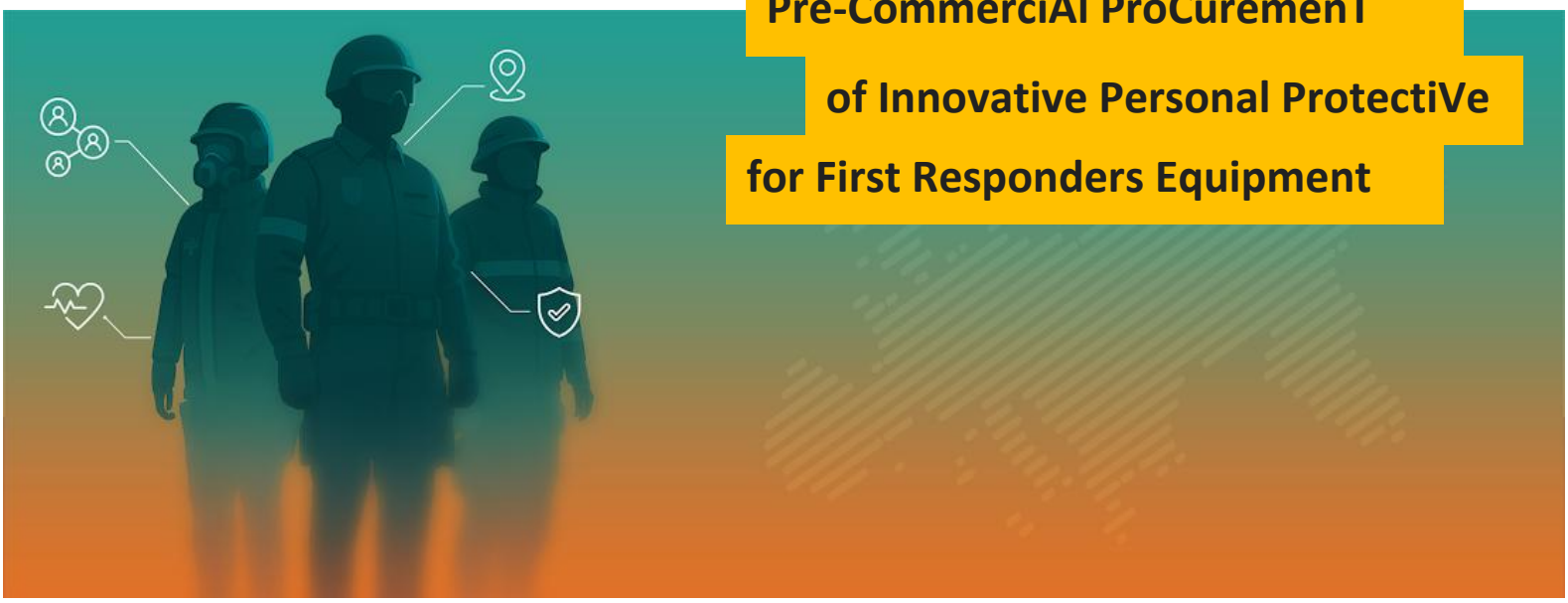
ACTIVE PCP



Pre-CommerciAl ProCuremenT of Innovative Personal ProtectiVe for First Responders Equipment

Questions & Answers (Q&A): Call for Tenders

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QUESTIONS AND ANSWERS DOCUMENT

ACTIVE PCP Call for Tenders - Framework Agreement and Phase 1

I. General, procedural and financial aspects

Question 1

Received: 09.11.2026 | Reference: Annex 3 R7.1, Table 1; TD1 §2.3-2.7, §5.4

> *Please confirm the number of phases and rounds, the duration of each, the expected TRL at the end of each phase, and how many suppliers continue from one phase to the next. Must (priority 1) requirements: must all be met in V1, or may they be demonstrated progressively by V2 and the final pilot?*

Answer

The PCP comprises three Phases (TD1 §2.3, §2.5, §2.7):

- Phase 1 - Solution Design: 4 months; Framework Agreements and Phase 1 contracts with at least six (6) Contractors.
- Phase 2 - Prototyping: 10 months; call-off aiming at at least three (3) contracts.
- Phase 3 - Original development and testing: 7 months; call-off aiming at a minimum of two (2) contracts.

Only Contractors that have successfully completed the preceding phase are eligible to submit offers for the next phase (TD1 §2.5, §5.4). The exact number of contracts depends on the prices offered and on the number of offers passing the evaluation (TD1 §2.6).

No separate "rounds" are foreseen. Within Phase 2 there are two prototype iterations: Prototype v1 (non- or partly functional prototypes of key system components; D2.2 at the end of month 4, M2.3 at month 5) and Prototype v2 (functional prototype demonstrating component behaviour and system-wide interaction; M2.4 at month 10) (TD1 §2.3, Table 1).

TRL: the Tender Documents do not mandate specific target TRLs per phase. Solutions are expected to progress from solution design (Phase 1), to laboratory validation of prototypes (Phase 2), up to original development and field testing of a limited volume of first products in realistic operational environments (Phase 3) (TD1 §2.1, §2.3).

Must requirements: evidence of compliance is to be provided progressively, in accordance with the maturity of the solution (TD1 §2.3, General Testing and Pilot Strategy). At Tender and Phase 1 stage, Tenderers provide the available evidence on existing or baseline materials, components and technologies, together with a verification and testing plan explaining how and when requirements not yet demonstrated will be verified in Phases 2 and 3. Prototype v1 is by definition non- or partly functional. Priority 1 requirements therefore do not all need to be demonstrated in v1; however, the solution design must address all of them, and the Requirements Verification Matrix must show for

each requirement the phase in which it will be verified. Successful completion of each phase is assessed against the minimum functionality/performance requirements of the challenge (TD1 §5.4).

See also the answers to Questions 10, 15 and 44.

Question 2

Received: 09.11.2026 | Reference: Annex 3 Table 1, §8; TD1 §3.4-3.5, §4.4

> *How are priority 2 and 3 requirements scored, and may a bid offer partial coverage (for example all Must requirements but only some Important ones)? Are the ACTIVE PCP Target values (for example 5.0 kg, donning time, accuracy) mandatory pass/fail, or may we justify a deviation?*

Answer

Tenders are scored against the weighted award criteria of TD1 §3.4 (Table 8) using the scoring model of Table 10. Criterion 2 (Functional Quality, 40 points) is split into requirement groups (CBRN 11, Heat and Thermal 7, Fluid Exposure 6, Mechanical and Physical 6, Operational Barriers 10) and criterion 3 (Non-Functional, 15 points) into Security and Privacy (5) and Organizational and Piloting (10). The Tender Documents do not apply a separate arithmetic weight per priority level; the priority (1 = Must, 2 = Important, 3 = Nice to have) expresses the importance of each requirement to the Buyers' Group.

The technical plan must outline the Tenderer's idea for addressing all the requirements of the challenge (TD1 §4.4). A Tender that does not address some requirements will be scored accordingly under the relevant criterion; minimum thresholds of 40% per criterion and 32 out of 80 points overall apply, and failure to reach them leads to exclusion (TD1 §3.4).

The "ACTIVE PCP Target" values of Annex 3 §8 (Table 3) "should be considered as general guidelines rather than rigid criteria". They are not pass/fail criteria at tender stage, and Tenderers may propose different values with a justification. Formal verification in Phases 2 and 3 will follow detailed test protocols finalised before the corresponding verification activity. These protocols may refine the test methods, conditions and configurations within the scope established by the Tender Documents, but may not modify the mandatory acceptance criteria or evaluation framework. Equivalent verification objectives and acceptance criteria shall be maintained where different solution architectures require different technical test configurations (TD1 §2.3).

See also the answers to Questions 15, 27 and 34.

Question 3

Received: 09.11.2026 | Reference: Annex 3 R5.10, §3; TD1 Table 8; TD4 Section 3

> *R5.10 (cost) has the target N/A: is there a target unit price, a price ceiling per ensemble or a total-cost-of-ownership target? Should one solution serve both firefighters and law enforcement, or may a bid focus on one group with a configuration for the other? Which group is the priority for evaluation?*

Answer

There is no target unit price, price ceiling per ensemble or total-cost-of-ownership target (Annex 3, Table 3, R5.10: N/A). Tenderers must estimate the future market price of the developed solution (TD4, Section 3); the realism of licensing, pricing, packaging and distribution is assessed under award criterion 4 "Commercial Feasibility" (TD1 Table 8).

The challenge addresses first responders such as police, firefighters and emergency medical services (Annex 3 §1), and the four scenarios involve both police and fire service roles (Annex 3 §4). The solution is expected to serve these users through a modular design enabling rapid adaptation to evolving operational roles and threat levels (R1.1, R5.18). The Tender Documents do not prioritize one user group over another in the award criteria. A Tender may therefore centre its design on one user group and offer a configuration for the other, provided it shows how the requirements relevant to both are addressed. A focus on one user group does not waive any mandatory requirements or the obligations to demonstrate and deliver the solution for the Public Buyers as specified in TD1 and Annex 3. The Technical Offer must explain how the proposed configuration or configurations address the relevant operational roles; coverage is assessed under the applicable award criteria.

See also the answers to Questions 14, 25 and 30.

Question 4

Received: 09.11.2026 | Reference: Annex 3 R7.1, §4 (scenarios); TD1 §1.2, §2.3; Annex 2

> *Which four procurers and countries are involved, and which languages are needed for support and training? Which of the four scenarios will each procurer exercise, in which season, with real or simulated agents, and will wearers be trained firefighters and police officers?*

Answer

Procurers: KEMEA - Center for Security Studies (Greece, Lead Procurer); PAGD - Fire and Rescue Department under the Ministry of the Interior (Lithuania); CNBOP-PIB (Poland); and the Fire Service of Cyprus (Cyprus) (TD1 §1.2; Annex 2). Phase 3 pilots will take place at four national pilot sites in Greece, Lithuania, Poland and Cyprus (TD1 §2.3).

Languages: all communication, offers and deliverables must be in English (TD1 §6.1). For helpdesk support during the pilots, R7.3 targets multilingual support in English and the national languages of all procurers (English, Greek, Lithuanian and Polish).

Scenarios: Phase 3 includes four Tabletop Exercises followed by field trials at the four pilot sites; the Public Buyers may combine pilot tests where feasible. Solutions will be tested across the four core scenarios of Annex 3 §4. Tactical scenario scripting, drill duration, simulated threat escalation and end-user evaluation rubrics will be finalized during Phase 3 (TD1 §2.3). Laboratory testing uses standardized test substances, representative agents, simulants or indicators (TD1 §2.3).

For the safety of participants, field trials at the pilot sites are to be carried out with simulants and indicators only; live agents, where needed, are confined to laboratory testing in authorised facilities. The wearers will be serving firefighters and police officers of the Public Buyers and their end-user organisations, trained in the use of their PPE; technical training of the dedicated end users on the

solution is given by the Contractor at the start of pilot operations (TD1 Table 1, M3.2). According to the time schedule, pilot operations run from month 3 to month 6 of Phase 3, that is, approximately from August to November 2028 (TD1 §2.4, §2.7), so the trials fall in late summer and autumn. The allocation of the four scenarios to the pilot sites is finalised during Phase 3 (TD1 §2.3).

See also the answers to Questions 18, 20, 28, 43 and 44.

Question 5

Received: 09.11.2026 | Reference: Annex 3 cover; TD1 §1.3.3, §2.8, §3.1, §3.1.2, §5.5; TD7 Art. 7

> *Under the PCP rules, who owns the IP generated, what rights do procurers receive, and what are the follow-on procurement arrangements? May a consortium include partners from different countries, and may components (for example sensors) be provided by third parties under subcontract?*

Answer

IPR: Each Contractor keeps ownership of the IPRs attached to the results it generates (TD1 §2.8.1; TD7 Art. 7.2.1, TD7 Art. 7.1.7 and TD8 Art. 6). The Buyers' Group receives royalty-free access to the results for its own use and may require the Contractor to grant non-exclusive licences to third parties under fair and reasonable conditions (without the right to sub-license). The Buyers' Group may require the transfer of ownership if the Contractor fails to commercially exploit the results within four years after the end of the Framework Agreement, or uses them to the detriment of the public interest (TD1 §2.8.1, §2.8.4; TD7 Art. 7.3.4-7.3.5). Ownership of background IPRs is not affected; the Tenderer grants the Buyers' Group a royalty-free, non-exclusive licence to use its background for the execution of the contract (TD1 §2.8.2; TD7 Art. 7.3). The offered price must reflect the fact that IPRs stay with the Contractor (TD1 §1.1; TD4).

