

Information Notice #1

within the framework of the European open tender procedure for an Electrode production pilot line

Guide number: WS3166300549

Date: 30-09-2026

1. Introduction

This Information Notice forms part of the European open Tender procedure for an Electrode production pilot line, published on 19-07-2026 under TNO reference number WS3166300549.

This Information Notice provides a record of the questions submitted by the Tenderers up to and including [date] and the answers provided by TNO.

The Information Notice serves to provide any additions/changes to the Tender Documents and to communicate announcements from TNO.

If Tenderers have asked questions of similar nature, all such questions have nevertheless been included in this Information Notice and answered separately. This may result in repetition of information.

Where a company name was mentioned in a question, it has been replaced by another word or term to anonymize the questions.

TNO advises you to read the entire Information Notice.

All information in the Information Notice is classified as Confidential and may only be used for the purpose of submitting a Tender for this procurement.

The Information Notice are made available on TenderNed through publication at www.tenderned.nl and added as a document.

2. Additions / Amendments to the Tender Documents

The following changes have been made to the tender documents:

- *Paragraph 2.1*

No.	Action Points	New / Revised Date or Deadline
2	Publication of final Information Notice	30-09-2026
3	Closing date and time for submission of Tenders	26-10-2026, 11:00
4	Notification of Award Decision	17-11-2026
5	Closing date for submission of supporting documents by intended beneficiary	24-11-2026
6	Closing date for submission of challenges	08-12-2026
7	Final award	Close after 08-12-2026

- **R-1200-130:**

R-1200-130 no longer constitutes a strict knock-out criterion and is now merely an option. Annex **A04** has been amended accordingly and has been added as a new document for use. You must therefore use this revised Annex A04 when submitting your tender, rather than the version included with the original publication.

3. Questions and Answers

Please note that several questions submitted during the clarification process were not actual questions, but rather statements, confirmations of compliance with a requirement, proposed interpretations of requirements, or descriptions of potential solutions. These questions have been disregarded by TNO and are not considered part of the clarification process. They do not alter, supplement, or clarify the requirements and will not be taken into account in any way during the assessment or evaluation of tenders.

TNO will evaluate tenders solely against the requirements, criteria and conditions set out in the procurement documents and the answers provided by TNO in this Note of Information.

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1.	General	This is a general question. We understand why you would like to have just one contractual partner instead of one for each application. We have made in the past experience that this may be good for one party, however for the end user it may be better to have individual contracts as you will save overall money on the whole project. did you consider this for the tender or what that be an option to elaborate?	TNO has considered the contractual structure for this Tender. The possibilities that are acceptable to TNO are set out in the Procurement Documents, including the options for tendering as a single Tenderer, as a Combination, with subcontractors and/or with reliance on Third Party resources.
2.	8.1 - Subject-matter 'General' - 30	R-1000-135 ATEX – The Arbeidsomstandighedenbesluit (Arbobesluit) transposes the ATEX Directive into Dutch national law. Has an explosion protection document been drawn up on the basis of the Arbobesluit, and what zone classification has been applied to the interior of the machinery and the installation site especially for mixer and coater? How was the risk of hydrogen generation from silicon-containing anode mixtures assessed in this context?	No final site-wide Explosion Protection Document or area classification is currently available. As this is an R&D facility, the exact powder grades and slurry formulations will depend on future projects and cannot yet be fully specified. The tenderer shall therefore use conservative, reasonably foreseeable worst-case assumptions for graphite, graphite–silicon and high-silicon aqueous anode formulations. The assessment shall consider combustible fine-powder atmospheres and hydrogen generation from silicon–water reactions. The tenderer shall perform and document the preliminary ATEX zone classification and ignition-hazard assessment for the supplied mixer and coater systems, including internal equipment volumes and potential external release areas. All assumed material and process parameters, resulting equipment classifications and operating limitations shall be clearly stated.

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			The tenderer shall also identify any material-specific data or testing required before introducing a new powder or formulation. TNO will update the final site-wide Explosion Protection Document for the materials actually used.
3.	8.2 - Subject-matter 'Slurry Mixing' - 40	The tender provides no guidance on how the mixer is to be fed with powders. Is existing equipment to be used? In this case, this should be specified in detail so that the mixer can be adapted accordingly. In principle, our solution allows for two methods of material feeding. Included at no extra cost is feeding from bags or containers weighed by the customer into the open machine. Alternatively, for an additional charge, feeding via closed can systems is possible; these can also be equipped with their own gas atmosphere and docked to the mixer in a dust- and gas-tight manner. In addition to containers, this requires handling systems, which incur corresponding additional costs and increased space requirements. Furthermore, there are closed weighing and dosing stations that can be integrated into the control system for filling the containers. It should be clearly stated which method of feeding powders is required or intended.	No existing powder-feeding equipment is available on site. Due to the relatively small quantities used in the R&D batches, the baseline configuration shall be manual feeding of pre-weighed powders from bags or small containers. Automated weighing and dosing are not required. The tenderer shall include any containment, local extraction, earthing and other protective measures necessary for safe manual feeding, based on the machinery risk assessment and ATEX assessment. A closed-can feeding and docking system, including any required container-handling equipment, may be proposed as a separately priced option. The supplier shall state its footprint and utility requirements.
4.	8.2 - Subject-matter 'Slurry Mixing' - 40	R-1000-200 – is there a specific OEB level that must be complied with in section 8.2?	No specific OEB level has been assigned at this stage, as the exact powder grades and formulations will depend on future R&D projects. In accordance with R-1000-020, the tenderer shall perform a machinery risk assessment in accordance with ISO 12100 and propose appropriate containment and operator-protection measures for the intended handling of graphite, graphite–silicon and high-silicon powders. The tenderer shall clearly state the assumed containment performance, design basis and any material-related operating limitations.
5.	8.2 - Subject-matter 'Slurry Mixing' - 40	Is there a central exhaust air system in the installation room into which, for example, process air from the rinsing of the mixer's interior or displaced air during the feeding of powders or liquids can be fed? Or is a separate dust extraction system to be provided (R-	R-1100-065 refers exclusively to the inline slurry filter and is not related to the exhaust-air or dust-extraction system. No central process exhaust-air system should be assumed to be available.

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		1100-065, or is something else meant here?)? Can exhaust air from the filter system be recirculated into the installation room, or must it be discharged from the room?	In accordance with R-1000-085, a dedicated local dust-extraction system suitable for the baseline manual powder-feeding arrangement shall be included in the base scope. The tenderer shall propose an appropriate exhaust-air handling concept and specify the required filtration, interfaces and utilities. Recirculation into the installation room shall only be permitted where justified by the risk assessment and the declared material operating envelope. Process or vacuum exhaust potentially containing hydrogen shall be assessed separately.
6.	8.2 - Subject-matter 'Slurry Mixing' - 40	How many liquids are to be metered into the mixer? Water and SBR are standard. Should other liquids, such as binder solutions, CNT suspensions or dispersing aids, also be dispensed automatically or manually? Please specify the liquids to be dispensed and whether they are to be dispensed manually or automatically, so that the correct system configuration can be selected, as, in accordance with 2.2.11, the provision of variants is not permitted.	The system shall support aqueous anode slurry formulations based on graphite, graphite-silicon and high-silicon active materials. Potential liquids include DI water, SBR, binder solutions, CNT dispersions and liquid dispersing aids. All liquids may be dispensed manually; automatic liquid metering is not required. The system shall include a suitable manual liquid-addition arrangement that allows controlled and safe addition of these materials to the mixer. No alternative system variants are requested.
7.	8.2 - Subject-matter 'Slurry Mixing' - 40	How are the liquids, in particular the main liquid (demineralised water), supplied? Via a central on-site pipework system, IBCs or canisters?	All liquids may be added manually; automatic liquid-metering circuits are not required. Manual additions shall remain measurable and controllable in accordance with R-1100-110 and shall be supported by the recipe-execution workflow.
8.	8.1 - Subject-matter 'General' - 30	R-1000-060 How is the cooling medium for the mixer or transfer tank supplied? Is there a central cooling medium network to which the system can be connected, or is a dedicated supply unit required? If a cooling medium network is available, please provide the technical data such as flow temperature, pressure, etc.	No central cooling-medium network is available. A dedicated standalone temperature-control unit providing both cooling and heating shall be included in the tender quotation. It shall be appropriately sized for the mixer and transfer tank and shall meet the temperature-control requirements of R-1100-035. The supplier shall specify the proposed medium, capacity, operating temperatures, flow and pressure.
9.	8.2 - Subject-matter 'Slurry Mixing' - 40	Is the use of binder solution envisaged, and how is this to be produced? Is there already a facility on site for producing binder solution, is it to be produced directly in the mixer, or is a separate station for the production of binder solution required?	The main mixer shall be capable of preparing binder solutions directly. No separate binder-preparation station is required.

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10.	8.2 - Subject-matter 'Slurry Mixing' - 40	R-1100-050 – Teflon coatings in tanks such as mixers or transfer tanks are uncommon, as they act as an insulator, impeding heat transfer, and are susceptible to damage from abrasive products such as silicon. Scratches that can be caused by the product in the soft Teflon make cleaning more difficult rather than easier. Is a Teflon coating absolutely essential, given that it also incurs additional costs?	No PTFE/Teflon coating is required. Its inclusion in R-1100-050 was an error. R-1100-050 shall therefore be understood as requiring tanks and product-contact surfaces to be manufactured from at least SS304, with a surface finish or treatment suitable for the intended materials and cleaning procedures, in accordance with R-1100-045.
11.	8.2 - Subject-matter 'Slurry Mixing' - 40	R-1100-020 and R-1100-040 – The slurry conveyance system is usually part of the coater. The transfer tank containing slurry from the mixer is docked onto the coater and emptied by it. Should a viscometer, as well as screen and magnetic filters, also be included in the scope of the mixer system?	Yes. A standalone mobile slurry-transfer unit on wheels shall be included within the mixer system scope. It shall include a slurry pump, magnetic filter, mesh filter and in-line viscometer compliant with R-1100-020. The same unit shall be suitable for transfer from the mixer to the transfer tank and from the transfer tank to the coater. When connected to the coater, the unit shall fulfil the closed-loop, low-pulsation circulation requirements of R-1200-090, including the required return connection and operation while the coater is stopped.
12.	8.1 - Subject-matter 'General' - 30	Cleaning and disposal of cleaning fluid? Is there a dedicated cleaning room where, for example, transfer vessels or machine parts can be cleaned, or must this be done on site? Does this room have lifting equipment, for example to lift the lid of the transfer vessel, so that a thorough cleaning can be carried out? How should the resulting cleaning fluid be handled? May it be tipped out of the mixer into, for example, plastic drums (standard procedure), or should it be removed using, for example, a wet vacuum system – without the operator coming into contact with the fluid – and discharged via integrated pumps to a central waste water collection point?	Installed equipment, including the main mixer and fixed slurry paths, shall be cleaned at its installation location using the flushing procedure described in R-1100-060. Removable vessels and machine parts will also be cleaned on site. Resulting wash water shall be removed by pump and transferred to a dedicated IBC located outside the C&D Room. Any lifting or handling equipment required for safe cleaning shall be identified and included by the supplier.
13.	8.1 - Subject-matter 'General' - 30	R-1000-250 The machine must be fitted with a robust safety door system with electromagnetic locks, whereby the door leaves must ensure mechanical strength and operator safety whilst providing the widest possible field of view for process monitoring, provided the process environment permits this. The glass must be capable of being cleaned with IPA without	The safety-interlocking requirement applies to the Slurry Mixing process. The Mixer lid shall not be openable while the rotor is in motion, and rotor operation shall not be possible unless the lid is closed and secured. The lid shall remain locked until the rotor has reached a complete standstill and any relevant pressure or vacuum condition has been safely equalised.

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		causing chemical damage. -> Does this also apply to mixing process 8.2?	A process-viewing window shall be provided where technically feasible and permitted by the process conditions. Any viewing window provided shall be resistant to cleaning with IPA.
14.	8.2 - Subject-matter 'Slurry Mixing' - 40	R-1000-075 All plant and machinery must ensure complete traceability of batch and process data, including timestamps, setpoints, measured values and alarms. -> Does this only apply to the recipe data for the mixer? Or does it also apply to raw material traceability?	The requirement applies to all recipe and process-execution data generated by the equipment, including timestamps, setpoints, measured values and alarms. Raw-material identification, lot tracking and material genealogy are outside the required scope. However, quantities added and operator confirmations recorded as part of recipe execution shall be retained in the corresponding batch record.
15.	8.1 - Subject-matter 'General' - 30	Please clarify the required configuration and coverage of the equipment enclosure for maintaining the -40 °C dew-point micro-environment. In particular, the dew-point condition may be temporarily affected at necessary process openings and connection areas, such as web entry/exit points, the connection between the coater and dryer, and areas for roll changeover and electrode transfer. Please clarify the enclosure or sealing arrangement expected by TNO for these areas and the extent to which the -40 °C dew point must be maintained. In addition, please clarify how the L3 leakage class requirement should be applied and verified considering these necessary process openings.	The specified dew point shall be maintained during normal production, including normal web transport through the designed process interfaces. Necessary openings and interfaces shall therefore be designed and sealed so as to minimise air ingress. The Supplier shall define an appropriate boundary and sealing arrangement between the enclosed coating section and the excluded dryer zone. Temporary deviations during necessary operator access, roll changeover or maintenance are acceptable while the relevant access point is open. The Supplier shall state the expected recovery time after closure and include its verification in the SAT proposal. Leakage class L3 shall apply to the micro-environment as a whole in its normal closed operating configuration: $QvL \leq 0.003 \times \Delta p^{0.65} [m^3/s \cdot m^2]$, determined at a differential pressure of ± 15 Pa or lower.
16.	8.1 - Subject-matter 'General' - 30	Please clarify the scope of the six-month pilot production support, including the specific activities and services expected during this period beyond the standard two-year warranty services specified in the tender.	The six-month pilot-production support required under R-1000-065 is application and process support and is separate from the Supplier's warranty obligations. It shall cover assistance with initial recipe setup, adjustment and optimisation of Machine parameters, execution of pilot and DOE runs, interpretation of process and product data, troubleshooting of process

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			behaviour, operator coaching, and advice regarding the expected effect of Machine adjustments on process and product outputs. Failures, defects, software errors and non-conformities of the supplied Equipment remain subject to the applicable warranty and contractual obligations. The six-month period shall start following successful SAT and handover. It does not require continuous on-site presence. The Tenderer shall describe the proposed combination of on-site and remote support, the number of included support days or hours, the relevant personnel and competencies, and the applicable response times as part of the Maintenance & Service Concept under P-8000-040.
17.	8.1 - Subject-matter 'General' - 30	Please define the Process Data to be recorded, including whether this covers setpoints, actual measured values, alarms, recipes, trend data and any other parameters. Please also specify the required sampling rate, retention period and export format, as these requirements affect the controller and industrial PC configuration and are necessary for comparable pricing.	Process Data shall include, at minimum: • batch ID, roll ID and timestamps; • active recipe and recipe version; • process setpoints and corresponding actual measured values; • Machine states, operating modes and production status; • alarms, warnings, events and operator interventions; • quality and inspection results; • process- and tool-specific usage counters. The station-specific data shall include, as applicable: • Slurry Mixing: rpm, torque, temperature, vacuum and batch ID; • Coater: web speed, web tension, pump rate, oven-zone temperatures and coating-bead status; • Calender: thickness, nip force, roll temperature, web tension, speed and batch ID; • Slitter: tension curves, speed, blade position, roll ID and alarms. In accordance with R-1000-030, local storage shall cover at least one week of continuous operation without dependency on an external network. Longer-term retention may be provided through data export or MES integration.

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			Data shall be exportable in a standard, non-proprietary, machine-readable format. CSV shall be supported as the minimum offline export format, in addition to OPC-UA connectivity. For archived continuous data, the proposed minimum sampling rate is 1 Hz for slowly varying parameters, such as temperatures and vacuum, and 10 Hz for dynamic parameters, such as web tension, torque and nip force. Alarms and state changes shall be recorded on an event basis. Where a higher acquisition rate is necessary for process control or quality evaluation, the Tenderer shall identify the relevant signals and proposed rate in the Tender.
18.	8.1 - Subject-matter 'General' - 30	Please specify the material standard or qualification method by which compliance is to be demonstrated, for example a recognised cleanroom-suitability assessment or a defined list of permitted material groups for elastomers, seals, lubricants and cable sheathing. As currently worded, the requirement does not allow an objective and comparable assessment between Tenderers, and material selection has a direct effect on cost. We would also note that this requirement states a dew point of -50 °C, whereas R-1000-015 requires the micro-environment to maintain an internal dew point of -40 °C.	No single mandatory material-certification standard is prescribed. Compliance may be demonstrated using manufacturer declarations, technical datasheets, recognised cleanroom-suitability assessments, particle-shedding or outgassing information, or documented reference applications under equivalent or more demanding low-humidity conditions.
19.	8.1 - Subject-matter 'General' - 30	Please confirm which value governs the selection and qualification of the internal materials and components, and whether the -50 °C figure is intended as a material qualification condition or as an operating condition of the micro-environment. If the applicable condition is -40 °C in line with R-1000-015, we would ask that this requirement be amended accordingly, as qualification of elastomers, seals, lubricants and cable materials to -50 °C may result in a significant cost increase relative to its impact on final electrode quality.	The governing condition is an internal dew point of -40°C, as specified in R-1000-015. The reference to -50°C is inconsistent with this requirement and shall be replaced by -40°C. It is not intended as a separate material-qualification condition. Internal materials and components shall be suitable for continuous operation under the specified low-humidity micro-environmental conditions. This requirement does not mean that the materials must be qualified for an ambient operating temperature of -40°C or -50°C.
20.	8.1 - Subject-matter 'General' - 30	Please confirm whether TNO will review and approve the Dutch translations prior to delivery and whether the translation requirement	The Supplier remains responsible for the completeness and technical accuracy of all required translations. TNO will review the translated

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		extends to user-visible texts and diagnostic messages generated by standard third-party components, such as PLC system messages, purchased sub-systems, vision-system software and drive diagnostics, which may only be available in English. Please clarify the applicable scope so that any required third-party modification or manufacturer support can be included in the Tender.	documentation, labels, HMI screens and alarm messages during document review and FAT prior to delivery. Such review does not relieve the Supplier of responsibility for translation accuracy. The Dutch-language requirement applies to all texts visible to operators through the normal Machine interface, including operating screens, safety messages, alarms and operator-level diagnostic messages. This also applies where such texts originate from purchased sub-systems or third-party components but are displayed through the normal operator interface. Engineering tools, native drive or PLC diagnostic interfaces, and other service interfaces intended exclusively for qualified service personnel may remain in English, consistently with R-1000-230.
21.	8.1 - Subject-matter 'General' - 30	Please confirm that "Mechanical Schematics" is understood as the assembly, sectional and layout drawings and parts diagrams required for operation, maintenance, disassembly and reassembly, and spare-part identification, and that the requirement does not extend to detailed manufacturing drawings of individual proprietary components.	Confirmed. "Mechanical Schematics" shall be understood as complete Machine-level assembly drawings, sectional drawings, layouts, interface drawings, parts diagrams and other documentation necessary for safe operation, maintenance, troubleshooting, disassembly, reassembly and spare-part identification. Detailed manufacturing drawings of individual proprietary or standard purchased components are not required, provided that the documentation supplied is sufficient to safely operate, maintain, replace and reassemble those components. Drawings concerning safety-critical functions, Machine interfaces and custom components necessary for maintenance shall remain included.
22.	8.1 - Subject-matter 'General' - 30	Please confirm that the required free-of-charge software updates and HMI improvements are limited to error corrections, security patches and improvements within the functional scope agreed under the Contract, and that new functionality outside that scope will be handled through a Change Order.	Confirmed. Free-of-charge software updates during the supported lifetime of the Machine shall cover error corrections, cybersecurity patches, compatibility updates and maintenance improvements within the functionality delivered and accepted under the Contract. Software and HMI improvements requested during FAT, commissioning, SAT and the warranty period shall be provided free of charge where they

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		Please also define "the entire lifetime of each Machine", including whether this means the 10-year spare-parts availability period in R-1000-120 or another defined period.	remain within the agreed functional scope. New functions, modules or changes outside that scope may be handled through a Change Order. For the purpose of R-1000-215, the supported Machine lifetime shall be understood as a minimum period of 10 years following SAT, aligned with the spare-parts availability period specified in R-1000-120.
23.	8.1 - Subject-matter 'General' - 30	This requirement calls for compliance with ATEX Directive 2014/34/EU, but the tender documents do not identify which areas or items of Equipment are classified as potentially explosive atmospheres. As the anode process in this project uses a water-based binder, we understand that a gas explosive atmosphere arising from flammable solvents would not normally occur. Please therefore confirm whether TNO envisages any classified area for this Equipment. If so, please confirm: (a) whether TNO will provide the hazardous-area classification (zone designation and extent) for the dry room and for each Machine, or whether the Supplier is expected to propose it for TNO's approval; (b) which Equipment or sub-systems TNO currently considers to fall within a classified zone; and (c) the dust group and minimum ignition characteristics to be assumed. Without this information the ATEX-related scope of supply cannot be assessed on a comparable basis between Tenderers.	TNO does not currently consider the complete dry room to be an ATEX-classified area solely because the anode process uses a water-based binder. Nevertheless, the possibility of combustible dust atmospheres associated with graphite, silicon-containing powders, conductive carbon, electrode dust and dust-collection systems shall be assessed. TNO will provide the available material safety information and the intended process conditions. The Supplier shall perform an Equipment-specific explosion-risk assessment and shall propose, where applicable: • internal zone designation and extent; • affected Equipment and sub-systems; • required Equipment category and protection concept; • applicable dust group; • relevant ignition and explosion characteristics based on the proposed materials. The assessment shall particularly consider powder charging and handling, extraction points, filters and dust collectors, and dust-generating calendaring or slitting operations. The whole facility does not need to be classified by the Supplier. Where the Supplier demonstrates through a documented risk assessment that its design prevents the formation of a potentially explosive atmosphere, no ATEX zone needs to be assigned to that part of the Equipment. Any proposed zoning and protection concept shall be submitted to TNO for review and approval during the design phase.

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24.	8.1 - Subject-matter 'General' - 30	This requirement provides that any solution requiring external server connectivity shall be considered non-compliant and the offer rejected, while R-1000-115 requires remote support within one hour by video call and P-8000-010 awards evaluation points for secure remote data access and data extraction. Please confirm that this requirement is directed at operational dependency, namely that each Machine must be able to operate, process data, perform judgments and handle production data on site without any connection to a vendor-owned or external server. Please also confirm that a temporary remote service connection, established under TNO's control and only at TNO's request for diagnostics and support purposes, is not precluded by this requirement, and that such a connection is compatible with the requirement where it is provided as a function that TNO can enable and disable.	Confirmed. R-1000-195 addresses operational dependency. Every Machine shall be capable of operating, processing data, performing judgments and handling production information locally without connection to a vendor-owned or other external server. An optional and temporary remote-service connection is permitted, provided that it is established through the TNO-controlled site network, enabled only at TNO's request, and capable of being disabled by TNO. Loss or absence of that connection shall not affect Machine operation, local data handling, MES readiness or access to process parameters. This interpretation is compatible with R-1000-115 and P-8000-010.
25.	8.2 - Subject-matter 'Slurry Mixing' - 40	Volume measurement using a flow meter appears to be technically feasible. However, the current requirement does not clearly define what volume is to be measured or what the required accuracy of 0.01 L represents. Please clarify whether the volume refers to the slurry in the mixing vessel, the slurry in the transfer tank, or the actual quantity transferred between the two. Please also confirm whether 0.01 L refers to the instrument resolution or the actual measurement accuracy, and whether TNO intends the volume to be determined by a flow meter, tank-level measurement, or calculation based on mass and density.	The primary quantity used for recipe execution and batch control shall be mass. The required volume functionality relates to monitoring or controlling the actual quantity of slurry transferred from the Mixer or Transfer/Storage Tank towards the downstream process. The value of 0.01 L shall be understood as display and recording resolution, rather than absolute measurement accuracy. The proposed minimum process accuracy for transferred volume is $\pm 1\%$ of the measured quantity or better. A flow meter is acceptable but is not the only permitted measurement principle. An equivalent solution based on mass measurement and validated slurry density may also be proposed. The Tenderer shall state the measurement principle, operating range, resolution, achievable accuracy and any limitations related to viscosity, entrained gas or slurry composition.

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			R-1100-110 should be amended accordingly to distinguish measurement resolution from measurement accuracy.
26.	8.2 - Subject-matter 'Slurry Mixing' - 40	The requirement does not define where or under which conditions the temperature stability of $\pm 1^{\circ}\text{C}$ is to be measured. The temperature stability of a batch may vary depending on the heat-transfer characteristics of the slurry, including solids content, viscosity, and fill level, as well as the shear energy introduced during high-shear mixing. A common reference is therefore required for reproducible verification. Please confirm the measurement location and instrument for assessing the $\pm 1^{\circ}\text{C}$ requirement (jacket fluid circuit, vessel wall in contact with the slurry, or immersed probe), the reference medium and process conditions for verification, and whether the tolerance applies to the jacket circuit or to the slurry bulk temperature. If the tolerance applies to the slurry bulk temperature under all recipes, please confirm whether a defined reference condition can be established with a wider tolerance permitted during high-shear mixing phases.	The $\pm 1^{\circ}\text{C}$ requirement in R-1100-035 applies to the bulk slurry temperature, measured using a calibrated product-contact temperature probe. Jacket-fluid temperature or external vessel-wall temperature alone is not sufficient for acceptance. The requirement shall be verified after temperature stabilisation under agreed reference conditions, including a defined reference medium or representative slurry, fill level, mixing speed and setpoint. Verification should cover at least the minimum and nominal working volumes. Short transient deviations during defined high-shear or kneading steps may be accepted where heat generation makes continuous $\pm 1^{\circ}\text{C}$ control impracticable. The Tenderer shall state the expected maximum transient deviation and recovery time. The slurry shall return to and subsequently remain within $\pm 1^{\circ}\text{C}$ of the setpoint after the relevant transient process phase.
27.	8.2 - Subject-matter 'Slurry Mixing' - 40	Please confirm whether a separate binder mixer is required. If so, please specify the required working volume and whether transfer to the PD mixer shall be manual or automatic.	A separate binder mixer is not required in the mandatory base scope. Binder preparation and incorporation may be performed in the main PD Mixer. A separate binder-preparation unit may be offered as a separately itemised option under R-1000-235. If offered, the Tenderer shall specify its working volume, mixing principle and whether transfer to the PD Mixer is manual or automatic.
28.	8.3 - Subject-matter 'Coater' - 41	This requirement refers to single- or double-sided coatings of 40-200 μm per side but does not state how double-sided coating is to be achieved. Please confirm whether double-sided coating is required in a single pass, by means of a tandem arrangement with a second coating head and an additional dryer section, or by two consecutive	The mandatory configuration shall achieve double-sided coating through two consecutive passes using the same coating head and dryer. A tandem arrangement with a second coating head and additional dryer section is not required. Such a configuration may be offered as an optional alternative, provided that the footprint requirement is met.

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		passes through the same coating head. The two configurations differ fundamentally in machine layout, dryer length, investment cost, and the ability to meet the 12 × 3.5 m footprint specified in R-1200-005, and confirmation is therefore required for comparable pricing between Tenderers. This requirement also includes Al foil (8-20 µm), while R-1000-140 defines the coating scope as the Anode Coater and includes the Cathode for slitting only. Please confirm whether the Anode Coater is required to coat Al foil and, if so, for which chemistries and slurry systems, and whether the same coating head and slurry supply system are to be used for cathode slurry.	The reference to Al foil in R-1200-115 is not part of the mandatory Anode Coater scope. The base scope covers water-based anode coating on Cu foil. Cathode-slurry coating and use of the same slurry supply system for cathode materials are not required. R-1200-115 should therefore be revised to refer to Cu foil only. Optional capability to process Al foil may be separately described and quoted.
29.	8.3 - Subject-matter 'Coater' - 41	Please confirm whether the ±2% applies to the tension setpoint, the full-scale range of the tension measurement system, or another basis. The reference basis needs to be defined before FAT and SAT, as it determines the resulting absolute tolerance and the measurement and acceptance method. The web widths on this line are at or below 220 mm (R-1300-115 up to 220 mm, R-1400-010 input rolls up to 220 mm, and R-1200-015 nominal coating width of 160 mm). At these narrow web widths, the actual operating tension is low, making a percentage-only tolerance difficult to measure and verify reliably. We therefore ask TNO to amend the requirement to read: "Web handling shall include closed-loop tension control with a stability of ±2% of setpoint or ±2 N, whichever is greater, from unwinder to rewinder." Please confirm whether this amendment is acceptable.	The percentage tolerance in R-1200-070 refers to the active tension setpoint rather than the full-scale range of the measurement system. TNO agrees that an absolute tolerance floor is necessary for reliable verification at low web tensions. However, ±2 N may be too wide for low-tension recipes and fragile thin Cu foil. The proposed revised requirement is: "Web handling shall include closed-loop tension control with a stability of ±2% of setpoint or ±0.5 N, whichever is greater, from unwinder to rewinder under steady-state operation." The Tenderer shall state the proposed operating tension range, load-cell range, measurement accuracy and FAT/SAT verification method.
30.	8.3 - Subject-matter 'Coater' - 41	Please confirm the intended measurement principle for the coating weight measurement system. The specified combination of a 1-1,000 g/m² measuring range, ±1% accuracy, 5 ms response time, 40 mm head gap, and 30 mm spot size correspond to a beta-transmission or X-ray transmission gauge. If a beta gauge with a sealed radioactive source is intended, please confirm which party is responsible for obtaining and maintaining the Dutch radiation-	The measurement principle is not prescribed, provided that all functional and performance requirements of R-1200-095 are met. An X-ray transmission system is acceptable as an equivalent solution. If the Tenderer proposes a beta-transmission system using a sealed radioactive source, the Tender shall include the complete radiation-safety concept, shielding, source and system documentation, installation and

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		protection licence, source registration and handling, periodic inspection, and end-of-life return, and whether the associated costs are to be included in the Tender price. Please also confirm whether an X-ray based system is acceptable as an equivalent solution.	commissioning support, required training, inspection and maintenance concept, and arrangements for end-of-life return of the source. The Tenderer shall clearly identify any registration, licence or other statutory obligation that can legally be performed only by TNO as the site operator. All Equipment-, source- and Supplier-related costs shall be included in the Tender price. A non-radioactive-source solution will be preferred where it provides equivalent technical performance and reliability.
31.	8.4 - Subject-matter 'Calendar' - 42	Please clarify whether this system forms part of the mandatory base scope of supply or is an option to be separately itemised and quoted in accordance with R-1000-235. Based on our experience, roll heating and active-material surface preheating are normally applied to cathode calendaring and are not a standard process step for anode electrodes on Cu foil. Implementing this function would require additional heating components and associated control systems, resulting in a corresponding increase in the equipment price. Could TNO please clarify the purpose of this requirement for the specified anode chemistries (graphite, graphite-Si and high-Si), confirm the intended operating conditions including the target surface-temperature range and web speed, and confirm whether this function is essential for the intended process?	The heating or active-material surface-preheating system specified in R-1300-160 is optional and does not form part of the mandatory base scope. It shall be separately itemised and quoted in accordance with R-1000-235. The purpose of this option is to provide additional R&D flexibility for future recipes and material systems. No mandatory target temperature range or web speed is prescribed for this option. The Tenderer shall propose and justify the technically appropriate temperature range, heating method, control accuracy, heating uniformity and compatible web-speed range.
32.	8.4 - Subject-matter 'Calendar' - 42	We would ask that this requirement be stated in functional terms, for example: "The reel/spool mounting system shall ensure secure and concentric core fixation during operation at nominal operating speed." This would allow any mounting principle that demonstrates the required concentricity and clamping repeatability. Please confirm whether an equivalent solution, such as a pneumatic expanding chuck providing equal or better concentricity and clamping repeatability with a shorter changeover time, is acceptable.	An equivalent reel or spool mounting solution is acceptable, including a pneumatic expanding chuck, provided that it demonstrates equal or better performance regarding: • secure and concentric core fixation; • radial runout; • clamping repeatability; • rated roll weight and operating speed; • operator safety; • roll-change time.

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			R-1300-030 should be interpreted functionally rather than as prescribing one mandatory mechanical design principle. The Tenderer shall provide the relevant performance data and verification method.
33.	8.5 - Subject-matter 'Slitter' - 44	This requirement states a maximum roll diameter of 460 mm and a roll width of 60-210 mm, while R-1400-110 requires the Rewinder to be compatible with rolls having a 3-inch inner core and an outer diameter of 8-10 inches (approximately 203-254 mm), and R-1400-010 defines slit widths of 50-200 mm. Please confirm which figures govern the Rewinder design and whether the maximum roll diameter of 460 mm applies to the Unwinder only.	The maximum roll diameter of 460 mm in R-1400-090 applies to the Slitter unwinder and its input roll. The rewinder shall be compatible with a 3-inch inner core and outer core diameter of 8–10 inches, as specified in R-1400-110.
34.	8.5 - Subject-matter 'Slitter' - 44	The coating and electrode thickness ranges are stated on different bases in different requirements. R-1200-030 specifies a dry thickness capability of 40-200 µm, R-1300-010 refers to double-sided coatings of 20-200 µm per side, and R-1400-015 refers to a supported coating thickness of 20-200 µm total. Please confirm, for each requirement, whether the stated range refers to the coating thickness per side or the total electrode thickness, and whether the substrate foil thickness is included. Please also confirm the minimum coating thickness that the Anode Coater is required to apply, as R-1200-030 specifies a minimum of 40 µm, while R-1300-010 and R-1400-015 specify 20 µm. These thickness requirements affect the Coating Head configuration, Calender Gap range, and thickness measurement system configuration, and are therefore required for comparable pricing between Tenderers.	Coating-thickness values shall exclude the substrate foil thickness unless explicitly stated otherwise. The required ranges shall be interpreted as follows: • Anode Coater: dry coating thickness of 40–200 µm per coated side; • Anode Calender and both Slitters: capability to handle coating thicknesses of 20–200 µm per coated side, allowing the processing of externally supplied or experimental thinner electrodes; • total electrode thickness: substrate-foil thickness plus the coating thickness on one or both sides. The mechanical clearance and measurement ranges of downstream Equipment shall therefore accommodate the resulting total electrode thickness. For a double-sided electrode at the maximum specified coating thickness, this means the substrate foil plus 2 × 200 µm coating. R-1300-015 and R-1400-015 should be revised to remove the inconsistent use of “total” and clearly state the applicable per-side coating basis.

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35.	8.5 - Subject-matter 'Slitter' - 44	Please specify the required number of simultaneous slitting lanes and the minimum slit width to be supported. In particular, please confirm whether the Equipment is required to perform Single (Half) Slitting or Multi-Lane Slitting of three or more lanes per pass. The required number of lanes affects the knife arrangement, machine configuration, and cost. Please also confirm the maximum input roll width required for the Cathode Slitter, as R-1000-005 includes Cathode Slitting in the scope, while this requirement specifies a maximum input width of 220 mm. Please also confirm which tolerance applies for acceptance. Specifically, please confirm whether ± 0.2 mm refers to the nominal setting tolerance between recipes, while ± 0.1 mm in R-1400-025 refers to the width variation during operation of a single roll.	The mandatory base scope requires Single/Half Slitting, producing a maximum of two finished lanes in one pass. Multi-lane slitting of three or more lanes is not mandatory but may be offered as a separately itemised option. Both the Anode Slitter and Cathode Slitter shall support input roll widths up to 220 mm. The tolerances shall be interpreted as follows: • ± 0.2 mm in R-1400-010: permissible deviation of the nominal width setting between recipes; • ± 0.1 mm in R-1400-025: maximum width variation of an individual slit strip during steady-state processing of a roll. Both criteria shall be met during acceptance testing.
36.	- Annex A04 - 46	General – Status of Answers in the Information Notice(s) Annex A04 requires the Tenderer to declare compliance with each requirement. Several of our questions seek confirmation of an interpretation, verification method, or equivalent solution. Please confirm that any interpretation, clarification, or equivalent solution confirmed or accepted by TNO in the Information Notice(s) will form part of the tender and contract documents and, in case of inconsistency, will prevail over the original wording of Annex A04. Please also confirm whether TNO will issue a revised Annex A04 for use in the final tender submission.	TNO confirms that the Information Notice(s) (Nota van Inlichtingen) form an integral part of the procurement documents. In accordance with Section 2.2.4 (Precedence of Procurement Documents) of the Procurement Guide, the most recent Information Notice prevails over the Procurement Guide and its annexes, including Annex A04, in the event of any discrepancy or inconsistency. Furthermore, Section 2.3 states that all questions and answers included in the Information Notice are deemed to form an integral part of the Procurement Guide. TNO will only issue a revised version of Annex A04 if it considers this necessary. Unless explicitly stated otherwise in an Information Notice, Tenderers shall use the Annex A04 format as issued with the procurement documents.
37.	1.4 - Objective, scope and content of the proposed Contract - 7	We will submit our Tender on a DDP basis as required and are not requesting any change to the tender requirement. For post-award implementation only, please confirm whether TNO would, subject to applicable procurement rules, be willing to agree a DAP (Incoterms 2020) arrangement under which the Supplier bears all customs duties and clearance costs and appoints/pays the	The Tender shall be priced on a DDP-equivalent basis. DAP Helmond may be accepted, subject to TNO's prior written approval, provided that the Supplier bears all costs, duties, customs-clearance costs, risks and liabilities other than TNO's role as importer of record for VAT purposes.