Follow-on procurement: limited follow-up procurement of innovative solutions (PPI) for a limited set of prototypes and/or test products developed during the PCP may be awarded; a follow-up PPI for a commercial volume will be subject to a new call for tenders (TD1 §5.5).

Consortium: Yes. Joint Tenders may include natural or legal persons established in any of the eligible countries (EU and EEA Member States and Horizon Europe Associated Countries as defined in TD1 §3.1), subject to the place-of-performance requirements of TD1 §3.4 C.

Third-party components: Yes. Hardware or software from a Third Party may be used without that party being a consortium member, provided that its availability is demonstrated (TD1 §3.1.2). Subcontracting is allowed in each phase but may not cover essential parts of the contract or the management of the PCP and may not exceed 30% of the total contract value (excl. VAT) of the relevant phase; Subcontractors must submit TD6 and the ESPD (TD1 §3.1.2). The Contractor must obtain from its Subcontractors all rights necessary to comply with its IPR obligations (TD7 Art. 7.3.6).

See also the answers to Questions 9 and 14.

Question 6

Received: 09.11.2026 | Reference: TD1 §2.6 (Tables 2 and 3), §3.1.1; TD8 Art. 4

> *(a) Is VAT for a consortium member in an EEA country outside the EU treated as for an EU Member State supplier or a third-country supplier? (b) In a joint tender, does only the Lead Contractor invoice the Lead Procurer, or may each member invoice its own share? (c) Please confirm that the figures in Tables 2 and 3 are the maximum total contract value per Contractor per phase (all work, including consortium members and subcontracting) and that the "subcontracting" column heading is a labelling error.*

Answer

(a) TD1 §2.6 sets out the VAT treatment for suppliers from Greece, from other EU Member States (reverse charge) and from third countries; for joint consortia, the headquarters of the consortium coordinator are of relevance. EEA countries outside the EU (for example Norway, Iceland and Liechtenstein) are not part of the EU VAT territory (Council Directive 2006/112/EC). Under the Greek VAT Code (Law 5144/2024), a supplier established in such a country is therefore treated for VAT purposes in the same way as a supplier from a third country.

(b) All Contractors are paid by the Lead Procurer through centralised payments (TD1 §2.6). The Lead Contractor carries overall responsibility for the contracts and acts on behalf of the consortium (TD1 §3.1.1). In principle, since the headquarters of the Lead Contractor also determine the applicable VAT regime (TD1 §2.6), invoices should be issued centrally by the Lead Contractor. Invoicing by each member of the consortium for its own share is also possible, in line with the price breakdown per member in the Financial Offer (TD4) and the arrangements of the joint tender/consortium agreement, including any joint powers granted for receiving payments (TD1 §3.1.1). In either case, the payment documentation required under TD1 §5.3 must be submitted for all consortium members. Please note that invoicing by each member multiplies the invoices to be issued and checked for every payment, which increases the administrative burden and may cause delays in the payments; tenderers are therefore encouraged to consider invoicing through the Lead Contractor. Invoices are submitted by e-mail to activepcp-procurement@kemea-research.gr after formal acceptance of the deliverables (TD8, Art. 4.4).

(c) Confirmed. As stated in the text preceding the tables (TD1 §2.6), Tables 2 and 3 give the minimum number of Contractors per phase, the maximum budget per Contractor and the maximum budget per phase. The column headings "Subcontracting cost per contractor" and "Total subcontracting cost per phase" should read "Maximum budget per Contractor" and "Maximum budget per phase". The amounts are the maximum total price per Contractor for each phase and cover all work, including that of consortium members and Subcontractors (Table 2 including VAT; Table 3 excluding VAT, including other taxes and fees). Offers above these amounts are excluded (TD4, Section 2).

See also the answers to Questions 11, 13 and 14.

Question 7

Received: 10.11.2026 | Reference: TD1 §5.3, §4.1, §4.3; TD5

> *TD1 §5.3 requires that the tax clearance certificate, social security certificate, criminal record and company legal documents accompany each invoice "with their official translation in English". (a) Must these documents (or their translations) bear an Apostille stamp? (b) Would a translation by a certified translator or a lawyer be accepted as "official"? (c) Is a standard unofficial translation enough (signed by a legal representative) at the submission stage? (d) Is any of these documents required at tender submission stage (Envelope A), or is the ESPD (TD5) sufficient at that stage?*

Answer

(a) No Apostille is required.

(b) Since Greek law applies, an 'official translation' means a translation by a Greek lawyer or by Certified Translators of the Registry of the Ministry of Foreign Affairs or by Graduates of the Ionian University Translation School, or a translation made in accordance with the laws of the Tenderer's country of origin. The Lead Procurer may request further evidence in case of doubt.

(c) Since these documents are not requested at submission stage, no translation is required at that stage. Tenders and supporting documents must be written in English or accompanied by a full English translation at no cost to the Lead Procurer (TD1 §4.1); the Tender Documents do not require the translation of supporting documents submitted with the Tender to be certified. The official translation described under (b) concerns only the documents of TD1 §5.3, which are requested at the payment stage.

(d) The documents listed in TD1 §5.3 are required at the payment stage, together with each invoice, and not at tender submission. At tender stage, Envelope A contains the ESPD (TD5) of the Tenderer, of each consortium member and of each Subcontractor/Third Party, and the Subcontracting Statement (TD6) if applicable (TD1 §4.3; Annex 1). By signing the ESPD the Tenderer declares that it is able to provide the relevant certificates and documentary evidence upon request and without delay (TD5, Sections 1, 3 and 5). The Lead Procurer may request additional information or missing documents, to be submitted within five (5) days (TD1 §3.2, §3.7).

See also the answers to Questions 8 and 12.

Question 8

Received: 10.11.2026 | Reference: TD1 §4.1, §4.3; TD2; TD4; TD5; TD6

> *During the webinar it was mentioned that no digital signatures are required for submission via the Innovation Procurement Platform. (a) Does this also apply to the ESPD (TD5), the Subcontracting Statement (TD6) and the Financial Offer (TD4), i.e. is a scanned handwritten signature acceptable, or is a Qualified Electronic Signature (QES) required? (b) For the Cover Letter (TD2), is it also foreseen to be sent by post as a mandatory step? Is an original wet-ink signature required, or is a printed copy of a QES-signed document acceptable?*

Answer

(a) The Tender Documents require the ESPD (TD5), the Subcontracting Statement (TD6, if applicable) and the Financial Offer (TD4, Section 1) to be signed by a duly authorised representative of the Tenderer (TD1 §4.3). All three envelopes are digital and are submitted only via the Innovation Procurement Platform (TD1 §4.1). A Qualified Electronic Signature is not required: a scanned copy bearing the handwritten signature of the authorised representative (and the company stamp, where available) is accepted. Documents signed with a Qualified Electronic Signature are also accepted.

(b) Yes. In addition to its upload on the Platform, the Cover Letter (TD2) must be delivered by post or by hand to KEMEA and must be received no later than 14-12-2026, 12:00 noon (CET) (TD1 §4.1). It must be signed by the Tenderer or its duly accredited representative with the power to bind the Tenderer; this signature is considered the signature of the Tender (TD1 §6.2). A Cover Letter bearing an original handwritten (wet-ink) signature is accepted. A printed copy of a Cover Letter signed with a Qualified Electronic Signature is also accepted, provided that it is verified as a true printout according to article 15 para. 2 of Greek law 4727/2020 and that its content is identical to the Cover Letter uploaded on the Platform. Where the Cover Letter is sent by registered post, Tenderers should inform the Contracting Authority of the dispatch of the tender by fax or email on the same day, attaching a proof of the date of shipment, which must be before the deadline for the submission of tenders, and the Cover Letter must state a telephone number and an email address for contact. The Cover Letter, even if sent by post, should be received no later than 12:00 (CET) on 14-12-2026 (TD1 §4.1).

See also the answer to Question 7.

Question 9

Received: 10.11.2026 | Reference: TD1 §3.1.2, §4.3; TD5; TD6

> *(a) Does the rule that subcontractors cannot participate in more than one Tender also apply to suppliers of standard Commercial Off-The-Shelf (COTS) materials (e.g. baseline fabrics, generic electronic sensors), or only to entities performing R&D tasks? (b) Must such COTS suppliers submit an ESPD (TD5) as "Third Parties"? (c) Does the single-Tender restriction also apply to consortium members, e.g. may an entity be a consortium member in one Tender and a subcontractor in another?*

Answer

(a) Subcontracting refers to a contract whereby a Third Party provides services to the Tenderer to enable or assist it in providing the R&D services (TD1 §3.1.2). Where hardware or software from a Third Party is needed for the solution, that Third Party does not need to be part of the consortium; the Tenderer must demonstrate that these resources will be available to it (e.g. by a licensing or supply agreement) (TD1 §3.1.2). A supplier that only sells standard, commercially available materials or components to the Tenderer, and provides no services for the performance of the contract, is therefore not a Subcontractor, and the rule that a Subcontractor may take part in only one Tender does not apply to it.

(b) The ESPD (TD5) must be submitted by each Subcontractor and by each Third Party on whose capacities the Tenderer relies to fulfil the requirements to participate (TD1 §3.1.2, §4.3).

(c) TD1 §3.1.2 states that Subcontractors cannot participate in more than one Tender and that failure to comply leads to the automatic exclusion of the Tender in which it participates, irrespective of its role in the Tender. An entity that acts as Subcontractor in one Tender may therefore not participate in any other Tender, including as consortium member.

See also the answers to Questions 5, 12 and 42.

Question 10

Received: 10.11.2026 | Reference: TD1 §2.4 (Table 1), §2.7 (Table 4)

> *Phase 1 is described as lasting 4 months, but the time schedule sets the start on 20-01-2027 and the deadline for final deliverables on 12-04-2027 (approx. 2.7 months), with the end of Phase 1 on 30-04-2027. Should Tenderers plan the Phase 1 work plan, effort and budget on the basis of the exact period 20-01-2027 to 12-04-2027? Are interim deliverables expected on fixed dates?*

Answer

Yes. According to the time schedule (TD1 §2.7, Table 4), Phase 1 starts on 20-01-2027 and the deadline for the Phase 1 final milestone(s), final report and deliverable(s) is 12-04-2027. The period up to 30-04-2027 covers the assessment of the deliverables (26-04-2027), the notification of the Contractors and the standstill period. The Phase 1 work plan should therefore be planned so that all activities and deliverables are completed between 20-01-2027 and 12-04-2027. The maximum budget per Contractor for Phase 1 is not affected.

Interim milestones and deliverables are defined relative to the start of the phase (TD1 Table 1): M1.1 kick-off meeting at the beginning of Phase 1; D1.1 Contractor details and project abstract (TD9) at the end of month 1; M1.2 interim review meeting with intermediate progress report at the end of month 2; M1.3/D1.2 End of Phase 1 Report and D1.3 report on main results (TD10) at the end of Phase 1, i.e. by 12-04-2027. Monitoring meetings take place at least once a month (TD1 §2.3).

See also the answers to Questions 1 and 44.

Question 11

Received: 10.11.2026 | Reference: TD1 §3.4 A, §4.5; TD4; TD5 Section 4

> *TD1 requires the value of products to be below 50% of each Phase 1 and Phase 2 contract value, and cumulatively below 50% of the Framework Agreement value. TD5 refers only to the cumulative threshold against the Framework Agreement value. (a) Could you confirm which calculation basis applies? (b) How should physical prototype materials (e.g. advanced fabrics, integrated wearable sensors) consumed in R&D activities be classified in TD4: as "products" or as part of the R&D services?*

Answer

(a) Both conditions of TD1 §3.4 A apply: the total value of products offered in Phase 1, respectively Phase 2, must be less than 50% of the value of the Phase 1, respectively Phase 2, contract; and the value of products offered in Phase 3 must be such that the total value of products in all phases (1, 2

and 3) is less than 50% of the total value of the Framework Agreement. The ESPD (TD5) is the Tenderer's declaration of compliance with §3.4 and does not replace these conditions.

(b) Materials and components purchased and consumed in the R&D activities (e.g. fabrics, membranes, sensors and electronic components used for prototyping and testing) form part of the R&D services and should be entered in TD4 under "B. Materials & Equipments", with a description of their intended use. In accordance with TD4, Section 2, the total of the non-personnel costs (materials and equipment, travel, subcontracting and other costs) offered in each Phase must be less than 50% of the total price of that Phase.

See also the answers to Questions 6 and 14.

Question 12

Received: 10.11.2026 | Reference: TD1 §3.3, §3.7, §6.3; TD3; TD5 Section 2

> *TD1 requires "at minimum" the CVs of five (5) key personnel, while also allowing one individual to cover several areas of expertise. TD5 refers to "a number of CVs which they consider necessary". (a) Is the minimum requirement five CVs, or coverage of the five areas, even if fewer individuals are proposed? (b) Should the CVs be submitted in Envelope A (selection criteria) or as an annex to the Technical Offer (Envelope B)? If annexed to TD3, are they excluded from the 40-page limit? (c) Is a specific format (e.g. Europass) or page limit per CV required? (d) May the CVs of a subcontractor staff count towards the required key personnel? Can we resubmit a relevant enquiry again if something additional arises, respecting the deadline of 15/11/2026?*

Answer

(a) At a minimum, five (5) CVs of key personnel must be submitted (TD1 §3.3). Together, the CVs must cover all five areas of expertise: (i) fabric materials and advanced textile engineering, (ii) CBRN protection technologies, (iii) wearable electronics and smart textiles, (iv) R&D/project management and (v) testing and validation. A single individual may cover more than one area, provided that his/her CV demonstrates the required qualifications, experience and competence in each area concerned. This possibility does not reduce the minimum number of five CVs. Additional CVs may be provided where necessary to demonstrate the full range of competencies required. The CVs are evidence for the selection criteria, which are assessed on a pass/fail basis (TD1 §3.3, Table 9, Step 2); they are not scored under the weighted award criteria (TD1 Table 8).

(b) Envelope A contains the ESPD (TD5), a declaration by which the Tenderer confirms that it fulfils the selection criteria (TD1 §4.3); initial documentary evidence, such as the CVs, is not required in Envelope A. The evidence for the selection criteria is the Technical Offer (TD3) (TD1 Table 6); the CVs shall therefore be submitted as an annex to the Technical Offer (Envelope B). Where CVs are attached as an annex to the Technical Offer, they are excluded from the 40-page limit, since supporting annexes are excluded from that limit (TD3, instructions). Annexes must contain only supporting evidence and must not be used to provide substantive responses or circumvent the page limit.

(c) No specific CV format or page limit per CV is prescribed in the Tender Documents.

(d) Yes. The Tenderer must demonstrate access to suitably qualified personnel (TD1 §3.3), and the references may relate to the Tenderer, members of the joint consortium and Subcontractors "who

will be working on the project". A Subcontractor on whose experience the Tenderer relies is obliged to perform the relevant work (TD1 §3.1.2). Staff of Subcontractors must also be included in the list of staff and locations required for the place-of-performance criterion (TD1 §3.4 C).

The deadline for submitting questions was 15-11-2026, 12:00 noon (CET). Questions received after that deadline are not answered (TD1 §6.3).

See also the answers to Questions 7 and 9.

Question 13

Received: 06.11.2026 | Reference: TD1 §2.6, §6.3

> *To ensure the accuracy of our financial proposal, we would appreciate any updated information regarding the budgetary framework and the specific allocations intended for each project phase.*

Answer

The maximum total budget and budget distribution (per phase), inclusive and exclusive VAT, are set out in detail in Section 2.6 of Tender Document 1 (TD1) - Call for Tenders.

The Tender Documents are accessible on ACTIVE PCP's site (https://www.activepcp.eu/call-for-tenders/) and on the Innovation Procurement Platform (https://www.innovationprocurement.com/tenders/36/show/active-pcp-pre-commercial-procurement-of-innovative-personal-protective-equipment-for-first-responders).

See also the answers to Questions 6 and 14.

Question 14

Received: 09.11.2026 (information session)

> *Could you please explain how the IPRs are managed? As we read in the Tender Documents, the Contractor will keep ownership of the IPRs generated during the PCP (foreground). However, in the financial section (Envelope C) Tenderers need to calculate a financial compensation valuing the benefits and risks of the allocation of ownership of the IPRs to the Contractor. What is meant by this financial compensation, and how should it be calculated and reflected in the price offered?*

Answer

Background IPRs (pre-existing rights) remain with their owner and are not transferred to the Buyers' Group. Tenderers must declare the background relevant to their proposed solution in the Technical Offer (TD3, Part 3), to allow IPR dependencies to be assessed; this declaration is mandatory (TD1 §2.8.2, §4.4). Subject to pre-existing obligations, the Tenderer grants the members of the Buyers' Group a royalty-free, non-exclusive, irrevocable and non-sub-licensable licence to use its background IPRs for the execution of the contract (TD1 §2.8.2).

Foreground IPRs (results generated during the PCP) are owned by the Contractor, subject to the rights of the Buyers' Group described in TD1 §2.8 and TD7, Art. 7 (see also the answer to Q5).

Because the Contractor keeps ownership of the results and can exploit them commercially, the price offered must reflect this benefit (TD1 §1.1, §4.5). For this reason, TD4 (Section 2) requires two prices for each cost category:

- the "virtual" price, i.e. the price that would have been quoted if all IPRs, including the ownership of the results, were retained by the Buyers' Group and the Tenderer could not exploit the results (exclusive development price); and
- the "actual" price, which takes into account that the Tenderer keeps ownership of the IPRs attached to the results and can exploit them.

The financial compensation is the absolute value of the price reduction between the virtual price and the actual price (Financial Compensation = Virtual Price - Actual Price, where the Virtual Price must be higher than the Actual Price) (TD1 §4.5; TD4, Section 2). It must reflect the market value of the benefits received (i.e. the opportunity that the IPRs offer for commercial exploitation) and the risks assumed by the Contractor (e.g. the cost of maintaining the IPRs and bringing the products onto the market). The Tender Documents do not prescribe a fixed formula or mandatory percentage for this reduction; Tenderers determine this value themselves and should explain briefly the basis of the valuation.

Only the actual price is evaluated under the Price award criterion (TD1 §3.5, §4.5), and it must not exceed the maximum budget per Contractor for each phase set out in TD1 §2.6 (Table 2 and 3) (whereas the virtual price may exceed the maximum phase budget ceiling) (TD1 §2.6, §4.5; TD4, Section 2).

See also the answers to Questions 3, 5, 6, 11 and 13.

Question 15

Received: 13.11.2026 | Reference: Annex 3 §5, §8; TD1 §2.3, §3.4, §5.4

> *Which requirements and numerical targets determine acceptance? Section 8 states that its baselines and target metrics are general guidelines rather than rigid criteria. Please identify which standards, protection classes and numerical thresholds are mandatory for acceptance at each phase. Please also clarify whether failure to fulfil a Priority 2 or Priority 3 requirement affects admissibility, evaluation score, or phase acceptance.*

Answer

Acceptance is governed by the requirements of Annex 3, Table 1 (79 requirements, each with its type and priority) and by the procedures of TD1, not by the figures of Annex 3 §8 taken in isolation. The standards, protection classes and numerical values in Table 3 describe today's typical baseline and the level the Buyers' Group would ideally like to reach; as §8 states, they are general guidelines rather than rigid criteria. No single value of Table 3 is, on its own, a mandatory pass/fail threshold.

In practice this works as follows at each stage:

- Tender stage: no separate pass/fail test is applied solely on the basis of an indicative value in Table 3. This is without prejudice to the exclusion criteria, selection criteria, on/off award criteria and other mandatory requirements of the Tender Documents. The Technical Offer must address all requirements of the challenge as required by TD1 §4.4.Tenders are scored

against the award criteria of TD1 §3.4, with the minimum thresholds explained in the answer to Question 2. Tenderers should state, for each requirement, the performance level, standard and class they commit to, and justify any departure from the Table 3 targets.

- Phase 1: the solution design must address all requirements, and the Requirements Verification Matrix must show for each of them the value offered, the verification method and the phase in which it will be verified (see the answer to Question 1).
- Phases 2 and 3: formal verification follows detailed test protocols which the TEC, coordinated by the Lead Procurer, develops and refines for each solution, where appropriate in consultation with the Contractor. Each protocol states the requirement verified, the standard or reference method, the test conditions and the acceptance criteria, and is finalised before the corresponding verification activity begins (TD1 §2.3, Detailed Test Protocols). The Buyers' Group will share more information on formal verification testing before Phase 2. The Contractor records, for every requirement, the verification method, the acceptance criterion and the evidence in its Requirements Verification Matrix. Where compliance with a standard is to be shown formally, the evidence must come from an appropriately accredited laboratory or a notified body. Successful completion of a phase is assessed against the minimum functionality and performance requirements of the challenge (TD1 §5.4).

Priority 2 and Priority 3 requirements do not affect admissibility: a Tender is not rejected because it covers an Important or Nice-to-have requirement only partly. Incomplete coverage does affect the evaluation score under the relevant award criterion. As regards phase acceptance, the Contractor's commitments in the accepted Technical Offer and the applicable phase contract remain binding, irrespective of the priority assigned to the requirement. Any shortfall is assessed against the contractual obligations, agreed milestones and applicable acceptance criteria under TD1 §5.2 and §5.4. Its priority classification alone neither determines nor excludes an impact on satisfactory or successful completion.

See also the answers to Questions 1, 2, 42 and 46.

II. CBRN hazard scope and decontamination

Question 16

Received: 09.11.2026 | Reference: Annex 3 R1.3, R1.7, R1.10, R1.13, R1.18, §6 Part II

> *Biological: which agents or risk groups (RG 1 to 4) must the garment protect against and the sensors detect, and which exposure routes are in scope (skin, aerosol and droplet, bloodborne puncture)? Is protection at garment level only, with respiratory protection separate? What does "early-warning detection" mean in practice (specific agent identification, generic bioaerosol detection, or a sample-taking alert), with what detection time and limit of detection? May a bid meet the biological requirements with protection and decontamination only and treat sensing (R1.7, R1.10) as a longer-term development?*

Answer

Agents and risk groups: the biological protection of the garment is a barrier property and is not tested agent by agent. The reference is EN 14126 and its test methods (Table 3, R1.3), which use standard test organisms and synthetic body fluids. Annex 3 §6, Part II gives a non-exhaustive list of agents,

ordered by how often responders meet them and how much they matter (Categories 1 to 3, with reference to Risk Groups 1 to 4 of Directive 2000/54/EC). It is there to help Tenderers set priorities; it is not a list of agents against which each garment must be individually tested.

Exposure routes: skin contact with contaminated liquids (blood and body fluids, flood and sewage water), splashes and droplets, and contaminated aerosols and dust settling on the garment are all in scope. Puncture by contaminated sharp objects is not part of the biological barrier requirement; it is covered by R4.2 (Priority 2), which mentions needle-stick resistance.

Respiratory protection: protection is at garment level. Respiratory protective equipment is not part of the solution to be developed; the solution must be compatible with the equipment already used by responders (R5.19; Annex 3 §7, Table 2), including a reliable interface between garment, hood and mask.

Early warning: R1.7 does not ask for the identification of a specific agent in real time, and the detection function does not have to be built into the fabric of the garment: a wearable detector that belongs to the solution and is compatible with the garment is sufficient. The expected timing and the meaning of 'real time' are explained in the answer to Question 23 (see also the answer to Question 31).

Staged approach: R1.3 (protection) is Priority 1; R1.7 and R1.13 are Priority 2 and R1.10 is Priority 3. Table 3 itself recognises that no integrated real-time biological detector exists today. A Tender may therefore concentrate its biological effort on protection, decontamination and reuse and present detection and monitoring as a development path with clear steps across Phases 2 and 3, provided the Technical Offer explains how R1.7, R1.10 and R1.13 will be approached. Such a Tender is admissible; the extent to which these requirements are covered is reflected in the score of the CBRN requirement group.

See also the answers to Questions 23, 26 and 31.

Question 17

Received: 09.11.2026 | Reference: Annex 3 R1.4, R1.5, R1.8, R1.11, R1.14, R1.21

> *Radiological and nuclear: is gamma shielding out of scope for R1.5? Which test method and which radionuclides or particle sizes define "validated" protection, and what is the baseline for "beyond the current baseline" (for example EN 1073-2)? What must the garment detect (surface contamination, dose rate or nuclide identification), and is a logging, alerting dosimeter sufficient, or must it be integrated into the garment?*

Answer

Gamma shielding by the garment is out of scope. R1.5 concerns protection against radioactive particulate contamination (alpha and beta emitters), and Table 3 (R1.4) states that the focus is on alpha and beta radiation. The garment is not expected to shield the wearer against penetrating radiation (gamma, neutrons); that risk is managed operationally (time, distance, shielding; Annex 3 §6, Part III) and through the dose-rate warning and monitoring functions (R1.8, R1.11, R1.14).

Test method: the reference standard is EN 1073-2 (non-ventilated protective clothing against particulate radioactive contamination), which measures the inward leakage of a test aerosol into the

complete suit and expresses it as a nominal protection factor (NPF). Testing with radioactive material is not required. The radionuclides named in Annex 3 §6, Part III (for example Cs-137, Co-60, Ir-192, Ra-226) are context information on realistic incidents.