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		customs agent, while TNO acts as importer of record for import-VAT purposes only, provided that this results in no additional cost, risk or administrative burden for TNO. Please confirm whether such an arrangement could be agreed in writing after award without affecting the compliance of the Tender submitted on a DDP basis.	
38.	1.4 - Objective, scope and content of the proposed Contract - 7	To support our internal commercial review and the preparation of a competitive and appropriately scoped tender, we would appreciate clarification regarding the anticipated budget for this procurement. Could TNO please confirm whether an estimated contract value, available project budget, reference price, or maximum budget/ceiling price has been established for the Complete Electrode Production Pilot Line? If such a value has been established, please indicate whether it can be disclosed to the Tenderers and clarify whether it should be regarded as an indicative budget for reference purposes or as a maximum allowable Tender Price. This information would assist us in aligning the proposed technical scope and commercial offer with TNO's expectations.	TNO confirms that an internal estimate and budget assessment have been established as part of the preparation of this procurement procedure. However, TNO is under no obligation to disclose this information and does not intend to make it available to Tenderers. No maximum available budget or ceiling tender price has been included in the Procurement Documents. Tenderers are requested to submit a competitive market-based Tender based on the requirements and conditions set out in the Procurement Documents.
39.	1.4 - Objective, scope and content of the proposed Contract - 7	Please clearly define the responsibilities for unloading, lifting, rigging, and mechanical installation at the TNO Helmond site. Specifically, please confirm whether TNO or the Supplier will be responsible for providing cranes, forklifts, and qualified rigging personnel; unloading from transport vehicles; internal transportation to the final installation location; temporary removal and reinstatement of facility structures (including doors, walls, or other building elements, where required); floor reinforcement; foundations; levelling plates; anchor bolts and chemical anchors; wall, roof, and floor penetrations; disposal of packing materials; and final cleaning and site restoration.	The allocation of responsibilities for delivery and unloading is governed by the applicable Incoterms® 2020 Delivered Duty Paid (DDP) rule, with delivery to the designated location at the TNO Helmond site, which will be further specified in the Purchase Order. Under DDP, the Supplier is responsible for transporting the equipment to the agreed place of destination and making it available to TNO ready for unloading. Responsibilities relating to lifting, rigging, internal transportation, mechanical installation, cranes, forklifts, qualified rigging personnel,

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		In addition, please provide details of site access and installation constraints, including transportation route dimensions, door opening sizes, ceiling heights, and allowable floor loading capacities.	temporary modification of building elements, structural works, floor reinforcement, foundations, levelling plates, anchors, penetrations, removal of packing materials, final cleaning, and site restoration are not determined by the DDP rule itself. These responsibilities shall therefore be allocated in accordance with the relevant technical specifications, installation scope, site requirements, and any specific written agreements between TNO and the Supplier. Notwithstanding the use of DDP (Incoterms® 2020), TNO shall be responsible for unloading the Equipment from the delivery vehicle and for the internal transportation of the Equipment from the delivery point to the designated installation location within the Site. The Supplier shall provide all required lifting points, handling instructions, centre-of-gravity information, transport restrictions and rigging requirements sufficiently in advance to enable safe unloading and transportation. The tender documentation already states that delivery is based on DDP Incoterms® 2020 to TNO Helmond and that installation and commissioning form part of the equipment scope.
40.	1.4 - Objective, scope and content of the proposed Contract - 7	The delivery terms are specified as DDP Incoterms 2020 to TNO Helmond. Please clarify whether a non-EU Supplier is required to act as the Importer of Record and assume responsibility for all customs duties, import VAT, and customs clearance obligations, or whether TNO will act as the Importer of Record. In addition, please clarify how recoverable Dutch import VAT should be treated for tender pricing purposes, including whether it should be included in or excluded from the tender price and the basis on which price comparisons will be evaluated.	Please see the answer under 'Question No. 37'.
41.	1.5 - Facility readiness Timeline - 7	The tender documentation states that mechanical completion of the facility and equipment delivery are expected in mid-June; however, the applicable year is not specified. Please confirm the planned year and provide the target schedule for equipment delivery, installation, commissioning, SAT, and final acceptance.	Mechanical Completion of the facility is currently estimated for mid-August 2027. The Goods shall be delivered no earlier than calendar week 35 of 2027 to Automotive Campus 80, 5708 JZ Helmond, the Netherlands. The detailed project schedule will be coordinated with the awarded Contractor. These dates are current planning assumptions and are not guaranteed or binding dates.

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			At this stage, no detailed schedule is available for installation, commissioning, Site Acceptance Testing (SAT) and final acceptance. These activities are expected to take place following delivery of the equipment and will be further coordinated with the successful Tenderer. The schedule currently available should therefore be considered indicative only. If additional planning information becomes available during the procurement procedure, it will be shared with all Tenderers.
42.	1.5 - Facility readiness Timeline - 7	In the event of delays in facility readiness, the Supplier shall store the equipment until installation can proceed at no additional cost to TNO. Please specify the maximum free storage period that shall be included in the tender price and confirm which party will be responsible for costs associated with storage, corrosion protection and preservation, insurance, maintenance, and re-inspection if the delay exceeds the agreed free storage period.	The Tender Price shall include a minimum of six months of temporary storage at no additional cost to TNO, commencing when the Equipment is ready for shipment following successful FAT but Delivery cannot proceed due to facility-readiness or site-availability issues. If storage exceeds six months for reasons not attributable to the Supplier, the Parties shall agree in writing on any reasonable and demonstrable additional storage-related costs and necessary schedule adjustments. No other costs or contractual rights arise automatically.
43.	2.2.10 - Reliance on Third Party resources? - 12	Please clarify the documentation requirements for cases where a Bidder relies on the technical and professional capabilities and reference projects of a third party. Specifically, please confirm whether a separately completed and signed ESPD from the third party, the relevant Annex A02 reference forms, and Annex B02 must be included with the initial tender submission, or whether Annex B02 is only required after selection as the preferred bidder or intended awardee.	Please refer to Sections 2.2.10, 2.5.2, 5.2.2.1 and 7.1 of the Procurement Guide. For the submission of the Tender, where a Tenderer relies on the technical and professional competence of a Third Party, the Tenderer shall submit: • a separately completed and duly signed ESPD (Annex A01) for each relevant Third Party; • the applicable reference project information using Annex A02 for the relevant Third Party. Annex B02 (Declaration as to Reliance on Technical and Professional Competence of a Third Party) is not part of the Tender submission itself. Annex B02 constitutes a supporting document that shall be submitted only upon request by TNO by the Tenderer to whom TNO intends to award the Contract.

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			See in particular Sections 2.2.10(A)(4) and (5), Section 5.2.2.1, Section 7.1 and the overview in Section 2.5.2 of the Procurement Guide.
44.	2.2.21 - Legally valid signature - 14	The tender documentation states that the tender submission must be signed in a legally valid manner. However, we would appreciate clarification regarding the signing requirements for the ESPD (Annex A01). The signature fields in the provided ESPD document appear to be inactive and do not allow for the application of a digital signature. In this case, please confirm whether it is acceptable for an authorized representative to print the completed ESPD, sign it manually, scan it, and submit it as a PDF document. If a different signing method is required, please provide details of the applicable signing procedure and specify whether a qualified electronic signature, digital certificate, or any specific TenderNed signing process is required for the ESPD. Please also confirm whether a scanned handwritten signature of an authorized representative will be considered a legally valid signature for the purposes of this tender submission.	Please refer to Sections 2.2.21, 2.5.1 and 2.5.2 of the Procurement Guide. The ESPD (Annex A01) must be validly signed by the duly authorised representative(s) of the Tenderer. A validly signed ESPD constitutes a valid signature for the Tender as a whole. This requirement also applies to ESPDs submitted by Combination members and Third Parties relied upon by the Tenderer. The Procurement Guide expressly permits the use of an electronic signature, provided that an eHerkenning tool with at least security level EH4 is used. TNO will also accept a manually signed ESPD that has been scanned and submitted as part of the Tender, provided that the ESPD is signed by the duly authorised representative(s) of the Tenderer. The Tenderer remains responsible for demonstrating signing authority if requested by TNO in accordance with the Procurement Guide. This includes Combination members and Third Parties where applicable.
45.	2.5.2 - Sending and grading Tender - 16	Annex A02 and A05 have been provided in editable MS Word format, and Annex A03 and A04 have been provided in editable MS Excel format. However, Section 2.5.2 refers to Annex A01 through A05 as PDF files. Please clarify whether bidders are required to submit (a) PDF versions only, (b) the original editable files only, or (c) both the original editable files and corresponding PDF versions for Annex A01 through A05.	The editable MS Word and MS Excel versions have been provided solely to facilitate the preparation and completion of the Tender. The Procurement Guide specifies that Annexes A01 through A05 shall be submitted as part of the Tender and that the PDF files of Annexes A01 through A05 shall be gathered into a compressed file (zip file) and uploaded to TenderNed. Accordingly, Tenderers are required to submit PDF versions of Annexes A01 through A05. Submission of the original editable Word or Excel files is not required. However, TNO has no objection if Tenderers additionally upload the relevant Annexes in their original editable MS Word and/or MS Excel format for convenience. In the event of any discrepancy, the submitted PDF version will prevail.

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46.	3 - Assessment of Tenderers and Tenders - 18	In the event that an intended beneficiary submits supporting documents that were originally issued in a language other than English, could TNO please clarify the applicable language requirements? Would submission in the original language be permitted? If an English translation is required, please confirm whether an informal translation prepared by the supplier would be sufficient or whether a certified or sworn translation would be required.	Please refer to Section 2.2.6 of the Procurement Guide. Official documents that cannot be submitted in the English language may be submitted in the language of the document's country of origin. Upon request by TNO, the Tenderer shall provide a translation prepared by a sworn translator. Any costs associated with such translation shall be borne by the Tenderer. Accordingly, supporting documents issued in another language may be submitted in their original language. An English translation is not required at the time of submission unless specifically requested by TNO. Where TNO requests a translation, such translation shall be prepared by a sworn translator in accordance with Section 2.2.6 of the Procurement Guide.
47.	7.1 - Requesting supporting and other documents from intended beneficiary - 29	A prospective supplier is incorporated outside the European Union. Regarding the required Certificate of Conduct for Procurement and Declaration of Payment Behaviour from the Dutch Tax and Customs Administration, could TNO please confirm whether equivalent official documents issued by the competent authorities in the supplier's country of establishment would be accepted? If so, please also clarify whether an English translation would be sufficient, or whether a certified translation and/or an apostille would be required.	Please refer to Sections 2.2.6, 5.1 and 7.1 of the Procurement Guide. Where a Tenderer or Third Party is established outside the Netherlands, TNO will accept equivalent documents issued by the competent authority in the country where the relevant entity is established, to the extent such documents serve the same purpose as the supporting documents requested in the Procurement Guide. Official documents that are not available in English may be submitted in the language of the country of origin. In accordance with Section 2.2.6 of the Procurement Guide, TNO reserves the right to request a translation prepared by a sworn translator. Any costs associated with such translation shall be borne by the Tenderer. The Procurement Guide does not require an apostille as part of the Tender or supporting document submission process. TNO reserves the right to request additional evidence regarding the authenticity or legal status of submitted documents if deemed necessary.
48.	8.1 - Subject-matter 'General' - 30	Please clearly define the complete scope of testing for FAT, site commissioning, and SAT. Specifically, please provide details regarding the electrode chemistry and recipes, batch size, number of production test runs and operating duration for each test, required	FAT, commissioning and SAT shall demonstrate compliance with the applicable functional, safety and performance requirements of the Procurement Documents. They are not intended to qualify every chemistry that may subsequently be investigated on the R&D line.

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		output capacity, sampling and measurement methods, and acceptance criteria for each process step, including mixing, coating, drying, calendaring, and slitting. In addition, please clarify the methods for measuring yield, equipment availability, and OEE during the acceptance inspection. Please also confirm the retesting procedures and the responsible party for associated costs in the event of a failure to meet the acceptance test requirements.	The exact recipes cannot be fully defined at this stage because the Equipment will be used for future R&D projects involving different graphite, graphite-silicon and high-silicon formulations. Testing shall therefore use representative materials and recipes agreed between TNO and the Supplier during preparation of the FAT and SAT protocols. The Supplier shall propose a detailed testing protocol covering the required batch sizes, number and duration of test runs, sampling plan, measurement methods and acceptance criteria for mixing, coating, drying, calendaring, slitting and the relevant interfaces between Machines. The protocol shall be submitted to TNO for review and approval before testing. Availability and yield shall be evaluated under the agreed reference conditions and qualified recipe in accordance with R-1000-040 and R-1000-045. Start-up material and losses resulting from planned sampling, setup or recipe changeover shall be excluded. OEE is not a separate acceptance criterion. If a test fails due to a defect or non-conformity attributable to the Supplier or the supplied Equipment, the Supplier shall perform the necessary corrective actions and repeat the affected test at its own cost.
49.	8.1 - Subject-matter 'General' - 30	Please clarify which party will be responsible for providing and bearing the cost of all raw materials and process consumables required for FAT, site commissioning, SAT, and any retesting activities. This includes, but is not limited to, active materials, conductive additives, binders, solvents, copper foil, aluminium foil, filters, cleaning agents, and other consumables. In addition, please clearly define the responsibilities for material specification and quantity confirmation, packaging, transportation, customs clearance, hazardous goods documentation, storage, return or disposal of unused materials, and the handling and disposal of	TNO will provide the process materials required for FAT, site commissioning and SAT, including active materials, conductive additives, binders, liquids or solvents, and current-collector foils. The Supplier shall specify the required materials, grades, quantities, packaging conditions and required delivery dates sufficiently in advance. As this is an R&D line, the final test formulations will be agreed during preparation of the FAT and SAT protocols. The Supplier shall provide all Machine-specific consumables required to perform the tests, including filters, lubricants and standard cleaning consumables.

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		slurry, coated electrodes, and other process waste generated during testing and commissioning activities.	If retesting is required due to a failure or non-conformity attributable to the Supplier or the supplied Equipment, the Supplier shall bear the associated retesting costs, including the cost of replacement process materials.
50.	8.1 - Subject-matter 'General' - 30	Please provide a Battery Limit Matrix clearly defining the division of responsibilities for all facility utilities and site connections. For each piece of equipment, please identify the Point of Connection (POC) and clarify the respective responsibilities of TNO and the Supplier regarding 400 V AC, 50 Hz power supply, main distribution boards and circuit breakers, power cables and cable trays, final electrical terminations, protective grounding and equipotential bonding, compressed air, dry air, vacuum, cooling water supply and return, exhaust, dust collection and solvent treatment ducting, drainage, and Ethernet/OPC-UA/MES connectivity. In addition, please clarify which party will perform and bear the costs for licensed electrical works, inspections, energization/power connection, and utility consumption during installation, commissioning, and SAT. Please also provide the available utility capacities and connection locations at site. For each individual equipment unit, please provide the final electrical specifications, including power configuration (voltage, frequency, number of phases, neutral, and protective earth), allowable voltage and frequency tolerances, rated connected load (kW/kVA), maximum demand power, rated current, starting/inrush current, power factor, harmonic and EMC requirements, upstream circuit breaker type and rating, short-circuit withstand rating or SCCR, recommended power cable specifications and termination method, and any requirements for transformers, voltage stabilizers, UPS, or emergency power supply. Please also confirm whether 400 V AC, 50 Hz, three-phase power is applicable to all equipment and auxiliary systems. If any equipment	TNO will provide and bear the costs of the facility utilities and hook-up connections up to the agreed Points of Connection. All provisions forming part of the Electrode Production Pilot Line itself are entirely within the Tenderer's scope, including the equipment, auxiliary systems, internal cabling, piping, ducting, controls, safety provisions and connections from the Points of Connection to the individual equipment units. In accordance with Section 8.1, the Tenderer must specify in its Tender all required utilities, loads, capacities, Points of Connection and any deviations from 400 V AC, 50 Hz, three-phase power. A separate Battery Limit Matrix will not be provided at this stage.

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		requires a different voltage or power configuration, please clearly identify and specify such exceptions.	
51.	8.1 - Subject-matter 'General' - 30	Could you please confirm the site main electrical power specifications? (ex: 400V / 3P / 50Hz)	Please see the answer under 'Question No. 50'
52.	8.1 - Subject-matter 'General' - 30	Could you please confirm the site main compressed air specifications? - Supply pressure / Supply flow rate / Availability of dry air supply Could you please provide the compressed air piping connection specifications and connection location? - Piping size / Connection type / Connection location	The Clean & Dry room needs to be developed
53.	8.1 - Subject-matter 'General' - 30	Could you please confirm on which floor each piece of equipment (Mixer / Coater / Press / Slitter) will be installed? Whether installation is on the ground floor (1st floor) or on an upper floor (2nd floor or above) Floor Load Capacity. If the equipment will be installed on the 2nd floor or above, could you please provide the floor load capacity? (Unit: kg/m²)	Equipment will be installed in a Clean and Dr room on the ground floor Floor load capacity is 2500 kg/m ²
54.	8.1 - Subject-matter 'General' - 30	Could you please confirm the effective ceiling height of the equipment installation area? Is it possible to provide a building cross-section drawing or other relevant documents? If available, please share the facility layout drawing.	Clean & Dry room ceiling height is 3m; The Clean & Dry needs to be developed. C&D room concept layout see answer 55.
55.	8.1 - Subject-matter 'General' - 30	Could you please provide a layout drawing or other documents showing the equipment delivery route? What is the maximum equipment size that can be brought into the site? (Width × Length × Height (W × L × H))	The Clean & Dry room needs to be developed and will be placed on ground floor: see concept layout of C&D room, Annex A, space left bottom under mezzanine is max 2400mm

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		If the equipment will be installed on the 2nd floor or above, is a freight elevator available for equipment transportation? - Elevator door dimensions / Elevator internal dimensions / Maximum loading capacity If a freight elevator is not available, would it be possible to open an external wall for equipment installation and rigging?	
56.	8.1 - Subject-matter 'General' - 30	Is it possible to perform anchor bolt installation for equipment fixation? Are floor anchor bolts (set anchors) allowed to be used?	This needs to be confirmed with building owner. For the floor finish, all fixing points in production areas must be designed to be smooth, easy to clean, and low-dust. Base plates, anchors, and floor connections must be fully sealed with a chemically resistant sealant. No open joints, gaps, or cavities that are difficult to clean may be created. In addition, all materials must be suitable for operating conditions at a dew point of -20°C.
57.	8.1 - Subject-matter 'General' - 30	Is connection to the exhaust system available? Please confirm applicability for the Mixer and Coater. Could you please provide the exhaust connection specifications? (Duct size / Airflow capacity (Air Volume)) Up to which point will the exhaust ducting be provided by the customer?	The Clean & Dry room needs to be developed. Typically, the ceiling as the demarcation point, whereby an extraction connection is provided that extends sufficiently below the ceiling to allow a connection to be made by either the supplier of the extraction arm or the equipment supplier.
58.	8.1 - Subject-matter 'General' - 30	Is the equipment installation area a general HVAC-controlled area or a Dry Room?	Equipment will be installed in a Clean & Dry room at -20°C DP Equipment Mini Environment: see R-1000-015
59.	8.1 - Subject-matter 'General' - 30	Are there any limitations on the maximum installation footprint and height for each piece of equipment? Are there any requirements regarding the minimum aisle or maintenance clearance around the equipment?	See requirements

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60.	8.1 - Subject-matter 'General' - 30	Could you please clarify the customer's scope of supply for the following utilities? - Main Power / Dry Air / Exhaust System / Dust Collector What is the distance between each utility connection point and the planned equipment installation location? Could you please provide the utility layout and drawings showing the utility connection points?	Clean and Dry room needs to be developed: not yet defined
61.	8.1 - Subject-matter 'General' - 30	Could you please clarify whether equipment unloading and internal transportation are within the customer's scope or the supplier's scope? • Truck and container unloading • Equipment movement from the unloading area to the final installation location	Please see the answer under 'Question No. 39'.
62.	8.1 - Subject-matter 'General' - 30	Will all required utilities be available and ready for use prior to equipment installation? - Main Power / Dry Air / Exhaust System	The Clean and Dry room is commissioned before equipment is installed
63.	8.1 - Subject-matter 'General' - 30	Could you please advise the planned equipment delivery date and the earliest date installation work can commence?	Current time plan is Clean and Dry room ready week 35 2027. The C&D room still needs to be tendered and therefor concept timing. Electrode equipment installation alignment is needed with Cell Assembly Equipment installation: to be confirmed.
64.	8.1 - Subject-matter 'General' - 30	What are the permitted working hours for equipment installation and commissioning activities? • Regular weekday working hours / Availability of night work / Availability of weekend work	Equipment installation and commissioning activities may only be performed during regular working hours on weekdays, from 08:00 to 18:00.
65.	8.1 - Subject-matter 'General' - 30	Are there any site-specific safety trainings or work permits required for installation activities?	The specific requirements and schedule will be determined in consultation with the Contractor before the work starts. All personnel need to be registered at TNO.

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		If safety training is required, could you please provide the training schedule and related requirements?	The Supplier remains responsible for compliance with applicable Dutch laws and regulations and must verify, before deployment, that its personnel possess the required competence, instructions, certificates and any legally required permits.
66.	8.1 - Subject-matter 'General' - 30	Is any advance registration, approval, or site access process required for foreign engineers who will perform equipment installation and commissioning work on-site?	No country-specific registration or approval by TNO is required in advance. However, all on-site personnel, irrespective of nationality, must comply with the applicable Dutch immigration, work-authorisation, social-security, tax, safety and site-access requirements. The Supplier is responsible for obtaining any required visas, residence or work permits and other legally required documentation. Personnel details must be provided to TNO sufficiently in advance for security registration and site-access coordination. Access remains subject to TNO's applicable security and safety procedures.
67.	8.1 - Subject-matter 'General' - 30	R-1000-15 - Please clarify the required coverage and sealing arrangement of the equipment enclosure for maintaining the -40 °C dew point. Please also confirm the required enclosure/sealing conditions for web entry/exit, coater-dryer connections, roll change, and electrode transfer areas, as well as the applicable range for maintaining -40 °C. In addition, please clarify how the L3 leakage class should be applied and verified considering the necessary process openings.	The specified dew point shall be maintained during normal production, including normal web transport through the designed process interfaces. Necessary openings and interfaces shall therefore be designed and sealed so as to minimise air ingress. The Supplier shall define an appropriate boundary and sealing arrangement between the enclosed coating section and the excluded dryer zone. Temporary deviations during necessary operator access, roll changeover or maintenance are acceptable while the relevant access point is open. The Supplier shall state the expected recovery time after closure and include its verification in the SAT proposal. Leakage class L3 shall apply to the micro-environment as a whole in its normal closed operating configuration: $Q_vL \leq 0.003 \times \Delta p^{0.65} \text{ [m}^3\text{/s}\cdot\text{m}^2\text{]}$, determined at a differential pressure of $\pm 15 \text{ Pa}$ or lower.
68.	8.1 - Subject-matter 'General' - 30	R-1000-035 - Please clarify the scope of the Dutch translation requirement. Please confirm whether messages and diagnostic texts from third-party components such as PLCs, Vision Systems, and	The Supplier remains responsible for the completeness and technical accuracy of all required translations. TNO will review the translated documentation, labels, HMI screens and alarm messages during

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		Drives must also be translated, and how any additional costs should be handled.	document review and FAT prior to delivery. Such review does not relieve the Supplier of responsibility for translation accuracy. The Dutch-language requirement applies to all texts visible to operators through the normal Machine interface, including operating screens, safety messages, alarms and operator-level diagnostic messages. This also applies where such texts originate from purchased sub-systems or third-party components but are displayed through the normal operator interface. Engineering tools, native drive or PLC diagnostic interfaces, and other service interfaces intended exclusively for qualified service personnel may remain in English, consistently with R-1000-230.
69.	8.1 - Subject-matter 'General' - 30	R-1000-055 - Please clarify the evaluation criteria for the noise level during operation.	The limit of 70 dB(A) applies to the A-weighted equivalent sound-pressure level during normal, steady-state operation of the Machine, with the auxiliary systems required for that operation running. Short-duration audible safety alarms are excluded from this limit. The Supplier shall propose the measurement positions, operating conditions, background-noise correction and verification method in accordance with an applicable machinery-acoustics standard. The proposed method shall be included in the FAT and SAT protocols and submitted to TNO for approval.
70.	8.1 - Subject-matter 'General' - 30	R-1000-065 - Please clarify the scope of the six-month pilot production support and whether any additional activities are required beyond the standard two-year warranty service.	The six-month pilot-production support required under R-1000-065 is application and process support and is separate from the Supplier's warranty obligations. It shall cover assistance with initial recipe setup, adjustment and optimisation of Machine parameters, execution of pilot and DOE runs, interpretation of process and product data, troubleshooting of process behaviour, operator coaching, and advice regarding the expected effect of Machine adjustments on process and product outputs.

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			Failures, defects, software errors and non-conformities of the supplied Equipment remain subject to the applicable warranty and contractual obligations. The six-month period shall start following successful SAT and handover. It does not require continuous on-site presence. The Tenderer shall describe the proposed combination of on-site and remote support, the number of included support days or hours, the relevant personnel and competencies, and the applicable response times as part of the Maintenance & Service Concept under P-8000-040.
71.	8.1 - Subject-matter 'General' - 30	R-1000-075 - To establish the lot traceability system, please provide the required lot identification information and corresponding data management items.	The requirement applies to all recipe and process-execution data generated by the Equipment, including timestamps, setpoints, measured values and alarms. Raw-material identification, lot tracking and material genealogy are outside the required scope. However, quantities added and operator confirmations recorded as part of recipe execution shall be retained in the corresponding batch record.
72.	8.1 - Subject-matter 'General' - 30	R-1000-115 - Due to the time differences, it may be difficult for us to consistently provide remote support within 1 hour during the specified support hours. Could you please confirm whether this response time requirement is open to discussion and may be adjusted by mutual agreement?	The one-hour response time shall be understood as acknowledgement by a suitably qualified support representative and commencement of remote assessment during the specified support hours. It does not require complete resolution of the issue within one hour. The requirement remains applicable irrespective of the Supplier's location. The Tenderer may use an appropriate regional service organisation, local representative or on-call support arrangement to meet it. The proposed support structure and escalation process shall be described in the Maintenance & Service Concept.
73.	8.1 - Subject-matter 'General' - 30	R-1000-175 - The Slitter will be equipped with a brush-type edge cleaning device and a dedicated dust collection system. While we will aim to minimize burr formation, consistently guaranteeing a maximum burr height of $\leq 15 \mu\text{m}$ may be challenging due to process and equipment limitations.	The maximum burr-height requirement of $\leq 15 \mu\text{m}$ remains applicable under the agreed reference-material and qualified-process conditions used for acceptance testing. A general replacement of this requirement with $\leq 20 \mu\text{m}$ is not accepted.

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		Would TNO consider accepting a maximum allowable burr height of $\leq 20 \mu\text{m}$ instead of $\leq 15 \mu\text{m}$?	TNO recognises that the achievable burr height may depend on the foil, coating formulation, coating condition, electrode thickness and slitting parameters. As this is an R&D line, compliance is not expected to be guaranteed for every future experimental material. The Supplier shall define the applicable material and process envelope, recommend suitable knife and process settings, and demonstrate compliance during FAT or SAT using the agreed reference material. Performance outside the qualified envelope may be assessed separately for the relevant R&D application.
74.	8.1 - Subject-matter 'General' - 30	R-1000-235 / R-1300-160 - Please clarify whether this system is included in the base scope or should be quoted as an option according to R-1000-235. Based on our experience, roll heating and active material surface preheating are generally applied to the Cathode process and are not commonly used for Anode processes using Cu foil. Please therefore clarify the purpose and necessity of this function for the Anode process, including the target temperature range and applicable operating conditions, if required.	The heating or active-material surface-preheating system specified in R-1300-160 is optional and does not form part of the mandatory base scope. It shall be separately itemised and quoted in accordance with R-1000-235. The purpose of this option is to provide additional R&D flexibility for future recipes and material systems. No mandatory target temperature range or web speed is prescribed for this option. The Tenderer shall propose and justify the technically appropriate temperature range, heating method, control accuracy, heating uniformity and compatible web-speed range.
75.	8.2 - Subject-matter 'Slurry Mixing' - 40	R-1100-035 - Please clarify the measurement location and verification conditions for the $\pm 1^\circ\text{C}$ temperature stability requirement. Please confirm whether the requirement applies to the jacket temperature or slurry bulk temperature, and specify the reference conditions for verification.	The $\pm 1^\circ\text{C}$ requirement in R-1100-035 applies to the bulk slurry temperature, measured using a calibrated product-contact temperature probe. Jacket-fluid temperature or external vessel-wall temperature alone is not sufficient for acceptance. The requirement shall be verified after temperature stabilisation under agreed reference conditions, including a defined reference medium or representative slurry, fill level, mixing speed and setpoint. Verification should cover at least the minimum and nominal working volumes. Short transient deviations during defined high-shear or kneading steps may be accepted where heat generation makes continuous $\pm 1^\circ\text{C}$ control impracticable. The Tenderer shall state the expected maximum transient deviation and recovery time. The slurry shall return to and subsequently

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			remain within $\pm 1^{\circ}\text{C}$ of the setpoint after the relevant transient process phase. Temperature uniformity across the batch shall be demonstrated during FAT or SAT using an agreed temperature-mapping method.
76.	8.2 - Subject-matter 'Slurry Mixing' - 40	R-1100-110 - Please clarify the volume to be measured and the meaning of the required 0.01 L accuracy. Please also confirm whether the measurement should be based on a flow meter, tank level, or mass/density calculation.	The primary quantity used for recipe execution and batch control shall be mass. The required volume functionality relates to monitoring or controlling the actual quantity of slurry transferred from the Mixer or Transfer/Storage Tank towards the downstream process. The value of 0.01 L shall be understood as display and recording resolution, rather than absolute measurement accuracy. The proposed minimum process accuracy for transferred volume is $\pm 1\%$ of the measured quantity or better. A flow meter is acceptable but is not the only permitted measurement principle. An equivalent solution based on mass measurement and validated slurry density may also be proposed. The Tenderer shall state the measurement principle, operating range, resolution, achievable accuracy and any limitations related to viscosity, entrained gas or slurry composition. R-1100-110 should be amended accordingly to distinguish measurement resolution from measurement accuracy.
77.	8.3 - Subject-matter 'Coater' - 41	R-1200-025 - Stable coating performance at the minimum viscosity of 50 mPa·s may be challenging when using a single slot-die across the entire viscosity range. Therefore, dedicated slot-dies for low- and high-viscosity applications are recommended to maintain consistent coating quality. Could you please confirm whether the use of dedicated slot-dies for different viscosity ranges may be considered and agreed upon?	Yes. Dedicated slot-dies or interchangeable slot-die components for different viscosity ranges are acceptable where this is necessary to achieve stable coating performance across the complete specified range. The Supplier shall define the number and configuration of slot-dies required, the applicable viscosity range for each configuration, and the associated changeover, adjustment and cleaning procedure. All configurations necessary to meet the mandatory viscosity range of R-1200-025 shall be included in the base scope.

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			As this is an R&D line, the design shall allow practical changeover between different material systems and shall not be limited to one narrowly defined production recipe.
78.	8.3 - Subject-matter 'Coater' - 41	R-1200-030/R-1300-010/R-1400-015 - Please clarify the applicable coating/electrode thickness criteria. In particular, please confirm whether the minimum Anode Coater coating thickness is 20 µm or 40 µm, whether foil thickness is included, and whether the values refer to single- or double-sided coating.	Coating-thickness values shall exclude the substrate foil thickness unless explicitly stated otherwise. The required ranges shall be interpreted as follows: • Anode Coater: dry coating thickness of 40–200 µm per coated side; • Anode Calender and both Slitters: capability to handle coating thicknesses of 20–200 µm per coated side, allowing the processing of externally supplied or experimental thinner electrodes; • total electrode thickness: substrate-foil thickness plus the coating thickness on one or both sides. The mechanical clearance and measurement ranges of downstream Equipment shall therefore accommodate the resulting total electrode thickness. For a double-sided electrode at the maximum specified coating thickness, this means the substrate foil plus 2 × 200 µm coating. R-1300-015 and R-1400-015 should be revised to remove the inconsistent use of “total” and clearly state the applicable per-side coating basis.
79.	8.3 - Subject-matter 'Coater' - 41	R-1200-095 - Please clarify the required measurement principle for the Coating Weight Measurement System. Please confirm whether a Beta Gauge is mandatory or whether an X-ray system is acceptable as an equivalent solution. If a Beta Gauge is required, please also clarify the responsibility and cost for radiation-related licensing.	The measurement principle is not prescribed, provided that all functional and performance requirements of R-1200-095 are met. An X-ray transmission system is acceptable as an equivalent solution. If the Tenderer proposes a beta-transmission system using a sealed radioactive source, the Tender shall include the complete radiation-safety concept, shielding, source and system documentation, installation and commissioning support, required training, inspection and maintenance concept, and arrangements for end-of-life return of the source. The Tenderer shall clearly identify any registration, licence or other statutory obligation that can legally be performed only by TNO as the site

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			operator. All Equipment-, source- and Supplier-related costs shall be included in the Tender price. A non-radioactive-source solution will be preferred where it provides equivalent technical performance and reliability.
80.	8.3 - Subject-matter 'Coater' - 41	R-1200-115 - Please clarify the required method for double-sided coating, i.e. single-pass Tandem coating or two-pass coating using the same Coating Head. Please also confirm whether the Anode Coater is required to process Al Foil and Cathode Slurry.	The mandatory configuration shall achieve double-sided coating through two consecutive passes using the same coating head and dryer. A tandem arrangement with a second coating head and additional dryer section is not required. Such a configuration may be offered as an optional alternative, provided that the footprint requirement is met. The reference to Al foil in R-1200-115 is not part of the mandatory Anode Coater scope. The base scope covers water-based anode coating on Cu foil. Cathode-slurry coating and use of the same slurry supply system for cathode materials are not required. R-1200-115 should therefore be revised to refer to Cu foil only. Optional capability to process Al foil may be separately described and quoted.
81.	8.1 - Subject-matter 'General' - 30	R-1000-060 How is the cooling medium for the mixer or transfer tank supplied? Is there a central cooling/heating medium network to which the system can be connected, or is a dedicated supply unit required? If a cooling/heating medium network is available, please provide the technical data such as flow temperature, pressure, etc.	No central cooling or heating medium network is available. A dedicated standalone temperature-control unit providing both cooling and heating shall be included in the Tender quotation. The unit shall be appropriately sized for the Mixer and Transfer/Storage Tank and shall meet the temperature-control requirements of R-1100-035. The Supplier shall specify the proposed temperature-control medium, heating and cooling capacity, operating-temperature range, flow and pressure.
82.	8.1 - Subject-matter 'General' - 30	R-1000-250 The machine must be fitted with a robust safety door system with electromagnetic locks, whereby the door leaves must ensure mechanical strength and operator safety whilst providing the widest possible field of view for process monitoring, provided the process environment permits this. The glass must be capable of being cleaned with IPA	The safety-interlocking requirement applies to the Slurry Mixing process. The Mixer lid shall not be openable while the rotor is in motion, and rotor operation shall not be possible unless the lid is closed and secured. The lid shall remain locked until the rotor has reached a complete standstill and any relevant pressure or vacuum condition has been safely equalised.

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		without causing chemical damage. -> Does this also apply to mixing process 8.2?	A process-viewing window shall be provided where technically feasible and permitted by the process conditions. Any viewing window provided shall be resistant to cleaning with IPA.
83.	8.2 - Subject-matter 'Slurry Mixing' - 40	R-1000-075 All plant and machinery must ensure complete traceability of batch and process data, including timestamps, setpoints, measured values and alarms. -> Does this only apply to the recipe data for the mixer? Or does it also apply to raw material traceability?	The requirement applies to all recipe and process-execution data generated by the Equipment, including timestamps, setpoints, measured values and alarms. Raw-material identification, lot tracking and material genealogy are outside the required scope. However, quantities added and operator confirmations recorded as part of recipe execution shall be retained in the corresponding batch record.
84.	1.3 - Purpose of the Tender - 7	Do we need to include conditioning in our offer? The handover point and the system's airtightness must be precisely defined.	The facility will provide dry air at the agreed Machine inlet connection. The Supplier shall include the Machine-side enclosure, internal dry-air distribution, circulation, filtration, monitoring provisions and controls required to achieve the specified micro-environment. The handover point shall be the dedicated dry-air inlet connection of each applicable Machine. The Supplier shall define the required inlet dew point, flow, pressure and connection specification. The Supplier shall also define the enclosure boundary and sealing concept and shall demonstrate compliance with the specified dew-point and airtightness requirements during SAT. Conditioning of the complete installation room is not included in the Equipment scope and shall not be relied upon to meet the Machine-level requirements.
85.	8.1 - Subject-matter 'General' - 30	R-1000-015: Sensors for monitoring conditions can only be included in the scope of delivery if they are precisely defined. The system is not a self-contained cleanroom, but it can be installed in a cleanroom or dry room.	R-1000-015 requires designated provisions for the installation of a dew-point sensor and particle counter rather than prescribing specific sensor manufacturers or models. The Tenderer shall define suitable measurement locations, ranges, mounting arrangements and electrical or data interfaces required to monitor and verify the specified micro-environment. Any instrumentation required specifically for FAT or SAT verification shall be included by the Supplier.

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			The surrounding room shall not be relied upon to provide the specified process conditions. Except for the exclusions expressly stated in R-1000-015, the required micro-environment shall be maintained by the Machine enclosure using the facility dry-air connection.
86.	8.3 - Subject-matter 'Coater' - 41	P-8000-025: are there any preferred suppliers	No preferred supplier is prescribed for the optional IR or near-IR boost module. The Tenderer may select a technically suitable solution and shall describe its operating range, controllability, uniformity, integration with the Coater and compatibility with the intended R&D applications.
87.	8.3 - Subject-matter 'Coater' - 41	P-8000-030: are there any preferred suppliers for the density measurement. Can you explain the entry point?	No preferred supplier or mandatory measurement technology is prescribed. As this is an R&D line intended for different material systems, the Tenderer shall propose and justify a suitable measurement principle and installation location. The proposal shall explain which measured inputs are used to determine or estimate coating density, the achievable accuracy and resolution, and how the measurement is integrated into the automatic feedback function. Measurement after drying and before rewinding or calendaring is preferred where technically appropriate.
88.	8.3 - Subject-matter 'Coater' - 41	P-8000-035: any preferred supplier?	No preferred supplier is prescribed. The Tenderer may propose any suitable inline thickness-measurement technology, provided that it meets the specified performance requirements and can be reliably integrated with the Calender control system. The proposed measurement principle, accuracy, repeatability, calibration method and control interface shall be described in the Tender.
89.	6.1.2 - Sub-award criterion: Quality (QY) - 26	P-8000-030: Do we have to adjust the lip or can we also adjustment the amount of slurry. Like controll the slurry feeding?	The preferred functionality is automatic correction based on the inline measurement signal. The specific control actuator is not prescribed. The feedback may act on the lip gap, slurry feed rate or a coordinated combination of process parameters, provided that the Tenderer

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			demonstrates that the proposed control strategy can maintain the required coating output and stability across the intended R&D operating range. The proposed control philosophy and its limitations shall be clearly described.
90.	8.3 - Subject-matter 'Coater' - 41	R-1200-060: Any preferred supplier?	No preferred supplier is prescribed for the temperature sensors. The Supplier shall select sensors suitable for the required temperature range, accuracy, response time and operating environment. The proposed arrangement shall include at least the measurement points specified in R-1200-060 and shall be suitable for verification during FAT and SAT.
91.	8.3 - Subject-matter 'Coater' - 41	R-1200-025: Is the anode waterbased or are there any solvents? So the coater is not designed according to atex regulation. If there are any solvents which one and how much.	The mandatory Anode Coater scope is based on aqueous anode slurry systems, including graphite, graphite-silicon and high-silicon formulations. No flammable organic solvent is required for the base configuration. As the Equipment is intended for R&D use, the exact future formulations and additives cannot be fully specified at this stage. The Supplier's risk assessment shall nevertheless consider the reasonably foreseeable hazards associated with powder handling and hydrogen generation from aqueous silicon-containing formulations. Any capability for processing solvent-based formulations may be proposed separately as an option, together with the resulting safety, ATEX, exhaust and solvent-handling requirements.
92.	8.3 - Subject-matter 'Coater' - 41	R-1200-095: Any preferred Supplier? How many measuring points would you prefer, substrate, wet, dry?	No preferred supplier or mandatory measurement principle is prescribed. The mandatory configuration shall include measurement of the dry coated electrode after the dryer, before rewinding or subsequent processing. The measurement system shall provide representative coverage across the coated width and meet the functional requirements of R-1200-095. Additional measurement of the bare substrate or wet coating may be

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			proposed as an option where it provides useful process information for R&D work. The Tenderer shall define and justify the proposed measurement locations and coverage.
93.	8.3 - Subject-matter 'Coater' - 41	R-1200-105: Are there any specifications according OPC-UA and MES?	No project-specific MES platform or fixed OPC-UA information model has been selected at this stage. The Equipment shall expose the process parameters specified in the Procurement Documents through a standard OPC-UA interface. The Tenderer shall provide the proposed namespace and tag list, including data types, engineering units, timestamps, quality status, update rates, alarms, Machine states, recipe identifiers and relevant batch or roll identifiers. The interface shall operate locally without dependency on an external or Supplier-hosted server. The final signal mapping and integration details will be agreed during the design phase.
94.	8.4 - Subject-matter 'Calendar' - 42	R 1000-200: What kind of machine encapsulation is desired ? Full surrounding like a green house ? Or do you provide a dust free room with airing system?	The Calender shall include its own enclosed micro-environment in accordance with R-1000-015 and R-1000-200. TNO will provide the facility dry-air connection, but the surrounding room shall not be assumed to provide the specified dew point, cleanliness or containment conditions. A separate walk-in enclosure around the complete working area is not prescribed. The Supplier shall define an appropriate enclosure boundary, sealing arrangement and air-distribution concept that meet the specified environmental performance while maintaining safe and ergonomic access for operation, roll handling and maintenance.
95.	8.4 - Subject-matter 'Calendar' - 42	R-1000-215 Software updates. They are not free of charge for the complete live time of calender.	Confirmed. Free-of-charge software updates during the supported lifetime of the Machine shall cover error corrections, cybersecurity patches, compatibility updates and maintenance improvements within the functionality delivered and accepted under the Contract.