Baseline: following a review of the EN 1073-2 classification criteria, the baseline value quoted in Table 3 requires correction. According to EN 1073-2:2002, the classification is based on the Nominal Protection Factor (NPF), with the following values:

- Class 1: NPF 5 (TIL 20%).
- Class 2: NPF 50 (TIL 2%).
- Class 3: NPF 500 (TIL 0.2%).

Consequently, the previously quoted value of TIL ≤ 1×10^{-4} (0.01%) does not correspond to EN 1073-2 Class 2. The ACTIVE PCP target of whole-suit particle leakage ≤ 0.05% (TIL ≤ 5×10^{-4}), corresponding to an attenuation factor of at least 2,000, is more stringent than the EN 1073-2 Class 3 leakage threshold of 0.2%.

The ACTIVE PCP target is therefore considered technically consistent as an enhanced performance requirement, provided that the comparison is based on equivalent test conditions and measurement methods.

Radiological detection and alerting may be implemented by detachable, body-worn devices that form part of the proposed solution; physical embedding in the fabric is not required. The functions concerned are the dose-rate warning and the monitoring of the accumulated dose (R1.8, R1.11, R1.14); identification of the radionuclide is not required of the garment, and surface contamination is checked after the operation (R1.21). A logging, alerting dosimeter is sufficient provided it is part of the solution, is worn on the body or mounted on the garment, alerts both the wearer and operational command, and feeds its data into the recording and transmission chain of the solution (R5.22, R5.23). It does not have to be embedded in the fabric (see also the answer to Question 31). A stand-alone commercial dosimeter with no link to the wearer alerts and to command would not meet R1.8 and R1.14.

See also the answers to Questions 19, 21 and 31.

Question 18

Received: 09.11.2026 | Reference: Annex 3 R1.1, R1.2, R1.22, R2.6, §6 Part I; TD1 §2.3

> *Chemical protection: please give a defined challenge-chemical list with concentrations and the required breakthrough time per chemical class (R2.6 only says "TIC/CWA", 30 min). What is the baseline for "enhanced protection" and the minimum level (liquid-tight, vapour-tight or splash-resistant)? Which seam and closure technologies are acceptable (welded, taped, zippers), and does the same permeation test apply at seams as for fabric (R1.22)?*

Answer

Challenge chemicals: the Tender Documents do not contain a closed list of test chemicals with concentrations. Annex 3 §6, Part I gives a non-exhaustive overview of chemical agents ordered by operational frequency and importance, and Table 3 gives indicative targets: for R1.2, a permeation

breakthrough time of at least 180 minutes under EN ISO 6529 (Method B), validated against at least ten representative agents (HD, GB, GD, TDI, NH3, HCl and HF are named); for R2.6, at least 30 minutes for the combined chemical and thermal construction. Test concentrations and conditions are those of the referenced test standards. Tenderers are expected to state in their Technical Offer the chemicals and breakthrough times they design for, with a justification based on Annex 3 §6 and on the four scenarios. The final list and conditions will be fixed in the Phase 2 test protocols: the Buyers' Group may select the test laboratories and the agents or simulants (for example from the STANAG 4632 priority list), and laboratory testing uses standardised test substances, representative agents, simulants or indicators (TD1 §2.3). The testing is commissioned and paid for by the Contractor (see the answer to Question 42).

Baseline and minimum level: the 'current baseline' for R1.2 is described in Table 3 as EN 14605 Type 3 or 4 (liquid-tight or spray-tight clothing) with a breakthrough time of at least 60 minutes for common toxic industrial chemicals. 'Enhanced' means better than that. The ideal target is EN 943-1 Type 1 (gas-tight). The Tender Documents do not set a mandatory minimum class; Tenderers must state clearly which protection type they will reach, in which configuration, and why. The relation between the Type 1 and Type 3 figures is explained in the answer to Question 24.

Seams and closures: no joining or closure technology is prescribed or excluded. This is a pre-commercial procurement and the requirement is functional: under R1.22 (Priority 1) all seams, welds and closure points must offer the same resistance as the textile. The indicative target confirms that the same permeation test (EN ISO 6529, Method B) is applied to seams and that their breakthrough time should be at least equal to that of the fabric, together with seam strength and flex-crack targets, also after decontamination cycles. Welded, taped, bonded or other seams and any type of closure may be proposed if this is demonstrated.

See also the answers to Questions 4, 24, 30, 33 and 42.

Question 19

Received: 09.11.2026 | Reference: Annex 3 R1.6, R1.9, R1.12, §6 Part I

> *Chemical detection and monitoring: should the garment detect specific agents, broad families or give a general presence alert, and must it work without a hand-held detector (R1.12) or may it rely on one the responder already carries? Is cumulative-dose monitoring required for specific agents and against which limits (for example AEGL or IDLH)? Are fire-smoke gases (CO, HCN, HCl, formaldehyde) in scope?*

Answer

Chemical detection and alerting may be implemented by detachable, body-worn detectors that form part of the proposed solution; physical embedding in the fabric is not required (see the answer to Question 31). The functional coverage remains that specified by the applicable requirements and by the accepted Technical Offer. Identification of the exact substance is not required of the solution unless it is included in the offered capability; it remains the task of the specialised CBRN/HAZMAT units, as the scenarios show. For the functions addressed, the detectors must provide the applicable alerts to the wearer and to operational command and feed the recording and transmission chain of

the solution (R5.22, R5.23). Mere compatibility with an unrelated external detector does not demonstrate these functions.

Hand-held detectors: the garment must be compatible with the hand-held CBRN detectors carried by responders. R1.12 requires the alert to reach the wearer 'without requiring additional hand-held detectors'. The warning function must therefore be provided by a wearable, body-worn detector that is part of the proposed solution (see the answer to Question 31).

Cumulative dose and limits: cumulative-dose monitoring is part of R1.9 (Priority 2), and may be provided by the body-worn detector of the solution. Table 3 refers to AEGL-1 (US EPA) or IDLH (NIOSH) values as the reference for the detection threshold. The 'critical contamination levels' of R1.12 are not fixed in the Tender Documents; Tenderers should propose alert thresholds per agent class, configurable by them, and explain the reference limits used.

Fire-smoke gases are relevant to garments' protection capability. Carbon monoxide, formaldehyde and hydrogen chloride are in Category 1 (high frequency, high importance) of Annex 3 §6, Part I, and hydrogen cyanide is listed as a combustion by-product. Since the list is non-exhaustive and meant to help set priorities, Tenderers decide which gases their solution covers and justify the choice against the scenarios.

See also the answers to Questions 17, 21, 22 and 31.

Question 20

Received: 09.11.2026 | Reference: Annex 3 R1.15-R1.21, R3.2, R5.11, R5.12, R5.17

> *Decontamination and reuse: how many decontamination cycles must the garment survive (the annex mentions 30) and with which methods? How is decontamination verified for chemical and biological contamination (on-garment indicator, lab test or procedure), and by whom? Which test standard and reduction proves the antimicrobial property (for example ISO 20743 or 18184), and are biocidal finishes acceptable under the PFAS-free requirement and REACH? Which washing process applies to the 50 washes with integrated sensors (domestic, industrial or specialist decon laundry), who performs it, and how does it fit the 10-minute sensor swap?*

Answer

Number of cycles and methods: the indicative targets are a minimum of 30 decontamination cycles for each type of contamination without loss of protective performance: chemical decontamination with a chlorine dioxide or hypochlorite wash (R1.15), biological decontamination with hydrogen peroxide vapour or a chlorine solution (R1.16) and radiological decontamination by aqueous washing (R1.17). In addition, the ensemble should withstand at least 50 washing cycles (R5.11). These figures are guidelines (Annex 3 §8); Tenderers state the number of cycles and the decontamination methods their solution supports.

Verification: the solution must provide a verifiable method that allows the user to decide whether the garment can be reused (R1.19 to R1.21). An indicator on the garment is one possible answer but is not mandatory. For chemical contamination the target describes a validated, agent-specific method based on wipe, extraction or rinse sampling or on direct-reading techniques, with results expressed as residual mass per unit area and compared with acceptance limits, paying attention to seams, closures

and folds. For biological contamination it describes a field reader (LAMP) or a lateral-flow strip giving a result within about 30 minutes. For radiological contamination it describes a swipe or scan probe. The Contractor develops and validates the method and the procedure; in operational use it is applied by the user organisation (its decontamination or CBRN personnel), as far as possible in the field. Please note that the words 'chemicals identified in Annex I' under R1.19 refer to the chemical agents of Annex 3 §6, Part I.

Antimicrobial properties: the indicative reference is EN ISO 20743 (antibacterial activity of textiles), with a reduction of at least 3 log (99.9%) against S. aureus, E. coli and MRSA after 50 washing cycles. Evidence of antiviral activity (ISO 18184) is not requested but may be offered in addition. Biocidal finishes are acceptable provided they are PFAS-free (R3.2), contain no substances of very high concern and comply with EU chemicals legislation, in particular REACH and the Biocidal Products Regulation (EU) No 528/2012 as regards treated articles. The technologies named in Table 3 (photocatalytic or nano-silver surfaces) are examples, not a prescription.

Washing: the reference is machine washing at 40°C under ISO 6330, the standard domestic washing procedure used for textile testing, with dimensional stability also checked at 60°C (R5.12). The intention is that the garment can be washed by the user organisation with its usual laundry arrangements, without a specialist process. Electronic modules are expected to be either washable in place or detachable and re-attachable without tools in about two minutes, and washing must not affect their calibration. This is a different matter from the 10-minute figure of R5.17, which concerns the replacement of a faulty sensor module in the field. Tenderers should describe the care and decontamination process they propose, who carries out each step and any limitation. In Phase 2 the Public Buyers will carry out their own independent washability and shrinkage checks (R5.11, R5.12), in addition to the evidence supplied by the Contractor (TD1 §2.3).

Decontamination during the pilots: During the pilot implementation, the Public Buyers will be able to carry out their own decontamination procedures, in accordance with their established operational protocols, and examine whether any suit failures occur during this process. The method, substances, concentrations and duration of each procedure are documented and communicated to the Contractor and to the TEC before the activity. Procedures that fall outside the decontamination methods declared by the Contractor are exploratory trials: their results are reported for improvement and are not treated as a failure against an acceptance criterion that did not apply to the agreed test. The objective is to identify weak points so that they can be reported for improvement, rather than to determine liability for any damage to the suits. The trial period is intended to be a phase where the equipment is subjected to rigorous use, with the aim of uncovering any potential weaknesses.

See also the answers to Questions 4, 33 and 43.

Question 21

Received: 13.11.2026 | Reference: Annex 3 R1.6-R1.14, R5.21-R5.25

> *Must every wearer carry the complete set of hazard sensors? Must the detection, monitoring and alerting requirements be fulfilled independently by equipment carried by each wearer, or may specified capabilities be distributed across a team, with sensor measurements shared between responders? Please identify which requirements must be demonstrated using measurements taken at the individual receiving the warning.*

Answer

The detection, monitoring and alerting requirements are written from the point of view of the individual wearer and the garment must be compatible with the wearable CBRN detectors that form part of the proposed solution and with the equipment identified for compatibility verification under R5.19: the solution must alert 'the wearer and operational command' (R1.6 to R1.8) and must alert the wearer before critical levels are reached, without additional hand-held detectors (R1.12 to R1.14). The scenarios describe responders who arrive first, sometimes alone or in pairs, before the hazard is known. A warning that depends on another team member being nearby, or on a working network connection, would not meet that need.

It follows that every wearer must receive, on his or her own equipment, the warnings relevant to his or her own position, including when communications are lost (R5.24). This does not mean that every garment must carry an identical, complete set of wearable/portable sensors in all circumstances: the modular design required by R5.18 allows the sensor set to be adapted to the role and the threat level, and Tenderers may propose configurations per role with a justification. Sharing measurements between team members and command is welcome as an additional capability, but it complements individual warning and does not replace it.

The requirements that must be demonstrated with measurements taken on the individual who receives the warning are the alerting requirements R1.12 to R1.14, the thermal monitoring and warning requirements R2.1 and R2.2, vital signs (R5.20) and location (R5.21). Cumulative exposure and dose (R1.9, R1.11) are individual by nature.

See also the answers to Questions 17, 19, 31 and 38.

Question 22

Received: 13.11.2026 | Reference: Annex 3 R1.12-R1.14

> *Does warning before protective performance is compromised require a prediction of breakthrough? Do these requirements mandate prediction of garment breakthrough or remaining protective time, or is warning based on measured hazard levels and predefined exposure limits sufficient? If prediction is mandatory, please identify the protective endpoint, reference exposure conditions and acceptance criteria to be demonstrated.*

Answer

A prediction of breakthrough is not mandatory. R1.12 to R1.14 state the purpose: the wearer must be warned before critical contamination levels are crossed and before the protective performance of the clothing is compromised. They do not prescribe how. The indicative targets in Table 3 describe a threshold-based alarm (activation within 5 seconds of a threshold being detected).

A warning based on measured hazard levels and, where supported, cumulative exposure is therefore sufficient, provided its thresholds and safety margins are justified for the relevant substances, exposure conditions and tested garment configuration. Any relationship between measured exposure and protective performance must be supported by validation evidence; a laboratory breakthrough time is not a safe-use time and cannot be compared directly with a cumulative-exposure figure without a validated relationship. Predictive estimation of the remaining protective time goes beyond

this and would be regarded as added innovation. A Tenderer that offers it should itself define the protective endpoint, the reference exposure conditions and the way the prediction will be validated; these will then be taken up in the test protocols (TD1 §2.3).

See also the answers to Questions 19 and 45.

Question 23

Received: 13.11.2026 | Reference: Annex 3 R1.7, R1.10, R1.13, §8

> *What biological information must be available in real time? Please clarify whether biological early warning may be based on a presumptive bioaerosol indication with subsequent confirmatory identification, or whether agent-specific identification is required within the early-warning interval. Please also define the event from which alert latency is measured: initial exposure, sensor detection, or availability of a presumptive positive result.*

Answer

A presumptive indication followed by confirmatory identification is acceptable. Table 3 describes exactly this approach: a presumptive bioaerosol or bio-threat signal in real time (R1.7, R1.10), with identification at agent-class level transmitted to command later, indicatively within 90 minutes, by a field method such as LAMP or lateral flow. **Agent-specific identification within the early-warning interval is not required.**

Alert latency is measured from the moment the sensor produces a presumptive positive result (the detection threshold is reached), not from the initial exposure of the wearer. The indicative values are an alert to the wearer within 30 seconds of the presumptive positive signal (R1.7), activation of the audible and visual alarm within 5 seconds of threshold detection (R1.13), and an alert to command within 60 seconds of a confirmed positive. The presumptive early warning is also transmitted to operational command (R1.7), clearly marked as unconfirmed, and is not withheld until identification is complete; the confirmed result follows as a separate update. The time between exposure and the presumptive signal depends on the detection principle; Tenderers should declare it, together with the false-positive rate they expect.

See also the answer to Question 16.

Question 24

Received: 13.11.2026 | Reference: Annex 3 R1.1-R1.2, R2.6, §8

> *Which chemical protection level applies? The indicative targets for R1.1-R1.2 refer to Type 1 gas-tight protection and chemical breakthrough times of at least 180 minutes, whereas R2.6 refers to Type 3 protection and at least 30 minutes. Please clarify whether these apply to different configurations or operational conditions, and identify the protection classes, challenge agents and exposure conditions against which compliance will be assessed.*

Answer

The two sets of figures describe two different things and, as Annex 3 §8 states, both are indicative rather than rigid. For the garment in its base, firefighting-capable form the reference is R2.6, which addresses the specific case where chemical and thermal protection must be present in the same construction: the garment in its firefighting-capable form should reach at least EN 14605 Type 3 with a breakthrough time of at least 30 minutes while meeting EN 469 level 2. The Type 1 and 180-minute figures of R1.1 and R1.2 describe the level the Buyers' Group would ideally like to reach in the highest CBRN configuration. The modular design required by R5.18 allows the level of protection to be raised to match the threat.

Tenderers should therefore describe the configurations of their solution and state for each one the protection type, the breakthrough times and the conditions of use. Compliance will be assessed against the classes and test methods named in Table 3 (EN 943-1, EN 14605, EN ISO 6529) and against the challenge chemicals and conditions fixed in the test protocols (see the answer to Question 18).

See also the answers to Questions 18, 27 and 30.

III. Architecture, fit, weight and compatibility

Question 25

Received: 09.11.2026 | Reference: Annex 3 R1.1-R1.4, R2.4, R3.5, R5.1, R5.9, R5.18

> *Does "integrated into the standard operational uniform" mean a single garment worn as the daily uniform, or may protection be a quickly added layer or overgarment stored in the vehicle? What is the maximum time to reach full protection? Which modules are expected to be exchangeable (outer shell, sensor layer, communication module), and should a published interface control document be a V1 deliverable?*

Answer

The intention behind 'integrated into the standard operational uniform' (R1.2 to R1.4) is that responders who arrive first already have an enhanced level of protection at the moment of initial approach, before the hazard is confirmed, and do not have to change into a separate conventional protective suit (R1.1). The wording does not impose a single garment. Annex 3 speaks of an 'integrated operational garment/ensemble' and names adaptive, modular design with interchangeable layers as a key innovation area (§2; R5.18).

Both approaches mentioned in the question can therefore be proposed: a garment worn as the daily operational uniform, or a base garment complemented by layers or modules that are added quickly when the threat requires it and that may be carried individually or in the vehicle (R5.9). What matters is that the Tenderer shows what protection the responder has on arrival and how fast the full level is reached. A solution in which all protection sits in an overgarment kept in the vehicle, with an ordinary uniform underneath, would not meet the 'from the moment of initial approach' element of R1.2 to R1.4.

Time to full protection: there is no single binding maximum. The indicative targets are a packed ensemble ready for donning within 120 seconds (R5.9), donning of the base ensemble in no more than 5 minutes by one person and of the top CBRN level in no more than 10 minutes with a buddy (R5.1), 3 minutes 30 seconds when the inside is damp (R3.5) and module exchange within 15 minutes (R5.18).

Exchangeable modules: Table 3 (R5.18) names the outer protective shell, the integrated sensor layer and the communication/data module as elements that should be upgradable independently, on the basis of a published Interface Control Document (ICD). The Tender Documents do not list the ICD as a separate deliverable of Prototype v1. The interfaces should be described in the Phase 1 solution design and the ICD should mature with the prototypes, so that a complete version is available with Prototype v2 at the latest.

See also the answers to Questions 3, 30 and 31.

Question 26

Received: 09.11.2026 | Reference: Annex 3 R5.1, R5.4, R5.5, R5.8, R5.19, Table 2

> *Is respiratory protection (SCBA, and PAPR in addition) and the mask or visor (R5.4, 180° by 70° field of view, anti-fog) part of the supplier's deliverable or supplied by the procurer? For R5.5, is there a maximum number of attachment points, and is PALS/MOLLE webbing mandatory or may we propose another system?*

Answer

Respiratory protection (SCBA, PAPR, filtering masks) is not part of the supplier's deliverable. It is equipment that the responders already have and with which the solution must be compatible: R5.19 requires compatibility with additional PPE carried by the wearer, Table 2 lists respiratory protective equipment among the compatible gear, and R5.8 excludes respiratory protection from the weight of the ensemble. The same applies to helmets and footwear. Tenderers remain responsible for the interfaces, in particular the seal between hood and mask.

The field-of-view and anti-fog values under R5.4 apply to any visor or transparent face element that the Tenderer includes in its own solution (for instance in a hood). Where the face is covered by the user's existing full-face mask, the optical performance is that of the mask, and the solution must simply not reduce it. R5.4 also covers how visible the wearer is to others (retroreflective material).

Attachment points (R5.5): the requirement asks for 'sufficient, but reduced' attachment points. Table 3 indicates a minimum of four; no maximum is set, and the Tenderer should justify the number and position in relation to the equipment actually carried. PALS/MOLLE is given as the reference because it is widely used; another attachment system may be proposed if the Tenderer shows that the standard accessories of the responders (radio, first-aid kit, tracker) can be mounted and removed as easily.

See also the answers to Questions 16, 27 and 29.

Question 27

Received: 09.11.2026 | Reference: Annex 3 R2.3, R2.6, R5.8, R5.9

> *Are gloves, hood and boots inside or outside the 5.0 kg limit (R5.8), and what is the maximum weight for the excluded electronics and batteries? Are the 5.0 kg (R5.8) and 3.5 kg (R2.6) limits for the same garment, and which one is binding?*

Answer

Under Table 3 (R5.8) the 5.0 kg figure covers the complete ensemble made up of jacket, trousers, gloves and hood. Gloves and hood are therefore inside the limit; boots are outside it, as are the other detachable or external elements listed: electronic modules, batteries, active cooling systems, respiratory protection, helmet and other equipment carried by the responder.

The Tender Documents set no overall maximum weight for the excluded electronics and batteries. Some partial indications exist: 1.5 kg for a thermal regulation system (R2.3), 400 g for impact or cushioning inserts (R4.3, R4.5) and 5.5 kg for the packed ensemble (R5.9). Since R5.8 asks for PPE that is light to wear over multi-hour operations, Tenderers must declare the weight of every excluded element and the total weight worn in each configuration; this total is part of the assessment of R5.8.

The 3.5 kg under R2.6 and the 5.0 kg under R5.8 do not refer to the same thing. R2.6 concerns the combined chemical and thermal protective construction, that is, the garment itself (jacket and trousers), whereas R5.8 concerns the complete ensemble including gloves and hood. Both are indicative targets and neither is a pass/fail limit at tender stage (see the answer to Question 2). For the weight of the solution as a whole, R5.8 is the reference.

See also the answers to Questions 2, 24, 26 and 32.

Question 28

Received: 09.11.2026 | Reference: Annex 3 R5.14, R5.15, R7.7; TD1 §2.3

> *R7.7 specifies four garments per procurer (male, female, two unisex) while R5.14 asks for at least 8 sizes: which sizes should be delivered, and will body measurements of the pilot wearers be provided? How many test samples, and of what size, are needed for destructive testing in Phase 2? TD1 asks for at least one complete unisex garment per prototype iteration (v1 and v2) while Annex 3 R7.7 says one unisex garment per Public Buyer in Phase 2: what is the minimum number of complete garments?*

Answer

R7.7 requires a total of at least four garments per procurer (1 male, 1 female and 2 unisex): at least one unisex garment to each Public Buyer in Phase 2 and the remaining three in Phase 3, consistent with TD1 §2.3 (Phase 3: at least three pilot garments per Public Buyer). R5.14 (≥ 8 sizes) refers to the size range of the solution, not to the number of garments delivered: its target is availability in at least 8 standard sizes (EN 13402) accommodating the 5th-95th percentile body dimensions, with fit validated by a 3D body-scan protocol (EN ISO 20685-1) for a BMI range of 18.5-35, and size grading that does not degrade the CBRN seal geometry at any size; R5.15 additionally requires dedicated female-pattern garments. It is not necessary to know the biometric details (height, weight) at tender

stage. For the garments delivered during the PCP, a range of sizes from Small to XL needs to be available. This concerns the PCP deliveries only; it does not replace the size range of the solution required by R5.14.

Sizes: Sizes are designated by body measurements in centimetres (height, chest or bust, waist and hip), in line with EN ISO 13688 on protective clothing, and may additionally be labelled with the usual European letter or number sizes for men and for women. The '8 standard sizes' of R5.14 correspond to a range such as XS to 4XL; under R5.15 the female garments follow their own pattern and their own size table. Body measurements of individual wearers are not available at tender stage. For the purpose of costing, Tenderers should assume the following sizes, within the range S to XL; the final allocation of sizes is agreed with each Public Buyer, on the basis of the measurements of the designated wearers, before the garments are manufactured:

- Phase 2, unisex garment: size L (height 176-182 cm, chest 100-108 cm).
- Phase 3, male garment: European men's size 50-52, i.e. L (height 176-182 cm, chest 100-108 cm).
- Phase 3, female garment: European women's size 40-42, i.e. M (height 164-170 cm, bust 90-98 cm, hip 98-106 cm).
- Phase 3, unisex garment: size M (height 170-176 cm, chest 92-100 cm)

Garments or material samples for destructive testing, repeated decontamination, washing, ageing or durability testing are provided separately and do not reduce the number of garments available for operational validation (Annex 3 Table 3, R7.7). Their number and size follow the applicable test methods and the agreed Phase 2 test programme; additional complete garments are provided where a verification method requires a complete garment (TD1 §2.3).

The two provisions apply together. During Phase 2 each Contractor provides at least one complete unisex prototype garment for each prototype iteration (v1 and v2), to support usability, integration and laboratory assessment (TD1 §2.3, Sample Delivery) and, by the end of Phase 2, at least one complete unisex garment for each of the four Public Buyers (R7.7), so that the prototype can be demonstrated at the premises of each procurer (R7.1). The v2 garment used for assessment may count as one of these four only if it has not undergone destructive testing. For Prototype v1, the TEC and the PEC clarify that two complete unisex garments are to be provided. The minimum is therefore six complete garments in Phase 2 (two of v1 and four of v2), plus the material samples, specimens and any additional complete garments required by the agreed test protocols.