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			Software and HMI improvements requested during FAT, commissioning, SAT and the warranty period shall be provided free of charge where they remain within the agreed functional scope. New functions, modules or changes outside that scope may be handled through a Change Order. For the purpose of R-1000-215, the supported Machine lifetime shall be understood as a minimum period of 10 years following SAT, aligned with the spare-parts availability period specified in R-1000-120.
96.	8.4 - Subject-matter 'Calendar' - 42	Crane above calender: do you have overhead crane installed (for take out calender rolls) resp. will a crane installed by TNO?	There is no overhead crane foreseen in the clean and dry room. Small hand operated electrical forklift will be used to transport rolls
97.	1.2.1 - Procurement department - 6	R-1000-290 Payment condition: A bank guarantee cannot exceed the amount of downpayment. Requested payment conditions: 40% DP against BG, 50% at the time of shipment, 10% after SAT.	TNO maintains the payment conditions set out in the Procurement Documents, including Requirement R-1000-290. A single bank guarantee covering 40% of the total Contract Price remains required. For the avoidance of doubt, the provision in R-1000-290 requiring the bank guarantee to remain valid until approval of the SAT is amended accordingly.
98.	8.4 - Subject-matter 'Calendar' - 42	R-1300-050 Winder: Which automatic functions are requested? Loading and unloading will be manual, feeding of electrode will be manual. Splicing and cutting will be manual. Only Edge guiding of web will be automatic controlled.	"Automatic unwinder and rewinder" in R-1300-050 refers to automatic web transport, speed control, closed-loop tension control and edge guiding during operation. Manual loading and unloading of rolls, initial web threading, splicing and cutting are acceptable for this R&D line. The Supplier shall provide suitable controls and procedures for safe setup, threading, roll change and restart.
99.	8.4 - Subject-matter 'Calendar' - 42	R 1300-100 Available space of 6mx3,5 m is probably too tight for the requested calender. Can you provide 8m x 3,5m at least?	The maximum footprint of 6.0 × 3.5 m specified in R-1300-100 remains applicable to the complete Calendar system, including its required peripheral and service components. An increase to 8.0 × 3.5 m cannot be assumed.

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			The Supplier shall develop a layout that meets the specified footprint while maintaining safe and ergonomic access for operation, maintenance and material handling. If the requirement cannot be met, the Tenderer shall clearly identify and justify the proposed deviation in the Tender.
100.	8.4 - Subject-matter 'Calendar' - 42	Please inform about pattern of coating (continuous or intermitted, one lane of max.220mm or several lanes ?	The Calender shall be capable of processing continuously coated electrodes within the specified width and thickness ranges. The mandatory base scope requires processing of one electrode web with an input width of up to 220 mm. Processing of several parallel coating lanes is not required.
101.	8.4 - Subject-matter 'Calendar' - 42	R-1300-155 Do you like a spot measuring on one point of the electrode or do you like a sensor which oszilatte across the width of the electrode web (left-to right and back)	The inline thickness-measurement system shall provide a representative thickness profile across the usable electrode width. A traversing or oscillating sensor is preferred because it supports evaluation of cross-web thickness uniformity during R&D work. An alternative measurement arrangement may be proposed if the Supplier demonstrates equivalent cross-web coverage, accuracy and repeatability. A single fixed-point measurement without representative cross-web information is not sufficient.
102.	8.4 - Subject-matter 'Calendar' - 42	R-1300-055 Tension stability from infeed to outfeed shall be within ± 2 %. TBD.	R-1300-055 shall be understood as tension stability within $\pm 2\%$ of the active setpoint or ± 0.5 N, whichever is greater, during steady-state operation. Threading, start-up, stopping and emergency transients are excluded. The Tenderer shall state the available tension range, measurement accuracy and proposed FAT/SAT verification method.
103.	8.4 - Subject-matter 'Calendar' - 42	R 1000-040 and R-1000-045 to be discussed. (Availability).	The requirements remain applicable. Availability and yield shall be assessed under agreed pilot-line conditions using a qualified reference recipe, excluding planned stops, recipe changes and start-up material. The Tenderer shall propose a clear calculation and verification method for approval before FAT/SAT.

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104.	8.4 - Subject-matter 'Calendar' - 42	R-1000-055 Noise of Blowers can be higher as 70 dba!	The 70 dB(A) limit applies to the complete supplied equipment, including blowers and other required auxiliaries, at the operator positions during normal steady-state operation. The Tenderer shall provide any acoustic attenuation necessary to meet this requirement and propose the applicable measurement method. Safety alarms are excluded.
105.	2.2.6 - Language - 11	Documentation and HMI will be English. Is German language as 2nd language for the HMI acceptable?	No. Please refer to Requirements R-1000-035 and R-1000-230 of the Programme of Requirements. The HMI shall be available in both English and Dutch. German may be offered as an additional language but cannot replace the mandatory Dutch language requirement.
106.	8.4 - Subject-matter 'Calendar' - 42	R-1000-135 Is ATEX a must for the calendar ?	ATEX compliance is not automatically required for the complete calendar. The Tenderer shall assess the risks associated with electrode dust, extraction and potential ignition sources. ATEX-compliant equipment shall be provided wherever the resulting equipment-specific risk assessment and zoning require it.
107.	8.4 - Subject-matter 'Calendar' - 42	R-1000-110 Each cable, pipe, sensor, servo, piston, or other Machine component shall have its own IP address? Please clarify.	"IP address" in R-1000-110 shall be understood as a unique equipment identifier or tag, not as a network IP address for every cable, pipe or mechanical component. Network addresses are required only for network-connected devices. All relevant components shall be clearly labelled, and HMI alarms shall identify the affected component using the corresponding tag or network address, as applicable.
108.	1.6 - Maintenance/services Contract - 8	I don't understand, if the maintenance contract is already included in the price during the 24 months warranty period, what is it that we have to maintain during this same period.	The maintenance referred to in TP1 is the maintenance required for the complete Electrode Production Pilot Line during the 24-month warranty period. It includes the preventive, predictive and corrective maintenance support necessary to keep the Equipment safe, reliable and operational, in accordance with the Supplier's Maintenance & Service Concept. The warranty covers the rectification of defects attributable to the supplied Equipment. Maintenance covers the servicing and support required to preserve the condition, performance and availability of the Equipment. Both must be included in the TP1 price.

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			TP2 is a separate one-year maintenance and services contract that commences after the 24-month warranty period and may subsequently be renewed annually.
109.	8.1 - Subject-matter 'General' - 30	In point R-1000-015. Do we need to encapsulate the machine, or also the working areas around the machine, especially the unwinder and rewinder section.	The controlled micro-environment shall enclose the Machine process area and the web path necessary to maintain the specified cleanliness and dew point. General operator working areas around the Machine do not need to be enclosed. The Tenderer shall define the appropriate enclosure boundary, including the unwinder and rewinder areas where necessary for process quality.
110.	8.1 - Subject-matter 'General' - 30	R-1000-290. Instead of a bank warranty for the 40% of the price when TNO has paid 20%, we prefer to do two bank warranties for each 20%, and they both should expire at the arrival of equipment, not until end of SAT.	Please see the answer under 'Question No. 97'.
111.	8.1 - Subject-matter 'General' - 30	R-1000-295. We do not have a certificate indicating the origin of the steel or iron incorporated in our machines. We can ask our suppliers. But we have never done it before.	The Tenderer is not required to have the requested documentation available at the time of submission of the Tender. However, the successful Tenderer must be able to provide the required country-of-origin documentation upon delivery of the Equipment. The purpose of Requirement R-1000-295 is to enable TNO to verify compliance with the applicable EU sanctions concerning iron and steel products of Russian origin. The successful Tenderer is therefore expected to obtain the necessary information from its suppliers and supply chain. A Mill Test Certificate is not the only acceptable form of evidence. An equivalent certificate or other verifiable supply-chain documentation may also be submitted, provided that it clearly demonstrates the country of origin of the relevant iron or steel products incorporated in the Equipment and enables TNO to verify compliance with the applicable sanctions requirements.

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			For clarification, this documentation requirement applies to iron and steel products incorporated in the Equipment that fall within the scope of the applicable EU sanctions legislation. TNO does not require a separate Mill Test Certificate for every individual standard component, provided that adequate, verifiable and traceable alternative evidence of origin is available for the relevant products. The Tenderer's statement that it has not previously requested such documentation does not waive this requirement. The successful Tenderer must establish an appropriate process with its suppliers to ensure that the required evidence can be provided upon delivery. This requirement is already stated in Requirement R-1000-295 of the Programme of Requirements. In addition, Section 5.2.4, "Legal suitability to perform an assignment", of the Procurement Guide states that, where products falling under Annex XVII of Council Regulation (EU) No 833/2014 are included in the scope of supply, the Tenderer must demonstrate the non-Russian origin of these materials by means of an MTC or an equivalent certificate.
112.	1.5 - Facility readiness Timeline - 7	Section 1.5 states that facility handover is expected by mid-June without identifying the year, while Annex C02 refers to mid-June 2027. Please confirm the binding facility-readiness date, delivery date, installation window, final address and relief available if the facility is not ready.	Mechanical Completion of the facility is currently estimated for mid-August 2027. The Goods shall be delivered no earlier than calendar week 35 of 2027 to Automotive Campus 80, 5708 JZ Helmond, the Netherlands. The detailed project schedule will be coordinated with the awarded Contractor. These dates are current planning assumptions and are not guaranteed or binding dates. This date represents TNO's current planning assumption and is not a guaranteed or binding facility-readiness date. TNO cannot currently provide a definitive delivery date or installation window. Delivery and installation will be coordinated with the awarded Contractor in accordance with Section 1.5 of the Procurement Guide. The delivery and installation address is: <i>TNO, Automotive Campus 80, 5708 JZ Helmond, The Netherlands</i>

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			As already provided in Section 1.5, Tenderers must allow sufficient flexibility for possible changes in the facility schedule. If the facility is not ready when the Equipment becomes available, the Supplier shall arrange temporary storage at no additional cost to TNO until installation is possible. TNO cannot confirm any additional relief or compensation in advance. Any actual delay and its contractual consequences will be assessed in accordance with the Contract and the applicable Procurement Documents.
113.	2.2.10 - Reliance on Third Party resources? - 12	Section 2.2.10 instructs tenderers to use Annex A03 for Third-Party reference projects, but Annex A03 is the Price Sheet and Annex A02 is the reference-project format. Please confirm that Annex A02 must be used for all own and Third-Party references.	Confirmed. The reference to Annex A03 in Section 2.2.10 of the Procurement Guide is incorrect and must be read as a reference to Annex A02.
114.	2.2.17 - Period of validity - 13	Please confirm the controlling initial validity period and its exact expiry date. Please also clarify whether the automatic extension until final contract conclusion is subject to any maximum duration or further consent by the Tenderer, and whether tender prices, delivery dates, subcontractor commitments and bank-guarantee quotations must remain unchanged throughout every such extension.	The initial Tender validity period is 120 calendar days from the closing date for submission, expiring on 29 December 2026. If necessary, TNO may request a written extension for a specified period, subject to the Tenderer's written consent. During any agreed extension, the Tender, including prices and contractual commitments, must remain unchanged. Project dates may be adjusted where required by TNO's facility-readiness planning. The bank guarantee is not required during the Tender validity period. It must only be provided following signature of the Contract and issuance of the administrative Purchase Order, and before payment of the relevant advance instalment. Any costs associated with the required bank guarantee must remain included in the tendered price.
115.	2.2.2 - Formats - 10	The annexes state that the first/instruction page should not be enclosed, while the Procurement Guide prohibits changes to the prescribed formats. Please identify precisely which pages must be removed and confirm that their removal will not be treated as an impermissible template change. For Annex A02, please also confirm what should be entered under "What tender procedure is used by	Tenderers must remove only the first cover/instruction page of each Annex A02 reference-project form and of Annex A05, as these pages expressly state: "Tenderer should not enclose this page upon submission of the Tender." Their removal is required and will not be regarded as an impermissible change to the prescribed formats. No other pages or worksheets may be removed unless expressly instructed by TNO.

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		Contractor?" where the cited reference was a private-sector sale or was not awarded through a procurement procedure.	In Annex A02, if the reference concerns a private-sector sale or was not awarded through a procurement procedure, the Tenderer may enter "Not applicable, private-sector contract" or "Not applicable, no procurement procedure", as applicable. A brief description of how the reference contract was concluded may be added. All other requested reference information must be completed.
116.	2.2.4 - Precedence of Procurement Documents - 10	Please confirm that the latest Information Notice and the 4 August 2026 rectification prevail over inconsistent dates and language fields elsewhere, and specify the precedence between a rectified announcement and the Procurement Guide where no Information Notice has yet resolved the inconsistency.	As stated in Section 2.2.4, the latest Information Notice prevails over inconsistent dates or language fields elsewhere. Where an inconsistency has not been resolved by an Information Notice, the Procurement Guide and its Annexes prevail over the Announcement, including any rectification thereof.
117.	8.1 - Subject-matter 'General' - 30	The 11 August EF16 notice refers to TenderNed publication 436001, following publications 433845 and 435527. Please confirm that 436001 contains the complete controlling procurement pack and provide a list of every document added, replaced or amended across the three publications.	On 11 August, only the dates in Section 2.1 of the Procurement Guide were amended. No documents were added, replaced or otherwise amended on that day.
118.	7.2 - Contract subject to condition precedent - 29	The payment schedule mixes percentages stated excluding VAT and including VAT. Please issue a corrected schedule in which the calculation basis for each 20/20/40/20 milestone is stated consistently and totals 100% of the agreed price excluding VAT, with VAT added to invoices as legally applicable.	Under Section 7.2 of Annex C02, each milestone percentage is calculated on the agreed price for the Goods excluding VAT: • 20% at order, subject to receipt of the required bank guarantee; • 20% after TNO's approval of the FAT; • 40% after delivery and successful visual inspection; • 20% after installation, commissioning and TNO's approval of the SAT. These instalments total 100% of the agreed price excluding VAT. VAT shall be added to each invoice only where and to the extent legally applicable. Section 7.2 of Annex C02 will be corrected accordingly.
119.	- Annex A04 - 46	Please provide recipe-specific process windows for line/total pressure, roll gap, roll temperature, speed, tension, and target compression, density, and porosity.	Recipe-specific process windows cannot be defined at this stage because the line is intended for R&D and future materials and formulations are not yet known. The Equipment shall cover the parameter ranges specified in Annex A04. The Tenderer shall define the safe and controllable operating

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			envelope and propose suitable initial process windows for the reference materials used during commissioning and acceptance testing. Final recipe-specific settings will be developed during R&D operation.
120.	- Annex A04 - 46	Please define CD measurement points, MD length, edge exclusion, gauge R&R, and statistical acceptance criteria for post-calender thickness uniformity.	The detailed CD/MD measurement and acceptance methodology shall be proposed by the Tenderer and agreed before FAT/SAT. It shall include representative measurements across the usable web width, defined edge exclusions, steady-state MD sampling, calibrated measurement equipment, an appropriate measurement-system analysis and a clear pass/fail rule accounting for measurement uncertainty.
121.	- Annex A04 - 46	The $\pm 2 \mu\text{m}$ thickness tolerance is a critical performance guarantee item. Acceptance conditions, including the reference thickness, cross-web measurement locations, sampling method, recipe/raw material conditions, and measurement system MSA, should be agreed in advance.	The $\pm 2 \mu\text{m}$ requirement applies to post-calender total electrode thickness relative to the agreed target across the usable coated width, under steady-state operation with an agreed reference material supplied by TNO. Start-up sections, splices, uncoated areas and agreed edge exclusions shall not be included. The Tenderer shall propose the sampling plan, measurement-system analysis and detailed FAT/SAT acceptance protocol. The guarantee is not expected to apply universally to every future R&D formulation.
122.	- Annex A04 - 46	The reference value for $\pm 1\%$ pressure stability, measurement sensor accuracy, operating conditions, and verification duration should be clearly defined.	The $\pm 1\%$ stability requirement refers to the active roll-pressure or nip-force setpoint, rather than the full measurement range, during steady-state operation after process stabilisation. The Tenderer shall define the required sensor accuracy, calibration method, sampling rate and representative verification duration. Start-up, shutdown and emergency transients may be excluded.
123.	- Annex A04 - 46	As roll parallelism of $\leq 1 \mu\text{m}$ is technically challenging in terms of manufacturing and measurement, the measurement method, effective length, temperature conditions, and supplier's capability to guarantee this requirement should be confirmed in advance.	The functional objective is a uniform and controllable nip across the usable web width. The Tenderer shall propose the technically appropriate and verifiable combination of roll parallelism, cylindricity, runout, crown or deflection compensation and loaded-nip uniformity required to achieve the specified post-calender thickness tolerance. If direct verification of $\leq 1 \mu\text{m}$ geometric parallelism is not technically meaningful for the proposed design, an equivalent measurable guarantee may be proposed with appropriate justification.

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124.	- Annex A04 - 46	Please provide daily/weekly targets in electrode length, area, roll count, and cell-equivalent output, together with product mix and expected run time by recipe.	No fixed daily or weekly production targets, product mix or cell-equivalent output are defined because this is an R&D pilot line. Required Machine capabilities, batch sizes and web speeds are specified in Annex A04. Acceptance shall demonstrate the specified technical capability under agreed reference conditions rather than a production-volume target.
125.	- Annex A04 - 46	Please provide the detailed environmental control criteria for the dry room and each machine micro-environment, including temperature, relative humidity, dew point, cleanliness, differential pressure, and allowable recovery time during operation and standby.	The required Machine micro-environment is defined in R-1000-015: dew point $\leq -40^{\circ}\text{C}$, cleanliness according to ISO 14644-1 Class 7 and leakage class L3 verified at ± 15 Pa. These requirements do not apply to the slurry mixer or the dryer zone of the coater. Dry air will be supplied through the designated facility interface. No separate relative-humidity requirement is specified, as dew point is the governing parameter. The Tenderer shall define the required airflow, operating pressure, sensor locations and recovery time necessary to maintain the specified conditions.
126.	- Annex A04 - 46	(1) Please clarify whether the micro-environment requirement is -40°C dew point and whether -50°C is only the material design condition. State the guaranteed value, design value, and test condition separately. (2) The required scope of material evidence and supplier certificates should be confirmed to demonstrate particle-shedding performance and suitability for low-humidity conditions of internal materials.	The governing micro-environment requirement is a dew point of $\leq -40^{\circ}\text{C}$. Any reference to -50°C shall not be interpreted as a separate operating or material-design requirement. Internal materials shall be suitable for repeated operation under the specified low-humidity and ISO Class 7 conditions. The Tenderer shall provide suitable supporting evidence, such as material declarations, technical datasheets, cleanroom-suitability information or relevant reference applications.
127.	- Annex A04 - 46	Can you provide the facility layout, including CAD, for the 12×3.5 m installation area, showing doors, columns, ceiling height, utility points, and maintenance removal routes?	See question 55 answer with concept layout of Clean and Dry room
128.	- Annex A04 - 46	Please provide the target cell format, chemistry by electrode polarity, cell capacity, N/P ratio, electrode width/length, coated and uncoated dimensions, and tab/notching geometry.	No single target cell format, cell capacity, N/P ratio or tab geometry is defined because the line will support different future R&D projects. The required electrode polarity, foil, coating and dimensional capabilities are those specified in Annex A04. The Tenderer shall design the Equipment for this stated operating envelope and clearly identify any technical limitations.

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129.	- Annex A04 - 46	Please provide recipe-specific targets and tolerances for coat weight, dry thickness, post-calender thickness, density, and porosity for anode and cathode.	Recipe-specific targets cannot be defined at this stage. The Equipment shall cover the coating and calendering ranges and tolerances specified in Annex A04. Electrode density and porosity are dependent on the material and formulation and therefore cannot be guaranteed as universal values for all future R&D chemistries. The Tenderer shall define the controllable equipment range and propose initial parameters for the reference materials used during commissioning.
130.	- Annex A04 - 46	FAT/SAT acceptance criteria should be established to define how the cleanliness and particle-emission performance of the enclosed structure will be verified.	The Tenderer shall propose a detailed FAT/SAT verification protocol. SAT shall include verification of the specified dew point, ISO 14644-1 Class 7 cleanliness and enclosure leakage performance under representative operating conditions. Particle measurements shall cover agreed locations and relevant operating states, including normal web movement and recovery following access. Measuring instruments shall be calibrated, and the sampling locations, test duration and acceptance rules shall be agreed before testing.
131.	- Annex A04 - 46	Please provide the coater maximum high-speed mode and the guaranteed coating width, coat-weight uniformity, drying capacity, and defect criteria at that speed.	The required guaranteed high-speed operating mode for the Anode Coater is 5 m/min; a higher speed may be offered. The supported coating width is nominally 160 mm and adjustable within approximately 100–200 mm. At 5 m/min, coating and drying performance shall be demonstrated using an agreed reference material supplied by TNO. As future R&D formulations are not yet known, no universal coat-weight uniformity, drying-capacity or defect guarantee can be defined for every chemistry. The Tenderer shall state the achievable performance, drying capacity, defect definitions and proposed verification method for the agreed reference conditions.
132.	- Annex A04 - 46	Must the four or more dryer zones and all auxiliaries fit within the total 12 m length? Please provide effective length per zone and allowable layout-adjustment range.	Yes. The complete Anode Coater, including the dryer with at least four zones and all peripheral and service components, shall fit within the total footprint of 12 × 3.5 m specified in R-1200-005. The Tenderer shall define the effective length of each dryer zone and provide a detailed layout. The dryer configuration shall be selected by the Tenderer to achieve the required drying performance within the available footprint.

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133.	- Annex A04 - 46	Please specify coating method, sequential single/double-side coating, coating width, edge/center registration basis, intermittent or continuous coating, and number of stripes.	The primary coating method shall be slot-die coating. The baseline configuration shall support continuous, single-stripe coating, with a nominal width of 160 mm adjustable within approximately 100–200 mm. Double-sided coating may be performed sequentially; simultaneous double-sided coating is not required. Intermittent or multi-stripe coating may be offered as an additional capability. The Tenderer shall propose the appropriate edge-registration and second-side alignment method.
134.	- Annex A04 - 46	Please define MD/CD coat-weight uniformity, measurement length/width, edge exclusion, statistical method such as mean, 3σ or Cpk, and tolerance.	No universal MD/CD coat-weight tolerance can be defined for all future R&D formulations. The Tenderer shall state the achievable coat-weight uniformity under agreed reference conditions and propose the measurement area, edge exclusions, sampling plan and statistical acceptance method. The method and acceptance criteria shall be agreed before FAT/SAT using representative material supplied by TNO.
135.	- Annex A04 - 46	Please provide residual moisture or solvent targets and test methods after drying, zone temperature, air velocity, exhaust, dew-point ranges, and maximum allowable foil temperature.	Residual moisture and drying conditions will depend on the formulation and cannot be specified universally for an R&D line. The dryer shall meet the requirements of Annex A04, including at least four independently controlled zones, a temperature range of 40–130°C and uniformity of $\pm 2^\circ\text{C}$ within each zone. The Tenderer shall define the airflow, exhaust requirements, allowable foil temperature and controllable drying envelope necessary to achieve appropriate drying quality for the specified material range.
136.	- Annex A04 - 46	The measurement locations, cross-web sampling method, and recipe/raw material conditions for the thickness range and $\pm 3\ \mu\text{m}$ uniformity should be clearly defined, and the process capability should be verified.	The $\pm 3\ \mu\text{m}$ requirement applies to dry electrode thickness under steady-state operation using an agreed reference material. The Tenderer shall propose the measurement locations, cross-web sampling method, MD sampling length, edge exclusions and measurement-system verification. Start-up sections, splices and uncoated areas may be excluded. As this is a pilot R&D line, no universal Cpk requirement is imposed; acceptance shall follow an agreed sampling and pass/fail protocol.
137.	- Annex A04 - 46	The sensor locations, measurement method, stabilization time, and calibration criteria for $\pm 2^\circ\text{C}$ temperature uniformity in each zone should be confirmed.	In accordance with R-1200-060, each dryer zone shall include at least three temperature measurement points across the web width: left, centre and right, in addition to heater-box and supply-air temperature

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			measurement. The Tenderer shall define the exact sensor locations, stabilisation time, calibration criteria and verification procedure required to demonstrate the $\pm 2^{\circ}\text{C}$ uniformity during FAT/SAT.
138.	- Annex A04 - 46	It should be confirmed whether the surface treatment module is mandatory or preferred, as well as the applicable recipe range. An additional module may have a significant impact on cost, design, and schedule.	The surface-treatment module required by R-1200-130 is optional and shall be proposed as an option outside the base scope. The Tenderer may propose a suitable technology, such as plasma, corona or wetting treatment, for the specified foils and water-based anode applications. The proposed technology, controllable operating range, material-related limitations, and any impact on equipment layout, utilities, cost and schedule shall be stated.
139.	- Annex A04 - 46	(1) Is supply and implementation of the MES application itself included in the evaluation scope? If yes, please provide the required functions, target systems, protocols, tag count, data cycle, and interface responsibilities. (2) The scope of MES integration, including the data list, transmission frequency, resolution, and feedback functions, should be clearly defined. Supporting evidence from previous implementation or demonstration should also be provided.	Supply and implementation of a separate MES application are not included in the required scope. Each Machine shall be MES-ready, support OPC-UA communication and provide independent local data storage. The Tenderer shall provide the equipment-side interface, data mapping and documentation required for future integration with a TNO MES. Broader integration and control capabilities may be described in accordance with P-8000-005.
140.	- Annex A04 - 46	Please provide the complete OPC-UA tag list, data type, unit, read/write access, update rate, timestamp synchronization, alarm/event structure, and communication load-test plan.	The OPC-UA tag list shall be developed and supplied by the Tenderer based on the final Machine design. It shall include relevant process values, setpoints, Machine states, alarms, batch identifiers and usage counters. The interface documentation shall identify data types, units, read/write permissions, update rates, timestamps and alarm structures. The Tenderer shall also propose an appropriate communication and load-verification test.
141.	- Annex A04 - 46	Please describe genealogy among batch, raw-material lot, slurry, mother roll, and slit roll, including roll/defect-map linkage, ID rules, and barcode/label requirements.	Automated raw-material lot genealogy is not required. The system shall retain recipe and process data using the applicable batch ID and shall support identification of slurry batches, mother rolls and resulting slit rolls where these identifiers are used by the Equipment. Vision-system defect records and applied defect labels shall be linked to the corresponding roll ID. Barcode scanning and automated raw-material genealogy are not required in the base scope.

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142.	- Annex A04 - 46	(1) Please confirm whether participant's tender and supply scope shall include the design, supply, and installation of facility utilities outside the equipment. If yes, please identify the battery limits for power, dry air, compressed air, nitrogen, vacuum, chilled water, exhaust, and piping. (2) Joint review by Quality and Equipment teams required. Measurement location/method, sensor accuracy, verification frequency, and FAT/SAT acceptance criteria for the - 40°C dew point and cleanliness requirements should be defined in advance.	Facility utility distribution outside the Equipment is not included in the Machine supply. The Tenderer shall define all equipment battery limits, connection points and required utility conditions. For the Machine micro-environment, FAT/SAT verification shall cover the requirements of R-1000-015. The Tenderer shall propose the measurement locations, calibrated instruments, stabilisation time and acceptance procedure for dew point, cleanliness and enclosure leakage.
143.	- Annex A04 - 46	Please confirm the supply and installation scope and battery limits for compressed air and chilled water, and provide chilled-water supply/return temperatures, pressure, flow, water quality, and maximum heat load.	Facility utilities will terminate at agreed Machine connection points. The Tenderer shall provide a complete battery-limit and utility schedule stating the required supply and return conditions, flow, pressure, water quality and maximum heat load. Where a dedicated temperature-control unit is required by the process, including for the slurry-mixing system, it shall be included in the Equipment scope. A standalone chiller as auxiliary for the Machine is required.
144.	- Annex A04 - 46	Please clarify whether the required integrated extraction means an on-machine dust collector, central extraction connection, adsorption tower, or a combination, and provide airflow, static pressure, filter class, emission limit, and explosion-protection requirements.	No central extraction system shall be assumed to be available. The supplied Equipment shall include local extraction at the relevant emission sources, together with a dedicated collector or filtration unit where required. An adsorption tower is not automatically required. The Tenderer shall define the necessary airflow, static pressure, filtration, discharge arrangement and explosion-protection measures based on the equipment risk assessment and the specified material envelope.
145.	- Annex A04 - 46	(1) Is a separate external dust collector or adsorption tower required for the slitter? If yes, please provide supply scope, installation location, airflow, static pressure, filtration, and emission requirements. (2) Quantitative criteria for dust collection performance, as well as requirements for dust collection and disposal management, should be confirmed.	The Slitter shall include integrated extraction at the knife and web areas in accordance with R-1400-100. The dust collector shall be installed locally outside the main enclosure but shall form part of the supplied and integrated system. A separate adsorption tower is not required for electrode dust. The Tenderer shall define the airflow, filtration performance, filter monitoring and safe contained method for dust and filter removal.

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146.	- Annex A04 - 46	Please provide applicable ATEX zone classification and basis, explosion-protected equipment, grounding/bonding, static monitoring, explosion venting/isolation, and housekeeping criteria.	No final site-wide ATEX zoning is available because the exact materials will depend on future R&D projects. The Tenderer shall perform an equipment-specific explosion-risk assessment using conservative, reasonably foreseeable assumptions for graphite, graphite-Si, high-Si and electrode dust. The Tenderer shall define any required zones, equipment categories, grounding, bonding, static-control, explosion-protection and housekeeping measures, together with the assumed material properties and operating limitations.
147.	- Annex A04 - 46	Please provide expected emissions by process, normal/maximum exhaust flow, waste types/quantities, filter replacement/disposal method, and TNO OBIC/participant responsibilities.	Process emissions and waste quantities cannot be specified precisely because recipes and operating schedules will vary. The Tenderer shall identify expected emission and waste streams, maximum exhaust requirements, filter consumption and collected-waste quantities based on the proposed design and declared operating envelope. The Equipment shall provide safe containment, collection and removal arrangements. TNO will provide the process materials and manage the resulting process waste at the installation site.
148.	- Annex A04 - 46	CE/ISO compliance is a mandatory requirement. The certification scope, responsible party, required documentation, and certification schedule should be confirmed. Non-compliance may have a significant impact on the project schedule and cost.	The Supplier or system integrator is responsible for CE conformity of the complete supplied Equipment under the EU legislation applicable when the Equipment is placed on the market. The scope shall include the machinery risk assessment, applicable standards, technical documentation, declarations, safety validation and operating instructions. Preliminary compliance documentation shall be reviewed before FAT, and final documentation shall be delivered before handover. Third-party certification shall be included only where legally required.
149.	- Annex A04 - 46	The applicable ATEX stations/zones and certification scope should be confirmed. If applicable, the certification body, required design changes, and potential impact on schedule and cost should be reviewed in advance.	ATEX requirements apply only to stations and areas identified by the Tenderer's equipment-specific explosion-risk assessment. Where applicable, the Tenderer shall provide correctly certified equipment, installation documentation and the required ignition-hazard assessment. Any required third-party involvement, design consequences or operating limitations shall be identified in the Tender.

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150.	- Annex A04 - 46	The reference edge, measurement location, operating speed, and verification method for EPC performance of ± 0.2 mm should be clearly defined, and the capability should be demonstrated during FAT/SAT.	EPC performance shall be referenced to the selected foil or electrode edge at the defined control point. The Tenderer shall specify the sensor location, downstream verification point and control method. Compliance with ± 0.2 mm shall be demonstrated at the nominal operating speed during a representative steady-state run using an independent calibrated measurement method. Threading, splices and start-up transients may be excluded.
151.	- Annex A04 - 46	(1) Is a beta-ray gauge permitted for inline coat-weight measurement? If permitted, please clarify responsibility for radiation licensing, shielding, source management, and disposal. Please also confirm whether non-radiation alternatives are acceptable. (2) Compliance with the measurement system requirements, including range, gap, speed, accuracy, response time, and spot size, should be verified through the supplier's datasheet and calibration records. Potential cost impact should also be reviewed.	A beta-ray gauge is not required. Non-radiation measurement technologies are acceptable and preferred, provided they meet the requirements of R-1200-095. If a beta-ray solution is proposed, the Tenderer shall clearly identify all shielding, licensing, source-control, inspection and end-of-life disposal requirements; its use will be subject to TNO approval. Compliance shall be supported by technical datasheets, calibration records and FAT/SAT verification.
152.	- Annex A04 - 46	Please provide minimum defect size, detection rate, false-call rate, inspected side, speed-dependent resolution, and labeling/mapping requirements for each coating-defect type.	The vision system shall detect the defect types listed in Annex A04 with a spatial resolution of $60 \times 60 \mu\text{m}$ or better and shall support defect marking. The Tenderer shall state the minimum detectable size, detection rate, false-call rate, inspected side or sides, speed-dependent performance and defect-mapping functionality for each defect type. Final validation criteria shall be agreed using representative samples, as defect visibility will depend on the coating and substrate.
153.	- Annex A04 - 46	Please provide test methods, instruments, sampling plans, MSA/gauge R&R, and calibration intervals for coat weight, thickness, width, burr, moisture, density, porosity, adhesion, and roughness.	The Tenderer shall define test methods, calibration and measurement-system analysis for all measurements included in the Equipment scope, such as inline coat weight, thickness, alignment and vision inspection. Reference offline methods required for FAT/SAT shall be agreed with TNO. Separate laboratory equipment for moisture, density, porosity, adhesion or roughness is not required unless explicitly included in Annex A04. Calibration intervals shall follow the instrument manufacturer's recommendations and the required measurement accuracy.

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154.	- Annex A04 - 46	The measurement location, method, operating speed conditions, measurement system accuracy, and FAT/SAT acceptance criteria for alignment accuracy should be clearly defined.	The Tenderer shall define the reference edge, measurement point and verification method appropriate to the proposed alignment-control system. Performance shall be demonstrated at the specified nominal speed during steady-state operation using an independent calibrated measurement system. The detailed sampling duration and FAT/SAT acceptance procedure shall be submitted for TNO approval.
155.	- Annex A04 - 46	Cleaning methods, approved cleaning agents, cleaning frequency, and verification criteria for preventing cross-contamination should be defined. The scope of Cleaning Verification for recipe changes should also be confirmed.	The baseline anode process uses water-based formulations, but exact future R&D materials are not yet known. The Tenderer shall specify compatible cleaning methods, recommended cleaning agents and procedures for the proposed Equipment. Changeover shall comply with the applicable Annex A04 requirements. Recipe-specific cleaning verification and any additional cross-contamination limits will be defined by TNO when the relevant materials are introduced.
156.	- Annex A04 - 46	Requirements for measurement data retention, resolution, raw data preservation, calibration, and MSA should be confirmed. Acceptance criteria for demonstrating measurement system performance should be agreed in advance.	Local Machine storage shall retain process parameters, quality data and control-system data for at least one week of continuous operation independently of network availability. Data shall be exportable in standard formats for longer-term storage and analysis. The Tenderer shall state the native data resolution, sampling rates and raw-data retention method and shall provide calibration and MSA documentation for the included measurement systems. Performance shall be demonstrated during FAT/SAT.
157.	- Annex A04 - 46	The $\pm 1 \mu\text{m}$ accuracy and $<0.1\%$ repeatability are critical measurement system specifications. Performance across the measurement range, Calibration/MSA requirements, reference standards, and FAT/SAT verification methods should be defined and agreed in advance.	The specified $\pm 1 \mu\text{m}$ accuracy and repeatability better than 0.1% shall be demonstrated over the relevant electrode working range, particularly $40\text{--}200 \mu\text{m}$. The Tenderer shall provide instrument datasheets and calibration records and propose FAT/SAT verification using traceable reference standards at several representative thicknesses. The measurement uncertainty and repeatability method shall be documented. Any limitation outside the relevant electrode range shall be clearly stated.
158.	- Annex A04 - 46	For the $60 \times 60 \mu\text{m}$ vision system performance, defect-specific detection capability, false-call/miss criteria, MSA requirements, and	The Tenderer shall define defect-specific detection capability, false-call and missed-detection criteria for the proposed $60 \times 60 \mu\text{m}$ vision system. FAT/SAT validation shall use mutually agreed representative or artificial

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		FAT/SAT validation samples should be defined and secured. Verification of the labeler interface should also be included.	defect samples. Because defect contrast depends on the material and coating, universal detection performance for every future R&D chemistry is not required. The test shall also demonstrate defect-position recording and correct operation of the marking labeller.
159.	- Annex A04 - 46	Are there specified requirements for magnetic-filter strength, capture size and material, and mesh-filter aperture and replacement criteria? Please also provide target contamination limits and allowable pressure drop.	No fixed magnetic strength, capture size, mesh aperture or contamination limit is specified because the appropriate configuration depends on the slurry formulation and particle characteristics. The Tenderer shall select and justify filters suitable for the stated viscosity range and graphite, graphite-Si and high-Si formulations. The proposal shall state the magnetic-filter performance, mesh aperture, allowable pressure drop, monitoring method and cleaning or replacement criteria.
160.	- Annex A04 - 46	Please provide supplier, grade, particle size, solids content, moisture content, SDS, and TDS for active materials, conductive additives, binders, solvents/water, and additives.	Exact material suppliers and grades cannot be specified because the line will be used for future R&D projects. The design basis includes graphite, graphite-Si and high-Si active materials, conductive additives and water-based binder systems, including SBR and formulation-dependent additives. TNO will supply the process materials for FAT, commissioning and SAT and will provide the available SDS and TDS for the selected materials. The Tenderer shall specify the required material data, quantities and delivery dates and shall state any assumptions or operating limitations.
161.	- Annex A04 - 46	Please provide Cu/Al foil material, thickness, width, surface treatment, roughness, tensile properties, splice allowance, core specification, roll OD/weight, and incoming tolerances.	The mandatory foil and electrode compatibility shall be allocated as follows: - the Anode Coater and Anode Calender shall process water-based anode electrodes on Cu foil with a foil thickness of 4.5–12 µm; - the Anode Slitter shall process coated anode rolls based on Cu foil; - the Cathode Slitter shall process externally supplied coated cathode rolls based on Al foil with a foil thickness of 8–20 µm. The mandatory Anode Coater and Anode Calender scope does not include coating or calendaring of cathode materials on Al foil. Capability to process Al foil in the Anode Coater or Calender may be proposed and priced separately as an option.