See also the answers to Questions 4 and 44.

Question 29

Received: 09.11.2026 | Reference: Annex 3 R4.1, R4.3, R5.19, Table 2

> *Is the R5.19 equipment list (full-face SCBA masks, soft armour vests, firefighting helmets, TETRA radios) closed or only examples? Will the procurers supply the equipment for compatibility testing, and which procurer uses which models? For police, may we assume that stab or ballistic protection is added by the vest?*

Answer

The equipment named under R5.19 and in Annex 3 §7 (Table 2, 'Compatible Gear (Examples)') is illustrative, not a closed list. The makes and models are examples of the categories of equipment with which the solution should ideally be compatible: full-face masks and breathing apparatus, helmets, soft body armour, radios, gloves and boots. What will be verified in practice is compatibility with the equipment actually in service with the four Public Buyers and their end users.

The Public Buyers will make their own in-service equipment available for compatibility checks during the demonstrations at their premises and during the pilots, and will inform the Contractors of the models concerned. Contractors are not expected to purchase the equipment of each procurer, but they are responsible for the compatibility test report (EN 13921) and for any laboratory compatibility testing they need for their own development.

Police use: ballistic protection is not required of the garment. It is provided by the vest of the officer, which R5.19 treats as additional PPE to be worn with the solution, and Annex 3 §3 makes clear that Key Threat 4 is not a requirement for heavy tactical armour. Protection against stabbing, piercing and cutting, on the other hand, is requested of the garment itself under R4.1, R4.2 and R4.4 (Priority 2), at textile level and through targeted reinforcement. Tenderers may explain how the garment and the vest complement each other, but may not assume that the vest alone answers these requirements.

See also the answers to Questions 26 and 34.

Question 30

Received: 13.11.2026 | Reference: Annex 3 R1.1, R2.4-R2.6, R3.3-R3.4, R5.18, §8

> *Must all protective properties be demonstrated in the same configuration? R1.1 requires simultaneous protection without switching suits, while R5.18 permits adaptation of protection levels through modular design. Must chemical, thermal, liquid-barrier and breathability requirements all be demonstrated in one unchanged operational configuration? If different configurations are permitted, please clarify whether adding or removing a protective module constitutes prohibited suit switching, and which properties must be met in each configuration.*

Answer

Not every protective property has to be demonstrated in one single, unchanged configuration, but the solution must remain one system. R1.1 excludes having to switch suits, which Table 3 explains as replacing the ensemble by a separate conventional protective suit during the operational phase. R5.18 requires a modular design so that the level of protection can be adapted. Adding or removing a module or layer that belongs to the solution is therefore not prohibited suit switching. Table 3 (R2.4) says the same for thermal protection: the configuration intended for firefighting must show EN 469 level 2 performance, and it may use integrated layers or modular components as long as no separate conventional firefighting suit is needed.

Tenderers should define the configurations of their solution and provide a matrix showing which requirements are met in which configuration, and the time and steps needed to move from one to another. Each property is then verified in the configuration or configurations for which it is claimed. Some requirements are combined by definition and must be met at the same time in one

configuration: chemical barrier together with heat and flame resistance (R2.6), fluid barrier integrity under several simultaneous threats (R3.6), seams equal to the textile (R1.22), and breathability while the barrier is maintained (R2.5, R3.4). The fewer the configurations and the quicker the transitions, the better the solution answers R1.1.

See also the answers to Questions 3, 18, 24 and 25.

Question 31

Received: 13.11.2026 | Reference: Annex 3 R1.6-R1.14, R5.17-R5.18

> *What constitutes integration of detection and alerting into the PPE? Would a detachable, body-worn detector connected to wearer alerts and incident command satisfy the integration requirements, including the requirement to avoid additional hand-held detectors? Or must sensing and warning devices be physically embedded in the garment? Please identify any requirements that specifically exclude detachable body-worn equipment.*

Answer

A detachable, body-worn detector that is part of the proposed solution, is carried on the garment without occupying the hands, and is connected to the wearer alerts and to incident command satisfies the integration requirements. Physical embedding of sensors in the fabric is not required. This follows from Table 3 itself, which speaks of an 'integrated/body-worn' chemical sensor (R1.6), an 'integrated or body-compatible' biological indicator (R1.7) and an 'integrated or suit-attachable' probe (R1.21), provides for sensor modules that can be detached and re-attached without tools (R5.11) and replaced in the field (R5.17), and refers to electronic modules as detachable elements (R5.8).

What R1.12 to R1.14 exclude is reliance on additional hand-held detectors, that is, separate instruments that must be held or operated by hand and that do not belong to the solution. No requirement excludes detachable body-worn equipment. Such equipment must not compromise the protective barrier, hinder donning, doffing or movement, or conflict with the washing and decontamination concept, and should respect the indicative ingress-protection and explosive-atmosphere targets for electronic subsystems.

See also the answers to Questions 16, 17, 19, 21 and 25.

IV. Thermal, fluid and mechanical requirements

Question 32

Received: 09.11.2026 | Reference: Annex 3 R1.1, R2.3-R2.5, R3.4, R5.8, R7.6

> *Is structural firefighting with flashover exposure in scope, or only EN 469 level 2 as the thermal baseline? Is a water-cooled or active-cooling vest allowed, and does its weight count (R5.8 excludes cooling systems)? Should the final garment be certified under both EN 469 and the chemical standard, and does certification cover the whole ensemble including electronics? Is the ISO 11092 Ret target (15 m^2Pa/W or lower) tested on the complete laminate, and is a higher value acceptable if a thermal manikin test shows equal heat strain?*

Answer

Thermal scope: the thermal reference is EN 469 performance level 2 (R2.4, Priority 1), and R2.3 mentions interior firefighting as the use for which the garment must be thermally sufficient. No thermal performance beyond EN 469 level 2 is requested; specialised proximity or fire-entry clothing is outside the scope. Flashover is not defined as a separate design case in the Tender Documents.

Cooling: active cooling, including a liquid-cooled vest, is allowed. R2.3 refers to 'active or passive thermal regulation', and Table 3 gives indicative values for both options, with a system weight of no more than 1.5 kg. The weight of an active cooling system is not counted in the 5.0 kg of R5.8, but it must be declared and is considered in the overall assessment of wearability (see the answer to Question 27). The cooling system must not weaken the chemical barrier or the thermal protection.

Certification: the performance must be demonstrated on the final garment or ensemble for both the thermal standard (EN 469) and the chemical standards, with the integrated electronics in place, so that it is shown that they do not degrade protection. Electronic subsystems follow their own conformity rules in addition. What must be completed in terms of certification during the PCP is explained in the answer to Question 46.

Water-vapour resistance: EN ISO 11092 is a test on materials, so the Ret target of 15 m^2Pa/W or lower applies to the complete material assembly as worn (all layers of the laminate or layer combination), not to a single component layer. Like the other values of Table 3 it is a guideline. A higher Ret may be proposed if the Tenderer shows by thermal manikin or physiological testing that the heat strain on the wearer is equal or lower; Table 3 itself uses manikin-validated work time as a target under R2.5 and R3.4.

See also the answers to Questions 27, 42 and 46.

Question 33

Received: 09.11.2026 | Reference: Annex 3 R3.2, R3.6; TD1 §2.3

> *Does zero PFAS (OECD definition) apply only to finishes and membranes, or also to sealing tapes, coatings, electronics encapsulation and zippers? The combined-threat test in R3.6 (chemical spray with water jet) has no standard protocol: who defines it (procurers or a named test house), and when?*

Answer

PFAS: R3.2 requires the solution to be PFAS-free, and the indicative target is zero PFAS within the OECD definition. The requirement is not limited to water-repellent finishes and membranes. It covers all materials of the garment that are part of the protective and fluid barrier: fabrics, membranes, coatings, finishes, seam and sealing tapes, and closures such as zippers and their tapes. No exemption is foreseen for any of these materials. R3.2 belongs to the Fluid Exposure group ('Fluid Material - PFAS free') and is verified on the materials of the garment. Electronic modules remain subject to the EU chemicals legislation in force, including any restriction of PFAS under REACH, and Tenderers must declare the PFAS status of the electronic components they use.

Combined-threat test: as Table 3 states, no standard protocol exists for the simultaneous exposure of R3.6. The protocol will be defined in the same way as the other detailed test protocols: it is developed by the procurers or a certified test house, taking into account the architecture of each solution and, where appropriate, in consultation with the Contractor, and it is finalised before the formal verification in Phase 2 begins. The procurers may select the test laboratory and the simulants. Where different architectures call for different test set-ups, equivalent verification objectives and acceptance criteria are kept for all Contractors (TD1 §2.3). In their Technical Offer, Tenderers should explain in their verification and testing plan how they intend to demonstrate R3.6, building on the methods cited in Table 3 (EN ISO 6529 for the chemical simulant, EN ISO 17491-3 for the liquid jet; Table 3 cites EN ISO 17491-4, which is the spray test).

See also the answers to Questions 18 and 20.

Question 34

Received: 09.11.2026 | Reference: Annex 3 R4.1-R4.5, R5.2, R5.6, R5.7; TD1 §2.3

> *Which mechanical targets are binding (KR2 stab, SP1 spike, NIJ level 2 spike, cut level E gloves), and do they apply to whole garment surfaces or only to targeted zones? Under which conditions are range-of-motion, dexterity and tactile tests performed (with or without respirator, vest and helmet, and in which temperature range)?*

Answer

All mechanical requirements (R4.1 to R4.6) have Priority 2, and the levels quoted in Table 3 (KR2 knife, SP1 spike, NIJ spike level 2, cut level E for gloves, and so on) are indicative targets. None of them is a binding pass/fail value at tender stage; Tenderers state the levels they will reach and justify them.

Coverage: the levels are not meant to apply to the entire surface of the garment. Annex 3 §3 (Key Threat 4) explains that this category calls for appropriate textile-level resistance and targeted reinforcement, not heavy armour, because stiffness and weight conflict with mobility and add to heat stress. Table 3 already names the zones for several requirements: shoulder, elbow, forearm and knee for impact and cushioning (R4.3, R4.5); the glove system and the upper arm and forearm for cut resistance (R4.4); the outer shell in general, with reinforced knee, elbow and boot areas, for abrasion (R4.6). For stab and spike resistance (R4.1, R4.2) the zones are not defined; Tenderers should propose a coverage map with a justification based on the scenarios, taking into account the protection given by the vest worn over the garment (see the answer to Question 29).

Test conditions: Table 3 specifies the method for range of motion (goniometric protocol of EN 13921-4, at least ten subjects, five men and five women, compared with an unencumbered baseline) and for dexterity (glove dexterity test and Purdue Pegboard, plus practical tasks such as operating a weapon safety, a syringe and a radio button). It does not specify whether the respirator, vest and helmet are worn, nor a temperature range. The assessments will be made both with the garment alone and in full operational configuration with the compatible equipment of R5.19, under conditions to be laid down in the test protocols.

See also the answers to Questions 2 and 29.

Question 35

Received: 13.11.2026 | Reference: Annex 3 R2.1-R2.2, R5.20

> *Does thermal warning concern wearer heat strain, garment failure, or both? R2.2 refers to warning during thermal stress "before the clothing fails", while R2.1 and R5.20 concern thermal and physiological monitoring. Please clarify whether acceptance requires warning of physiological heat strain, impending loss of garment thermal protection, or both. Please identify the relevant endpoint and acceptance criteria for each required warning.*

Answer

Both aspects are covered by the wording of the requirements, but the Tender Documents define an endpoint only for the first.

Heat strain of the wearer: this is the core of R2.1 (Priority 1) and R5.20. Table 3 sets out indicative endpoints: monitoring of skin and core temperature, a configurable warning at a core temperature of 38.5°C and an evacuation alarm at 39.5°C, with the alert reaching the wearer and command within 5 seconds of the threshold being detected (R2.1, R2.2). A warning of physiological heat strain is expected in any solution.

Loss of thermal protection of the garment: R2.2 is a Priority 2 requirement and concerns a warning before the protective performance of the garment is compromised, so that the wearer still has time to withdraw. This function is distinct from the monitoring of physiological heat strain. Table 3 does not define a separate endpoint for the loss of thermal protection of the garment. Tenderers offering this function should identify the protective endpoint, the conditions and limitations of the warning and the proposed validation method. The function is evaluated under the applicable award criteria; if it is part of the accepted offer, its declared performance and the supporting evidence are recorded in the Requirements Verification Matrix and verified under the common verification framework.

See also the answers to Questions 36, 37 and 45.