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			The applicable input width is up to 220 mm. Slitter rewinder cores shall have a 3-inch internal diameter. The applicable input- and output-roll diameters are clarified in the answers concerning R-1400-090 and R-1400-110. Exact foil grades, surface treatments, roughness and mechanical properties will vary between R&D projects. TNO will provide representative foils and the available technical datasheets for FAT and SAT. The Tenderer shall state any required incoming tolerances, splice limitations and core, shaft or surface-treatment requirements.
162.	- Annex A04 - 46	The scope of materials/components requiring MTCs should be clearly defined, and the availability of country-of-origin information and certificates throughout the supply chain should be confirmed in advance.	It is the Tenderer's responsibility to identify all steel and iron inputs incorporated in the Goods, verify the availability of the required country-of-origin evidence throughout its supply chain and ensure that a valid MTC or equivalent certificate of origin is provided to TNO in accordance with the requirement. TNO is not responsible for determining the availability of such evidence within the Tenderer's supply chain. The Tenderer must assess and manage this before submitting its Tender.
163.	- Annex A04 - 46	(1) Please provide the required method for safely collecting a representative slurry sample without breaking vacuum, including sample volume, location, purge, and cleaning procedure. (2) The sampling reproducibility under vacuum conditions, allowable leakage criteria, and sampling SOP/verification method should be confirmed.	The sampling arrangement shall allow a representative slurry sample to be collected without loss of vacuum integrity. The Tenderer shall define the sampling location, sample volume, isolation method, purging and cleaning procedure appropriate to the proposed mixer design. The Tenderer shall also propose the leakage and reproducibility verification method for FAT/SAT.
164.	- Annex A04 - 46	Please agree on representative validation recipes, including standard graphite and highest-Si content, customer-supplied material quantities, target batches/rolls, and pretrial material plan.	Validation shall include at least one standard graphite formulation and one representative Si-containing formulation, preferably approaching the intended high-Si operating envelope. Exact recipes and material grades cannot yet be fixed because the line is intended for future R&D projects. TNO will supply the process materials. The Tenderer shall specify the required quantities, number of batches and rolls, material data and delivery dates based on the proposed FAT, commissioning and SAT plan.

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165.	- Annex A04 - 46	Please propose CTQ acceptance matrices for FAT, SAT, and PQ, including deviation handling, retest conditions, punch-list closure criteria, and final acceptance milestone.	The Tenderer shall prepare a requirement-traceability and CTQ acceptance matrix covering FAT and SAT. A separate PQ phase is not required unless mutually agreed. The matrix shall identify the test method, acceptance criterion, required material, responsible party and required records for each item. Any retesting caused by a Supplier non-conformity shall be performed at the Supplier's cost.
166.	- Annex A04 - 46	The required CDR deliverables, approval items, change-control process, and design freeze point following customer approval should be clearly defined.	The Tenderer shall propose the CDR package, including the final layout, process and instrumentation diagrams, electrical and pneumatic documentation, utility schedule, control philosophy, safety and ATEX assessments, materials of construction and preliminary FAT/SAT protocols. TNO approval of the CDR shall establish the design freeze. Subsequent changes affecting compliance, performance, footprint, safety or utilities shall require written approval.
167.	- Annex A04 - 46	The acceptance criteria, measurement methods, sample/recipe conditions, NCR handling, and re-test criteria for each FAT item should be agreed before contract award.	Detailed FAT procedures shall be prepared by the Tenderer after contract award and approved by TNO before testing. The Tender shall nevertheless identify the proposed acceptance concept and any deviations from Annex A04. FAT protocols shall define the test conditions, reference materials, measurement methods, acceptance criteria and retest rules. Retesting required due to Supplier non-compliance shall be at the Supplier's cost.
168.	- Annex A04 - 46	The commissioning scope, customer site prerequisites, re-test scope, and responsibility boundaries should be clearly defined.	Commissioning shall include installation checks, utility and interface verification, dry runs, safety validation, calibration, functional testing, recipe configuration and process trials using materials supplied by TNO. The Tenderer shall provide a site-prerequisite and battery-limit schedule. TNO will provide the agreed site utilities, access and process materials. The Supplier shall correct and retest any non-conformity attributable to the supplied Equipment.
169.	- Annex A04 - 46	The SAT acceptance criteria, items to be re-verified from FAT, customer site conditions, and responsibility for corrective actions/costs in case of non-compliance should be agreed in advance.	The Tenderer shall prepare a SAT protocol for TNO approval. SAT shall reverify safety functions, utilities, Machine interfaces, environmental performance and all process or quality characteristics that may be affected by transport and installation. Tests already conclusively

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			completed during FAT need not be repeated unless required by the SAT protocol. Supplier-related non-conformities shall be corrected and retested at the Supplier's cost.
170.	- Annex A04 - 46	(1) Please provide quantitative electrode edge-quality acceptance criteria, including burr height, chipping, delamination, loose particles/metal debris, measurement method, and sampling location/frequency. (2) Quantitative acceptance criteria, measurement methods/equipment, sampling requirements, and normal production conditions for edge quality should be agreed in advance, as these requirements are directly related to the Slitter performance guarantee.	The applicable edge-quality requirements are burr height $\leq 15 \mu\text{m}$, edge chipping $\leq 3 \mu\text{m}$, no coating delamination and no loose particles or metallic debris. The Tenderer shall propose a suitable calibrated measurement method and a representative sampling plan covering both slit edges and relevant positions within a steady-state production run. The detailed FAT/SAT protocol shall be agreed before testing.
171.	- Annex A04 - 46	Please clarify the meaning of compatibility with 3-inch ID cores and 8–10-inch OD rolls, and provide core width, material, maximum weight, minimum/maximum OD, and adapter supply scope.	R-1400-110 means that the Slitter rewinder shall accept cores with a 3-inch internal diameter and external diameter of 8–10 inches. Core width shall correspond to the selected finished electrode width. The Tenderer shall specify suitable core materials, maximum supported roll weight and allowable diameter range and shall include any required expanding shafts or adapters. Roll size and weight requirements are the same as in Calender. OD is extended by an additional 7 inches because of the wider core.
172.	- Annex A04 - 46	Please provide number of slits, finished-width combinations, minimum trim width, knife type, blade life/replacement criteria, and whether tools may be shared between anode and cathode.	No fixed production slit pattern is defined because this is an R&D line. The Slitter shall support configurable finished widths within the ranges specified in Annex A04. The Tenderer shall state the maximum number of simultaneous slits, achievable width combinations, minimum trim width, proposed knife type and blade replacement criteria. Anode and cathode tooling shall not be shared where this could create cross-contamination.
173.	- Annex A04 - 46	Please provide downstream notcher input-roll specifications, web direction, reference edge, tension range, splice allowance, roll-ID transfer method, and mechanical/data interfaces.	No dedicated automatic interface with a specific downstream notcher is required at this stage. The Slitter shall meet R-1400-090 and R-1400-110, including output roll widths of 60–210 mm, a maximum roll diameter of 460 mm and compatibility with 3-inch cores. Web direction, reference edge and roll-identification conventions shall be configurable and

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			documented. Direct mechanical or data integration with the notcher is not required.
174.	- Annex A04 - 46	Quantitative acceptance criteria for “no damage” should be defined. Inspection methods and acceptance criteria for coating damage and foil damage should be agreed in advance.	“No damage” means compliance with the defined burr and chipping limits, no coating delamination, no loose particles or metallic debris, and no visible foil tearing, wrinkling, scratching or indentation caused by the Machine. The Tenderer shall propose suitable inspection methods and acceptance criteria for the specified material range. Validation shall use agreed representative anode and cathode electrodes supplied by TNO.
175.	- Annex A04 - 46	The measurement method, sampling, speed/material conditions, and validation scope for recipe changes for the ± 0.2 mm width tolerance should be confirmed.	R-1400-010 defines the permitted deviation of the finished nominal electrode width as ± 0.2 mm. R-1400-025 specifies the stricter Machine slit-width accuracy of ± 0.1 mm. Verification shall be performed under steady-state conditions using calibrated measurement equipment and an agreed sampling plan covering each produced strip. Following a recipe change, first-piece verification is sufficient unless the material or tooling configuration has also changed.
176.	- Annex A04 - 46	Guaranteeing ± 0.1 mm across the full operating speed range and for all specified materials presents a high risk. Capability should be verified by material, thickness, and operating speed, and appropriate limitations on the performance guarantee should be considered.	The Slitter shall be capable of processing the material and speed ranges stated in Annex A04. The ± 0.1 mm performance guarantee shall be demonstrated using agreed representative materials and operating conditions rather than every possible future material at every speed. The Tenderer shall state the validated operating envelope and any justified limitations. New R&D materials may require process setup and blade optimisation before the specified performance is achieved.
177.	- Annex A04 - 46	The measurement method, sampling, microscope conditions, and definition of steady-state production for burr ≤ 15 μm , chipping ≤ 3 μm , and no delamination should be agreed in advance.	The Tenderer shall propose the detailed inspection procedure using calibrated optical or digital microscopy with sufficient resolution for the specified burr and chipping limits. Samples shall represent both slit edges and relevant positions during stable operation. “Steady-state production” excludes threading, acceleration, deceleration, splices and initial blade-adjustment material. The sampling plan and microscope settings shall be agreed before FAT/SAT.

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178.	- Annex A04 - 46	Please confirm whether the mixer must guarantee equivalent mixing uniformity and performance over the full 15–50 L working range, and define minimum, nominal, and maximum batch sizes.	The minimum batch size is 15 L, the nominal working volume is approximately 45 L and the maximum net working volume is 50 L. The mixer shall provide effective and repeatable mixing throughout this range. Identical mixing time or shear conditions are not required at every fill level. The Tenderer shall define appropriate recipe parameters and any operating limitations. Mixing performance shall be demonstrated at the minimum and nominal or maximum working volumes using agreed reference formulations.
179.	- Annex A04 - 46	(1) Are inline viscosity and temperature instruments included in the supply scope? Please provide measurement principle, range, accuracy, repeatability, calibration method, installation location, and cleaning method. (2) The definition and test conditions for 0.1% viscometer reproducibility, as well as the calibration basis, should be confirmed. The performance guarantee range should be clearly defined considering viscosity range, temperature, and fluid characteristics.	Yes. The inline viscometer and integrated temperature measurement are included in the supply scope and shall be installed downstream of the mesh filter. The viscosity range is 50–10,000 mPa·s, with built-in temperature measurement, analog current output and Profinet communication. The 0.1% requirement shall be understood as instrument reproducibility under stable reference conditions, not absolute accuracy for every non-Newtonian slurry. The Tenderer shall specify the measurement principle, accuracy, calibration method, installation and cleaning procedure and the validated viscosity and temperature envelope.
180.	- Annex A04 - 46	(1) Please confirm whether mass- and volume-based metering, charging, and discharge functions are all required, and provide applicable materials, ranges, accuracy, resolution, and calibration criteria for each. (2) The measurement range, calibration requirements, and definitions of resolution and accuracy for the 0.01 kg mass and 0.01 L volume accuracy requirements should be confirmed, and compliance with the proposed instrument specifications should be verified.	Mass shall be the primary quantity used for recipe execution, material additions and batch control. Manual additions are acceptable, and automatic metering, charging and discharge of every material are not required. Added quantities and the relevant operator confirmations shall be recorded in the batch record. The value of 0.01 kg shall be understood as the required display and recording resolution for mass measurement. The Tenderer shall state the applicable operating range, achievable accuracy and calibration method. The required volume functionality applies only to monitoring or controlling the actual quantity of slurry transferred from the Mixer or Transfer/Storage Tank towards the downstream process. It does not require separate incoming-volume measurement of manually added raw liquids.

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			The value of 0.01 L shall be understood as display and recording resolution. The required process accuracy for the transferred volume is $\pm 1\%$ of the measured quantity or better. A flow meter or an equivalent solution based on mass measurement and validated slurry density may be used. The Tenderer shall state the measurement principle, range, resolution, accuracy, calibration method and any limitations related to viscosity, entrained gas or slurry composition.
181.	- Annex A04 - 46	Please provide, for each recipe, the charging sequence, time, speed, shear, temperature, and vacuum by mixing step, plus target solids, viscosity, density, and allowable process window.	Recipe-specific charging sequences and process windows cannot be provided because the Equipment will support future R&D formulations. The control system shall allow TNO to create, edit and store complete mixing procedures, including charging steps, time, speed, shear ramps, temperature, vacuum and applicable limits. The Tenderer shall propose suitable initial procedures for standard graphite and Si-containing reference formulations used during commissioning.
182.	- Annex A04 - 46	Please provide mixing endpoint criteria, including viscosity shear rate and temperature, particle size/dispersion, solids, density, bubbles, and sampling location.	Mixing endpoint criteria will be recipe-dependent and cannot be defined universally. The Equipment shall allow endpoints to be based on elapsed time and stable values or trends in torque, rpm, temperature, vacuum and inline viscosity. Particle dispersion, solids content, density and bubble content may be verified offline using representative samples. The Tenderer shall provide the necessary process data and sampling capability so that TNO can develop and store recipe-specific endpoint criteria.
183.	- Annex A04 - 46	The measurement location, duration, load conditions, and FAT/SAT acceptance criteria for the 20-60°C temperature range, $\pm 1^\circ\text{C}$ stability, and batch uniformity should be clearly defined.	The mixer shall control the batch temperature within the 20–60°C range with stability of $\pm 1^\circ\text{C}$ around the active setpoint and suitable uniformity throughout the batch. The Tenderer shall define the permanent and temporary measurement locations, stabilisation time, representative load conditions and verification duration. FAT/SAT testing shall cover representative setpoints and relevant minimum and maximum batch volumes using calibrated temperature sensors.

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184.	- Annex A01 - 46	Please confirm all tender signature requirements in one matrix: (i) permitted signature methods for Annex A01/ESPD, including wet ink, eHerkenning EH4 and accepted foreign equivalents, together with evidence of authority; (ii) whether each Annex A02 must be signed and by whom where a Third Party provides the reference; (iii) whether Annex A03 cell C17 must remain blank or be separately signed; and (iv) whether TenderNed's SMS transaction code is submission authorisation only and not a substitute for the ESPD signature.	The signature requirements are set out in Section 2.2.21 of the Procurement Guide. The ESPD must be legally validly signed. In addition, any signature field included in an Annex must be completed by the authorised representative of the relevant entity. The TenderNed SMS transaction code confirms submission of the Tender and does not replace the required signature(s). Annex A02 should be signed by the Tenderer itself or the relevant third party or parties. Annex A03, Tab '1. Front page', should be signed by the Tenderer.
185.	- Annex A03 - 46	Please define the relationship between assessed TP2 and the optional Basic and All-inclusive maintenance prices for years 1 to 5, including which price becomes contractually binding for each renewal and whether any optional row is included in the evaluation.	TP2 is the price for the first one-year maintenance/services period following the 24-month warranty period and is included in the price evaluation under Section 6.1.1. The optional Basic and All-inclusive maintenance prices in Annex A03 are not included in the evaluation and only become contractually binding if the relevant option is exercised by TNO.
186.	1.6 - Maintenance/services Contract - 8	Please confirm whether the post-warranty maintenance arrangement is one separate one-year contract renewable annually at TNO's discretion for a maximum of 13 years, and whether there is any minimum purchase or renewal commitment.	Confirmed. As stated in Section 1.6 and Annex A03, the post-warranty arrangement starts with a separate one-year maintenance/services contract and may be renewed annually at TNO's discretion for a maximum total period of 13 years. TNO has no minimum purchase or renewal obligation.
187.	2.2 - Tender conditions - 10	Please confirm that all Information Notices and rectifications form part of the 'Request for an Offer' and prevail over inconsistent tender documents after award, and state where the award letter sits in the order of precedence.	As stated in Section 2.2.4, all Information Notices form part of the Procurement Documents and prevail over inconsistent documents in the specified order of precedence. The award letter does not amend this order of precedence and does not create additional contractual obligations.
188.	8.1 - Subject-matter 'General' - 30	Please reconcile clause 24's EUR1.25 million per claim and EUR2.5 million annual insurance levels with the Guide's EUR2.5 million per	The insurance levels stated in Section 5.2.1.1 of the Procurement Guide are controlling: EUR 2,500,000 per occurrence or series of related

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		occurrence and EUR5 million annual aggregate requirement, and confirm the controlling levels.	occurrences and EUR 5,000,000 annual aggregate. These levels replace the lower amounts stated in Clause 24.1 of Annex C03.
189.	8.1 - Subject-matter 'General' - 30	Please confirm the compensation payable for non-cancellable equipment, work in progress and committed third-party costs if TNO terminates services or the agreement for convenience without supplier default.	TNO does not confirm a separate or predetermined compensation for non-cancellable equipment, work in progress or committed Third-Party costs. In the event of termination, the Supplier's entitlement, if any, will be determined exclusively in accordance with the termination provisions of the Agreement and Annex C03. No additional compensation applies unless expressly provided for in the Contract Documents.
190.	4 - Assessment of timeliness, formal requirements and completeness - 19	Please specify the tender-stage and contract-stage evidence required to demonstrate an active Paris-aligned climate policy, a concrete climate-neutrality date, progress reporting and an ISO 20400-aligned sustainable procurement policy.	At the tender stage, no separate certification or independently audited statement is required. The Tenderer may substantiate compliance by referring to publicly available corporate information, such as its sustainability policy, climate transition plan, annual or sustainability report, Supplier Code of Conduct, sustainable procurement policy, or relevant information published on its corporate website. The submitted or referenced information must, taken as a whole, demonstrate: 1. an active climate policy that supports the objectives of the Paris Agreement; 2. a concrete target date for achieving climate neutrality; 3. reporting on progress towards that target; and 4. a sustainable procurement policy that reflects the objectives and principles of ISO 20400. For the purposes of this requirement, "in line with the Paris Agreement" and "in accordance with ISO 20400" are to be understood as alignment with the respective objectives and principles. ISO 20400 certification is not required. During the performance of the Contract, the Supplier must continue to comply with these requirements. In accordance with Clause 20.4 of Annex C03, the Supplier must, at TNO's first request, provide a written declaration and adequate supporting documentation demonstrating such compliance. Supporting documentation may include the documents

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			referred to above, provided that they are current and sufficiently specific to substantiate the relevant requirement. TNO reserves the right to request reasonable additional information where the documentation provided does not sufficiently demonstrate compliance. The relevant requirements of Annex C03 remain unchanged.
191.	- Annex A03 - 46	The notice states a duration of 24 months, while the Procurement Guide and Annex A03 provide for annual post-warranty maintenance renewals for up to 13 years. Please confirm the maximum potential contract duration, including options, and whether the notice duration covers only the initial supply and warranty period.	As stated in Section 1.6, the 24-month duration covers the initial supply and warranty period. Including the optional annual post-warranty maintenance renewals, the maximum potential duration is 15 years. TNO is not obliged to exercise any renewal option.
192.	5.2.2 - Technical and professional competence - 21	Please confirm whether the separate declaration of satisfaction referenced in Annex A02 is mandatory at tender submission, and specify the required issuer, minimum content, signature, date and acceptable alternatives where a client cannot issue a separate declaration.	A separate declaration of satisfaction is not required at Tender submission. A fully completed Annex A02 is sufficient. As stated in Section 5.2.2.1, TNO may verify the reference directly with the stated reference contact.
193.	- Annex A05 - 46	Please define the 'maximum annual maintenance duration of two weeks', including whether it refers to planned line shutdown, total on-site presence, preventive maintenance only or all maintenance activity, and identify permitted exclusions.	The maximum annual maintenance duration of two weeks refers to the cumulative planned shutdown of the Electrode Production Pilot Line for preventive maintenance per contract year. It does not refer to the Supplier's total on-site presence or to remote, predictive or corrective maintenance activities that do not require a planned line shutdown. Unplanned corrective maintenance and downtime attributable to equipment failure are not included in this two-week allowance and remain subject to the agreed availability requirements and service levels. Any other exclusion requires TNO's prior written approval.
194.	- Annex A03 - 46	Please provide binding definitions of Basic maintenance/services and All-inclusive maintenance/services, including labour, travel, remote support, preventive work, corrective work, consumables, spare parts and exclusions.	As stated in Section 1.6, the required maintenance and services include preventive, predictive and corrective maintenance support, documented schedules, spare-parts support, process monitoring, remote diagnostics and agreed service levels.

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			The Tenderer must define in Annex A05 the exact scope, inclusions and exclusions of its Basic and All-inclusive maintenance options, including labour, travel, remote support, consumables and spare parts. These definitions and the corresponding prices submitted in Annexes A03 and A05 will be contractually binding if TNO exercises the relevant option.
195.	- Annex C02 - 46	Please confirm that all blank dates, addresses, prices, representatives and optional provisions will be completed consistently with the successful tender and will not introduce material new obligations after award.	Any blank administrative fields in the Contract Documents will be completed in accordance with the Procurement Documents, the Information Notices and the successful Tender. Optional provisions will apply only if expressly agreed or exercised by TNO in accordance with the Contract Documents. Completion of these fields will not introduce material new obligations after award.
196.	- Annex A04 - 46	Please define the calender nip-pressure operating envelope and acceptance criteria, including the minimum stable force, maximum total and linear pressure, controllable range, setting/measurement resolution, accuracy, repeatability and stability required for soft silicon and standard graphite recipes, together with the roll-width/material basis and FAT/SAT test conditions.	The Anode Calender shall provide a maximum line-load capability of at least 2.5 metric tonne-force per centimetre of active pressing width, equivalent to approximately 24.5 kN/cm. The required total applied force shall scale with the active pressing width. At an active pressing width of 200 mm, a line load of 2.5 metric tonne-force per centimetre requires a total applied force of at least 50 metric tonnes-force, equivalent to approximately 490 kN. If the proposed effective pressing width exceeds 200 mm, the required total force shall increase accordingly. The reference to 25 metric tonnes-force is a minimum lower-bound capability and shall not be interpreted as limiting the total force to 25 metric tonnes-force at the maximum active pressing width. The Tenderer shall state the available line-load range, total-force range, effective pressing width, roll dimensions, control resolution, measurement accuracy and FAT/SAT verification method.

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197.	- Annex A04 - 46	Please define the required changeover capability and acceptance method for each main process, including the mixer <=60-minute chemistry changeover, coating-head exchange <=120 minutes, slitter tooling change <=60 minutes and recipe-only change <=10 minutes. Please confirm which values are binding pass/fail requirements, define the start/end states, operators, tools, utilities, material/recipe basis, cleaning endpoint, consumables and exclusions, state the expected start-up/changeover losses, and identify the FAT/SAT demonstration method.	The specified changeover times shall be demonstrated under agreed representative conditions. The Tenderer shall define the start and end states, number of operators, required tools, cleaning endpoint, consumables and justified exclusions in the FAT/SAT protocols. TNO will supply the process materials, while the Supplier shall provide Machine-specific cleaning and maintenance consumables. The mixer and coating-head values are process targets; the Slitter tooling and recipe-change limits are maximum required times. Start-up and changeover material losses shall be recorded but excluded from steady-state yield calculations.
198.	- Annex A02 - 46	Please specify the required content of the separate declaration of satisfaction and confirm whether TNO will accept a completion certificate, acceptance report or client email containing equivalent evidence.	Please see the answer under 'Question No. 192'.
199.	- Annex A02 - 46	For the minimum contract-value thresholds, please confirm whether the value refers to the entire referenced contract or only to the portion demonstrably attributable to the relevant core competence.	The minimum contract-value threshold refers to the value of the entire referenced contract, provided that the Tenderer demonstrates in Annex A02 that the reference project fulfils all aspects of the relevant core competence, as required by Section 5.2.2.1.
200.	- Annex B03 - 46	Please confirm that the applicable insurance requirement is EUR2.5 million per occurrence or related series and EUR5 million annual aggregate as stated in the Guide, notwithstanding the lower amounts in Purchasing Conditions clause 24.	Confirmed. The applicable insurance requirement is EUR 2.5 million per occurrence or series of related occurrences and EUR 5 million in the annual aggregate, as stated in the Procurement Guide. These amounts prevail over the lower insurance levels stated in Clause 24.1 of the Purchasing Conditions.
201.	- Annex A02 - 46	Please confirm the conditions under which a reference delivered jointly, as a consortium member or subcontractor, is accepted and how the tenderer must evidence its own or the relied-upon entity's attributable scope and value.	A reference performed as a consortium member or subcontractor is accepted only to the extent that the Tenderer, or the Third Party whose capacity is relied upon, actually performed the relevant scope. Annex A02 must clearly describe and substantiate that attributable scope and its corresponding value. The total contract value may not be relied upon where only part of the reference contract was performed by the relevant entity. See Section 5.2.2.1 and Annex A02.

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202.	- Annex C02 - 46	Please define the complete post-warranty maintenance price-revision mechanism, including labour/material split, base index month, first eligible date, treatment of negative indices, application of the 3% annual and 10% cumulative caps, evidence required and treatment of replacement indices. Please confirm that a correctly calculated symmetrical revision will not be unreasonably withheld or rejected once the conditions are met, and state TNO's decision period and dispute-resolution mechanism.	The post-warranty maintenance price-revision mechanism is fully set out in Section 1.6.1 and Annex C02. The Tenderer must specify the labour and material/general-cost proportions. Positive and negative index movements apply, subject to a maximum revision of 3% per contract year and a cumulative maximum increase of 10%. If an index is discontinued or materially altered, a comparable publicly available index will apply. A revision requires a timely written and verifiably substantiated request and TNO's prior written approval. No separate decision period or dispute-resolution mechanism applies beyond the provisions already included in the Contract Documents.
203.	- Annex A02 - 46	For Core Competence 5, please confirm whether the referenced EUR500,000 value may include the equipment supply contract where maintenance and SLA services formed an identifiable part, or whether the maintenance-services component alone must meet the threshold.	The EUR 500,000 threshold may relate to the total equipment supply contract, provided that maintenance and SLA services formed an identifiable and demonstrable part of that contract and that the reference demonstrates all aspects of Core Competence 5. The maintenance-services component alone is not required to meet the EUR 500,000 threshold. See Section 5.2.2.1 and Annex A02.
204.	- Annex A03 - 46	Please confirm whether PCLL unit prices are included in TP1 or TP2 scoring, whether they become fixed contractual prices, the permitted currencies and exchange-rate basis, and the applicable indexation mechanism over the support life.	The Parts & Consumables Life-Cycle List (PCLL) unit prices are not included in the evaluation of TP1 or TP2. They must be stated in EUR and will constitute the initial contractual reference prices for the listed parts and consumables. The price-revision mechanism in Section 1.6 applies to post-warranty maintenance and service prices and does not apply to PCLL unit prices. No separate indexation mechanism for PCLL prices is prescribed in the Procurement Documents. Any subsequent adjustment of PCLL prices therefore requires TNO's prior written agreement.
205.	- Annex C02 - 46	Please confirm that the obligation to return and delete all copies at the end of the Agreement permits retention of records required by law, regulation, insurance, quality, warranty or audit obligations and of copies embedded in immutable backups, subject to restricted access and deletion under the normal retention cycle. Please also	TNO confirms that statutory and operationally required records, as well as copies held in immutable backups, may be retained subject to restricted access and the applicable retention cycle. Each separate breach constitutes one occurrence. No cure period applies. Any penalty will be credited against damages and is subject to the agreed liability cap.

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		clarify what constitutes one "occurrence" for the EUR25,000 confidentiality penalty, whether a cure period applies where remediation is possible, and whether the penalty is credited against damages and included within any agreed liability cap.	
206.	- Annex A04 - 46	Please confirm whether remote support, user accounts, access logs, alarm/history records, video support or MES/network data will be treated as processing personal data on behalf of TNO. If so, please provide the proposed processing agreement and security requirements before tender submission and specify the expected data categories, controller/processor roles, processing locations, permitted subprocessors and international transfers, retention periods and incident-notification times.	No. Remote support, user accounts, access logs, alarm and history records, video support and MES or network data will not be treated as processing personal data on behalf of TNO. Consequently, no data processing agreement is required for the scope of this procurement.
207.	- Annex C02 - 46	Please identify any end-user statement, import document or other TNO-supplied information that the Supplier should assume will be required for controlled equipment, software or technology. Please confirm that TNO will provide the necessary accurate documents within an agreed period after request and that the Supplier will receive corresponding schedule relief where a permit is delayed because the required TNO document or information was not provided on time.	Delivery shall be made DDP in accordance with Requirement R-1000-300. The Supplier is responsible for identifying, obtaining and organising all permits, approvals and documentation required for the export, import, customs clearance and delivery of the Goods. If a specific end-user statement is required from TNO, the Supplier must identify the required document and provide TNO with the applicable official format and all necessary instructions in a timely manner. No automatic schedule relief applies. Any delay shall be addressed in accordance with Clause 21 of Annex C03.
208.	9 - List of Annexes - 46	Please confirm whether the Helmond works, project information, remote-access environment or any Supplier personnel will be subject to VIRBI classification, VOG/VGB screening or other security-clearance requirements. If so, please provide the applicable level, personnel scope, nationality or residency restrictions, application process, lead time and cost allocation. Please also provide the site-access rules that affect installation and service pricing, including permitted working hours, inductions, permits and mandatory PPE.	No project-specific VIRBI classification, VOG/VGB screening requirements or other security clearances are currently foreseen for the performance of this Contract. Access to TNO facilities and systems remains subject to TNO's applicable security, safety and access control policies and any requirements arising from applicable laws, regulations or national security considerations. Any such requirements applicable to the Contractor or its personnel will be communicated during contract execution.

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209.	- Annex C02 - 46	Please confirm the maximum 13-year renewal period, annual option exercise date, minimum notice, permitted scope adjustments, pricing rules and whether TNO has any minimum call-off commitment for maintenance tasks.	Please see the answer under 'Question No. 191'.
210.	- Annex A03 - 46	Please confirm that no priced item has been omitted between TP1 line 1 and TP2 line 3 and that the existing line numbering must be retained unchanged.	TNO confirms that no priced item has been omitted between TP1, line number 1, and TP2, line number 3. The absence of line number 2 does not indicate a missing price component. Tenderers must retain the existing line numbering and complete Annex A03 without changing its format, layout or line numbering.
211.	- Annex A04 - 46	Please confirm the controlling environmental design basis and SAT test condition for the -40 C micro-environment, -50 C material suitability and -20 C production-room ambient requirements, including dry-air quality, flow, pressure and facility interface data.	The required operating condition inside the Machine micro-environment is a dew point of $\leq -40^{\circ}\text{C}$ and ISO 14644-1 Class 7 cleanliness. The -50°C reference in R-1000-205 shall not be interpreted as a separate operating or material-design requirement. The ambient design conditions outside the micro-environment are -20°C dew point during production and -5°C during standby. Dry air will be supplied through the facility interface. The Tenderer shall specify the required inlet-air quality, flow and pressure necessary to maintain the internal conditions. SAT shall verify performance under normal closed operating conditions.
212.	- Annex A04 - 46	Please define the acceptance basis for the 70 dB(A) operating-noise limit, including the applicable measurement standard, operating state and load, measurement positions and distances, averaging or maximum criterion, treatment of background and adjacent-machine noise, and whether compliance is to be demonstrated at FAT, SAT or both.	The 70 dB(A) limit applies to the equivalent continuous A-weighted sound-pressure level at normal operator positions during representative steady-state operation, including all required blowers and auxiliaries. Safety alarms are excluded. The Tenderer shall propose a recognised machinery-noise measurement method, including positions, distances, operating load, averaging time and background-noise correction. Compliance shall be demonstrated during FAT and confirmed during SAT where site background conditions allow reliable measurement.
213.	- Annex A04 - 46	Please clarify which cables, pipes, sensors, servos, pistons and other components are expected to have a network IP address and	Network IP addresses are required only for components connected to an Ethernet-based network. Cables, pipes, pneumatic components and other

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		which require only a unique asset/component identifier. Please confirm that non-networked components are not required to become network nodes, and provide the required addressing/identifier scheme, label format, alarm-text linkage and FAT/SAT verification method.	non-networked devices do not need to become network nodes. All relevant components shall instead have a unique equipment identifier or tag and a corresponding visible label. HMI alarms shall identify the affected component using its tag or network address, as applicable. The Tenderer shall propose the identifier and label format and demonstrate the alarm linkage during FAT/SAT.
214.	- Annex A04 - 46	Please define the required scope of customer access to servo axes, robots, actuators and electronic process parameters, including the parameters and functions to be exposed, user roles and credentials, service software or licences to be supplied, safety limits, change logging and backup/restore arrangements. Please also confirm that authorised configuration within the agreed operating envelope will not invalidate CE conformity, safety validation or warranty, and identify any changes that would require vendor approval.	Authorised TNO users shall be able to view, configure and adjust all process parameters, servo axes and actuators within the documented safe operating envelope through the HMI or a supplied service interface. The Supplier shall provide the required permanent software licences, service tools, user roles, credentials and backup and restore functions. Parameter changes shall be logged. Safety limits, safety PLC functions and parameters that could invalidate CE conformity may remain protected and shall require an appropriate authorised access level or formal engineering change procedure. Access to PLC source code is not required.
215.	- Annex A02 - 46	Please confirm that the three-year reference period is measured from 17 July 2026 and that the relevant project must have completed acceptance testing within that period, even if contract award or installation commenced earlier.	Confirmed. The three-year reference period is calculated retrospectively from the date of announcement of the procurement procedure, being 17 July 2026. Accordingly, the reference project must have been completed, including the applicable acceptance testing, within that three-year period.
216.	8.1 - Subject-matter 'General' - 30	The 11 August EF16 notice confirms the question, submission and opening dates but does not state the intended award decision, supporting-document deadline, standstill deadline or final award date. Please provide the complete revised downstream timetable.	Please refer to the information provided in paragraph 2 of this Information Notice.
217.	- Annex A04 - 46	Please provide quantitative acceptance criteria for "low pulsation", "minimal dead volume" and prevention of stagnation in the mixer-transfer and coater-feed circuits. Please specify allowable flow/pressure variation, maximum residual/dead volume, hold or recirculation time, reference slurry properties and temperature, measurement method, and the FAT/SAT method for demonstrating flushability, material recovery and absence of stagnation.	No universal numerical limit for pulsation or dead volume is specified because slurry behaviour will depend on future R&D formulations. The Tenderer shall define and justify the required performance for the proposed transfer system across the specified viscosity and flow range. The proposal shall state the expected pulsation, estimated retained volume, circulation capacity and recommended maximum hold time. FAT shall verify flow stability, leakage and flushability using a suitable test

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			fluid, while SAT shall verify circulation and absence of unacceptable stagnation using an agreed slurry supplied by TNO.
218.	- Annex A03 - 46	TP2 commences after the initial two-year period, while the Guide states that maintenance prices remain fixed for 24 months after Final Acceptance. Please provide a worked timeline showing when the first TP2 year starts and when the first indexation may take effect.	The first TP2 year starts immediately after the initial 24-month period following Final Acceptance. For example, if Final Acceptance is on 1 July 2027, the first TP2 year starts on 1 July 2029. Indexation may take effect from that date, subject to a timely substantiated request and TNO's prior written approval. Indexation is not automatic.
219.	8.1 - Subject-matter 'General' - 30	Please confirm whether relief remains available where a listed event, including epidemic, transport disruption or critical third-party failure, is demonstrably beyond the supplier's reasonable control and could not reasonably have been avoided or mitigated.	No. The events listed in Clause 22.3 of Annex C03 - Purchasing Conditions for Goods TNO 2025.pdf, including epidemics, transport problems and failures of third parties engaged by the Supplier, do not qualify as force majeure, even if they are beyond the Supplier's reasonable control and could not reasonably have been avoided or mitigated. The relevant contractual allocation of risk remains unchanged.
220.	- Annex A04 - 46	Please describe roll-deflection compensation, crown/tilt adjustment, warm-up time, thermal-expansion compensation, and pressure/gap calibration procedures.	The Tenderer shall define the roll-heating, thermal-expansion and deflection-compensation concept appropriate to the proposed calender design. No specific compensation method is prescribed. The system shall maintain the required effective nip uniformity and post-calender thickness performance after thermal stabilisation. The Tenderer shall state the warm-up procedure, calibration method and recipe parameters and shall propose FAT/SAT verification using roll-geometry records, pressure or nip measurements and representative electrode trials.
221.	- Annex A04 - 46	The feasibility of automatic feedback from in-line thickness measurement to nip pressure/gap control should be confirmed. Acceptance criteria for measurement system accuracy and control stability should also be defined.	Automatic closed-loop adjustment of nip pressure based directly on the inline thickness measurement is not mandatory. The calender shall provide servo-controlled roll pressure and inline thickness measurement as specified in Annex A04. Operators shall be able to use the measured thickness to adjust recipe parameters. A closed-loop thickness-control function may be offered, provided that it includes adjustable limits, recipe control, safe fallback behaviour and the ability to disable automatic correction for R&D trials.

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222.	- Annex A04 - 46	Quantitative criteria for “no damage/particle shedding” should be defined. The inspection method for surface defects/particles and the corresponding acceptance criteria should be agreed in advance.	Web-contacting components shall not cause scratches, indentations, coating delamination, foil tearing or unacceptable transfer of particles to the electrode. Because particle behaviour depends on the coating formulation, no universal particle-count limit is defined. The Tenderer shall propose suitable contact materials, surface finishes and inspection methods. FAT/SAT validation shall compare representative electrode samples before and after calendering and confirm that no new damage or contamination attributable to the Machine is introduced.
223.	- Annex A04 - 46	Quantitative criteria for dust collection performance, including airflow, collection efficiency, and cleanliness level, as well as maintenance conditions, should be confirmed.	The calender shall include local dust collection at the infeed, nip and outfeed areas where loose coating particles may be released. No central extraction system shall be assumed. The Tenderer shall size the extraction and filtration system based on the proposed enclosure, electrode-dust risk assessment and required micro-environmental performance. The proposal shall state airflow, static pressure, filter class, filter monitoring and the contained filter and dust-removal procedure.
224.	- Annex A04 - 46	The verification method and control criteria for electrostatic control performance should be confirmed.	The Tenderer shall provide an electrostatic-control system suitable for the specified foils and coated electrodes and shall define the appropriate control criteria. Performance shall be verified at representative web speeds and materials by measuring surface potential or an equivalent parameter before and after the control point. No universal absolute charge limit is specified because charge generation depends on the material and environmental conditions. The proposed system shall also be consistent with the equipment-specific ATEX assessment.
225.	- Annex A04 - 46	The performance and applicable scope of the self-cleaning system should be confirmed, and the risks of surface damage or contamination caused by cleaning materials should be evaluated.	The self-cleaning system shall operate on the calender rolls during active processing and shall remove loose coating material without damaging the roll surface or electrode. The Tenderer shall select a non-shedding and chemically compatible cleaning material, such as a suitable soft fabric, and define its contact pressure, replacement frequency and operating range. FAT/SAT shall demonstrate effective cleaning without scratching, particle transfer or contamination. The system shall be safely accessible for inspection and replacement.

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226.	- Annex A04 - 46	Quantitative criteria for dust collection performance, as well as requirements for dust collection and disposal management, should be confirmed.	The Tenderer shall define the required extraction airflow, capture performance, filtration efficiency, filter monitoring and safe dust-removal method based on the proposed Machine design and equipment-specific risk assessment. Performance shall be verified through airflow and pressure measurements and by demonstrating effective capture without visible uncontrolled dust release during representative operation. Dust and used filters shall be collected in closed, removable containers suitable for disposal by TNO.
227.	- Annex A04 - 46	The OEE calculation criteria and required level of supporting evidence should be confirmed. If historical performance data is provided, the calculation method and comparability under equivalent operating conditions should be clearly defined.	No separate OEE target is specified. The applicable requirements are the $\geq 80\%$ Machine availability defined in R-1000-040 and the $\geq 92\%$ manufacturing yield target under an agreed qualified recipe defined in R-1000-045. Historical OEE evidence is not mandatory. If provided, the Tenderer shall state the calculation method, exclusions, operating conditions and relevance to the proposed Equipment.
228.	- Annex A04 - 46	The scope of equipment compatibility with the ISO Class 7 environment and supplier-guaranteed requirements should be confirmed. The responsibility boundary between equipment cleanliness performance and the customer's site environment should be clearly defined.	External Machine surfaces and components exposed to the room shall be compatible with ISO Class 7 cleanroom operation and shall not create unacceptable particle emissions. The Supplier is responsible for the cleanliness and environmental performance of the Machine and its enclosed micro-environment. TNO is responsible for maintaining the specified environmental conditions at the facility-side utility and room boundaries.
229.	- Annex A04 - 46	Equipment compatibility with the specified external dew point conditions should be verified. Test methods under production and standby conditions should be defined, with the customer's site utility conditions clearly specified as prerequisites.	The Equipment shall be suitable for operation at an external ambient dew point of -20°C during production and -5°C during standby. The Machine is not required to generate these room conditions. Compatibility may be demonstrated through design documentation, component specifications and SAT operation under the available site conditions. Machine shall not age quicker in these conditions.
230.	- Annex A04 - 46	Supporting design and measurement evidence should be provided to quantitatively demonstrate the performance of minimizing external air ingress.	Compliance shall be demonstrated against the leakage-class requirement in R-1000-015: $Q_vL \leq 0.003 \times \Delta p^{0.65} \text{ m}^3/\text{s} \cdot \text{m}^2$ at a differential pressure of $\pm 15 \text{ Pa}$ or lower. The Tenderer shall provide the enclosure design basis and proposed measurement method. Final leakage performance

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			shall be demonstrated during SAT using calibrated airflow and pressure measurements.
231.	- Annex A04 - 46	(1) Is closed-loop feedback from inline coat-weight measurement to the coating-nozzle lip-gap servo mandatory or optional? Please specify required response time, control interval, accuracy, and manual-override conditions. (2) The feasibility of automatic feedback from in-line density measurement to lip-gap control should be reviewed with the Equipment team. Control stability and the verification method should also be defined.	Closed-loop feedback from the inline coat-weight measurement to the slot-die lip-gap servo is not mandatory. The Machine shall provide inline measurement, servo-controlled adjustment and recipe-based setpoint repeatability. Operators shall be able to adjust the lip gap using the measurement results. Inline density measurement is not required. Automatic feedback may be offered provided it includes adjustable limits, manual override, stable control and safe fallback behaviour.
232.	- Annex A04 - 46	Please provide coating-bead stabilization time, expected scrap length during startup/shutdown/speed changes, automatic-splice handling, and tension-transition logic.	No fixed coating-bead stabilisation time or start-up scrap length is specified because these values depend on the formulation and coating settings. The Tenderer shall state the expected values for representative operating conditions and shall minimise and document start-up, shutdown and speed-transition losses. Automatic splice handling is not required unless included in the proposed design. Tension transitions shall be managed automatically to prevent web damage and coating instability.
233.	- Annex A04 - 46	The location, accuracy, calibration requirements, and data logging scope of the three temperature sensors across the web width should be confirmed.	Each dryer zone shall include temperature measurement at the left, centre and right sides of the web, in addition to heater-box and supply-air temperature measurement. The Tenderer shall select sensor accuracy sufficient to control and verify the required $\pm 2^{\circ}\text{C}$ uniformity. All relevant temperatures shall be displayed and logged. Calibration certificates and the proposed calibration and verification method shall be provided for FAT/SAT.
234.	- Annex A04 - 46	The verification criteria for static elimination performance and the maintenance/inspection method should be confirmed.	The Tenderer shall define a static-elimination system suitable for the specified substrates, coatings, speeds and environmental conditions. Performance shall be verified using surface-potential measurement or an equivalent recognised method at representative operating conditions. The Supplier shall provide inspection, cleaning and maintenance instructions and identify the recommended verification frequency.

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235.	- Annex A04 - 46	Compliance with the required temperature, humidity, and airflow sensor accuracy, as well as the scope of calibration certificates to be provided, should be confirmed. The responsibility boundary for external air supply quality should be clearly defined as part of the customer's utility conditions.	The external-air inlet sensors shall meet R-1200-140: temperature accuracy of at least $\pm 0.5^{\circ}\text{C}$, relative-humidity accuracy of $\pm 2\%$ RH or better, with $\pm 1\%$ RH preferred where available, and airflow accuracy of $\pm 3\%$ of reading. Calibration certificates shall be supplied. TNO is responsible for the quality of air delivered to the Machine battery limit. The Supplier is responsible for measurement, distribution and control within the supplied Equipment.
236.	- Annex A04 - 46	Please define the training audience and level. Provide duration, class size, language, materials, and practical scope for operation, recipe creation, quality-deviation response, troubleshooting, maintenance, safety, and LOTO.	The Supplier shall provide at least two days of on-site training for TNO operators and maintenance personnel. Training shall be delivered in English and shall include practical operation, recipe creation and editing, cleaning and changeover, response to quality deviations and alarms, routine troubleshooting, preventive maintenance, safety and LOTO. The Tenderer shall propose an appropriate class size and provide editable training materials and user documentation.
237.	- Annex A04 - 46	Please explain the meaning of "with or without dimensional control" in maintenance mode, including permitted movements, allowable safety-interlock bypasses, access control, and event logging requirements.	"With or without dimensional control" means that maintenance mode may allow individual axes to be jogged either using position-controlled movement or a restricted service movement without automatic dimensional regulation. Normal safety interlocks shall remain active. Any necessary service override shall be risk-assessed, access-controlled and limited through measures such as reduced speed, hold-to-run control and safe limited movement. Use of such functions shall be logged where technically applicable.
238.	- Annex A04 - 46	Please provide the document register and submission schedule for P&ID, GA/layout, electrical/pneumatic drawings, utility matrix, risk assessment, CE technical file, FDS/SDS, software backup, spare list, calibration certificates, and material certificates.	The Tenderer shall provide a document register and submission schedule covering the final layout, P&IDs, electrical and pneumatic drawings, utility matrix, functional and software descriptions, risk assessment, CE documentation, software and parameter backups, spare-parts lists, calibration certificates and applicable material certificates. Preliminary documents shall support the design review, test documents shall be available before FAT, and final as-built documentation shall be delivered before SAT completion.

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239.	- Annex A04 - 46	Compliance with PLC standards should be reviewed by the Equipment/Control team. From a quality perspective, the management criteria for software version control, change history, and validation records should be confirmed.	Machine software shall use controlled and uniquely identifiable versions. The Supplier shall maintain a revision history describing each change and its verification status. The final validated PLC, HMI, drive and recipe configurations shall be backed up and supplied to TNO in a restorable format. Changes affecting validated functions after FAT shall be documented and reverified as appropriate. Access to source code is not required unless otherwise agreed.
240.	- Annex A04 - 46	Requirements for remote access security policies, access authority management, access logs, and customer IT approval should be confirmed. Additional development may be required depending on the cybersecurity requirements.	Any remote-access function shall be subject to TNO IT approval and shall be disabled by default when not in use. Access shall be initiated or explicitly authorised by TNO, time-limited, encrypted and protected through individual accounts and appropriate authentication. Access events and performed changes shall be logged. The Machine shall remain fully operational without remote access or connection to vendor-owned servers.
241.	- Annex A04 - 46	The OPC-UA data logging scope, sampling rate, data retention period, and Batch/Recipe traceability requirements should be confirmed.	OPC-UA shall include relevant process values, setpoints, Machine states, alarms, recipe identifiers and batch identifiers. The Tenderer shall propose signal-specific sampling and update rates suitable for the dynamics of each parameter. Local storage shall cover at least one week of continuous operation and allow export in standard formats. Raw-material lot genealogy is not required.
242.	- Annex A04 - 46	Requirements for Data Tags, sampling rate, data retention period, Roll ID traceability, and alarm history management should be confirmed.	For the web-processing Equipment, the data scope shall include tension, speed, relevant axis or blade positions, roll ID, operating states and alarms. The Tenderer shall prepare the final tag list and define suitable update rates and data types. Local storage shall retain at least one week of continuous operation, including alarm history and timestamps. Roll data shall be linked to the applicable roll ID.
243.	- Annex A04 - 46	Please provide quantitative criteria for ergonomic and safe access, including minimum aisle/service clearance, working height, lifting limits, door-opening clearance, and replacement path for major parts.	No additional fixed aisle or working-height dimensions are prescribed beyond the Machine footprints and access requirements in Annex A04. The Tenderer shall define appropriate clearances, working heights, access doors and component-removal paths through the ISO 12100 risk assessment and ergonomic design. Rolls and other loads not suitable for

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			safe manual handling shall use the specified trolley or another suitable handling solution included by the Supplier.
244.	- Annex A04 - 46	Requirements for the process parameter Tag List, sampling rate, data retention period, Batch ID linkage, and data integrity should be confirmed.	The final process-parameter tag list shall be prepared by the Tenderer and shall include timestamps, recipe and batch IDs, setpoints, measured values, Machine states and alarms. Sampling rates shall be appropriate to the relevant process dynamics. Local data storage shall cover at least one week of continuous operation, with export available for backup and offline analysis. The Supplier shall maintain data integrity through controlled time synchronisation and traceable software configuration.
245.	- Annex A04 - 46	As the lip-gap position repeatability and verification method are not specified, additional customer acceptance criteria should be confirmed.	The Tenderer shall define the lip-gap positioning resolution and repeatability required to achieve the coating performance specified in Annex A04. The design shall support repeatable recipe-based positioning and return to a stored setpoint. The Supplier shall propose an appropriate calibration and FAT/SAT verification method using calibrated dimensional equipment, certified shims or an equivalent method.
246.	- Annex A04 - 46	The reference value for $\pm 2\%$ tension stability, speed/recipe conditions, measurement locations, and exclusion of transient conditions should be agreed in advance.	The $\pm 2\%$ tension-stability requirement refers to the active tension setpoint during steady-state operation. At very low tension settings, a tolerance of ± 0.5 N may be applied where this is greater than $\pm 2\%$. Threading, start-up, stopping, splices and emergency transients are excluded. The Tenderer shall state the operating range, sensor accuracy, measurement locations and FAT/SAT verification method.
247.	- Annex A04 - 46	The locations of static eliminators, performance verification criteria, and maintenance requirements should be confirmed.	Static eliminators shall be installed at the locations specified in Annex A04: upstream of the coater, at the Slitter unwind, cutting and rewind areas, and at the Calender infeed or outfeed as required by the design. The Tenderer shall confirm the final positions through the risk assessment and process design. Performance and maintenance shall be verified as described for the applicable Machine.
248.	- Annex A03 - 46	The instructions permit bidder-added optional items from line 17 onward, while blank lines 14 to 16 are also present. Please confirm that lines 14 to 16 must remain unused.	No. Lines 14 to 16 may also be used by the Tenderer for bidder-added optional items. Such optional items may therefore be entered from line 14

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			onward. The reference to line 17 in the instructions should be read accordingly.
249.	- Annex A04 - 46	Please define process-capability targets such as Cp/Cpk or Pp/Ppk, applicable CTQs, minimum data count, and trial-production duration.	No general Cp/Cpk or Pp/Ppk target is required because the Equipment is intended for low-volume R&D work with frequent recipe changes and trial runs. Specified CTQs shall be assessed directly against the applicable tolerances using an agreed sampling plan. The Supplier shall demonstrate repeatable Machine performance and provide the raw measurement data. Capability indices may be reported where the trial duration and sample count are statistically meaningful.
250.	- Annex A04 - 46	The inspection criteria of the Vision software, authority to modify recipes/thresholds, software version control, and result traceability requirements should be defined.	The vision system shall support configurable inspection recipes and thresholds for the defect types specified in Annex A04. Authorised TNO users shall be able to create and modify inspection recipes within documented limits. Software and recipe versions shall be identifiable, changes shall be logged, and results shall be linked to the applicable roll ID. The Supplier shall provide software and configuration backups and define appropriate user-access levels.
251.	- Annex A04 - 46	A list of approved cleaning agents and supporting material compatibility data should be provided. Customer approval requirements for any changes should also be confirmed.	The Supplier shall provide a list of cleaning agents compatible with all product-contact surfaces, seals, hoses, coatings and sensors within the supplied Equipment, together with supporting compatibility information. The baseline process uses water-based formulations, but additional cleaning agents may be required for future R&D materials. TNO approval shall be required before introducing an agent outside the Supplier's approved list.
252.	- Annex A04 - 46	The required measurement items, allowable tolerances, measurement body/equipment, and submission format for the coating head dimensional certificate should be confirmed.	The coating-head dimensional certificate shall include the dimensions and characteristics required to demonstrate correct coating performance, including the effective coating width, lip straightness, parallelism and relevant gap geometry. Measurement shall use calibrated laser equipment or an equivalent traceable dimensional method. The certificate shall state the measurement conditions, results, tolerances, equipment used and measurement uncertainty. The Supplier shall define suitable manufacturing tolerances consistent with the required coating quality.

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253.	- Annex A04 - 46	The acceptance criteria, measurement method, and measurement body/equipment requirements for the cylindricity and flatness certificates should be confirmed.	The pressing-roll certificates shall report cylindricity, straightness or flatness, diameter and radial runout across the effective working length, as applicable to the proposed roll design. Measurements shall be performed by the roll manufacturer or a qualified metrology provider using calibrated equipment. The certificates shall identify the measurement conditions, acceptance limits and uncertainty. The Supplier shall select tolerances sufficient to achieve the required nip and electrode-thickness uniformity.
254.	- Annex A04 - 46	Please provide the Si-content range and available data on expansion, abrasiveness, heat/reactivity, and dust-explosion properties such as Kst, Pmax, and MIE.	Exact Si content and powder grades cannot be specified because the line will support future R&D projects. The Tenderer shall design the Equipment using conservative, reasonably foreseeable assumptions for graphite-Si and high-Si formulations and shall state the assumed operating envelope. TNO will provide available SDS, TDS and material data for the products selected for FAT/SAT. Where necessary safety data such as Kst, Pmax, MIE or hydrogen-generation behaviour are unavailable, the Tenderer shall identify the required testing and define appropriate operating limitations.
255.	- Annex A04 - 46	The scope of SS304 + Teflon application and the risks related to chemical resistance, contamination, and coating delamination should be reviewed. Requirements for material certificates and surface treatment documentation should also be confirmed.	No PTFE/Teflon coating is required. Its inclusion in R-1100-050 was an error. R-1100-050 shall therefore be understood as requiring tanks and product-contact surfaces to be manufactured from at least SS304, with a surface finish or treatment suitable for the intended materials and cleaning procedures, in accordance with R-1100-045. The Supplier shall provide applicable material certificates and documentation for any additional surface treatment used.
256.	- Annex A04 - 46	If half-cell or full-cell evaluation will be performed using produced electrodes, please define test owner, assembly conditions, formation protocol, comparison baseline, and data-sharing scope.	Half-cell or full-cell testing is not part of the Equipment FAT/SAT acceptance scope. TNO may perform separate cell evaluation as part of subsequent R&D activities and will be responsible for cell assembly, formation and electrochemical testing. Machine acceptance shall be based on the electrode and process CTQs specified in Annex A04. Cell-test results may support process development but shall not constitute an additional Equipment acceptance criterion unless mutually agreed.

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257.	- Annex A04 - 46	The reference point, measurement method, and continuous operating length for verification of the 0.1 mm drift per 100 m requirement should be confirmed.	Registration drift shall be evaluated over a representative continuous length of 100 m during steady-state operation. The Tenderer shall define the reference edge, Machine datum and measurement location appropriate to the proposed control system. Drift shall be determined by comparing the measured position against the initial reference using calibrated optical or dimensional equipment. Threading, start-up, stopping and splices may be excluded.
258.	- Annex A04 - 46	Quantitative criteria for roll hardness and winding quality, including acceptance criteria for telescoping and coating compression, should be defined. Additional customer acceptance criteria should be confirmed.	Winding quality shall prevent telescoping, core slippage, wrinkling, edge damage and unacceptable compression or cracking of the coating. No universal numerical roll-hardness value is specified because the appropriate value depends on the electrode formulation, thickness and roll diameter. The Tenderer shall provide recipe-controlled winding tension and lay-on pressure and shall propose a suitable inspection and acceptance method using representative materials supplied by TNO.
259.	- Annex A04 - 46	The performance, installation locations, and inspection/verification criteria for the ESD control system should be confirmed.	For the Slitter, ESD control shall be provided at the unwind, cutting and rewind sections as required by R-1400-065. The Tenderer shall confirm the final locations based on the Machine design and risk assessment. Performance shall be verified at representative web speeds using surface-potential measurement or an equivalent method. Inspection, cleaning and maintenance requirements shall be included in the documentation.
260.	- Annex A04 - 46	Quantitative inspection criteria for particle shedding prevention and coating protection, as well as the required scope of supporting material documentation, should be confirmed.	Web-contacting components shall use cleanroom-compatible, non-shedding materials and shall not scratch, contaminate or otherwise damage the electrode coating. No separate universal particle-emission limit is specified beyond the applicable ISO Class 7 and product-quality requirements. The Tenderer shall provide relevant material datasheets, declarations or reference evidence and propose visual, microscopic and environmental verification during FAT/SAT.
261.	- Annex A04 - 46	Are the shear ramp, torque limit, and binder-protection values for the Si mode recalled from predefined recipes? Please explain user-adjustable ranges and access rights.	The Si-specific shear ramps, torque limits and binder-protection settings shall be stored as part of editable recipe templates. Authorised TNO users shall be able to adjust these parameters within the machine

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			operating envelope defined by the Supplier. The Tenderer shall state the available ranges, access levels and applicable safety limits. Parameter changes shall be recorded in the recipe or audit history and shall not require vendor intervention.
262.	- Annex A04 - 46	Please confirm whether an anchor-type agitator is required for the transfer tank and provide diameter, clearance, speed range, vacuum performance, and mixing-uniformity guarantee.	The transfer tank shall include an its own low-shear mixing capability. An anchor agitator operating within 5–50 rpm is the preferred configuration, although an equivalent solution may be proposed if it provides suitable slurry homogeneity without damaging the material. The tank shall have the same working volume and vacuum capability as the main mixer, including $\leq$ -80 kPa for at least 60 minutes. Agitator diameter, clearance and detailed uniformity criteria shall be defined by the Tenderer.
263.	- Annex A04 - 46	Please provide maximum allowable hold time from charging to coater feed, continuous-agitation conditions, temperature and vacuum/nitrogen conditions, and retest criteria.	Maximum slurry hold time and the required storage conditions will depend on the formulation and cannot be specified universally for an R&D line. The transfer tank shall support continuous low-speed agitation within 5–50 rpm, temperature monitoring and vacuum operation. The Tenderer shall recommend safe operating conditions and hold-time limits for graphite and Si-containing slurries and shall identify any need for inert-gas protection. Recipe-specific retest or release criteria will be defined by TNO when the applicable material is introduced.
264.	- Annex A04 - 46	As the quantitative criteria for minimizing dead zones are unclear, measurable acceptance criteria such as mixing uniformity and residual volume should be agreed in advance.	The mixer, transfer tank and slurry paths shall be designed to minimise dead zones, retained material and stagnation. The Tenderer shall propose measurable acceptance criteria appropriate to the design, including mixing uniformity and residual volume after normal discharge or flushing. Verification shall use agreed representative formulations or suitable test fluids. The design shall include full-coverage wall scrapers and accessible cleaning of areas where residual material could accumulate.
265.	- Annex C02 - 46	Please confirm whether a separate signed acceptance of the Supplier Code is required with the tender or only upon contract award.	No separate signed acceptance of the Supplier Code of Conduct is required, either with the Tender or upon contract award. By submitting a validly signed Tender, the Tenderer confirms that it has read the Supplier

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			Code of Conduct and will comply with it throughout the term of the resulting Agreement.
266.	- Annex C02 - 46	Please confirm whether the Code must be contractually flowed down in full to every subcontractor and equipment manufacturer or whether equivalent policies and risk-based due diligence are acceptable.	The TNO Supplier Code of Conduct does not have to be flowed down verbatim to every subcontractor or equipment manufacturer. Equivalent policies, contractual measures and risk-based due diligence are acceptable, provided that the Supplier ensures and can demonstrate compliance with the Code's principles throughout its supply chain. The Supplier remains fully responsible for its subcontractors and suppliers.
267.	5 - Assessment of Grounds for Exclusion and Suitability Requirements - 20	Please clarify the reference material, substrate, slurry properties, coating configuration, wet or dry thickness range, coating-width range, quality criteria and steady-state test duration to be used for verification of the specified 5 m/min coating performance. Please confirm that performance will be assessed only under these agreed reference conditions.	The 5 m/min coating capability shall be demonstrated under agreed reference conditions using a representative water-based graphite anode slurry and Cu foil supplied by TNO. The baseline test configuration shall use slot-die, continuous, single-stripe coating at an agreed width within the specified 100–200 mm range and at an agreed wet and dry thickness within the Annex A04 ranges. Acceptance shall include stable coating, adequate drying, dry-thickness uniformity of $\leq \pm 3 \mu\text{m}$ and absence of unacceptable coating defects. The Tenderer shall propose a sufficient steady-state test duration and required material quantity. The guarantee is not expected to apply to every future R&D formulation at 5 m/min.
268.	- Annex C02 - 46	Please define the required 80% availability, including the calculation formula, measurement period, operating schedule and minimum scheduled production time. Please also identify which events are excluded from downtime, including planned maintenance, cleaning, changeovers, operator delay, lack of utilities or materials, upstream/downstream equipment constraints, safety stoppages not caused by the supplied equipment, and other causes outside the contractor's control.	Availability shall be calculated as the scheduled operating time minus technical downtime attributable to the supplied Machine, divided by the scheduled operating time. The required level is $\geq 80\%$, corresponding to no more than 12 minutes of technical downtime per evaluated hour and no more than six Machine errors per hour under the defined pilot-line load. Planned maintenance, cleaning, changeovers, operator delays, unavailable materials or utilities, external Equipment constraints and safety stops not caused by the supplied Machine shall be excluded. The detailed assessment window shall be defined in the FAT/SAT protocol.
269.	8.1 - Subject-matter 'General' - 30	Please define the required 92% yield, including (i) the numerator and denominator, (ii) the measurement point and measurement period, (iii) the reference material and product specification, and (iv) the treatment of start-up, shutdown, changeover, sampling, planned	Yield shall be calculated as the quantity of conforming electrode output divided by the total evaluated material entering the relevant process after agreed exclusions. The required target is $\geq 92\%$ under agreed operating conditions and a qualified reference recipe. Start-up, shutdown,

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		trials, off-specification input material and losses not attributable to the supplied equipment. Please also confirm whether compliance will be assessed during FAT, SAT or another agreed test.	changeover, planned sampling and R&D trials shall be excluded, as shall losses caused by non-conforming input materials, unavailable utilities or events not attributable to the supplied Equipment. Compliance shall be assessed during an agreed SAT process run using materials supplied by TNO.
270.	- Annex C02 - 46	Please confirm the contractual consequences if FAT, delivery, installation, SAT or acceptance is delayed or cannot be completed for reasons not attributable to the contractor. We request confirmation that the relevant milestone dates will be extended accordingly and that, if TNO does not perform an agreed acceptance activity or provide a substantiated rejection within an agreed period after notice of readiness, the relevant milestone will be deemed accepted for payment, warranty-commencement and schedule purposes, without prejudice to TNO's rights in respect of duly notified defects.	The requested confirmation cannot be given. The contractual consequences of a delay will be determined in accordance with the Procurement Documents and the circumstances of the specific delay. Any amendment to milestone dates must be agreed in writing. No milestone will be deemed accepted solely because TNO has not performed an acceptance activity or issued a rejection within a specified period. Payment, commencement of the warranty and acceptance remain subject to the applicable contractual requirements, including successful completion and approval of the relevant milestone.
271.	- Annex C02 - 46	Please clarify the security required for the 40% advance payment, including the required form and issuer, guaranteed amount, effective date, expiry or reduction mechanism, wording approval process, and the event upon which the guarantee will be released. Please confirm whether the guarantee amount may reduce in proportion to recovery of the advance through subsequent payments.	TNO will have paid a cumulative 40% of the total contract price before physical delivery: 20% at order and 20% following successful FAT approval. Before the first payment, the Contractor must provide an on-demand bank guarantee covering 40% of the total contract price, issued by a bank with a minimum A rating and approved by TNO. An acceptable Parent Company Guarantee may be provided as an alternative. The guarantee must be effective before the first payment and remain valid until delivery at TNO's location and completion of the visual inspection, at which point it will be released. Its form and wording require TNO's prior approval. No proportional reduction of the guarantee applies before its release.
272.	8.2 - Subject-matter 'Slurry Mixing' - 40	The requested scope covers mixing, coating, calendaring and slitting on the anode side, while the cathode scope starts at slitting. Could TNO clarify whether this boundary is intentional in relation to the future function of the line? Should the proposed solution allow for later expansion of cathode-processing steps?	Yes, the stated boundary is intentional. The base scope includes anode slurry mixing, coating, calendaring and slitting. On the cathode side, the base scope includes only slitting of externally supplied coated cathode rolls. Future addition of cathode mixing, coating or calendaring is not a

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			mandatory requirement. The Tenderer may describe any practical modular provisions that would facilitate later expansion.
273.	8.4 - Subject-matter 'Calendar' - 42	The tender documents appear to state both 2.5 ton/cm and 25 ton as the required calendering force. Please confirm the correct requirement, units and basis of calculation, including whether the value is line load across the effective roll width or total applied force.	The governing requirement is a maximum line-load capability of at least 2.5 metric tonne-force per centimetre of active pressing width. The total required force shall be calculated from the active pressing width. For example, an active pressing width of 200 mm at 2.5 metric tonne-force per centimetre requires a total applied force of at least 50 metric tonnes-force, equivalent to approximately 490 kN. The separate reference to 25 metric tonnes-force is a minimum lower-bound capability and does not replace or limit the force calculated from the required line load at wider operating widths. The Tenderer shall state the available line-load and total-force ranges and the calculation basis used.
274.	8.4 - Subject-matter 'Calendar' - 42	Please confirm the unit, parameter and measurement standard applicable to the specified calender roll surface finish value of 0.4 (for example, whether it is Ra expressed in micrometres), together with any required measurement or certification method.	The specified pressing-roll surface finish is $Ra \leq 0.4 \mu m$. The Supplier shall confirm this value by measurement using a calibrated surface profilometer or an equivalent traceable method in accordance with an applicable surface-texture standard. The certificate shall identify the measurement locations, cut-off settings, results, equipment used and measurement uncertainty.
275.	- Annex C02 - 46	Please confirm the EU machinery legislation and conformity-assessment regime that must apply to the supplied equipment, taking account of the planned placing-on-the-market and/or commissioning date. If Regulation (EU) 2023/1230 is expected to apply, please identify the contractual date and deliverables on which TNO bases that requirement.	The Equipment must comply with the EU machinery legislation and conformity-assessment regime applicable when it is placed on the market and/or put into service. Based on the currently anticipated delivery and commissioning schedule in 2027, compliance with Regulation (EU) 2023/1230 is required, including the applicable conformity assessment, technical documentation, EU Declaration of Conformity and CE marking.

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			If the applicable legislation changes before the Equipment is placed on the market or put into service, the Supplier must comply with the legislation applicable at that time.
276.	8.1 - Subject-matter 'General' - 30	The tender documents appear to indicate different deadlines for submitting clarification questions (12 August and 31 August). Please confirm the applicable deadline and time zone for submission of questions through TenderNed.	Please refer to the information provided in paragraph 2 of this Information Notice.
277.	- Annex C02 - 46	Is it acceptable for specialised consortium partners to supply different process modules, provided that one party carries overall system-integration responsibility? What requirements does TNO impose on the allocation of warranty, integration and liability responsibilities within such a consortium?	Yes. Specialised members of a Combination may supply different process modules, provided that the Combination submits a single Tender for the complete, fully integrated and operational system and clearly identifies the coordinator and the allocation of responsibilities. One member may have overall system-integration responsibility. However, all members of the Combination remain jointly and severally liable towards TNO for full performance of the Contract, including system integration, interfaces, warranty obligations, maintenance and the successful completion of FAT and SAT. Any internal allocation of responsibilities does not limit TNO's contractual rights or the joint and several liability of the Combination members.
278.	- Annex A03 - 46	For DDP delivery to Helmond, please confirm the named place, importer of record, customs-declaration and fiscal-representation responsibilities, treatment and presentation of import VAT in Annex A03, and responsibility for duties and broker charges. Please also clarify when TNO may advance customs/import charges and apply the stated administration fee of up to 8%, and confirm that any fee is limited to reasonable documented processing cost, does not duplicate the DDP price and does not apply where the charge results from TNO's act or omission.	Please see the answer under 'Question No. 37'. Only if TNO is exceptionally required to advance an import or customs-related charge that is contractually for the Supplier's account may TNO recover that amount from the Supplier. In such a case, TNO may apply the stated administration fee of up to 8% to cover its reasonable and documented processing and handling costs. The fee shall not duplicate any amount already included in the DDP price and shall not apply where the charge results from an act or omission attributable to TNO.
279.	- Annex C02 - 46	Please define the L3 leakage requirement and its SAT acceptance criteria, including the applicable standard or test method, system boundary, test medium, pressure or operating condition, allowable leakage rate and units, test duration, instrumentation accuracy, and the party responsible for performing and certifying the measurement.	The L3 leakage requirement applies to the complete Machine micro-environment boundary. Leakage shall not exceed $Q_{vL} = 0.003 \times \Delta p^{0.65} \text{ m}^3/\text{s} \cdot \text{m}^2$ at a differential pressure of $\pm 15 \text{ Pa}$ or lower. The test medium shall be air. The Tenderer shall define the enclosure surface used in the calculation and propose a recognised pressure-decay or

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			airflow-balancing method using calibrated pressure and airflow instruments. The Supplier shall perform and document the SAT measurement after installation.
280.	- Annex C02 - 46	Please define the FAT and SAT basis for each guaranteed performance requirement, including: (i) tests and pass/fail criteria; (ii) test sequence, duration and number of runs or batches; (iii) reference materials, substrates, recipes and operating conditions; (iv) quantities and specifications of materials to be supplied by TNO; (v) treatment of start-up, changeover and sampling losses; (vi) required measurement methods, instruments and data approval; and (vii) the procedure, schedule and allocation of reasonable costs for retesting where a failure is attributable respectively to the contractor, TNO-supplied materials/utilities, or another cause outside the contractor's control. Please confirm that the final protocol will be mutually agreed before FAT and will not introduce requirements beyond the contract.	The Tenderer shall prepare detailed FAT and SAT protocols following design freeze, and these protocols shall be mutually agreed before testing. They shall identify each test, pass/fail criterion, test sequence, duration, number of runs, reference conditions, measurement method and required records. TNO will supply the process materials and substrates in quantities and by dates specified in advance by the Tenderer. Start-up, changeover and planned sampling losses shall be treated according to the agreed protocol. Retesting caused by Supplier non-conformity shall be performed at the Supplier's cost. The protocols shall verify the contractual requirements and shall not introduce additional requirements beyond the agreed scope.
281.	8.1 - Subject-matter 'General' - 30	If a bidder can demonstrate that an alternative technical configuration achieves equivalent or better functionality, safety and reproducibility, will such a solution be considered compliant? If yes, how should technical equivalence be demonstrated?	An alternative technical configuration may be considered where it demonstrably provides equivalent or better functionality, safety, process control, reproducibility and maintainability. The Tenderer shall identify the affected Annex A04 requirement and provide a clause-by-clause comparison, quantitative performance evidence, risk assessment and proposed validation method. An alternative shall not be assumed compliant without explicit TNO acceptance.
282.	8.1 - Subject-matter 'General' - 30	What range of future anode materials and formulations should the installation be able to process without fundamental redesign? Should the system, for example, anticipate silicon-containing anodes, hard carbon, lithium-metal-related concepts or other non-conventional systems?	The mandatory material envelope includes water-based graphite, graphite-Si and high-Si anode formulations. The Equipment shall accommodate changes within this range without fundamental redesign, subject to recipe development and appropriate cleaning. Hard-carbon formulations may be processed where their physical properties remain within the declared Equipment operating envelope, but no separate guarantee is required. Lithium-metal and anode-free concepts are outside the scope of this slurry-based electrode line. The Tenderer shall state the supported material envelope and any operating limitations.

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283.	8.1 - Subject-matter 'General' - 30	Could TNO confirm the installation location in Helmond and provide the relevant site conditions before submission, including available footprint, clear height, floor loading, utilities, ventilation/extraction, ATEX zoning where applicable, material flow and access constraints?	The installation location is Automotive Campus 80, 5708 JZ Helmond, the Netherlands. The applicable maximum equipment footprints are stated in Annex A04: R-1100-100; R-1200-005; R1300-100; R1400-085. All Machines must fit within a room height of 3.0 m. The utilities shall be based on the specifications stated in the Procurement Documents. No central cooling-medium network or central process exhaust-air system shall be assumed to be available. The Supplier shall include the required standalone cooling/heating unit and dedicated local extraction systems and shall specify all required capacities, interfaces and utility demands in its Tender. No final site-wide ATEX zoning or Explosion Protection Document is currently available. The Tenderer shall apply conservative, reasonably foreseeable assumptions and provide a preliminary ATEX classification and ignition-hazard assessment for the relevant Equipment. Further detailed site information, including final utility connection points, floor-loading data, delivery and rigging routes, door openings and other access constraints, is not currently available. These interfaces will be finalised during the detailed design and CDR phase. Tenderers shall clearly state their equipment dimensions, weights, loads, utility requirements, access requirements and other site assumptions in their Tender.
284.	- Annex A03 - 46	Annex A03 appears to contain a tender reference that differs from the reference stated in the other tender documents. Please confirm whether tenderers must leave the form unchanged and whether TNO will issue a corrected Annex A03.	TNO will issue a corrected version of Annex A03 and Annex A04. Tenderers must use the corrected version for their Tender and must not make any other changes to its format, layout or line numbering.
285.	- Annex C02 - 46	Please confirm the aggregate cap on the contractor's contractual liability and clarify whether delay damages and any other liquidated damages are included within that cap. Please also confirm that neither party will be liable for indirect or consequential loss, including loss of profit, production, revenue, use, contracts or opportunity,	TNO agrees that the Contractor's aggregate contractual liability for direct damages shall be limited to three (3) times the total Contract Price. Delay damages and any other contractual penalties or liquidated damages are included within this cap.

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		except to the extent expressly required by mandatory law, and identify any liabilities that TNO proposes to exclude from the cap.	TNO also agrees to exclude liability for indirect and consequential damages. For the purposes of the Agreement, indirect and consequential damages are exhaustively limited to reputational damage, loss of profit and loss of anticipated savings. For the avoidance of doubt, loss of production, loss of use, loss of revenue, loss of contracts or orders, loss of opportunity, and loss of or costs relating to the recovery of data are not automatically classified as indirect or consequential damages and are therefore not generally excluded. The above limitations and exclusions do not apply where liability cannot be limited or excluded under mandatory law.
286.	8.1 - Subject-matter 'General' - 30	Please clarify the purpose and start date of the 10-, 13- and 15-year periods referenced for service life, support and/or spare-parts availability, and confirm the obligations that must be priced for each period. Within the applicable lifetime, please define requirements for spare-parts availability, maintenance support, software support and technical documentation, confirm whether TNO requires supplier-independent access for routine maintenance, process changes and data access to minimise vendor lock-in, and state whether this vendor independence is evaluated under the quality criteria.	The ten-year period applies to the spare-parts availability obligation and the supported software-update period where expressly stated. The maximum potential contractual lifecycle, including optional maintenance periods, is fifteen years. TP1 shall include the maintenance and support required during the warranty period. TP2 covers the first one-year maintenance/services period following the warranty period and is included in the price evaluation. Subsequent annual periods are optional, are exercised at TNO's discretion and do not constitute a minimum purchase or renewal commitment. Throughout the applicable lifecycle, the Supplier must support the continued operation of the Equipment through maintenance and technical support, spare-parts availability, software support and updates, and the required technical and maintenance documentation, in accordance with the Procurement Documents. TNO must have appropriate access to operational and process data and be able to perform routine operation and agreed first-line maintenance without unnecessary Supplier dependency. Supplier access or approval may remain required for safety-critical activities, protected software and

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			specialist maintenance. Vendor independence is not a separate award criterion, but will be assessed only insofar as it forms part of the requirements and quality criteria stated in Annex A04.
287.	8.1 - Subject-matter 'General' - 30	Please clarify the scope of the requirement for free software updates during the equipment lifetime. Please distinguish corrective updates required to maintain the agreed functionality and cybersecurity from upgrades, new features, operating-system or third-party-license changes, adaptations caused by TNO modifications, and changes required by future legislation or standards.	Free software updates shall cover corrective updates required to maintain the contracted functionality, safety, cybersecurity and compatibility with the originally supplied hardware and software environment. They do not automatically include new functions, capacity upgrades, adaptations resulting from TNO modifications, major third-party operating-system or licence changes, or changes required solely by future legislation or standards. Software and HMI corrections or improvements necessary to meet the agreed requirements during FAT, commissioning, SAT and the warranty period shall be included.
288.	8.1 - Subject-matter 'General' - 30	Please clarify the requirement for support within one hour. In particular, please confirm the applicable service hours and time zone, the required communication channel, whether the one-hour period refers to acknowledgement and commencement of remote diagnosis rather than resolution, and the escalation requirement if remote support is insufficient.	The one-hour requirement means acknowledgement and commencement of remote diagnosis, not guaranteed resolution within one hour. Support shall be available between 06:00 and 18:00 Netherlands local time using video call or another agreed secure remote-support channel. If the issue cannot be resolved remotely, the Supplier shall escalate it to the appropriate technical specialist and provide a proposed recovery plan and further response time.
289.	8.1 - Subject-matter 'General' - 30	Does TNO value an open, modular system in which future equipment, sensors, software or process modules from third parties can be integrated? If so, which interfaces, communication protocols and technical documentation should be made available?	Yes. TNO values an open and modular architecture that permits future integration of third-party sensors, software and process modules. The Equipment shall provide OPC-UA communication and other standard interfaces specified in Annex A04, including Profinet where expressly required. The Supplier shall provide tag lists, communication documentation, electrical and mechanical interface information, schematics and configuration backups.
290.	- Annex A05 - 46	Please provide a single submission matrix for Annexes A01 to A05 stating, for each annex, whether it is mandatory, its required native/PDF format, folder or ZIP package, file name and signature requirement. For Annex A05, please also specify the mandatory content and page limit, define the Basic and All-inclusive	The submission requirements for Annexes A01 to A05, including the required formats, packaging, file names and signatures, are set out in Sections 2.2, 2.5.2 and 9 of the Procurement Guide and in the instructions contained in each Annex. Tenderers must follow these requirements. TNO will not issue a separate submission matrix.