Question 36

Received: 13.11.2026 | Reference: Annex 3 R2.1, R5.20, §8

> *Can model-based core-temperature estimation fulfil the monitoring requirement? May a validated model-based estimate derived from non-invasive measurements fulfil the core-temperature monitoring requirement, or is direct core-temperature measurement required? Please clarify whether the stated accuracy applies to the temperature sensor itself or to the final reported estimate of wearer core temperature, and under which operating conditions it must be demonstrated.*

Answer

Yes. R2.1 requires real-time thermal monitoring and does not prescribe the measurement principle. The zero-heat-flux patch and the ingestible capsule named in Table 3 are examples. An estimate of core temperature produced by a validated model from non-invasive measurements (for example skin temperature, heat flux and heart rate) can fulfil the requirement.

The stated accuracy applies to the value that is finally reported and used to trigger alerts, that is, the estimate of the core temperature of the wearer compared with a recognised reference measurement under the ISO 9886 protocol. It does not refer to the accuracy of an individual sensor element. It must be demonstrated under conditions representative of use: at rest and during physical work, in warm and hot environments such as those used for the thermal targets of Table 3 (35°C), with the sensors worn under the complete ensemble. Table 3 quotes slightly different figures in R2.1 and R5.20; both are guidelines, and Tenderers should state the accuracy they can substantiate and the range over which it holds.

See also the answers to Questions 35, 37 and 45.

V. Data, localisation, communications and security

Question 37

Received: 09.11.2026 | Reference: Annex 3 R2.1, R5.20

> *Is the vital-signs list (heart rate, body temperature, SpO_2) closed, or are ECG, heart rate variability, respiration rate or fatigue and heat-strain indices also expected? Is core temperature to be measured or estimated? How is accuracy validated (reference device, number of wearers, activities at rest, exertion and heat), given that SpO_2 ±2% is hard to reach on a moving wearer?*

Answer

The three parameters named in R5.20 (heart rate, body temperature and SpO2) are the vital signs that the solution is asked to monitor. Further parameters such as ECG, heart-rate variability, respiration rate or a heat-strain or fatigue index may be offered where they improve the safety of the responder, but they are not expected and their absence is not a weakness. Any additional parameter must be justified under the data-minimisation principle of R6.1. Core temperature may be measured or estimated (see the answer to Question 36).

Validation: Table 3 refers to ISO 80601-2-61 for pulse oximetry and to ISO 9886 for temperature. The validation plan should identify the reference method, the measurement range, the test population, the number and distribution of observations, the operating conditions and the method of analysing accuracy. These choices, including the sample size, are to be justified against the validation method and the performance claimed. Validation should cover the conditions for which the solution is intended, including rest, physical exertion and heat. The ±2% figure for SpO2 is an indicative target; Tenderers may state separately the accuracy substantiated at rest and in motion and justify any deviation. Operational usability trials do not, by themselves, establish measurement accuracy across the claimed range.

See also the answers to Questions 35, 36, 40 and 42.

Question 38

Received: 09.11.2026 | Reference: Annex 3 R5.21, R5.22, R5.24, §4; TD1 §2.3, §3.4 G

> *Will the procurers provide positioning infrastructure (for example UWB anchors) for indoor localisation, and which of the three methods (GNSS, infrastructure-assisted, infrastructure-free) is tested in each scenario? Which C2 systems and radio networks must the data reach, with which interfaces and data formats? Which networks may be used (TETRA, LTE or 5G, public mobile, mesh radio, satellite), is a dedicated frequency available, and is jamming a design case (scenario 3)?*

Answer

Positioning: Tenderers should not assume that the procurers will provide positioning infrastructure. First responders arrive at places that are unknown and unprepared, which is why R5.21 asks for location tracking 'even in GPS-denied environments' and why Table 3 includes an infrastructure-free mode (inertial sensors, SLAM or dead reckoning) with automatic switching between methods. The infrastructure-assisted mode applies where local infrastructure is available; if a Tenderer wishes to demonstrate it, the anchors or beacons are part of its solution and are brought and installed by the Contractor for the demonstrations and pilots. Outdoors (scenarios 1 and 2) satellite positioning is the natural method; indoors (scenarios 3 and 4) the GPS-denied methods are exercised.

Command systems and interfaces: under the on/off award criterion G (TD1 §3.4) the solution must interface with the operational systems of the Public Buyers, such as communications (radios, TETRA/TETRAPOL, dispatch), applications (command and control) and sensor-data platforms. The Tender Documents do not name the individual systems. R5.25 sets the technical means: open, documented interfaces (REST API described with OpenAPI). See the answer to Question 41.

Networks and spectrum: no bearer is prescribed or excluded. TD1 §3.4 G mentions TETRA/TETRAPOL and Table 2 lists TETRA/DMR radios, mesh data nodes and mobile devices as examples of the environment. Tenderers choose the communication means and are responsible for using them lawfully in each pilot country; no dedicated frequency is made available through the Tender Documents.

Jamming: scenario 3 mentions jammers used inside the laboratory, so loss of connectivity is a realistic condition that the design must cope with. The relevant requirements are that local warnings to the wearer keep working without the network and that data are cached locally and synchronised automatically when the connection returns (R5.24). Jamming-resistant communication as such is not a stated requirement; measures in that direction are a matter for the Tenderer.

See also the answers to Questions 21, 39 and 41.

Question 39

Received: 09.11.2026 | Reference: Annex 3 R5.23-R5.25, R7.8

> *Are HL7 FHIR objects mandatory for all biometric parameters or only recommended, and is there a reference data model for hazard and location data? Please confirm the sampling rate and channel count for sizing the 72 h storage and 24 h cache, and whether both use the same memory.*

Answer

HL7 FHIR R4 objects for the biometric parameters are part of the indicative target of R5.25, which is a Priority 2 requirement; like the other values of Table 3 this is a strong recommendation rather than a mandatory condition. The underlying requirement is an open, documented API that lets third-party software use the data. A Tenderer proposing another open and documented data format should explain why and how it can be mapped to FHIR.

For hazard and location data the Tender Documents do not prescribe a reference data model. R7.8 asks for harmonised terminology following relevant standards, and Table 3 mentions CWA 16849 compatibility for the output of biological detection. Tenderers should propose the data model, preferably based on existing open standards, and document it in the API specification.

Storage: the indicative figures are at least 72 hours of local storage of multi-sensor data at 1 Hz on all channels (R5.23) and a local cache of at least 24 hours at the maximum sampling rate of the sensors on all channels (R5.24). The number of channels depends on the design of the Tenderer and is not set by the Buyers' Group. Whether the long-term record and the cache share the same physical memory is a design choice, provided both capacities are available at the same time and the cache does not overwrite recorded data.

See also the answers to Questions 38, 40 and 41.

Question 40

Received: 09.11.2026 | Reference: Annex 3 R6.1-R6.3, R6.6; TD1 §2.4 (D3.1), §2.5, §3.4 F-H

> *Who is the data controller for pilot data (each procurer or the project), will the procurers' data-protection officers review the DPIA, and does the Law Enforcement Directive apply to the police pilot? Is the NATO RESTRICTED-compatible channel (R6.3) a hard pilot requirement, who provides keys and accreditation, and is post-quantum cryptography needed in V1 or only as a documented upgrade path? May the solution include optional camera or audio streaming with consent, and who gives that consent? Who may see responders' health data (commander, medical officer, peers), and should some data be hidden from team members by default?*

Answer

Controller and DPIA: the Tender Documents foresee a GDPR Processing Agreement between the Contractor and the Public Buyer hosting each pilot, governed by the law of the Member State where the pilot takes place; it must be signed at the beginning of Phase 3 and testing cannot start without it (TD1 §2.4, D3.1; §2.5). The Public Buyer therefore acts as controller for the data of its personnel and the Contractor as processor. An initial Data Management Plan and GDPR risk mitigation plan are submitted at the end of Phase 1 (D1.2); a Data Management Plan is prepared in Phase 2 and submitted for approval before field testing at each site, including to the competent ethics committee, together with the consent form (TD1 §3.4 H), and a GDPR compliance report is due at the end of Phase 2 (D2.5). Personal data must be processed and stored within the European Union (TD1 §6.6). The DPIA of R6.1 and R6.6 is prepared by the Contractor for its solution and feeds into this process.

Law Enforcement Directive: the GDPR applies to the health, exposure and location data of responders collected for their own safety. Directive (EU) 2016/680 is relevant where data are processed by a police

authority for law-enforcement purposes; Table 3 (R6.1) mentions it for the police pilot. Tenderers should design the solution so that it can comply with both regimes; which one applies to each data flow will be settled in the DPIA.

Encryption: the NATO RESTRICTED-compatible channel in Table 3 (R6.3) is an indicative target for a future operational deployment, not a condition for the pilots. The pilots do not involve classified information, and keys or accreditation for classified use fall to the competent national authorities, outside the PCP. Tenderers should show that the architecture could accommodate such a channel. Post-quantum cryptography is not needed in the prototypes; what is asked is a documented upgrade pathway.

Camera and audio: the solution does not need camera or audio functions, and Table 3 (R6.1) sets data minimisation as the rule: vital signs, location and exposure only, with no audio or video without explicit consent. An optional function of this kind may be proposed if it is switched off by default and can be disabled entirely. Consent is that of the wearer; whether and how the function can be used in each organisation is decided by the Public Buyer as controller in the DPIA.

Access to health data: under R6.2 only authorised personnel may see health, vital-sign and location data, and Table 3 asks for role-based access and for health data to be kept separate from tactical data. Who holds which role is decided by each user organisation. As a default, Tenderers should apply data minimisation: team members and the incident commander see the status and alerts needed for safety, while detailed health data are reserved for the roles the organisation designates, such as a medical or safety officer. The role model should be configurable.

See also the answers to Questions 37 and 39.

Question 41

Received: 13.11.2026 | Reference: Annex 3 R5.19, R5.25; TD1 §3.4 (on/off criterion G)

> *Which existing systems must the solution integrate with? Please identify the existing communications, command-and-control and sensor-data systems with which interoperability must be demonstrated. Will the procurers provide the necessary interface documentation, licences and test access, and at what stage? Where these systems differ between procurers, must the tender price include integration with every identified system?*

Answer

TD1 §3.4 (on/off award criterion G) requires that the solutions be usable in the countries of the Buyers' Group and that they interface with the operational systems of the Public Buyers, such as communications (radios, TETRA/TETRAPOL, dispatch), applications (command and control) and sensor-data platforms. At tender stage compliance is shown by a Declaration of Honour. The Tender Documents do not list the individual systems; Annex 3 §7 (Table 2) gives examples of the equipment in use, and R5.25 requires open APIs so that real-time data can be integrated into existing solutions and third-party software. The systems differ between the four Public Buyers.

Interoperability is then demonstrated progressively. In Phase 2 the Public Buyers verify the integration of telemetry. In Phase 3 the Contractor delivers an Integration Report explaining how integration with

the existing solutions used by the Public Buyers is to be planned, and the command-and-control integrations are validated during the pilots at the four sites (TD1 §2.3).

The tender price should therefore cover the means by which the solution presents data to operational command, an open and fully documented API with a test environment for integrators, compatibility with the radios and other equipment carried by the wearer (R5.19), and the work needed to connect to the systems used at the four pilot sites and to demonstrate the exchange of data there. The Public Buyers will identify the systems concerned and provide the interface documentation and test access needed for this work.

See also the answers to Questions 38 and 39.

VI. Certification, verification, piloting and delivery

Question 42

Received: 09.11.2026 | Reference: Annex 3 R2.7, R7.6; TD1 §2.3

> *Medical device: who decides whether the vital-signs sensors qualify as a medical device (R7.6, ISO 13485, MDR Class IIa), and may the supplier claim "wellness monitoring" instead? CE marking: is PPE Regulation Category III needed for pilot prototypes or only for the final product, and which notified bodies or test labs do the procurers recommend? ATEX Zone 1 (R2.7): does it apply to the integrated electronics (intrinsic safety), and is certification or a documented assessment expected? Verification: will the Evaluation Committee provide, in time for the Phase 2 call-off, a list of R-IDs that need accredited-lab or notified-body evidence? Will the Buyers' Group select the test labs, or may Contractors propose their own accredited labs, including outside the consortium? Do usability and ergonomics assessments (R5.1, 5.2, 5.3, 5.7) require accredited-lab evidence?*

Answer

Medical device: the qualification of a product as a medical device depends on the intended purpose assigned to it by its manufacturer (Regulation (EU) 2017/745). The Contractor, as future manufacturer, is responsible for this assessment and must document it; the Buyers' Group does not decide it. R7.6 asks for a quality management strategy that supports certification as a medical device 'if necessary'. A Tenderer may conclude that its vital-sign monitoring is not a medical device, but the conclusion must be consistent with what the function actually does, which includes warnings on which the withdrawal of a responder may depend. A change of label alone is not a justification. See also the answer to Question 46.