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		maintenance/service models and required SLA/pricing assumptions, and confirm whether the same document may serve as the scored P-8000-040 Maintenance & Service Concept or whether a separate four-page response is required.	The requirements for Annex A05 are stated in Annex A05 and the relevant award criterion. The response to P-8000-040 Maintenance & Service Concept must be provided separately and is subject to its stated four-page limit. Annex A05 does not replace this scored response.
291.	8.1 - Subject-matter 'General' - 30	What requirements apply to access to raw process data, data export, recipe management and integration with external data or automation systems? Is full TNO access expected without dependency on proprietary supplier cloud environments or restrictive software licences?	TNO shall have full local access to raw process data, measurement results, alarms, recipes and Machine settings. Data shall be exportable in standard formats.
292.	8.1 - Subject-matter 'General' - 30	The quality evaluation appears to refer to 601 points, whereas the stated total is 600 points. Please confirm the correct maximum score and provide the corrected allocation per quality criterion.	TNO confirms that the reference to 601 points is incorrect. The correct maximum quality score is 600 points, allocated as follows: • P-8000-005: 55 points • P-8000-010: 55 points • P-8000-015: 26 points • P-8000-020: 82 points • P-8000-025: 55 points • P-8000-030: 109 points • P-8000-035: 109 points • P-8000-040: 109 points Total: 600 points. The Procurement Documents shall be read accordingly.
293.	8.1 - Subject-matter 'General' - 30	Please confirm whether a page limit applies to the quality responses and, if so, specify (i) the limit for each criterion or for the quality submission as a whole, and (ii) whether cover pages, tables of contents, appendices, drawings and supporting evidence are included in that limit.	Page limits apply per individual quality criterion, as specified in Annex A04, and not to the quality submission as a whole. All content submitted for a criterion, including cover pages, tables of contents, drawings, appendices and supporting evidence, counts towards the applicable page limit. Content exceeding the stated limit will not be assessed.
294.	- Annex A04 - 46	Please provide the DOE support scope, adjustable process factors and safe ranges, and whether experimental design, statistical analysis, and reporting are included.	The Equipment shall support DOE activities by allowing authorised users to adjust relevant process factors within the documented safe operating envelope. These include mixing sequence, speed, shear, time,

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			temperature and vacuum; coating speed, slurry flow, lip gap, tension and dryer settings; calender pressure, gap, temperature, speed and tension; and slitting speed, tension and tooling positions. The Supplier shall document the available ranges and constraints. Creation of experimental designs, statistical analysis and formal DOE reporting are not included as separate deliverables.
295.	8.1 - Subject-matter 'General' - 30	Please define the scope of the six-month pilot support requirement, including the commencement date, expected on-site and remote presence, service hours, required disciplines, anticipated number of operating or trial days, response times, deliverables, and whether travel, accommodation and consumables must be included in the tender price.	The six-month pilot-support period shall commence after SAT. Continuous on-site presence is not required. The Tenderer shall propose an appropriate combination of scheduled on-site support and remote assistance for recipe setup, process trials, troubleshooting, optimisation, data review and additional operator guidance. The proposed support plan shall identify the available disciplines, response channels and planned deliverables. TNO will supply the process materials; the Supplier shall provide Machine-specific service consumables.
296.	8.5 - Subject-matter 'Slitter' - 44	The tender documents appear to specify an outside diameter of 460 mm and also refer to 8-10 inches. Please clarify whether the 8-10 inch value relates to core diameter, reel diameter or another dimension, and confirm the required minimum and maximum core inside diameter, reel outside diameter, reel width and maximum reel mass for design and acceptance.	The 3-inch value refers to the internal diameter of the rewinder core. The 8–10-inch value refers to the external diameter of the core. The 460 mm value is the maximum reel diameter that the Slitter shall be mechanically capable of handling. Input roll width shall be up to 220 mm, while finished roll widths shall comply with the configurable ranges in Annex A04. The Tenderer shall state the maximum supported reel mass and include the required shafts or adapters.
297.	- Annex C02 - 46	Please clarify the included free-storage period and the point from which it starts. Please also confirm the arrangements where shipment, delivery, installation or SAT is delayed for reasons not attributable to the contractor, including entitlement to reimbursement of reasonable storage, preservation, insurance, handling, demobilisation/remobilisation and schedule-extension costs, and the corresponding extension of contractual dates.	Please see the answer under 'Question No. 42'.
298.	8.1 - Subject-matter 'General' - 30	Please confirm that the tender submission, including all completed annexes and supporting documents, may be prepared and submitted entirely in English.	Please refer to Section 2.2.6, "Language", of the Procurement Guide.

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299.	- Annex C02 - 46	Please clarify the ownership and licence regime for (i) submitted Tender copies and annexes, (ii) each party's pre-existing Background IP, know-how, software, standard tools and third-party components, and (iii) project-specific Foreground IP. Please confirm that TNO ownership of submitted files does not transfer underlying IP, that Background IP remains with its owner, and that TNO receives only the rights reasonably required to evaluate the Tender and to operate, maintain and internally use the delivered line, including the treatment of subcontractor IP, source code/escrow and unsuccessful Tender retention.	The intellectual property regime remains as set out in Clauses 16 and 17 of Annex C03 - Purchasing Conditions for Goods TNO 2025. Ownership of submitted Tender files does not transfer the underlying intellectual property rights. Each Party's Background IP remains with its owner, subject to the licences specified in the Procurement Documents. Foreground IP shall be treated in accordance with Clause 17. The Supplier is responsible for securing all necessary rights relating to subcontractor and third-party components. No additional source-code, escrow or unsuccessful-Tender retention arrangements apply unless expressly stated in the Procurement Documents or agreed in writing. Annex C02 remains unchanged.
300.	- Annex A02 - 46	Please provide a single tender-stage and post-award document matrix for the Tenderer, Combination members, Third Parties relied upon for suitability and performance-only subcontractors. The matrix should state the required ESPD parts and timing, A02/B01/B02/B03 requirements, approval/consent timing, and the acceptable non-Dutch equivalents, issuing authorities, age limits and translation/legalisation requirements for the GVA, tax-payment declaration, trade-register extract and ISO 9001/14001 or similar evidence.	The requested information is already set out in Sections 2.2.7 to 2.2.10, 2.5.2, 5.2 and 7.1 of the Procurement Guide and in the instructions to Annexes A01, A02 and B01 to B03. Tenderers must follow those provisions. TNO will not provide a separate matrix. For clarification, Annex B01, B02 and B03 are supporting documents and are submitted by the intended successful Tenderer only upon TNO's request. Where a Tenderer relies on a Third Party's technical or professional competence, the relevant ESPD and Annex A02 must be included in the Tender, while Annex B02 is submitted at the supporting-document stage. Equivalent documents issued by the competent authority in the country of establishment are acceptable for non-Dutch entities, subject to the requirements of the Procurement Guide.
301.	8.1 - Subject-matter 'General' - 30	Could TNO clarify whether the primary purpose of the installation is to reproduce a fixed reference process or to serve as a flexible industrialisation and validation platform for different materials, recipes and process routes? If flexibility is intended, please define the minimum required reconfiguration and changeover capability.	The primary purpose is to provide a flexible R&D, process-development and industrialisation platform rather than to reproduce one fixed reference process. Within the operating envelope specified in Annex A04, the Equipment shall support different materials and recipes without fundamental redesign. Reconfiguration shall be possible through editable recipes, adjustable process parameters, changeable tooling or coating

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			heads and documented cleaning and changeover procedures. The Tenderer shall state any limitations and identify available modular extensions.
302.	6.1.2 - Sub-award criterion: Quality (QY) - 26	Please confirm whether the quality evaluation assesses only compliance with the specified equipment requirements or also the solution's capability to support future process development, scale-up and technology transfer. If industrialisation capability is assessed, please identify the applicable award criterion, scoring method and evidence required.	The quality evaluation is limited to the sub-award criteria and preferences expressly stated in Section 6.1.2 and Annex A04. The solution's capability to support future process development, scale-up or technology transfer is assessed only insofar as it is explicitly covered by those criteria. No separate award criterion or additional score applies to industrialisation capability.
303.	1 - Contracting Authority and Contract - 6	The contract refers in some places to 'Annex III' as well as to Annex A03 and Annex A04, whilst the list of annexes uses a different designation. Which documents and versions form a binding part of the contract?	The latest Information Notice forms an integral part of the Procurement Documents and prevails over earlier Procurement Documents during the Procurement Procedure. Following award, the Contract shall consist of the following documents, in descending order of precedence: • the signed Purchase and Supply Agreement, including any expressly incorporated schedule of agreed deviations; • the Information Notices, from most recent to oldest; • the Purchasing Conditions for Goods TNO 2025, except where expressly deviated from; • the Procurement Guide and its Annexes; • the Award Letter and Purchase Order, insofar as these contain administrative information only; • the Supplier's final Tender, but only insofar as it complies with the preceding documents. Only deviations expressly accepted by TNO in an Information Notice or incorporated into the signed Agreement shall be binding. The Supplier's general terms and conditions shall not apply. References to "Annex III" or otherwise inconsistent references in Annex C02 will be corrected in the final Agreement.

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304.	1 - Contracting Authority and Contract - 6	Can mutually agreed clarifications and deviations be documented in a binding 'Schedule of Deviations and Clarifications'?	No. Tenderers must submit a fully compliant Tender in accordance with the Procurement Documents. A separate "Schedule of Deviations and Clarifications" will not be accepted or included in the contractual hierarchy. Clarifications expressly issued by TNO through an Information Notice form part of the Procurement Documents and apply in accordance with the stated order of precedence. The Supplier's quotation, including its technical and commercial specifications, shall not take precedence over the Purchase and Supply Agreement, the Information Notices or the other Procurement Documents. Any non-compliance or reservation may result in rejection of the Tender.
305.	1 - Contracting Authority and Contract - 6	Can this document setting out deviations and clarifications be ranked immediately after the Purchase and Supply Agreement in the hierarchy?	Please see the answer under 'Question No. 304'.
306.	1 - Contracting Authority and Contract - 6	Can expressly agreed technical and commercial specifications from the supplier's quotation take precedence over general tender requirements?	Please see the answer under 'Question No. 304'.
307.	1 - Contracting Authority and Contract - 6	Can we agree that the English version of the contract documents is binding? If the Dutch version is to remain authoritative: Can TNO provide a binding English translation?	The English-language Purchase and Supply Agreement shall be binding. With respect to the Purchasing Conditions for Goods TNO 2025, the Dutch-language version shall remain decisive in the event of any discrepancy between the Dutch and English versions. TNO will not provide a separate English translation that prevails over the Dutch-language Purchasing Conditions. The English version itself confirms that the Dutch version is decisive in the event of a discrepancy.
308.	1 - Contracting Authority and Contract - 6	What binding deadlines apply to the design review, FAT, delivery, installation, commissioning and SAT?	No separate binding deadlines are prescribed for the design review, FAT, installation, commissioning and SAT. The Tenderer shall submit a detailed project schedule covering these milestones with its Tender. The final milestone dates will be agreed with the successful Tenderer and recorded in the Contract, taking into account the facility-readiness planning stated in the Procurement Documents.

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309.	1 - Contracting Authority and Contract - 6	What specific obligations to cooperate and delivery dates does TNO undertake with regard to: • buildings and installation areas, • foundations and fixing points, • utility supplies, • dry air, • extraction and exhaust air, • Power supply, • Network and IT, • MES interface, • Reference materials, • Operating and testing staff?	Please refer to the earlier answers concerning facility readiness, site utilities and FAT/SAT responsibilities. TNO will provide the designated installation area and the agreed facility interfaces, including power, dry air, utilities, network/IT and MES connectivity, in accordance with the approved interface and utility specifications. TNO will also provide the agreed process materials, substrates and appropriately qualified operating/testing staff. The Supplier shall specify all required loads, fixing points, utilities, interfaces, material quantities and personnel requirements sufficiently in advance. The final responsibilities, specifications and required availability dates shall be documented and agreed during the CDR and in the FAT/SAT protocols. No other fixed delivery dates apply unless expressly stated in the Procurement Documents or agreed in writing.
310.	1 - Contracting Authority and Contract - 6	Are delivery and project deadlines automatically extended if TNO fails to fulfil its obligations to cooperate or provide services on time?	Only where delivery and installation within the agreed period are not possible because the TNO facility is not ready, the applicable delivery milestone and related delay penalty shall be postponed for the corresponding period. In all other cases, the contractual delivery dates and penalty provisions remain unchanged.
311.	1 - Contracting Authority and Contract - 6	Are contractual penalties and the consequences of delay excluded, provided that the delay was not caused by the supplier?	The contractual penalty remains unchanged. The penalty applies only where the delay constitutes an attributable failure by the Supplier. Any penalty paid shall be credited against damages payable for the same delay and the same loss. However, TNO will not apply the contractual penalty where the Supplier promptly reports any actual or anticipated deviation from the agreed planning, provides a clear and adequately substantiated explanation, regularly updates TNO on progress, takes reasonable mitigation measures and agrees a revised planning with TNO in writing. If a delay is demonstrably caused by TNO's failure to provide agreed information or cooperation, the consequences for the planning and any reasonable additional costs must be substantiated by the Supplier and agreed in writing. No automatic entitlement to an extension of time or additional costs applies.

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			Timely, open and transparent communication is essential. In the absence of a written agreement on revised planning, the contractual Delivery Time and penalty provisions remain applicable.
312.	1 - Contracting Authority and Contract - 6	How are consequences arising from changes to the building design, technical interfaces or TNO's project planning dealt with?	Changes to the building design, technical interfaces or TNO's project planning shall be addressed through written coordination and change control. Any consequences for scope, costs or milestones must be agreed in writing.
313.	1 - Contracting Authority and Contract - 6	After how long a project interruption on the client's part does the supplier acquire the right to adjust prices and deadlines?	Please see the answer under 'Question No. 42.
314.	1 - Contracting Authority and Contract - 6	In the event of a prolonged interruption, can a right of termination or a right to settle accounts for services already rendered and obligations already entered into be agreed?	No additional right of termination or automatic entitlement to settle costs is agreed in the event of a prolonged interruption. The Supplier's rights and the financial consequences of any termination remain governed by Clauses 25 and 26 of the TNO Purchasing Conditions for Goods 2025. Payments remain subject to the agreed payment schedule and the applicable Acceptance and milestone conditions. For facility-readiness delays, the Supplier shall include at least six (6) months of temporary storage in the Tender Price, including the normal storage, preservation, protection and maintenance measures. If the interruption or required storage continues beyond this period, the Parties shall discuss and agree in writing on the further arrangements and consequences. Please also refer to the answer to Question No. 42.
315.	1 - Contracting Authority and Contract - 6	For what maximum period should the supplier undertake interim storage caused by TNO free of charge?	Please see the answer under 'Question No. 42.
316.	1 - Contracting Authority and Contract - 6	Can we agree that, following a 30-calendar-day period of free storage, the following costs will be borne by TNO: • storage, • insurance,	No. Please see the answer under 'Question No. 42.

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		• preservation, • additional handling, • financing, • demobilisation and remobilisation?	
317.	1 - Contracting Authority and Contract - 6	Following a successful FAT and notification that the goods are ready for dispatch, who bears the risk of accidental loss or damage if TNO postpones delivery or installation?	If Delivery is postponed and the Equipment remains with the Supplier or in temporary storage arranged by the Supplier, the risk remains with the Supplier until Delivery at the agreed TNO location. If only installation is postponed after Delivery in accordance with the applicable Incoterm, risk transfers upon such Delivery.
318.	1 - Contracting Authority and Contract - 6	What is the minimum notice period for TNO to postpone the delivery or installation date?	TNO will inform the Supplier as soon as reasonably practicable after becoming aware that postponement is required. Following notification, the Parties shall coordinate the revised planning through open and transparent communication.
319.	1 - Contracting Authority and Contract - 6	What specific test procedures, measuring equipment, reference materials and tolerances apply to FAT and SAT?	The applicable performance criteria and tolerances are specified in the Programme of Requirements and Preferences, including Annex A04. The requirements identified for verification during FAT or SAT shall be tested against the corresponding values and tolerances stated in those Procurement Documents. The Procurement Documents do not prescribe an exhaustive, predefined set of test procedures, measuring equipment or reference materials for every FAT and SAT measurement. The detailed FAT and SAT protocols, including the test method, test sequence, measuring equipment, calibration requirements, test materials, acceptance criteria and reporting format, shall be developed and agreed during the Critical Design Review. For FAT, the Supplier shall submit a proposed test protocol based on TNO's requirements and the accepted preferences. FAT shall be performed at the Supplier's site and shall include, as a minimum, verification of the basic functions and the requirements designated for FAT verification. Shipment will only be authorised after successful FAT and submission of the FAT report.

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			For SAT, TNO will submit a draft test protocol. The final SAT protocol shall be mutually agreed during the Critical Design Review. SAT shall include, as applicable, run and rate, tact time, OEE, product quality, the agreed SAT checklist, the requirements designated for SAT verification, and verification of the presence and quality of the required documentation. TNO reserves the right to verify the relevant test results. OEE will be recorded only as part of SAT reporting, but no separate contractual OEE target applies. All measuring equipment used for contractual acceptance testing shall be suitable for the relevant measurement and shall have valid calibration traceable to an appropriate recognised standard. The specific measuring equipment, calibration evidence and reference materials to be used shall be identified in the agreed FAT and SAT protocols. The applicable tolerances shall remain those stated in the Procurement Documents. The test protocols may further specify how compliance with these tolerances will be demonstrated, but may not reduce or otherwise amend the contractual requirements.
320.	1 - Contracting Authority and Contract - 6	Which requirements are verified during the FAT and which are verified exclusively during the SAT?	Please see the answer under 'Question No. 319'.
321.	1 - Contracting Authority and Contract - 6	Are the complete FAT and SAT reports agreed upon jointly before the contract is concluded?	No. The complete FAT and SAT reports are not jointly agreed before the Contract is concluded. The applicable requirements, performance criteria and tolerances are established in the Procurement Documents and form part of the Contract. Following contract award, the detailed FAT and SAT protocols and checklists will be developed and agreed during the Critical Design Review. For FAT, the Supplier shall submit a proposed test protocol based on TNO's requirements and the accepted preferences. The FAT report shall subsequently record the tests performed and the results obtained. The FAT report must be submitted to TNO prior to shipment.

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			For SAT, TNO will provide a draft test protocol. The detailed SAT protocol and acceptance checklist will be mutually agreed during the Critical Design Review. The SAT report shall subsequently record the tests performed and the results obtained against the agreed protocol and the applicable contractual requirements. Agreement on the detailed protocols and checklists after contract award does not amend or reduce the Supplier's obligation to comply with all requirements, performance criteria and tolerances stated in the Procurement Documents.
322.	1 - Contracting Authority and Contract - 6	Within what timeframe after notification of readiness for testing must TNO carry out the FAT or SAT?	The Procurement Documents do not specify a fixed period following notification of readiness within which TNO must carry out or attend the FAT or SAT. The Supplier is responsible for preparing and performing the FAT and SAT in accordance with the agreed project schedule and the applicable test protocols. TNO representatives may attend the FAT at the Supplier's premises. The SAT shall be conducted by the Supplier in collaboration with TNO after installation and commissioning at the TNO site. The detailed planning, notification procedure and coordination arrangements for FAT and SAT shall be included in the project planning and further agreed during the Critical Design Review. The Supplier shall provide timely notice of readiness, allowing TNO a reasonable opportunity to coordinate its availability and review the applicable test documentation. TNO does not agree to a fixed period commencing solely upon the Supplier's notification of readiness. A notification of readiness does not by itself constitute completion or acceptance and does not alter the agreed Delivery Time, milestone requirements or acceptance procedure.
323.	1 - Contracting Authority and Contract - 6	Can a deemed acceptance be agreed if TNO: fails to carry out the SAT on time despite the system being ready for testing,	No. Deemed acceptance will not be agreed.

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		• uses the system in production or for testing, • does not raise a reasoned objection within the agreed timeframe?	Acceptance shall occur only after successful completion of the SAT in accordance with the Procurement Documents and the agreed SAT protocol. Neither of the following circumstances shall, individually or jointly, constitute Acceptance: • a delay in carrying out or completing the SAT; • TNO's use of the system for testing, commissioning, pilot production, process validation or other operational purposes; • the absence of an objection by TNO within a particular period. Any notification by the Supplier that the system is ready for testing does not constitute Acceptance and does not replace the agreed SAT procedure. TNO's use of the system during the on-site acceptance and test periods forms part of the verification process. Such use does not demonstrate that the system complies with all contractual requirements and does not affect TNO's rights regarding defects, warranties, non-compliance or unsuccessful completion of the SAT.
324.	1 - Contracting Authority and Contract - 6	Can we confirm that minor defects or outstanding issues which do not significantly impair safe and contractual use do not prevent acceptance?	No general confirmation can be given that minor defects or outstanding issues will not prevent Acceptance. Acceptance shall occur only after successful completion of the SAT in accordance with the Procurement Documents and the agreed SAT protocol. The Deliverables must comply with the applicable functional and technical specifications, Minimum Requirements, performance criteria and acceptance criteria.
325.	1 - Contracting Authority and Contract - 6	How are repeat tests handled if the cause of a failed test lies with TNO, the materials provided, the media or the infrastructure? Who bears the costs of travel, personnel, materials and retests in this case?	If a FAT or SAT is unsuccessful, the cause shall first be documented and assessed against the agreed test protocol, the contractual requirements and the respective responsibilities of the Parties. The Supplier shall not classify a failed test as being caused by TNO, the test materials, utilities, media or infrastructure without objective substantiation. Where the failed test results from the Supplier's failure to comply with the contractual requirements, the Supplier shall submit the required corrective

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			action plan, remedy the deficiencies at no additional cost to TNO and perform the necessary repeat test. The related costs remain for the Supplier's account. Any demonstrably required repeat test that is exclusively caused by circumstances attributable to TNO shall be addressed on a case-by-case basis, taking into account the agreed allocation of responsibilities, the test protocol and the circumstances concerned. No costs may be incurred or charged to TNO without TNO's prior written approval.
326.	1 - Contracting Authority and Contract - 6	Are process and performance values verified exclusively using reference materials previously agreed upon jointly and under defined operating conditions?	Please see the answer under 'Question No. 319'. Process and performance values shall be verified under the operating and test conditions specified in the Procurement Documents and further detailed in the agreed FAT and SAT protocols. Where relevant, the protocols shall identify the recipes, materials, machine settings, environmental conditions and other test conditions required to obtain reproducible and representative results. The Procurement Documents do not provide that verification may take place exclusively using reference materials jointly agreed before conclusion of the Contract. The specific test materials and detailed test conditions shall be defined in the FAT and SAT protocols during the Critical Design Review, taking into account the materials and operating ranges specified in the Procurement Documents. Any materials used for contractual acceptance testing must be suitable for verifying compliance with the applicable contractual requirements. Agreement on test materials and operating conditions shall not amend, limit or reduce the Supplier's obligation to demonstrate compliance throughout the operating ranges, material compatibility requirements, performance criteria and tolerances stated in the Procurement Documents.

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327.	1 - Contracting Authority and Contract - 6	What is the procedure if the materials or formulations provided by TNO deviate from the reference conditions agreed for the FAT or SAT?	Please see the answer under 'Question No. 319'. The applicable test materials, recipes, operating conditions, responsibilities and acceptance criteria shall be specified in the FAT and SAT protocols and checklists agreed during the Critical Design Review. If a material or formulation intended for a contractual acceptance test deviates from the conditions specified in the applicable test protocol, the deviation shall be identified and documented before the relevant test is continued or assessed. The Parties shall determine, on the basis of the agreed protocol and the contractual requirements, whether: • the test can validly proceed under the changed conditions; • the test conditions must first be restored; • the protocol must be adjusted without changing or reducing the contractual requirements; or • the relevant acceptance test must be rescheduled. A deviation in materials or formulations does not automatically constitute a failure of the Equipment. It also does not automatically result in Acceptance, an amendment of the contractual requirements or an entitlement to additional payment. The Supplier remains responsible for demonstrating compliance with the material compatibility requirements, operating ranges, performance criteria and tolerances stated in the Procurement Documents. Any amendment to an agreed test protocol or any resulting additional costs shall require TNO's prior written approval.
328.	1 - Contracting Authority and Contract - 6	Does a potential contractual penalty relate to the total contract value or exclusively to the delayed part of the service?	The contractual penalty is calculated on the basis of the total agreed contract price, and not exclusively on the value of the delayed part of the Performance. Pursuant to Clause 8.4 of the TNO Purchasing Conditions for Goods 2025, the Supplier owes a penalty of 0.1% of the total agreed contract price for each day by which the Delivery Time is exceeded, up to a maximum of 10% of the total agreed contract price.

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			The contractual penalty applies without prejudice to TNO's other contractual rights and claims.
329.	1 - Contracting Authority and Contract - 6	Can the contractual penalty be limited to 0.1 per cent of the value of the delayed part of the service for each full week of delay?	No. TNO maintains Clause 8.4 of the TNO Purchasing Conditions for Goods 2025. The contractual penalty amounts to 0.1% of the total agreed Contract Price for each day by which the Delivery Time is exceeded, up to the applicable maximum. The penalty is not calculated per full week and is not limited to the value of the delayed part of the Performance.
330.	1 - Contracting Authority and Contract - 6	Can a maximum contractual penalty of 5 per cent of the value of the delayed part of the performance be agreed?	No. Please also refer to the preceding answer. The maximum contractual penalty is 10% of the total agreed Contract Price, in accordance with Clause 8.4 of the TNO Purchasing Conditions for Goods 2025. TNO does not accept a reduction to 5% or a limitation of the calculation basis to the value of the delayed part of the Performance.
331.	1 - Contracting Authority and Contract - 6	Does the contractual penalty apply only in the event of a delay caused through the supplier's fault?	The contractual penalty applies where Delivery after the agreed Delivery Time constitutes an attributable failure by the Supplier, as provided in Clause 8.4 of the TNO Purchasing Conditions for Goods 2025. The penalty does not apply to the extent that the Supplier objectively demonstrates that the delay was exclusively caused by circumstances attributable to TNO and that the Supplier complied with its notification, mitigation and planning obligations.
332.	1 - Contracting Authority and Contract - 6	Will a contractual penalty paid be set off in full against any further claims for damages arising from the same delay?	Yes. Any contractual penalty paid shall be credited against any damages awarded or payable in respect of the same delay and the same loss. This does not prevent TNO from claiming damages exceeding the amount of the contractual penalty, provided that such damages are demonstrably incurred and are not compensated twice. Nor does it affect claims arising from other breaches, Defects or losses that are not covered by the contractual penalty.

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333.	1 - Contracting Authority and Contract - 6	Are contractual penalties excluded if the delay was caused by TNO, the construction site, changes to interfaces, missing approvals or force majeure?	Contractual penalties do not apply to the extent that the Supplier objectively demonstrates that the delay was exclusively caused by circumstances attributable to TNO or by a qualifying event of force majeure and that the Supplier complied with its contractual notification, planning and mitigation obligations. However, the circumstances listed in the question do not automatically exclude the contractual penalty. In particular: • facility-readiness and construction-site circumstances expressly allocated to the Supplier's planning, flexibility or temporary-storage obligations remain governed by the Procurement Documents; • where a change requested by TNO results in a later Delivery Time, the Supplier must request an adjustment of the Delivery Time in writing and in good time, in accordance with Clause 3.7; • missing approvals excuse delay only where obtaining the relevant approval is TNO's contractual responsibility and the Supplier has timely provided all information and cooperation required for that approval; and • force majeure is assessed in accordance with the Agreement, including the exclusions specified in Clause 22.3. The Supplier shall promptly notify TNO of the cause, expected duration and consequences of any delay and shall take reasonable measures to prevent or limit that delay.
334.	1 - Contracting Authority and Contract - 6	Can the warranty period be set uniformly at 24 months from the date of successful final acceptance (SAT)?	Yes. The original warranty period for the Equipment shall apply uniformly for twenty-four (24) months from the date of successful completion and TNO's approval of the SAT, constituting Final Acceptance.
335.	1 - Contracting Authority and Contract - 6	Can it be agreed that the warranty period shall commence no later than 60 or 90 days after delivery, provided that the delay in the SAT was not caused by the supplier?	No. The 24-month warranty period shall commence upon successful completion and TNO's approval of the SAT, constituting Final Acceptance. TNO does not accept an automatic commencement of the warranty period sixty (60) or ninety (90) days after delivery, including where the SAT is delayed for reasons not attributable to the Supplier.

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336.	1 - Contracting Authority and Contract - 6	How is the term 'larger whole' in clause 6.3 of the Purchasing Conditions to be understood?	The term "larger whole" in Clause 6.3 means the complete functional system or installation of which the relevant Performance forms an integrated part. For this Contract, the "larger whole" is the complete, integrated and operational Electrode Production Pilot Line. Accordingly, the original 24-month warranty period commences upon successful completion and TNO's approval of the SAT, constituting Final Acceptance of the complete line.
337.	1 - Contracting Authority and Contract - 6	Can we confirm that the start of the warranty period for the delivered machines is not de-pendent on the completion of other plant, the building or the entire TNO project?	Yes. The warranty period for the complete, integrated Electrode Production Pilot Line commences upon successful completion and TNO's approval of the SAT, constituting Final Acceptance.
338.	1 - Contracting Authority and Contract - 6	Can we confirm that the ten-year warranty period for 'Work' does not apply to the machinery, assembly, installation and commissioning of the pilot line?	Yes, TNO confirms this. The scope of the contract qualifies as a delivery of Goods and not as Work within the meaning of the applicable TNO purchasing conditions. Assembly, installation and commissioning are considered services connected with the delivery of the Goods and form part of that delivery. Consequently, the ten (10) year warranty period applicable to Work does not apply. Instead, the warranty period applicable to deliveries of Goods/Performances other than Work applies.
339.	1 - Contracting Authority and Contract - 6	Can the renewed warranty following rectification be limited to the part that was actually repaired or replaced?	Yes. Clause 22.2 of the TNO Purchasing Conditions for Goods 2025 already provides that, following replacement or rectification of a Defect, a new warranty period of twenty-four (24) months applies to the replaced or remedied part. For the avoidance of doubt, the renewed warranty period does not restart for the entire Equipment solely because an individual part has been repaired or replaced. However, where the rectification or replacement affects other parts, subsystems or the performance of the Equipment as a whole, the Supplier remains responsible for demonstrating that the complete affected functionality complies with the contractual requirements.

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			All other applicable warranty rights and remedies of TNO remain unaffected.
340.	1 - Contracting Authority and Contract - 6	Can a maximum warranty period of up to 30 months from the start of the original warranty period be agreed for repaired parts?	No. The proposed maximum warranty period of thirty (30) months from the commencement of the original warranty period is not accepted. Pursuant to Clause 22.2 of the TNO Purchasing Conditions for Goods 2025, a new warranty period of twenty-four (24) months commences for the repaired or replaced part upon Acceptance or when the accepted, repaired or replaced part is put into use. This renewed warranty period applies only to the repaired or replaced part, as confirmed in the answer to the preceding question. It is not subject to an overall cap calculated from the commencement of the original warranty period. All other warranty rights and remedies of TNO remain unaffected.
341.	1 - Contracting Authority and Contract - 6	Are wear parts, consumables and wear and tear resulting from normal operation expressly excluded from the warranty?	Consumables that are consumed as part of their intended and normal use are not covered by the warranty merely because they require replacement at their specified consumption or replacement interval. Similarly, normal and foreseeable wear of a wear part, occurring within the properly specified service life and under the agreed operating conditions, does not in itself constitute a Defect. This does not apply where replacement is required due to, among other things, a Defect, premature or abnormal wear, inadequate design or material quality, incorrect specification of the expected service life, insufficient maintenance instructions, or failure of the Equipment to meet the contractual performance, availability, safety or quality requirements. The Supplier shall identify all consumables and wear parts, their expected service life, replacement triggers, replacement intervals and applicable maintenance requirements in the documentation and the Parts & Consumables Life-Cycle List.

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342.	1 - Contracting Authority and Contract - 6	Are defects excluded that arise in particular from the following causes: • unsuitable or modified materials, • unapproved formulations, • operating errors, • inadequate maintenance, • modifications made by TNO or third parties, • media supply not in accordance with specifications, • building or environmental conditions, • third-party software or the customer's IT systems?	No general or automatic warranty exclusion is accepted for the circumstances listed in the question. The Supplier's warranty obligations under Clauses 6 and 22 of the TNO Purchasing Conditions for Goods 2025 remain applicable. Whether a particular issue constitutes a Defect shall be assessed on the basis of the cause of the issue, the contractual requirements, the agreed operating conditions and the respective responsibilities of the Parties. An issue shall not be attributed to the Supplier only to the extent that the Supplier objectively demonstrates that it was caused exclusively by: • materials or formulations provided or modified by TNO that fall outside the agreed specifications or operating conditions; • incorrect operation or inadequate maintenance by TNO contrary to the Supplier's complete and correct instructions; • modifications made by TNO or a third party without the Supplier's approval; • utilities or media supplied by TNO that do not meet the contractual interface specifications; • building or environmental conditions that do not meet the conditions specified in the Procurement Documents and the agreed interface documentation; or • third-party software or TNO IT systems outside the Supplier's contractual scope and responsibility. No exclusion shall apply where the issue is wholly or partly related to a Defect in the Equipment, inadequate design or integration, insufficient material compatibility, incorrect or incomplete specifications, documentation or instructions, or the Supplier's failure to identify and timely notify TNO of a relevant incompatibility or unsuitable condition. The classification of an issue shall be determined on the basis of documented facts. The circumstances listed in the question do not automatically exclude the application of the warranty.

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343.	1 - Contracting Authority and Contract - 6	Does the ten-working-day period specified in the terms and conditions of purchase refer to the response or the commencement of fault analysis, or to the complete rectification of the fault?	The ten-working-day period specified in Clause 22.1 of the TNO Purchasing Conditions for Goods 2025 refers to the complete rectification of the Defect, unless otherwise agreed in writing by TNO. Merely acknowledging the request, commencing the fault analysis or starting the remedial work within that period is not sufficient. If complete rectification within ten (10) working days is not reasonably feasible, the Supplier shall inform TNO promptly, provide reasons and submit a proposed corrective action plan and completion date. Any extension or alternative rectification period shall require TNO's prior written agreement. In the absence of such written agreement, the Defect must be completely rectified within ten (10) working days.
344.	1 - Contracting Authority and Contract - 6	Can the final rectification period be determined depending on the cause of the fault, the availability of spare parts, access to the system and the technical effort required?	Yes, subject to TNO's prior written agreement. The ten-working-day period specified in Clause 22.1 of the TNO Purchasing Conditions for Goods 2025 remains the standard period for complete rectification of a Defect. If complete rectification within that period is demonstrably not reasonably feasible, the Supplier shall promptly provide TNO with: • the documented cause and impact of the Defect; • the proposed corrective measures and any temporary mitigation; • the required system access; • the required spare parts and their confirmed availability; • the technical activities to be performed; and • a substantiated final rectification date. TNO may agree in writing to an alternative final rectification period, taking into account the cause and complexity of the Defect, the reasonable technical effort required and the availability of and access to the system. The availability of spare parts shall not in itself entitle the Supplier to an extension. The Supplier remains responsible for complying with the contractual spare-parts availability, maintenance and support obligations.

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			In the absence of TNO's prior written agreement to an alternative period, the Defect must be completely rectified within ten (10) working days. Any alternative period shall not affect TNO's other contractual rights and remedies.
345.	1 - Contracting Authority and Contract - 6	Under what conditions may TNO arrange for a third party to carry out the rectification?	Pursuant to Clause 22.2 of the TNO Purchasing Conditions for Goods 2025, TNO may arrange for a third party to carry out the rectification if the Supplier has not remedied, corrected or removed the Defect within the applicable rectification period.
346.	1 - Contracting Authority and Contract - 6	Is the supplier granted a reasonable written grace period prior to any work being carried out by a third party?	The Supplier is granted the applicable rectification period before TNO may arrange for the rectification to be carried out by a third party. The standard period for complete rectification is ten (10) working days following TNO's request, unless TNO and the Supplier agree otherwise in writing. This applicable rectification period constitutes the Supplier's opportunity to remedy the Defect. If the Supplier fails to complete the rectification within that period, TNO may carry out the necessary work itself or arrange for a third party to do so in accordance with Clause 22.2 of the TNO Purchasing Conditions for Goods 2025. No separate or additional grace period applies after expiry of the applicable rectification period. TNO will notify the Supplier in writing before arranging third-party rectification, unless immediate intervention is reasonably necessary due to safety considerations or to prevent or limit further damage. Such notification does not provide the Supplier with a new rectification period. The costs shall be allocated in accordance with Clause 22.2, without prejudice to TNO's other contractual rights and remedies.
347.	1 - Contracting Authority and Contract - 6	How are warranty works distinguished from process optimisations, new functions, recipe changes and other additional services?	Warranty work is work required to remedy a Defect and to bring or restore the Equipment into compliance with the Agreement, including the applicable specifications, functional and performance requirements, accepted commitments, documentation and agreed use. Such work shall

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			be performed at no additional cost to TNO in accordance with Clauses 6 and 22 of the TNO Purchasing Conditions for Goods 2025. An activity will not be regarded as an additional service merely because it involves parameter settings, software, a recipe or process optimisation. Where the activity is necessary to: • remedy a Defect; • achieve or maintain the agreed functional, performance, availability, safety or quality requirements; • correct incomplete or incorrect design, integration, software, documentation or instructions; or • fulfil support, software-update, HMI-improvement, commissioning, SAT, warranty or pilot-production obligations already included in the Procurement Documents or the Supplier's accepted Tender, the activity remains within the contractual scope and shall not give rise to additional payment. A genuinely new function, new capability or other change requested by TNO that is demonstrably outside the agreed scope, specifications, operating ranges and accepted commitments may be treated as an additional service. Any such additional service, including its scope, price and impact on the planning, requires TNO's prior written approval. Recipe changes or process optimisations shall be assessed against the contractual material compatibility, operating ranges, performance requirements and included support obligations. They qualify as additional services only insofar as they constitute a demonstrable extension of the agreed scope and are not required to remedy a Defect or achieve the agreed contractual performance. The Supplier shall substantiate why a requested activity falls outside the contractual scope. No additional work or costs may be charged without prior written agreement with TNO.