CE marking: CE marking under the PPE Regulation (EU) 2016/425, Category III, is the target for the final product (Table 3, R7.6). Completed market certification is not a general prerequisite for the controlled R&D testing of pre-production prototypes. This does not waive any conformity-assessment or CE-marking obligation that applies to the actual supply or use of the equipment. Before each pilot activity, the Contractor and the hosting Public Buyer document the intended use, the regulatory applicability, the safety measures and the operational limitations, and the Contractor provides documented evidence that the prototype is safe for the planned activity. The Test Readiness Review confirms readiness for the approved test activity; it does not replace a conformity assessment required by law. The Buyers' Group does not recommend particular notified bodies or laboratories, in

order to treat all Tenderers equally. Notified bodies for the PPE Regulation are listed in the NANDO database of the European Commission.

ATEX and electronics: R2.7 itself concerns the anti-static properties of the garment (EN 1149-5). Electronics worn in the scenarios with a risk of explosive atmosphere must be designed with this in mind; Table 3 refers to Zone 2 under R1.6, R2.2 and R2.4 and to Zone 1 under R2.7. Zone 1 is an area where an explosive atmosphere is likely to occur occasionally in normal operation; Zone 2 is an area where it is not expected in normal operation and, if it occurs, lasts only a short time. The Zone 1 and Zone 2 references of Table 3 are indicative targets for the intended operational configurations. Tenderers identify the explosive-atmosphere conditions for which each configuration is designed and state any limitation; a configuration suitable for Zone 2 only may not be presented as suitable for Zone 1. The evidence required and the stage at which it is verified are recorded in the Requirements Verification Matrix. During controlled R&D testing the evidence is proportionate to the planned conditions; any conformity assessment required by law for an activity must be completed before that activity. The anti-static performance of the garment alone does not demonstrate the suitability of the electronic subsystem.

Verification: The verification method for each requirement is recorded in the Requirements Verification Matrix, and the detailed test protocols are developed by the TEC before each formal verification; the Buyers' Group will share more information on formal verification testing before Phase 2, and a Test Readiness Review precedes it (TD1 §2.3; milestone M2.2). Formal verification evidence must come from appropriately accredited laboratories or notified bodies where the applicable standard or EU regulatory framework so requires. In-house testing by the Contractor may be used for development; it counts as formal evidence only where the laboratory is accredited for the specific test method. The Contractor commissions this testing and bears its cost, which is part of the price offered for the phase.

Test laboratories: Contractors may propose accredited laboratories, including laboratories outside the consortium, but the Buyers' Group may select specific test laboratories and may carry out its own independent spot-check testing (TD1 §2.3). Testing entrusted to third parties is subject to the 30% subcontracting limit (TD1 §3.1.2) and is included in the calculation of the place of performance (TD1 §3.4 C). Where the Buyers' Group selects a laboratory for a formal verification test, the Contractor remains responsible for commissioning the test and for its cost; only the independent spot-check testing that the Buyers' Group decides to carry out itself is at its own expense.

Usability and ergonomics: usability and ergonomics assessments (R5.1, R5.2, R5.3, R5.7) are carried out separately, under usability and operational test protocols, and the Public Buyers make their own checks, for example on donning and doffing times; an accredited laboratory is not required for them unless the test protocol says so.

See also the answers to Questions 9, 15, 18, 32, 37 and 46.

Question 43

Received: 09.11.2026 | Reference: Annex 3 R5.13, R7.1-R7.4; TD1 §2.3, §5.1

> *Acceptance and support: will the 40+ site acceptance criteria per procurer be published early, and are the tests the same at every site? Do the helpdesk hours and response times (12 h per day, P1 response in 1 h) apply from V1 or only during exercise windows, and in which languages? Do the monthly two-page reports and quarterly KPI dashboard apply in addition to the procurers' own reporting, and on which platform? Is the sustainability requirement (LCA, 30% recycled or bio-based fibre, carbon target) needed by V2 or only for the final product?*

Answer

Site acceptance: the applicable requirements, the minimum verification scope and the acceptance framework are established by the Tender Documents. The TEC may develop or refine detailed protocols for a specific solution and site and finalises them before the corresponding activity, so that they are known to the Contractor in advance. Such refinements stay within the established scope, do not change mandatory acceptance criteria or the evaluation framework and do not materially increase the obligations or costs of the Contractors. Equivalent verification objectives and acceptance criteria are maintained for all Contractors; differences in technical test arrangements may reflect the local equipment or the architecture of the solution (TD1 §2.3). The month numbers quoted in Table 3 (M18, M30) do not correspond to the time schedule of the PCP; the applicable dates are those of TD1 (Table 1 and §2.7): Prototype v1 at months 4 to 5 and Prototype v2 at month 10 of Phase 2.

Helpdesk: R7.3 requires the help service from the first prototype delivered to end users in Phase 2 onwards, including the testing phases. Since there are no separate 'rounds' (see the answer to Question 1), 'Round 1' means Prototype v1. The hours and response times in Table 3 (12 hours a day on weekdays, first response to a critical fault within one hour) are indicative and are aimed at the periods when prototypes are in the hands of end users, in particular the pilot and exercise windows. Outside those periods a proportionate level of support is sufficient. The languages are English and the national languages of the procurers (see the answer to Question 4).

Reporting: R7.4 asks for regular progress reporting to the Buyers' Group throughout the PCP. The contractual reporting is the one set out in TD1: monitoring meetings at least once a month, the milestones and deliverables of Table 1 and the End of Phase Reports (TD1 §2.3, §2.4, §5.1), to which the Framework Agreement adds a quarterly security self-check scorecard (TD7, Art. 13.3). The monthly two-page report and the quarterly indicators in Table 3 are an indicative format for this reporting, not an extra layer. The references in Table 3 to grant-agreement reporting concern the project partners and not the Contractors.

Sustainability: R5.13 is a Priority 3 requirement. Table 3 asks for the life-cycle assessment to be documented 'for final product', so the full LCA, the recycled or bio-based content and the carbon figure relate to the solution at the end of Phase 3. In the earlier phases it is enough to describe the approach and to give preliminary estimates.

See also the answers to Questions 4, 20 and 44.

Question 44

Received: 09.11.2026 | Reference: TD1 §2.3, §2.4 (Table 1)

> *Timeline: D2.4 is due at the end of month 6 while M2.4 and D2.4a are set at month 10. What is the intended date for Prototype v2? Is a separate Test Readiness Review required before formal verification of v2? In Phase 3, are Contractors expected to deliver modified garments after pilot feedback, or only software and support updates?*

Answer

Prototype v2: TD1 §2.3 sets the demonstration of full functional interaction (Prototype v2 / D2.4) at month 10 of Phase 2, consistent with M2.4 and D2.4a.

Test Readiness Review: Yes. A TRR shall be conducted by the TEC before the start of any formal verification testing; formal verification may begin only after the TEC has confirmed test readiness (TD1 §2.3). This applies to every formal verification activity, including that of Prototype v2.

Phase 3: Phase 3 covers the original development and testing of the final solutions. The Contractor shall supply at least three (3) operational pilot garments to each Public Buyer (1 male, 1 female, 1 unisex) (TD1 §2.3; Annex 3 R7.7). A feedback mechanism will allow end users to request improvements directly from the Contractors during Phase 3, and iterative refinements based on TTX and live pilots are foreseen (TD1 §2.3).

Phase 3 includes iterative refinement on the basis of the tabletop exercises and field trials, and this is not limited to software and support. Contractors should plan for corrective modifications to the pilot garments (fit, closures, attachment and sensor positions, replacement of modules or panels), which the modular design of R5.17 and R5.18 is meant to make possible, and should include the corresponding effort in their Phase 3 offer. The delivery of a complete second set of garments is not required.

See also the answers to Questions 1, 4, 10, 28 and 43.

Question 45

Received: 13.11.2026 | Reference: Annex 3 R1.12-R1.14, R2.1-R2.2, R7.1-R7.6; TD1 §2.3

> *What validation evidence is required for model-derived warnings? For model-derived physiological or protective-performance warnings, please specify the minimum validation evidence required at each phase. Which claims require physical testing, where is simulation-supported evidence acceptable, and what reference measurements and acceptance thresholds will apply? Please distinguish evidence that contractors must obtain independently from data and test facilities supplied by the procurers.*

Answer

For any warning that is derived from a model rather than measured directly, the evidence expected grows with the maturity of the solution.

- **Tender and Phase 1:** a description of the model, its inputs and its intended use, the validation evidence already available (published work or the Tenderer's own data) and a validation plan. Evidence supported by simulation is acceptable at this stage.
- **Phase 2:** physical testing. For Prototype v1, bench verification of the sensors against reference instruments. For Prototype v2, controlled trials in which the outputs of the model are compared with reference measurements: for physiological warnings, trials with test persons or a thermal manikin under the ISO 9886 protocol; for warnings on protective performance, laboratory tests of the materials and seams (for example permeation under EN ISO 6529), including after decontamination cycles.
- **Phase 3:** validation in use, during the tabletop exercises and field trials, covering the behaviour of the alarms, false alarms and acceptance by end users.

As a rule, any claim on which a safety warning to the wearer relies must be backed by physical testing by the end of Phase 2; simulation alone is not sufficient for acceptance, though it may support the extension of tested results to other conditions. The reference measurements, the acceptance criteria and the validated operating range are recorded in the agreed test protocol and in the Requirements Verification Matrix. They reflect the applicable mandatory requirements and the commitments of the accepted offer, with Table 3 as indicative guidance; refinements of a protocol stay within the established acceptance framework and do not introduce new mandatory thresholds (TD1 §2.3).

The Contractor bears the primary responsibility for proving that its solution meets the requirements (TD1 §2.3, General Testing and Pilot Strategy) and obtains the laboratory and validation evidence itself, at its own cost,, including any ethics committee opinion required for trials with test persons (TD1 §3.4 D). The procurers host the pilots and provide the end users who wear the prototypes and their feedback in Phase 3. The Buyers' Group may also carry out its own independent spot-check laboratory tests, bench verification and ergonomic evaluations, and may select test laboratories, but this does not relieve the Contractor of its burden of proof. Contractors should not count on test facilities or data sets being supplied by the procurers.

See also the answers to Questions 22, 35 and 36.

Question 46

Received: 13.11.2026 | Reference: Annex 3 R7.6, §8; TD1 §2.3, §2.8.4

> *What certification must be completed during the PCP? Please distinguish, for each phase, between requirements for a certification strategy, independent conformity testing and completed certification. Does acceptance require certification of the complete integrated ensemble, or specified subsystems only? For physiological monitoring, please clarify the intended medical purpose, if any, against which medical-device applicability should be assessed.*

Answer

The Tender Documents do not make completed certification of the product a condition for acceptance within the PCP. The PCP covers research and development up to the testing of a limited number of first products; certification for the market is part of commercialisation. The dates attached to certification steps in Table 3 (R7.6) are indicative. What is expected at each phase is the following:

- **Phase 1**: a certification and regulatory strategy, covering the PPE Regulation (EU) 2016/425 (Category III) and the harmonised standards chosen, the rules applicable to the electronics (battery safety, explosive atmospheres, radio equipment), the assessment of whether any function is a medical device, and the quality management approach.
- **Phase 2:** test evidence on materials and prototypes, including independent testing by accredited laboratories for the protective properties identified in the test protocols. No certification is required.
- **Phase 3:** testing of the final solution as a whole and a conformity assessment route that is prepared and, where the Contractor is ready, started with a notified body.

The strategy and the testing must address the complete integrated ensemble, since the protective garment is certified as PPE with its integrated components in place and it must be shown that they do not reduce protection. Electronic subsystems are, in addition, subject to their own conformity requirements. TD1 asks Contractors to consider the future certification of their solutions in their commercialisation plan (TD1 §2.8.4) and requires formal test evidence from accredited laboratories or notified bodies where a standard or regulation so requires (TD1 §2.3); it does not require a certificate for the product.

Physiological monitoring: the Tender Documents do not assign a medical purpose to it. Its purpose in the challenge is occupational safety: to warn the responder and operational command of heat strain and of a deteriorating condition during an operation (R2.1, R2.2, R5.20). It is not intended for the diagnosis, treatment or clinical follow-up of the wearer. The applicability of the Medical Device Regulation is to be assessed by the Contractor against the intended purpose it defines for its own product (see the answer to Question 42).

See also the answers to Questions 15, 32 and 42.