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348.	1 - Contracting Authority and Contract - 6	Which maintenance and service work is specifically provided free of charge during the 24-month warranty period?	During the 24-month warranty period, the Supplier shall provide, at no additional cost to TNO: - the maintenance and services included in the Contract, including preventive, predictive and corrective maintenance support, as described in Sections 1.4 and 1.6 of the Procurement Guide and the Supplier's accepted Maintenance & Service Concept under P-8000-040; - rectification or replacement of Defects and recommissioning of the affected Equipment, in accordance with Clauses 6 and 22 of the TNO Purchasing Conditions for Goods 2025; - remote support in accordance with Requirement R-1000-115; - six months of pilot-production support in accordance with Requirement R-1000-065; and - software updates and the software and HMI improvements required under Requirement R-1000-215.
349.	1 - Contracting Authority and Contract - 6	Can the scope, number, duration and travel costs of the maintenance visits included be clearly defined?	Yes. The Tenderer shall clearly specify the scope, frequency, number and expected duration of the maintenance visits included during the 24-month warranty period in its Maintenance & Service Concept pursuant to Section 1.6 of the Procurement Guide and Preference P-8000-040. All travel, accommodation, personnel and related costs required for these included maintenance visits shall be included in TP1 and may not be charged separately to TNO.
350.	1 - Contracting Authority and Contract - 6	Can the supplier's total liability be limited to a maximum of 100 per cent of the net contract value?	No. A limitation of the Supplier's total liability to 100% of the net contract value is not accepted. TNO is prepared to limit the Supplier's total aggregate liability under the Agreement to three (3) times the total agreed contract value, excluding VAT.
351.	1 - Contracting Authority and Contract - 6	Can a lower liability limit be agreed for damage caused by slight negligence?	No. A separate or lower liability limit for damage caused by slight negligence is not accepted. As clarified in the previous answer (Question no. 350), the Supplier's total aggregate liability under the Agreement will be limited to three (3) times

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			the total agreed contract value, excluding VAT. This liability limit applies irrespective of the degree of negligence, subject to any exclusions expressly specified in the amended contractual provision.
352.	1 - Contracting Authority and Contract - 6	Can the following types of damage – to the extent permitted by law – be excluded: • indirect damage, • consequential damages, • loss of production, • loss of use, • loss of profit, • lost savings, • loss of orders, • loss or recovery of data?	Please refer to the answer to Question No. 285. TNO agrees to exclude liability for indirect and consequential damages. For the purposes of the Agreement, indirect and consequential damages are exhaustively limited to reputational damage, loss of profit and loss of anticipated savings. Loss of production, loss of use, loss of orders, and loss of or costs relating to the recovery of data are not automatically classified as indirect or consequential damages and are therefore not generally excluded.
353.	1 - Contracting Authority and Contract - 6	Can contractual penalties, price reductions and other lump-sum claims be set off against the agreed liability limit?	Contractual penalties and liquidated damages are included within the aggregate liability cap of three (3) times the total Contract Price, as confirmed in the answer to Question No. 285. Price reductions are not automatically included within that liability cap, as they constitute an adjustment of the Price payable for a non-compliant or incomplete Performance rather than a claim for damages. Other lump-sum claims will be assessed according to their contractual nature. They are included within the liability cap only insofar as they constitute contractual penalties, liquidated damages or claims for damages.
354.	1 - Contracting Authority and Contract - 6	Can the indemnity against third-party claims be limited to culpable breaches of duty within the supplier's sphere of responsibility?	The proposed general limitation is not accepted. The Supplier's indemnity obligations remain governed by Clauses 6 and 23 of the Annex C03 - Purchasing Conditions for Goods TNO 2025. Under Clause 23.2, the indemnity applies to third-party claims and related damage arising from or connected with the Supplier's non-performance, inadequate performance or late performance of its contractual obligations.

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			The Supplier remains responsible for matters within its contractual scope, including the acts and omissions of its Personnel, subcontractors and other third parties engaged by it. The indemnity does not extend to a third-party claim insofar as the Supplier objectively demonstrates that the claim was caused exclusively by circumstances attributable to TNO and outside the Supplier's contractual responsibility.
355.	1 - Contracting Authority and Contract - 6	Do the limitations of liability also apply to the supplier's subcontractors, employees and vi-carious agents?	The aggregate liability applies to the Supplier's aggregate contractual liability, including liability arising from acts or omissions of its Personnel, subcontractors and other third parties engaged by the Supplier in the performance of the Agreement.
356.	1 - Contracting Authority and Contract - 6	Can a standard force majeure clause be included? In particular, can the following uncontrollable events be recognised as force majeure: • war and terrorism, • sanctions and embargoes, • regulatory measures, • natural disasters, • epidemics and pandemics, • energy and raw materials crises, • exceptional transport disruptions, • widespread industrial action, • unforeseeable failures on the part of key subcontractors?	TNO does not agree to replace the applicable contractual provisions with the proposed general force majeure clause. Force majeure shall be assessed in accordance with the Agreement and applicable law, subject to the specific contractual allocation of risks. For the avoidance of doubt, Clause 22.3 of the Annex C03 - Purchasing Conditions for Goods TNO 2025 expressly provides which circumstances do not qualify as force majeure
357.	1 - Contracting Authority and Contract - 6	Shall the affected deadlines be extended by the duration of the hindrance plus a reasonable restart period?	No automatic extension by the duration of the hindrance plus a restart period is agreed.
358.	1 - Contracting Authority and Contract - 6	In the event of a prolonged hindrance, does each party have the right to terminate the contract without giving rise to claims for damages?	No mutual or automatic right of termination is agreed.
359.	1 - Contracting Authority and Contract - 6	Can we confirm that the fixed price covers exclusively the expressly defined scope of delivery and services under the agreed conditions?	Yes. The Fixed Price covers the complete agreed scope of delivery and services under the Procurement Documents and the Supplier's accepted Tender. Activities already included in, or necessary to complete, that scope do not qualify as additional work.

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360.	1 - Contracting Authority and Contract - 6	How will additional services arising from changed requirements, schedule changes, new interfaces or additional tests be remunerated?	Additional services are eligible for additional remuneration only where they result from a demonstrable written change to the agreed contractual scope and have been approved by TNO in advance
361.	1 - Contracting Authority and Contract - 6	Can a binding change request process be agreed, under which changes affecting the price or deadline are only implemented following a written request?	Yes. Clause 3.7 of the Annex C03 - Purchasing Conditions for Goods TNO 2025 already provides for a written change process. Changes affecting the scope, Price or Delivery Time shall be instructed or agreed in writing. Reasonable additional costs must be agreed by the Parties in advance. If a requested change affects the Delivery Time, the Supplier must request an adjustment in writing and in good time. No additional remuneration or adjustment of the Delivery Time applies unless agreed in writing by TNO.
362.	1 - Contracting Authority and Contract - 6	How are additional costs handled if TNO requests changes at short notice prior to the delivery date?	Where TNO requests a change prior to the Delivery Time, the Supplier shall promptly identify and substantiate any reasonable additional costs and any impact on the Delivery Time. Additional costs are payable only at amounts or prices agreed by the Parties in advance. If the requested change results in a later Delivery Time, the Supplier must request the required adjustment in writing and in good time. No additional costs or schedule adjustment may be charged or claimed without TNO's prior written agreement.
363.	1 - Contracting Authority and Contract - 6	Can the price revision for subsequent maintenance contracts apply automatically in accordance with the agreed index formula, without TNO being able to unilaterally reject the mathematically correct adjustment?	No. An automatic price revision without TNO's prior written approval is not accepted.
364.	1 - Contracting Authority and Contract - 6	Can price increases resulting from legislative changes, new customs duties or levies introduced retrospectively be taken into account separately?	No separate or automatic price adjustment is agreed for cost increases resulting from legislative changes or newly introduced customs duties or levies.

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365.	1 - Contracting Authority and Contract - 6	Why is a bank guarantee covering 40 per cent of the total contract value required for a 20 per cent deposit?	The bank guarantee secures the cumulative pre-delivery payments made by TNO. Under Requirement R-1000-290, TNO pays 20% upon order and a further 20% following TNO's approval of the FAT. TNO may therefore have paid 40% of the total Contract Price before the Equipment has been delivered, installed and accepted through the SAT.
366.	1 - Contracting Authority and Contract - 6	Can the bank guarantee be limited to the amount of the advance payment actually made and not yet earned through performance?	No. The bank guarantee shall cover 40% of the total Contract Price in accordance with Requirement R-1000-290.
367.	1 - Contracting Authority and Contract - 6	What is the fixed expiry date for the bank guarantee?	No fixed calendar expiry date applies. The bank guarantee shall remain valid until the Equipment has been delivered at the TNO location and TNO has completed a visual inspection confirming that no visible transport damage has occurred. Following this inspection, the bank guarantee will be released.
368.	1 - Contracting Authority and Contract - 6	Can the payment schedule be adjusted more closely to the actual progress of the project, for example: • 30 per cent upon contract award, • 30 per cent upon design approval, • 30 per cent upon successful FAT or when the goods are ready for dispatch, • 10% upon successful SAT?	No, TNO maintains the payment conditions set out in the Procurement Documents.
369.	1 - Contracting Authority and Contract - 6	Can the final payment become due if the SAT is delayed for reasons not attributable to the supplier?	No. The final payment becomes due only after installation and commissioning on site and successful completion and TNO's approval of the SAT, including the applicable test periods. A delay in the SAT, even if not attributable to the Supplier, does not automatically trigger the final payment and does not constitute deemed Acceptance.

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370.	1 - Contracting Authority and Contract - 6	Can TNO set off claims exclusively against undisputed or legally established claims?	No. TNO does not accept that its right of set-off is limited to claims that are undisputed or legally established. Pursuant to Clause 11.4 of the TNO Purchasing Conditions for Goods 2025, TNO may set off its payment obligations against its claims against the Supplier, on whatever grounds. TNO shall notify the Supplier of such set-off in writing.
371.	1 - Contracting Authority and Contract - 6	Can the transfer of title be linked to the progress of payments?	Yes. For this Contract, transfer of title may be linked to the payment schedule. Title to the relevant Equipment shall pass to TNO upon payment of 100% of the agreed Contract Price. Until that time, the Supplier shall ensure that the Equipment is clearly identified and kept separate as Equipment intended for TNO.
372.	1 - Contracting Authority and Contract - 6	Can it be agreed that full title shall only pass to TNO upon full payment for the relevant scope of supply?	Yes. Full title to the Equipment shall pass to TNO upon payment of 100% of the agreed Contract Price. Until transfer of title, the Supplier may retain title to the Equipment. However, such retention of title shall not affect the Supplier's obligations regarding delivery, installation, commissioning, SAT, warranty, temporary storage, preservation or insurance.
373.	1 - Contracting Authority and Contract - 6	What rights does the supplier retain if title passes upon a partial payment but further due payments are not made?	Until payment of 100% of the agreed Contract Price, the Supplier retains title to the Equipment. The Supplier's retention of title does not entitle it to suspend, remove or repossess the Equipment contrary to the contractual payment schedule, TNO's rights of set-off or other applicable provisions of the Contract. If an amount is contractually due but remains unpaid, the Supplier retains the remedies available under the Contract and applicable law. Following payment of 100% of the agreed Contract Price, title passes fully and unconditionally to TNO.

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374.	1 - Contracting Authority and Contract - 6	When does the transfer of risk take place in the event of a delivery or installation postponed by TNO?	If Delivery is postponed by TNO and the Equipment remains with the Supplier or in temporary storage arranged by the Supplier, the risk remains with the Supplier until actual Delivery at the agreed TNO location. If only the installation is postponed after the Equipment has been delivered in accordance with DDP Incoterms 2020, the risk transfers upon such Delivery.
375.	1 - Contracting Authority and Contract - 6	How is the transfer of risk aligned with the agreed delivery under DDP Incoterms 2020?	The transfer of risk is aligned with the agreed DDP Incoterms 2020 delivery arrangement.
376.	1 - Contracting Authority and Contract - 6	Can it be confirmed that all existing intellectual property rights, standard designs, software libraries, algorithms, calculation methods and general manufacturing and process know-ledge—whether developed prior to the project or independently of it—remain with the supplier?	Yes, subject to the distinction between Background IP and Foreground IP in the Procurement Documents. Existing intellectual property rights, standard designs, software libraries, algorithms, calculation methods and general manufacturing or process know-how that were developed before the Contract or independently of its performance remain with the Supplier as Background IP. Intellectual property, knowledge, experience or other information created within the scope of the Agreement is governed by the Foreground IP provisions of Clause 17 and is not classified as Background IP merely because it incorporates or builds upon the Supplier's general knowledge or standard components. The Supplier shall clearly identify its relevant Background IP and distinguish it from Foreground IP and the project-specific deliverables. TNO's rights of use under Clause 16 remain unaffected.
377.	1 - Contracting Authority and Contract - 6	Can TNO's right to use the background IP be restricted to the operation, maintenance and contractual use of the delivered plant?	No. The proposed restriction is not accepted. Clause 16.1 of the Annex C03 - Purchasing Conditions for Goods TNO 2025 remains applicable. To the extent that the Performance incorporates the Supplier's Background IP, or its use requires such Background IP, the Supplier grants TNO a worldwide, unlimited, non-exclusive, transferable,

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			perpetual and non-cancellable right of use without additional compensation. TNO's right of use will therefore not be restricted exclusively to operation, maintenance and contractual use of the delivered pilot line. The ownership of the Supplier's Background IP remains with the Supplier.
378.	1 - Contracting Authority and Contract - 6	Can this right of use be structured as non-exclusive and, in principle, non-transferable?	The right of use is already non-exclusive. However, TNO does not accept that it shall, in principle, be non-transferable.
379.	1 - Contracting Authority and Contract - 6	May background IP only be disclosed to maintenance companies commissioned by TNO, which are subject to an appropriate confidentiality obligation and do not compete with the supplier?	No. TNO's right to disclose or make available the relevant Background IP will not be restricted exclusively to maintenance companies that do not compete with the Supplier. TNO may make the Background IP available to third parties insofar as permitted by the transferable right of use under Clause 16.1, including where this is necessary for operation, maintenance, repair, modification, continuity or replacement of the Performance. Where information is expressly identified and protected as confidential information, TNO will handle such information in accordance with the applicable contractual and legal confidentiality obligations. A third party's competitive relationship with the Supplier does not in itself prevent TNO from exercising its contractual right of use.
380.	1 - Contracting Authority and Contract - 6	Can the use of the background IP for the reproduction of further machines or for commissioning a competitor be expressly excluded?	No general restriction is accepted.
381.	1 - Contracting Authority and Contract - 6	Do the source code, standard PLC modules, HMI libraries, design standards and engineering tools remain the property of the supplier?	Such elements remain the property of the Supplier only insofar as they qualify as the Supplier's Background IP, meaning that they existed before the Contract or were developed independently of its performance. Source code, standard PLC modules, HMI libraries, design standards and engineering tools created within the scope of the Agreement are governed by Clause 17 concerning Foreground IP.

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			The Supplier shall clearly identify and document which elements constitute its Background IP. TNO's rights of use under Clause 16.1 remain unaffected.
382.	1 - Contracting Authority and Contract - 6	Which specific deliverables arising from the project should, in TNO's view, be transferred in full to TNO as Foreground IP?	TNO does not currently identify any specific deliverables that are expected to be transferred automatically and in full as Foreground IP. It is highly unlikely that Foreground IP will be created under the Agreement. If the Supplier nevertheless creates Foreground IP that is uniquely specific to TNO's requirements and to which TNO has materially contributed, the Parties shall engage in good-faith discussions to determine the appropriate ownership, licensing and usage rights. Any resulting allocation of rights shall be recorded in writing. The Supplier remains obliged to provide all documentation, software access, configurations, drawings and other deliverables expressly required under the Procurement Documents. Delivery of these items does not in itself determine their intellectual-property classification.
383.	1 - Contracting Authority and Contract - 6	Can general technical improvements, reusable functions, standard modules and the know-how gained during the project remain with the supplier?	Yes. General technical improvements, reusable functions, standard modules and general know-how developed or enhanced by the Supplier during performance of the Agreement shall remain with the Supplier, provided that they are not uniquely specific to TNO's requirements. TNO's contractual rights to use the delivered Equipment, Documentation and any necessary Background IP remain unaffected.
384.	1 - Contracting Authority and Contract - 6	Can the transfer of Foreground IP be limited to expressly designated, customer-specific and fully paid-for development results?	Accepted in part. No automatic transfer of Foreground IP is expected under this Agreement. Only IP created within the scope of the Agreement that is uniquely specific to TNO's requirements may potentially qualify as Foreground IP. If such Foreground IP is created and TNO has materially contributed to it, the Parties shall engage in good-faith discussions to determine the

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			appropriate ownership, licensing and usage rights. Any agreed allocation shall be expressly documented in writing. The classification and allocation of Foreground IP shall not depend solely on whether a development result has been separately priced or fully paid for. The Supplier shall clearly identify its relevant Background IP and distinguish it from Foreground IP created within the scope of the Agreement. TNO's rights under Clauses 16 and 17 remain applicable.
385.	1 - Contracting Authority and Contract - 6	Can TNO's irrevocable power of attorney to sign and register assignments of intellectual property rights on behalf of the supplier be revoked?	The irrevocable power of attorney in Clause 17.2 shall not apply automatically to this Agreement. If Foreground IP is created, the Parties shall first determine the appropriate ownership, licensing and usage rights in accordance with the Foreground IP clarification above. Any assignment and any related authorisation required to implement the agreed allocation of rights shall be documented separately in writing. TNO shall therefore not exercise the power of attorney in Clause 17.2 in the absence of a written agreement establishing that the relevant Foreground IP is to be assigned to TNO.
386.	1 - Contracting Authority and Contract - 6	Is the handover of PLC, HMI or other software source code required? If source code is required: Can the scope, rights of use, rights to make amendments, liability implications and remuneration be agreed separately?	Requirement R-1000-190 expressly requires all servo axes, robots, actuators and electronic process parameters to be accessible, configurable, adjustable and monitorable by TNO through the HMI or an externally connectable service panel without requiring access to source code. However, where source code is expressly included in the agreed Performance or created and documented as Foreground IP within the scope of the Agreement, the applicable delivery and Foreground IP provisions remain applicable. The rights relating to Background IP incorporated into the software remain governed by Clause 16.

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			No separate remuneration is due for source code, software or related rights already included in the agreed contractual scope and Fixed Price. Any requirement outside the agreed scope would require prior written agreement in accordance with the applicable change procedure.
387.	1 - Contracting Authority and Contract - 6	Do the warranty and liability for the functions in question cease if TNO or a third party makes changes to the software or design?	No. The warranty and liability do not automatically cease merely because TNO or a third party modifies the software or design.
388.	1 - Contracting Authority and Contract - 6	Which documents may TNO amend or disclose to third parties in accordance with clause 8.6?	Clause 8.6 applies to the Documentation and other relevant information to be provided by the Supplier no later than the Delivery Time, including: • attestations and certificates of origin; • other certificates and permits; • safety data sheets and packing lists; • instruction and operating manuals; • maintenance and management documentation; and • other information required for TNO to transport, use, store, manage and maintain the Performance safely and properly. TNO may reproduce, amend and disclose this Documentation without additional compensation being due to the Supplier. This includes the technical documentation required under Requirements R-1000-095, R-1000-100 and R-1000-230.
389.	1 - Contracting Authority and Contract - 6	Can the use and reproduction of the supplier's documentation be restricted to the operation, maintenance and internal training relating to the specific plant?	No. The proposed restriction is not accepted. Under Clause 8.6, TNO may reproduce, amend and disclose the Documentation required for the safe and proper transport, use, storage, management and maintenance of the Performance. These rights will not be restricted exclusively to operation, maintenance and internal training relating to the specific Equipment.
390.	1 - Contracting Authority and Contract - 6	Can the disclosure of drawings, software descriptions, calculations and manufacturing documents to competitors be prohibited?	No general prohibition is accepted. TNO may disclose relevant Documentation and Background IP to third parties where permitted under Clauses 8.6 and 16, including where necessary for the operation, maintenance, repair, modification, continuity

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			or replacement of the Performance. A third party's competitive relationship with the Supplier does not, in itself, prevent TNO from exercising these contractual rights. This does not mean that ownership of the Supplier's Background IP transfers to TNO. Information that constitutes the Supplier's Background IP remains subject to the distinction between Background IP and Foreground IP under Clauses 16 and 17.
391.	1 - Contracting Authority and Contract - 6	Can the confidentiality obligation be made mutual?	TNO maintains Clause 18 of the Annex C03 - Purchasing Conditions for Goods TNO 2025. Where the Supplier expressly identifies information or Documentation as confidential and adequately substantiates its confidential nature, TNO will treat such information as confidential in accordance with the applicable contractual and legal obligations. Such confidentiality shall not restrict or prevent TNO from exercising its rights under the Agreement, including its rights concerning the use, reproduction, amendment and disclosure of Documentation, Background IP and Foreground IP under Clauses 8.6, 16 and 17. Where disclosure to a third party is necessary for the exercise of those rights, TNO may require that third party to observe appropriate confidentiality obligations.
392.	1 - Contracting Authority and Contract - 6	Can the contractual penalty of €25,000 be limited to culpable and material breaches of confidentiality?	No. The contractual penalty will not be limited exclusively to culpable and material breaches of confidentiality.
393.	1 - Contracting Authority and Contract - 6	Can a reasonable maximum total amount be agreed for all breaches of confidentiality?	Please refer to the answer to Question No. 285.
394.	1 - Contracting Authority and Contract - 6	Will the contractual penalty be set off in full against any further claim for damages?	Yes. Any contractual penalty paid shall be credited against damages payable in respect of the same breach and the same loss.

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395.	1 - Contracting Authority and Contract - 6	Is the supplier permitted to archive project documents required to be retained for legal and tax purposes, despite the requirement to delete data?	Yes. Notwithstanding Clause 18.2 of the Annex C03 - Purchasing Conditions for Goods TNO 2025, the Supplier may retain one archival copy of project documents where, and for as long as, retention is required by applicable law or binding tax, accounting or regulatory requirements. The retained documents: • may only be used to comply with the relevant retention obligation; • must remain subject to the confidentiality and security obligations under the Agreement; • may not be used for commercial or other purposes; and • must be securely deleted upon expiry of the applicable statutory retention period, unless continued retention is required by law. This exception does not permit the Supplier to retain TNO information merely for internal convenience, general record-keeping or future commercial use.
396.	1 - Contracting Authority and Contract - 6	How does TNO define the 'full operational lifetime' of the plant?	The wording "for the full operational lifetime, in accordance with Annex A04" shall be understood as follows: The Supplier shall guarantee the availability of spare parts for a minimum period of ten (10) years, in accordance with Requirement R-1000-120 of Annex A04 - Conformity list 'Programme of Requirements and Preferences'. The reference to the "full operational lifetime" does not create a legally binding spare-parts availability obligation beyond this ten-year period. After expiry of the ten-year period, the Supplier is expected to continue providing reasonable technical and service support, subject to availability and separate agreement on the applicable scope, conditions and remuneration.
397.	1 - Contracting Authority and Contract - 6	Can the obligation to supply spare parts be limited to ten years after SAT?	Please see the answer under 'Question No. 396'.

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398.	1 - Contracting Authority and Contract - 6	Is the availability of spare parts subject to the respective component manufacturers' ability to supply them?	No. The availability obligation is not automatically conditional upon the respective component manufacturer's ability to supply. In accordance with Requirement R-1000-120 of Annex A04 - Conformity list 'Programme of Requirements and Preferences', the Supplier shall guarantee the availability of spare parts for at least ten (10) years. The Supplier remains responsible for organising its supply chain accordingly. If an original component becomes unavailable, the Supplier may propose a technically equivalent replacement, provided that it does not adversely affect the Equipment's safety, functionality, performance, compatibility or certification. Any necessary modifications and associated consequences must be agreed with TNO in writing in advance.
399.	1 - Contracting Authority and Contract - 6	In the case of discontinued components, is the supplier permitted to offer technically equivalent spare parts or retrofit solutions subject to a charge?	Please see the answer under 'Question No. 398'.
400.	1 - Contracting Authority and Contract - 6	Who finances the build-up and maintenance of the stock of critical A-parts?	The financing and maintenance of the stock of critical A-parts shall be determined in the jointly developed spare-parts plan after contract award, taking into account the final scope of supply, criticality, lead times and required system availability. Unless TNO expressly agrees in writing to purchase specific A-parts for its own stock, the Supplier remains responsible for complying with the agreed spare-parts availability and support obligations. TNO is not required to finance the Supplier's general spare-parts stock.
401.	1 - Contracting Authority and Contract - 6	Do A-parts procured for stock become the property of TNO, and are they paid for by TNO?	A-parts specifically ordered and paid for by TNO for storage at its facility become the property of TNO in accordance with the agreed purchase arrangements. A-parts held by the Supplier as part of its own stock remain the Supplier's property and are not paid for by TNO until ordered, unless otherwise agreed in writing. TNO is not required to purchase all critical A-parts in advance.

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			The allocation of stock, ownership and costs shall be recorded in the jointly developed spare-parts plan. The Supplier's obligation to guarantee spare-parts availability for at least ten years remains applicable. Requirement R-1000-120 expressly requires spare parts to remain available for at least ten years.
402.	1 - Contracting Authority and Contract - 6	Is the supplier granted a reasonable written grace period prior to termination on the grounds of remediable breaches of duty?	No general additional grace period is agreed. Clause 25.2 remains applicable and already provides that termination or dissolution is not available where the special nature or minor importance of the breach does not justify that remedy. For a remediable breach, TNO may, taking into account the nature and circumstances of the breach, grant the Supplier a reasonable written period to remedy it. This does not apply where immediate termination is permitted under the Agreement or where allowing a remedy period cannot reasonably be required from TNO. The specific rectification and corrective-action periods agreed elsewhere in the Procurement Documents remain applicable.
403.	1 - Contracting Authority and Contract - 6	Can immediate termination be restricted to material and irremediable breaches of duty?	No. Immediate termination will not be restricted generally to breaches that are both material and irremediable. TNO maintains the termination rights and grounds set out in Clauses 21 and 25 of the Annex C03 - Purchasing Conditions for Goods TNO 2025. Clause 25.2 already contains a proportionality safeguard, as termination or dissolution is not available where the special nature or minor importance of the breach does not justify that remedy. Whether the Supplier is first given an opportunity to remedy a breach depends on the applicable contractual provision and the nature and circumstances of the breach. Immediate termination remains available where expressly provided for in the Agreement, including the circumstances covered by Clauses 25.1 and 25.5.

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404.	1 - Contracting Authority and Contract - 6	In the event of termination, how are the following items remunerated: • services already rendered, • assembly units on which work has already been carried out, • materials ordered that cannot be cancelled, • obligations to subcontractors, • engineering services, • demobilisation and cancellation costs?	Please refer to the previous answers concerning Clauses 25 and 26 of the TNO Purchasing Conditions for Goods 2025. No general or automatic entitlement applies to payment for work in progress, non-cancellable materials, subcontractor commitments, engineering services, demobilisation or cancellation costs. The financial consequences of termination depend on the contractual ground for termination and shall be determined in accordance with Clauses 25 and 26, the agreed payment schedule and the status of the relevant Performance. Properly performed and accepted services are handled in accordance with the applicable contractual payment provisions. Where termination or dissolution results from a failure attributable to the Supplier, TNO retains its rights to repayment, completion or transfer of the Performance and recovery of damages. Incomplete, defective or unaccepted Performance does not automatically qualify for payment.
405.	1 - Contracting Authority and Contract - 6	Does the supplier have a right of termination or a right to withhold performance in the event of: • late payment, • lack of cooperation, • a prolonged halt to construction, • repeated postponement of deadlines, • failure to provide utilities or reference materials?	No additional contractual right of termination or suspension is agreed for the circumstances listed. The Supplier's rights remain governed by the Agreement and applicable law. Late payment, lack of cooperation, construction delays, postponement of deadlines, or the unavailability of utilities or reference materials do not automatically entitle the Supplier to terminate the Agreement, suspend performance or claim additional costs. The Supplier shall promptly notify TNO of any actual or anticipated impediment, substantiate its effect on the planning and costs, take reasonable mitigation measures and provide regular progress updates. Any adjustment of the planning, Price or Performance must be agreed with TNO in writing.

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			Facility-readiness delays and temporary storage remain subject to the specific provisions and previous clarifications in the Information Notice. The Supplier's mandatory rights under applicable law remain unaffected.
406.	1 - Contracting Authority and Contract - 6	Can the cross-default clause be removed from other, legally separate contracts between TNO and the supplier?	Not applicable. The cross-default provision shall not apply to legally separate agreements that can be performed independently.
407.	1 - Contracting Authority and Contract - 6	What support and handover services must be provided upon termination of the contract, and how are these remunerated?	Upon early termination, the Supplier shall provide all cooperation reasonably necessary to enable TNO or a replacement supplier to continue the Performance without hindrance. This includes the transfer of relevant documentation, data, information carriers and the applicable rights regarding Background IP and Foreground IP. Where termination results from a failure attributable to the Supplier, such cooperation shall be provided at no additional cost to TNO. In other cases, any remuneration shall be determined in accordance with Clause 26 and the applicable termination provisions
408.	1 - Contracting Authority and Contract - 6	What specific insurance policies and levels of cover does TNO expect from the supplier?	Please refer to the insurance requirements in Section 5.2.1 of the Procurement Guide, which are leading.
409.	1 - Contracting Authority and Contract - 6	Can the obligation to assign insurance claims to TNO be removed?	No. The obligation to assign relevant insurance claims to TNO remains applicable.
410.	1 - Contracting Authority and Contract - 6	Can the irrevocable power of attorney granted to TNO to affect an assignment on behalf of the supplier be removed?	No. The irrevocable power of attorney in Clause 24.3 remains applicable. The power of attorney is limited to executing and notifying the assignment of insurance claims relating to liability for which TNO has held the Supplier liable. It does not authorise TNO to act on behalf of the Supplier in unrelated matters.
411.	1 - Contracting Authority and Contract - 6	Is a standard insurance certificate, without disclosure of the supplier's claims history to date, sufficient as proof?	Yes, provided that it confirms compliance with the insurance requirements in Section 5.2.1 of the Procurement Guide.

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412.	1 - Contracting Authority and Contract - 6	Is the 2024 Supplier Code of Conduct a binding part of the contract? If so, where does it rank in the hierarchy of documents?	Yes. The TNO Supplier Code of Conduct forms a binding part of the Contract pursuant to Section 2.2.19 of the Procurement Guide. Its position in the contractual hierarchy follows from the order of precedence stated in the Procurement Documents. The Procurement Guide and any Information Notices prevail over conflicting provisions in the general contractual documents.
413.	1 - Contracting Authority and Contract - 6	What specific evidence does TNO expect regarding a climate neutrality target and reporting on progress?	No specific certificate or prescribed reporting format is required. Upon TNO's request, the Supplier must provide reasonable evidence that it has an active climate policy aligned with the Paris Agreement, including a concrete climate-neutrality target date and information demonstrating progress towards that target, in accordance with Clause 20.3(g) and Clause 20.4 of Annex C03
414.	1 - Contracting Authority and Contract - 6	Does TNO expect formal certification to ISO 20400, or is a sustainable procurement policy aligned with ISO 20400 sufficient?	Formal ISO 20400 certification is not required. A documented sustainable procurement policy aligned with ISO 20400 is sufficient.
415.	1 - Contracting Authority and Contract - 6	Which requirements must be passed on to subcontractors?	The Supplier shall ensure that subcontractors comply with all contractual requirements relevant to the activities entrusted to them, including applicable requirements concerning quality, safety, confidentiality, data protection, integrity, CSR, sanctions and export control.
416.	1 - Contracting Authority and Contract - 6	What audit and monitoring rights does TNO have in relation to the supplier and its subcontractors?	TNO may request information and supporting documentation reasonably necessary to verify compliance by the Supplier and its subcontractors with the Contract, including the Supplier Code of Conduct.
417.	1 - Contracting Authority and Contract - 6	Before termination due to a compliance breach, is there generally an opportunity to rectify the identified breach within a reasonable timeframe?	Where a compliance breach is remediable, TNO will in principle give the Supplier a reasonable written period to remedy the breach.
418.	1 - Contracting Authority and Contract - 6	Can it be confirmed that the recruitment or poaching of staff is prohibited only in the case of active and targeted poaching, and that general job advertisements are exempt from this?	Confirmed

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419.	1 - Contracting Authority and Contract - 6	Can immediate termination on the grounds of employing former TNO staff be limited to cases where the supplier was aware of this and TNO had expressly objected to such employment beforehand?	Accepted
420.	1 - Contracting Authority and Contract - 6	Can all agreed amendments be definitively documented in a signed annex to the contract?	Please see the answer under 'Question No. 303 and 304'.
421.	1 - Contracting Authority and Contract - 6	Can we confirm that, in the event of any inconsistencies, the individually negotiated provisions of the Purchase and Supply Agreement and the agreed list of deviations take precedence over TNO's general terms and conditions of purchase?	Please see the answer under 'Question No. 303 and 304'.
422.	1 - Contracting Authority and Contract - 6	Will a bid written entirely in English be accepted, even though the request for proposals specifies Dutch as the sole language for bids?	The Tender, technical documentation and contractual communications shall be submitted in English, unless a specific document is expressly required in another language.
423.	1 - Contracting Authority and Contract - 6	Are technical specifications, data sheets, drawings, risk assessments, and subcontractor documents in English permissible?	Please see the answer under 'Question No. 46 and 422'.
424.	1 - Contracting Authority and Contract - 6	As the general contractor, is Supplier the sole contracting party and fully responsible for all subcontractors?	Correct. The engagement or approval of subcontractors does not limit the Supplier's obligations towards TNO.
425.	1 - Contracting Authority and Contract - 6	Are separate FATs for subcontractors accepted, and how is the overall line FAT subsequently conducted?	Yes. Separate FATs at the manufacturing facilities of subcontractors are acceptable, subject to prior coordination with TNO. The Supplier remains responsible for ensuring that all FAT requirements are covered and consolidated in a complete FAT report. Verification of the overall integrated line shall subsequently take place during commissioning and SAT at TNO's site, in accordance with Requirements R-1000-275, R-1000-280 and R-1000-285.
426.	1 - Contracting Authority and Contract - 6	Who bears the risk for interfaces between the mixer, coater, calender, slitter, drying room, exhaust system, media supply, and TNO-MES?	The Supplier bears responsibility for the interfaces within its contractual scope, including the integration between the supplied Machines, auxiliary systems, controls and internal connections.

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			TNO is responsible for facility utilities and connections up to the agreed Points of Connection. The precise allocation of interfaces and responsibilities shall be documented and confirmed during the CDR. See Requirement R-1000-270.
427.	1 - Contracting Authority and Contract - 6	Must Supplier issue a CE Declaration of Conformity for the entire line, or do individual machines remain legally independent machines?	The Supplier shall ensure compliance with all applicable CE requirements. Where the supplied line legally constitutes an assembly of machinery, the Supplier shall provide the required CE Declaration of Conformity for the integrated line. Individual legally independent Machines shall additionally be provided with the applicable declarations and technical documentation. See Requirement R-1000-020.
428.	1 - Contracting Authority and Contract - 6	From which event does the 24-month warranty begin: delivery, commissioning, SAT, or final acceptance? What exactly does the maximum total duration of 13 years mean: 13 years including or in addition to the first 24 months?	The 24-month warranty period commences upon successful completion and TNO's approval of the SAT, constituting Final Acceptance. The maximum period of thirteen (13) years concerns the optional post-warranty maintenance and service period and applies in addition to the initial 24-month warranty period.
429.	1 - Contracting Authority and Contract - 6	Are maintenance contracts after the warranty period a binding scope of services or merely a recommended option?	Post-warranty maintenance contracts are optional and do not constitute a binding purchase commitment for TNO. After the 24-month warranty period, TNO may conclude a separate one-year Maintenance and Services Contract. Any subsequent annual renewal is subject to mutual written agreement.
430.	1 - Contracting Authority and Contract - 6	How are consequences regarding deadlines and additional costs handled in the event of changes made after design approval?	Changes after design approval shall be handled through the written change procedure under Clause 3.7 of Annex C03 - Purchasing Conditions for Goods TNO 2025.
431.	1 - Contracting Authority and Contract - 6	What is the order of precedence in the event of contradictions between the request for proposals, technical specifications, the contract, terms and conditions of purchase, and answers provided during the Q&A session?	Please see the answer under 'Question No. 303 and 304'.

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432.	1 - Contracting Authority and Contract - 6	What is the budget or estimated contract value?	Please see the answer under 'Question No. 38'.
433.	8.5 - Subject-matter 'Slitter' - 55	R-1400-075 - How does the roll ID comes into the machine?	Roll ID may be entered manually through the HMI in the baseline configuration and shall be included in the process data made available via OPC-UA.
434.	8.5 - Subject-matter 'Slitter' - 44	R-1400-095 -- Can be done but will not live monitor the wear, can be done in regards to hours / meters - is that ok?	Yes. Direct real-time measurement of tool wear is not required. Usage-based monitoring is acceptable, provided that operating hours, processed slit length and slitting-cycle counts are recorded for the relevant wear components and can be linked to maintenance and replacement thresholds.
435.	8.5 - Subject-matter 'Slitter' - 51	R-1400-070 - can we supply all webrollers are hard coated ?	Hard-coated web rollers are acceptable, provided that the selected coating is non-shedding, chemically compatible with the intended materials and does not damage the foil or electrode coating. The Tenderer shall define the appropriate roller materials, surface finish and coating needed to meet R-1400-070.
436.	2.2.18 - Contract terms - 14	given payment terms we cannot accept, we suggest as follows: 40% down payment against bank Guarantee, 30% with FAT, 15% with arrival of goods, 15% with SAT but no later than 60 days after arrival , bank guarantee only valid until machines have arrived on site TNO	TNO maintains the payment conditions set out in the Procurement Documents, including Requirement R-1000-290. A single bank guarantee covering 40% of the total Contract Price remains required. TNO does, however, agree that the bank guarantee may be released following delivery of the complete Equipment at the designated TNO location and successful completion of the visual inspection, provided that no visible transport damage, material incompleteness or other delivery-related non-conformity has been identified. The request to divide the required security into two separate bank guarantees of 20% each is not accepted. TNO requires one uniform and continuous guarantee covering the cumulative advance payments made before delivery.

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			For the avoidance of doubt, the provision in R-1000-290 requiring the bank guarantee to remain valid until approval of the SAT is amended accordingly.
437.	8.1 - Subject-matter 'General' - 30	Steel manufacturing will be sent at FAT - ok?	Yes. The required steel and iron country-of-origin documentation may be submitted at the FAT, provided that it is complete and accepted by TNO before shipment of the Equipment.
438.	1.5 - Facility readiness Timeline - 7	due to delay in tendering this timeline is not possible anymore, project timeline more realistic to evaluate once the scope of supply has been agreed	Acceptance testing will commence only after Mechanical Completion of the facility, which is currently estimated for mid-August 2027. The detailed project timeline, including FAT, delivery, installation, commissioning and SAT, will be evaluated and coordinated with the awarded Contractor once the final scope of supply has been established. The stated dates are current planning assumptions and do not constitute guaranteed or binding dates.
439.	1.6 - Maintenance/services Contract - 8	Service agreements will be quitted after it has been agreed the scope of supply, 10 year supply for spare parts are legally binding not 15, support we will give for longer than 10 years	The detailed Maintenance and Services Agreement will be finalised after contract award, once the scope of supply and the corresponding maintenance and service requirements have been established. Any post-warranty Maintenance and Services Agreement is subject to mutual written agreement. In accordance with Requirement R-1000-120, the Supplier is legally required to guarantee the availability of spare parts for a minimum period of ten (10) years. No legally binding spare-parts availability period of fifteen (15) years applies. The Supplier is expected to continue providing reasonable technical and service support beyond the ten-year period, where reasonably available. However, support beyond ten years does not extend the legally binding ten-year guarantee concerning spare-parts availability and remains subject to availability and separate agreement on the applicable scope, conditions and remuneration.

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440.	1.6 - Maintenance/services Contract - 8	indexation Method - all suppliers under the umbrella for this Tender will use their own hour rate, travel rate etc. all have standard response time such as telephone support, on-site support etc	Tenderers may use their own standard maintenance and service pricing structure, including their own hourly rates, on-site service rates, remote-support rates, travel rates and other applicable tariffs. These rates must be stated clearly and transparently in Annex A03 - Price Sheet and reflected consistently in the Tenderer's Maintenance & Service Concept and proposed service agreement under Annex A05 - Maintenance - Services. The response-time categories specified in the Procurement Documents apply uniformly to all Tenderers. Tenderers must describe how telephone or remote support, fault analysis and on-site support will be provided in accordance with these response-time categories. The response-time requirements may not be replaced by a Tenderer's less stringent standard service levels. Any permitted indexation applies to the maintenance and service prices and rates offered by the relevant Tenderer. It does not require all Tenderers to use identical hourly, travel or service rates. Each Tenderer's own accepted rates form the applicable price baseline for subsequent indexation under Section 1.6 of the Procurement Guide. The Tenderer must clearly specify: • the services included in the annual maintenance price; • the applicable hourly, remote-support, on-site and travel rates; • the agreed response and intervention times; • which travel and accommodation costs are included or charged separately; and • which services qualify as additional services. No rates or costs that have not been transparently stated in the Tender may be charged to TNO without prior written agreement.

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441.	8.1 - Subject-matter 'General' - 30	R-1000-250 The machine must be fitted with a robust safety door system with electromagnetic locks, whereby the door leaves must ensure mechanical strength and operator safety whilst providing the widest possible field of view for process monitoring, provided the process environment permits this. The glass must be capable of being cleaned with IPA without causing chemical damage. -> Does this also apply to mixing process 8.2?	The safety-interlocking requirement applies to the Slurry Mixing process. The Mixer lid shall not be openable while the rotor is in motion, and rotor operation shall not be possible unless the lid is closed and secured. The lid shall remain locked until the rotor has reached a complete standstill and any relevant pressure or vacuum condition has been safely equalised. A process-viewing window shall be provided where technically feasible and permitted by the process conditions. Any viewing window provided shall be resistant to cleaning with IPA.
442.	8.1 - Subject-matter 'General' - 30	R-1000-075 All plant and machinery must ensure complete traceability of batch and process data, including timestamps, setpoints, measured values and alarms. -> Does this only apply to the recipe data for the mixer? Or does it also apply to raw material traceability?	The requirement applies to all recipe and process-execution data generated by the equipment, including timestamps, setpoints, measured values and alarms. Raw-material identification, lot tracking and material genealogy are outside the required scope. However, quantities added and operator confirmations recorded as part of recipe execution shall be retained in the corresponding batch record.
443.	8.2 - Subject-matter 'Slurry Mixing' - 40	referred to R-1100-015 and R-1100-025: specification is for a planetary mixer. Is an alternative mixing solution by a high shear mixer or an extruder also acceptable?	A planetary geometry is not mandatory. An alternative batch high-shear mixing solution may be accepted if the Tenderer demonstrates compliance with the complete functional and performance requirements for graphite, graphite-Si and high-Si formulations. A continuous extruder is not accepted as a direct replacement for the required batch mixer, as the baseline R&D system shall support batch operation with working volumes from 15 to 50 L. It may be offered as a separately itemised optional module.
444.	8.2 - Subject-matter 'Slurry Mixing' - 40	referred to R-1100-005: For continuous mixing processing, net batch volume is not applicable, please define throughput (kg/h or L/h).	The required baseline system operates in batch mode; therefore, a continuous throughput is not specified. If an optional continuous mixing module is proposed, the Tenderer shall define and guarantee its minimum and maximum throughput, turndown range and applicable material and process envelope.

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445.	8.2 - Subject-matter 'Slurry Mixing' - 40	referred to R-1100-110:What media should be measured (incoming, outcoming) ?	Incoming raw materials and liquids added to the Mixer shall be measured and recorded primarily by mass for recipe execution and batch control. Separate incoming-volume measurement is not required. For outgoing slurry, the system shall monitor or control the actual quantity transferred from the Mixer or Transfer/Storage Tank towards the downstream process. The transferred volume shall be recorded with a resolution of 0.01 L and a process accuracy of $\pm 1\%$ of the measured quantity or better. A flow meter is acceptable, but an equivalent method based on mass measurement and validated slurry density may also be proposed.
446.	8.2 - Subject-matter 'Slurry Mixing' - 40	referred to R-1100-125: There are mixing solution available (high shear mixer) which starting mixing with the liquid and don't need the kneading phase for proper dispersion. Acceptable?	Yes. A separate kneading phase is not mandatory where the proposed mixing principle makes it unnecessary. The Tenderer shall demonstrate that the proposed process provides the required dispersion, homogeneity and repeatability across the intended graphite, graphite-Si and high-Si R&D material range and shall provide appropriate recipe controls.
447.	8.2 - Subject-matter 'Slurry Mixing' - 40	referred to R-1100-075: Instead of vacuum, sampling at ambient pressure acceptable?	Sampling at ambient pressure is acceptable after controlled pressure equalisation. Sampling during active vacuum operation is not mandatory. The sampling arrangement shall provide safe access and reproducible, representative samples without uncontrolled loss of vacuum.
448.	8.2 - Subject-matter 'Slurry Mixing' - 40	referred to R-1200-015: What's the min. / max. foil width in mm?	R-1200-015 refers to coating width rather than foil width. The required coating width is nominally 160 mm and adjustable within approximately 100–200 mm. The Coater shall accept foil widths up to 220 mm for compatibility with the downstream equipment. The Tenderer shall state the minimum supported foil width and any required edge margins.
449.	- Annex A04 - 46	referred to R-1200-120: What's the core internal diameter of the reels in mm ? Would TNO have:	The reel core internal diameter shall be 3 inches. Automatic web guiding at the unwinder is required in accordance with R-1200-040 and R-1200-

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		- a web guiding at unwinder ? - a pressor (lay on roller) at rewinder?	075. A lay-on roller shall be included if required by the Tenderer's design to achieve stable and uniform rewinding.
450.	- Annex A04 - 46	referred to R-1200-125, 130 and others: Would TNO have: - slot-die coating (against backing roll) or slot-die coating (free span) ? - a magnetic bar for web cleaning ? - a non-contact web cleaning unit ? - a dust collector for non-contact web cleaning? - a contact web cleaning system? - a weight measurement system (bare foil, A-side wet, A-side dry) ? - a slot-die handling device (gantry + handling tools)?	The baseline configuration is slot-die coating against a backing roll, consistent with R-1200-110. Static elimination, surface treatment and the specified in-line coating measurement system are required. Separate magnetic, contact or non-contact web-cleaning systems and individual bare-foil, wet-coating and dry-coating measurement stations are not specifically prescribed. The Tenderer shall include the cleaning, extraction, measurement and slot-die handling arrangements necessary to meet the specified coating quality, safety and changeover requirements.
451.	- Annex A04 - 46	referred to R-1200-050: Would TNO have: - air flotation dryer? - heating source? - IR dryer? - infrared sensor at IR dryer outlet? - heating sole drying? - minimum length of heating sole (mm) ?	The Tenderer shall define the drying technology and dimensions required to meet the specified coating and drying performance. The system shall include at least four independently controlled zones, operate within 40–130 °C, provide the specified temperature uniformity and sensing, and support adjustable upper and lower airflow. Air flotation, a heating sole and IR heating are not individually mandatory. The heating source, dryer length and any supplementary IR equipment shall be selected and specified by the Tenderer for operation at 5 m/min across the intended R&D process envelope.
452.	- Annex A04 - 46	referred to R-1200-090: Would TNO have: - syringe pump system for slurry feeding? - skid pump system for slurry feeding? - flow meter for slurry feeding?	A closed-loop, low-pulsation pump skid with circulation and minimal dead volume is the required baseline. A syringe-pump system is not required. The Tenderer shall select the pump and flow-measurement technology necessary for stable and repeatable coating. The mobile slurry-transfer unit may perform this function if it fully complies with R-1200-090.
453.	- Annex A04 - 46	referred to R-1300-125: What's the core internal diameter of the reels in mm?	The reel core internal diameter shall be 3 inches.

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454.	- Annex A04 - 46	referred to R-1300-050: Would TNO have: - guided unwinder ? - manual splicing table ? - a magnetic bar for web cleaning ? - a non-contact web cleaning unit ? - a dust collector for non-contact web cleaning? - a contact web cleaning system? - a over thickness detection device ? - a edge trimming device ? - a edge induction heating device (IHA) ?	A guided unwinder with closed-loop tension control and EPC is required. A manual splicing table shall be included in accordance with R-1000-265. The required in-line thickness measurement, roll-cleaning and integrated dust-collection systems shall also be provided. No specific magnetic, contact or non-contact web-cleaning technology is prescribed; the Tenderer shall select the solution needed to meet quality and safety requirements. A separate edge-trimming system and edge-induction heating system are not required.
455.	- Annex A04 - 46	referred to R-1300-120: - any requirement to the minimum calender roller diameter (mm) ? - products/electrodes with intermittent (skip) coating planned ? - force mode and gap mode required ? - any requirements for roller face coating? - infrared web pre-heating required? - calender roller cleaning system required? - single sheet and roll-to-roll operation or only roll-to-roll operation ? - web thickness measurement required?	No minimum calender-roll diameter is prescribed; the Tenderer shall select and state a diameter suitable for meeting the specified force, parallelism, surface-finish and thickness-uniformity requirements. The mandatory operating mode is continuous roll-to-roll processing. Intermittently coated electrodes may occur in R&D work, and any processing limitations shall be stated. Force control is required; gap control shall be included where necessary for the proposed design. Roll surfaces shall be non-shedding and meet R-1300-045. The continuous roll-cleaning system and in-line web-thickness measurement are required. IR preheating is not mandatory and may be included with the optional heating solution under R-1300-160.
456.	- Annex A04 - 46	referred to R-1300-070: - calendering temperature range (min - max) in °C?	No mandatory minimum and maximum calendering temperature range is specified for the base configuration. The Tenderer shall propose a suitable operating range for the optional roll-heating or material-preheating system, taking account of graphite, graphite-Si and high-Si R&D electrodes, and shall state the range and associated utility requirements.
457.	- Annex A04 - 46	referred to R-1300-125: - pressor (lay on roller) required? - manual splicing table required?	A lay-on roller shall be included if required by the Tenderer's design to achieve stable rewinding without damaging the electrode coating. A manual splicing table is required in accordance with R-1000-265.

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458.	- Annex A04 - 46	referred to R-1400-005: - web guiding at unwinder required ? - coating edge sensor for web guiding required ? - amount of slitting devices ? - min/max slitting width (mm) ? - amount of slitting pattern? - counter knife sub assembly (number/amount) ? - counter knife handling trolley (number/amount) ? on the slitter outlet, would TNO have: - a magnetic bar for web cleaning ? - a non-contact web cleaning unit ? - a dust collector for non-contact web cleaning? - amount/number of rewinding positions? - pressor /lay on roller on the rewinder?	Automatic web guiding at the unwinder is required. The sensing technology shall meet the alignment requirement of R-1400-045; a dedicated coating-edge sensor is not separately prescribed. The Tenderer shall define the number of slitting stations, knife assemblies, slit patterns and rewinding positions required to cover the specified 220 mm input width and configurable 50–200 mm output widths. The knife-cartridge system, necessary tooling and safe handling equipment shall be included. Separate magnetic, contact or non-contact web cleaners are not mandatory, but extraction and particle-control measures required to meet the specified edge quality and safe-operation requirements shall be included. All simultaneously produced strips shall be rewound without damage, and adjustable lay-on rollers are required in accordance with R-1400-050.
459.	- Annex C02 - 46	General: Are common negotiation of the wording in the document "Annex C02 - TNO Purchase and Supply Agreement.docx" possible/acceptable? Or should we describe changes / deviation topics in a separate deviation list, which would be later on main part of the contract ?	Please see the answer under 'Question No. 304'.
460.	- Annex C02 - 46	to chapter A / page 1: DDP is not acceptable for us! We could offer following: Is this acceptable? Packaging/freight according Incoterm 2020: DAP Helmond (TNO location), Netherlands	Please see the answer under 'Question No. 37'.
461.	- Annex C02 - 46	to chapter 2.2 / page 2: We would ask for following changes: The technical part of our offer must apply with priority. Alternatively, there could also be a mutually agreed deviation list to the request for offer which applies with priority.	Please see the answer under 'Question No. 304'.
462.	- Annex C02 - 46	to chapter 3.3 / page 2: We would ask for following changes: Equipment warranty period starts from delivery according to the contractually agreed Incoterm. What is the meaning of b) maintenance and services with regards to the chapter 3.3?	The proposed change to the commencement of the warranty period is not accepted. The 24-month warranty period shall commence only upon successful completion of the SAT and TNO's Final Acceptance of the Equipment.

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			The reference to “maintenance and services” in Clause 3.3 concerns the preventive, predictive and corrective maintenance support required during the 24-month warranty period to preserve the safety, reliability, condition, performance and availability of the Equipment. The scope shall be provided in accordance with the Procurement Documents and the Supplier’s accepted Maintenance & Service Concept. Both the warranty and these maintenance and service activities are included in TP1 and shall be provided at no additional cost to TNO during the 24-month period. The warranty covers the rectification of Defects attributable to the supplied Equipment. Maintenance and services cover the servicing and support required to preserve the condition, performance and availability of the Equipment. A separate post-warranty Maintenance & Services Contract under TP2 may commence after expiry of the 24-month warranty period, subject to the applicable contractual arrangements.
463.	- Annex C02 - 46	to chapter 3.5 / page 2: What is the meaning "for the full operational lifetime, in accordance with Annexes A04". In Annexes A04 is no detailed description about that!	Please see the answer under 'Question No. 396'.
464.	- Annex C02 - 46	to chapter 3.5 / page 2: We could offer following procedure regarding spare parts, is it acceptable ? We do not have any storage place for spare parts for our customers. The customer will get a spare parts list and will have the opportunity to buy the spare parts and store them at its facility.	The proposed procedure is acceptable only in part. The Supplier shall provide TNO with a complete spare-parts list in accordance with Requirement R-1000-100, including the relevant replacement criteria, expected service life and other information required by the Procurement Documents. TNO may purchase and store selected spare parts at its own facility. However, this possibility does not replace or limit the Supplier’s obligation under Requirement R-1000-120 to guarantee the availability of spare parts for a minimum period of ten (10) years. TNO is not required to purchase and store all spare parts in advance in order to ensure such availability.

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			The Supplier shall identify critical spare parts, applicable lead times and recommended stock levels. The arrangements for critical spare parts to be held by TNO shall be agreed after award, based on the final scope of supply and the Supplier's spare-parts proposal. Accordingly, the Supplier is not required to maintain a dedicated physical warehouse exclusively for TNO, provided that it can demonstrably comply with the ten-year availability obligation and the agreed lead times.
465.	- Annex C02 - 46	to chapter 3.6 / page 3: We would ask for following changes, acceptable? The customer is responsible for ist facility and its readiness. Thus we cannot have any risk out of such issues. In such case the customer will have to pay for the storage unit as well as taking the risk.	No. Please see the answer under 'Question No. 42.
466.	- Annex C02 - 46	to chapter 4 / page 3: We would ask for following changes, acceptable? Delays caused by large-scale construction uncertainties or facility-readiness issues shall be at TNO's risk. We cannot be responsible for delays caused by parties outside of our scope.	The proposed amendment is not accepted. Please refer to the answer to Question No. 42.
467.	- Annex C02 - 46	to chapter 5.2 and 5.3 / page 3: DDP is not acceptable for us! We could offer following: Is this acceptable? Packaging/freight according to Incoterm 2020: DAP Helmond (TNO location), Netherlands In addition, the described wording in chapter 5.3 regarding administration fee is not acceptable for us. to be deleted.	Please refer to the answer to Question No. 37.
468.	- Annex C02 - 46	to chapter 6 / page 3: Described Price Revision Mechanism needs further common clarification!	The Price Revision Mechanism applies exclusively to the post-warranty maintenance and service prices under TP2. These prices remain fixed and non-indexable for the first twenty-four (24) months following Final Acceptance. After this period, a price revision may be requested subject to the following cumulative conditions:

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			• a revision may occur no more than once per contract year; • the Supplier must submit a written request no later than three (3) months before the start of the relevant contract year; • the request must include a clear and verifiable substantiation; • the Supplier must specify the proportion of labour-related costs and material/general costs in the maintenance price; • both positive and negative index movements apply; • the annual price revision is capped at 3%, with a cumulative maximum increase of 10% over the entire maintenance period. The labour-related component will be adjusted using the CBS Labour Cost Index for Business Services. The material/general-cost component will be adjusted using the Eurostat Harmonised Index of Consumer Prices, All Items. The formulas stated in Chapter 6 apply separately to these components. If an index is discontinued, materially altered or no longer representative, the Parties shall agree on a comparable publicly available index. Until such agreement has been reached, no price revision will take effect. A proposed revision requires TNO's prior written approval. Price revision cannot be used to compensate for inadequate service performance, reduced system availability, failure to meet response times or failure to comply with other agreed maintenance and service obligations. The Price Revision Mechanism does not apply to TP1, additional work or the prices stated in the Parts & Consumables Life-Cycle List. Any adjustment of those prices requires a separate prior written agreement with TNO.
469.	- Annex C02 - 46	to chapter 7 / page 4: Are the Payment terms negotiable? We need 80% of the contract value at notification readiness for shipment. Our alternative offer is: 40 % of the contract value at down-payment with the purchase order	No, TNO maintains the payment conditions set out in the Procurement Documents.

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		against group guarantee 10 % of the contract value at end of study and corresponding documentation review, latest 2 months after the order date 30 % of the contract value at notification readiness for shipment 20 % of the contract value at SAT (site acceptance test) and signature of the site acceptance report, but no later than 2 months after onsite delivery of the equipment Delivery starts immediately after receipt of 3rd payment rate according to Incoterms 2020.	
470.	- Annex C03 - 46	disclaimer / page 1: the English version must prevail.	Please see the answer under 'Question No. 307'.
471.	- Annex C03 - 46	to chapter 1 / page 2: # regarding agreed use Agreed Use shall be mimited to what was agreed in writing within the contractual documents. # reg. bank guarantee We would offer a parent company. # reg. Fixed price Any legal value-added tax that may be due will be indicated separately and shall be subject to our terms of payment as stated in the quotation. Any indirect and direct, present and future taxes, customs duties, fees, as well as all national, state, regional, provincial, and/or community or local rights, duties, rates and taxes or other fees and charges of any sort, which may fall due in connection with the conclusion or execution of the contract in the customer's country shall be borne by the customer, except for personnel employed by Supplier. Any modifications of the scope of services and supplies requested by the customer shall entitle Ingecal to adjust the agreed prices in correspondence to this modification, provided such a modification can be accepted.	The proposed amendments are only accepted to the extent stated below. <i>Agreed Use</i> No amendment is accepted <i>Bank Guarantee</i> Yes. TNO may accept an irrevocable parent company guarantee as an alternative to the required bank guarantee, provided that it offers TNO equivalent security and is subject to TNO's prior written approval. The parent company guarantee must: • cover the same guaranteed amount; • remain valid for the same period and until the same release event; • constitute an irrevocable, unconditional and directly enforceable payment obligation; • be payable upon TNO's first written demand under conditions equivalent to those of the prescribed bank guarantee; • be issued by the Supplier's ultimate parent company or another parent company acceptable to TNO; • remain unaffected by changes in the Supplier's financial position, corporate structure or relationship with the guarantor; and

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			TNO may assess the guarantor's financial standing and require supporting information. If TNO considers that the proposed parent company guarantee does not provide security equivalent to the prescribed bank guarantee, the Supplier must provide the required bank guarantee. The guarantee shall cover 40% of the total Contract Price and remain valid until the Equipment has been delivered at the TNO location and TNO has completed a visual inspection confirming that no visible transport damage has occurred. <i>Fixed Price, VAT, taxes and duties</i> The agreed Contract Price is exclusive of VAT. VAT shall be stated separately and handled in accordance with the Agreement, not the Supplier's terms of payment. The Supplier's general and special terms and conditions are expressly excluded under Clause 2.2. <i>Changes to the scope</i> Changes requested by TNO shall be handled in accordance with Clause 3.7. Reasonable additional costs and any adjustment of the Delivery Time must be substantiated and agreed in writing in advance. No unilateral price adjustment by the Supplier is permitted. Activities already included in, or necessary to complete, the agreed contractual scope do not constitute additional work.
472.	- Annex C03 - 46	to chapter 3.7 / page 3: No instructions acceptable. Any changes must be mutually agreed.	The proposed amendment is not accepted. Clause 3.7 remains applicable. TNO may instruct written changes where inaccuracies are identified in the Contract Documents, Specifications or Documentation. The Supplier must implement such changes. Any demonstrable and reasonable additional costs shall be agreed by the Parties in advance. If a change affects the Delivery Time, the Supplier shall submit a substantiated written request for an adjustment in good

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			time. No unilateral price or schedule adjustment by the Supplier is permitted.
473.	- Annex C03 - 46	to chapter 4.1 / page 3: As this is a lump sum agreement, the supplier must be free in choosing its subcontractors.	The proposed amendment is not accepted. The Supplier may engage subcontractors only in accordance with Clause 4.1 and the Procurement Documents. The Supplier remains fully responsible and liable for the Performance of its subcontractors.
474.	- Annex C03 - 46	to chapter 5.1 / page 4: sub-topic (iv) is not acceptable.	Clause 5.1(iv) remains applicable. The Supplier is responsible for ensuring that the Performance is suitable for the intended purpose and possesses the characteristics that TNO may reasonably expect on the basis of the Agreement. For the avoidance of doubt, the Supplier is not responsible for the specific end results achieved by TNO through the use of the Performance, provided that the Performance complies with the contractual requirements. This clarification does not limit the Supplier's responsibility for compliance with the agreed functional, technical, safety, quality and performance requirements.
475.	- Annex C03 - 46	to chapter 6.1 / page 4: IP Indemnification only if the equipment is used in accordance with the contract. Indemnification must be subject to the limitation of liability.	The IP indemnity applies where the Equipment is used in accordance with the Agreement and the Agreed Use. The Supplier's obligations relating to third-party intellectual property claims are subject to the aggregate liability cap of three (3) times the total Contract Price, as clarified in the answer to Question No. 285, except where liability cannot be limited under mandatory law.
476.	- Annex C03 - 46	to chapter 6.2 / page 4: What's the detailed meaning for work? 10 years warranty is not acceptable. We would suggest for scope & services of supply twenty-four (24) months after the Delivery Time.	"Work" means work of a corporeal nature created by or on behalf of the Supplier, as defined in Clause 1 of the Annex C03 - Purchasing Conditions for Goods TNO 2025. No Work forms part of the scope of this Contract; the Contract concerns the supply of Goods and the provision of related Services. Accordingly, the ten-year warranty period for Works is not applicable.

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477.	- Annex C03 - 46	to chapter 7 / page 4: # reg. 7.1: It is not clear what is meant? Which measures do you mean? It has to be described in detail. # general: factory acceptance test prior to delivery will be performed acc. Supplier's standard procedure. Special requests by TNO have to be described in detail as answer. factory acceptance test will be on different manufacturing facilities. one central location for factory acceptance test is not possible.	Clause 7.1 concerns reasonable quality-assurance measures required to verify compliance of the Performance with the Agreement. For this Contract, such measures may include review of quality and test documentation, inspections, verification of certificates and test results, and witnessing or repeating relevant tests. The measures must be proportionate and related to the contractual requirements. The FAT shall not be based exclusively on the Supplier's standard procedure. The Supplier shall submit a proposed FAT protocol based on the requirements and accepted preferences in the Procurement Documents. The detailed FAT protocol, including the applicable tests, acceptance criteria, documentation and any project-specific verification requested by TNO, shall be agreed during the Critical Design Review. The contractual requirements and tolerances remain applicable. TNO accepts that the FAT may be performed at different manufacturing facilities where the relevant Equipment is manufactured or assembled. A single central FAT location is not required, provided that: • all relevant Equipment and FAT requirements are covered; • the proposed locations and test schedule are identified in advance; • TNO is given a reasonable opportunity to attend the relevant tests; and • the results are consolidated in a complete FAT report. Shipment of the relevant Equipment remains subject to successful completion of the applicable FAT and submission of the required FAT documentation.
478.	- Annex C03 - 46	to chapter 8 / page 5: reg. 8.1: Delivery in parts must be possible, as soon as the complete equipment is ready for operation on the agreed milestone date.	Partial Delivery is permitted only with TNO's prior written approval and provided that it does not affect the agreed project milestones or the Supplier's obligation to deliver the complete, integrated and operational Equipment.

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			Any Partial Delivery shall be properly coordinated with TNO and shall not result in additional costs for TNO. All additional transport, handling, storage, preservation, insurance, installation or coordination costs arising from an approved Partial Delivery shall be borne by the Supplier. Partial Delivery does not constitute Acceptance of the relevant parts or of the complete Equipment, does not trigger payment unless expressly provided for in the agreed payment schedule, and does not alter the agreed Delivery Time for completion of the entire contractual Performance.
479.	- Annex C03 - 46	Reg. 8.3 & 8.4: Penalty for delay only acceptable for one specific milestone if the delay is due to the Supplier's fault or negligence. Max. amount 5%. This penalty for delay shall be the sole and exclusive remedy. Moreover, the supplier shall be entitled to an extension of time and costs if e.g. the customer does not provide the information on time or hinder the supplier in its performance of work.	Please see the answer under 'Question No. 311 and 328 up to 333'.
480.	- Annex C03 - 46	reg. 8.8: site acceptance test after commissioning will be performed acc. Supplier's standard procedure. Special requests by TNO has to be described in detail as answer.	The SAT shall not be performed exclusively in accordance with the Supplier's standard procedure. The Supplier shall prepare a detailed SAT protocol based on the Procurement Documents. The protocol, including test conditions, measurement methods, acceptance criteria and reporting requirements, shall be agreed with TNO before testing. It may incorporate the Supplier's standard procedure insofar as this complies with the contractual requirements. Any project-specific verification shall be identified and agreed in the SAT protocol and shall not introduce requirements beyond the agreed contractual scope. Please also refer to the previous answers concerning the FAT and SAT protocols.

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481.	- Annex C03 - 46	reg. 8.9: There is a final acceptance certificate that is signed by both parties. In case the final acceptance cannot be executed due to the reasons for which the supplier is not responsible, the equipment must be deemed accepted. Minor defects shall not prevent the final acceptance.	Final Acceptance shall be documented following successful completion and TNO's approval of the SAT. Deemed Acceptance is not accepted, including where the SAT cannot be completed for reasons not attributable to the Supplier. Minor defects or outstanding items do not automatically result in or prevent Final Acceptance. TNO will assess each identified defect or outstanding item on a case-by-case basis against the contractual requirements and the agreed SAT acceptance criteria. Final Acceptance may only take place if TNO determines that the system can be safely, operationally and contractually used for its intended purpose. A defect classified as minor may therefore prevent Final Acceptance if it affects the operational use, safety, functionality, performance or contractual use of the system. Any outstanding items and the applicable rectification period shall be documented in writing. The Supplier's classification of a defect as minor is not binding on TNO.
482.	- Annex C03 - 46	to chapter 9 / page 5: instructions must be provided beforehand. Please share with the answers.	TNO will provide the applicable site-access, safety, security and working instructions sufficiently in advance of the relevant on-site activities. The Supplier remains responsible for familiarising itself and its Personnel with the applicable instructions and for complying with them. TNO may provide additional or updated instructions where reasonably required by site conditions, safety requirements or applicable laws and regulations.
483.	- Annex C03 - 46	to chapter 10 / page 5: reg. 10.1: ...except as stated in the Agreement. Reg. 10.3: not acceptable. Only fixed price for the agreed scope of supply as basis for an order.	Clause 10.1: The requested clarification is accepted. The words "except as expressly stated otherwise in the Agreement or the Procurement Documents" shall be added. Clause 10.3 is not applicable to the agreed Fixed Price for this Contract. The Fixed Price covers the complete agreed contractual scope. Only a written change approved by TNO in accordance with Clause 3.7 may result in additional remuneration.

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484.	- Annex C03 - 46	to chapter 11 / page 6: reg. 11.4: Offset only acceptable in case of undisputed claims.	Not accepted. Please refer to the answer to Question No. 370.
485.	- Annex C03 - 46	to chapter 12 / page 6: Transfer of ownership upon full payment and transfer of risk in accordance with the applicable Incoterm.	Accepted. Title to the Equipment shall pass to TNO upon payment of 100% of the total agreed Contract Price for the Equipment. Risk shall transfer in accordance with the applicable agreed Incoterm. Transfer of risk does not constitute Acceptance.
486.	- Annex C03 - 46	to chapter 13 / page 6: Equipment packed appropriately for the method of transportation. The packaging is designed for safe transport only, not for long-term storage at site.	Standard transport packaging is not required to be suitable for long-term storage at the TNO site. This does not affect the Supplier's temporary-storage, preservation, insurance and risk obligations before Delivery.
487.	- Annex C03 - 46	to chapter 15 / page 6: not acceptable. If there is a possible improvement on the supplied equipment, Supplier can quote this as revamp case and TNO can order this improvement topic as an option.	Not accepted. Supplier shall, without undue delay, inform TNO of all product safety-related issues concerning the delivered Items. Furthermore, Supplier shall use best efforts to inform TNO about any non-safety-related updates or improvements available for the delivered Items. In addition, if and insofar as the nature or size of the Item gives rise to do so, Supplier shall proactively inform TNO about possibilities to improve the functioning of the Item during and for a period of at least five (5) years after the closing of the Agreement. Product safety-related modifications or replacements shall be carried out free of charge by or on behalf of the Supplier or the manufacturer of the Item. Any other modifications or replacements outside the scope of the Warranty must be remunerated by TNO based on a prior quotation from the Supplier.
488.	- Annex C03 - 46	to chapter 16 / page 7: Background IP rights shall remain with the Supplier. The customer shall only get a non-exclusive, non-transferable right to use the equipment to the extent necessary and in accordance with the agreement.	The Supplier remains the owner of its Background IP. However, the proposed limitation of TNO's right of use is not accepted. Clause 16 of the PC Goods TNO 2025 remains applicable. To the extent that the Performance incorporates the Supplier's Background IP, or such Background IP is required for its use, TNO shall receive a worldwide, unlimited, non-exclusive, transferable, perpetual and non-cancellable right of use without additional compensation.

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			The right of use will therefore not be limited to a non-transferable right or exclusively to the operation of the Equipment. TNO must be able to make the relevant Background IP available where necessary for the operation, maintenance, repair, modification, continuity or replacement of the Equipment, including to third parties acting on TNO's behalf.
489.	- Annex C03 - 46	to chapter 17 / page 7: Foreground IP rights shall remain with the Supplier if the Supplier creates such IP. The customer shall only get a non-exclusive, non-transferable right to use the equipment to the extent necessary and in accordance with the agreement.	Please see the answer under 'Question No. 382'.
490.	- Annex C03 - 46	to chapter 18 / page 7: Confidentiality shall apply to both parties. The provisions must be mutual. And a penalty is not acceptable as described in 18.7.	Please refer to the answers to Questions No. 391 to 393. Clause 18 remains applicable as clarified in those answers.
491.	- Annex C03 - 46	to chapter 20.2 / page 8: If employees apply on their own initiative, this must be permitted; only actively poaching employees is prohibited.	Accepted
492.	- Annex C03 - 46	to chapter 22 / page 9: reg. 22.1: In some cases 10 working days might be too short. The period should be reasonable taking into account the respective defect.	The standard period for complete rectification remains ten (10) working days following TNO's request. If complete rectification within this period is demonstrably not reasonably feasible, the Parties may agree in writing on an alternative final rectification period, taking into account the nature and cause of the Defect, the technical effort required, access to the Equipment and the reasonable availability of spare parts.
493.	- Annex C03 - 46	to chapter 22 / page 9: Reg. 22.2: However, in no case shall the warranty period exceed 48 months in total.	Not accepted. Please refer to Questions No. 339 and 340.
494.	- Annex C03 - 46	to chapter 22 / page 9: Reg. 22.5: Repair or replacement shall be the first remedy.	Accepted. However, this does not limit TNO's other contractual rights and remedies if repair or replacement is unsuccessful, not completed within the applicable rectification period, not reasonably possible, or cannot reasonably be required from TNO.
495.	- Annex C03 - 46	to chapter 23 / page 9: Clause 23 is not acceptable and needs to be reworded. We need to have a general liability cap in place. Furthermore, indirect damages,	Please see the answer under 'Question No. 285'.

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		loss of production, loss of profit, consequential damages etc needs to be excluded.No broad indemnification obligations are accepted.	
496.	- Annex C03 - 46	to chapter 24 / page 9: Insurance provisions need to be checked by the insurance department. TBD whether the mentioned insurances are available in the amounts mentioned.	The insurance requirements in Section 5.2.1 of the Procurement Guide are leading and remain applicable. The Tenderer may have these requirements reviewed by its insurance department.
497.	- Annex C03 - 46	to chapter 25 / page 9 & 10: reg. 25.1: is not acceptable	Clause 25.1 remains applicable. TNO must retain the right to terminate the Agreement with immediate effect and without an obligation to pay compensation in the insolvency, bankruptcy, liquidation and attachment circumstances specified in that clause.
498.	- Annex C03 - 46	to chapter 25 / page 9 & 10: reg. 25.2: Termination for cause must be mutual and is only acceptable in case of a culpable breach of material obligations and provided that the other party gives the breaching party a reasonable time to cure such breach.	TNO does not accept that termination or dissolution for cause must be mutual. Clause 25.2 provides TNO with a unilateral contractual remedy where the Supplier fails to perform its obligations, fails to perform them properly or on time, or where a Defect exists. Clause 25.2 already provides that termination or dissolution is not available where the shortcoming, in view of its special nature or minor importance, does not justify that remedy. TNO does not accept a general requirement that termination or dissolution may only take place after an additional cure period. The contractual consequences depend on the nature and circumstances of the non-compliance and on the other applicable provisions of the Agreement, including the specific corrective-action periods stipulated for FAT and SAT.
499.	- Annex C03 - 46	to chapter 25 / page 9 & 10: reg. 25.3: is redundant, please revise the chapter.	Clause 25.3 is not redundant and will not be deleted. The Contract includes the provision of Services in addition to the supply of Goods. TNO therefore maintains its right to terminate the Agreement prematurely in respect of Services in the circumstances covered by Clause 25.3.
500.	- Annex C03 - 46	to chapter 25 / page 9 & 10: reg. 25.4: In case of termination for convenience the customer has to pay the price for the work already performed, the work-in-progress and an additional 5% of the unfilled work.	The proposed compensation consisting of payment for work performed, work in progress and an additional 5% of the unperformed work is not accepted.

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			Clause 25.4 applies where the Agreement concerns the creation of Works and provides for the reasonable compensation specified in that clause. TNO will not introduce an additional entitlement to 5% of the value of unperformed work. Any payment following termination shall be determined exclusively in accordance with the applicable provisions of the Agreement and the TNO Purchasing Conditions for Goods 2025. There is no general or automatic entitlement to payment for incomplete, non-compliant or unaccepted Performance.
501.	- Annex C03 - 46	to chapter 25 / page 9 & 10: reg. 25.5. and 25.6.: both are not acceptable	Clauses 25.5 and 25.6 remain applicable, subject to the clarification provided in the answer to Question No. 419.
502.	- Annex C03 - 46	to chapter 26 / page 10: Clause 26 is not acceptable as it is. We can only accept a termination right with effect for the future, no refunds or repayments are acceptable. In case of termination for cause, we will get the payment for the work done until the effective date of the termination.	The proposed amendment is not accepted. Clause 26 will be replaced by the following provisions: 26.1 In the event of full or partial dissolution or termination under Clause 25, TNO may return Goods already delivered. The Supplier shall refund the payments made for the returned Goods. 26.2 All valid claims of TNO arising from such dissolution or termination, including claims for compensation, shall become immediately due and payable. 26.3 Upon premature termination, the Supplier shall, at TNO's first request, promptly return all documents, data carriers and other items made available by TNO. 26.4 Provisions which by their nature are intended to survive termination, including those concerning liability, warranty, intellectual property and rights of use, confidentiality, payment, consequences of termination, governing law and jurisdiction, shall remain in force. Any entitlement of the Supplier to payment shall be determined in accordance with the Agreement and shall be limited to amounts

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			contractually due for properly performed and accepted Performance retained by TNO.
503.	- Annex C03 - 46	to chapter 27 / page 10: We propose to agree on a neutral law, e.g. Swiss Law.	Not accepted. The Contract remains governed by Dutch law and the competent court in The Hague shall have exclusive jurisdiction.