



Pre-Commercial Procurement (PCP)

BROADWAY

Innovation activity to enable a pan-European interoperable broadband mobile system for PPDR

TENDER DOCUMENT 1:

REQUEST FOR TENDER

(the "RFT")

Version dated 15 February 2019

SUBMISSION TO EC AS D2.2

Deadline for receipt of Tenders:

3rd June 2019 @ 1200 NOON CEST

This Request for Tenders, designated as Tender Document 1 (TD1), should be read in conjunction with other documents related to this Pre-Commercial Procurement (PCP), listed hereunder:

- Tender Document 2: PCP Challenge (TD 2)
- Tender Document 3: Framework Agreement (TD 3)
- Tender Document 4: Specific Contract for Phase 1 (TD 4)

To submit an eligible Tender, the Tenderer shall sign and submit the documents attached to the Annex of the Request for Tender. The use of these Annex documents is mandatory.

All documents can be downloaded from the Broadway website www.broadway-info.eu

Preface¹

This Research and Development (R&D) Project takes the form of a Pre-Commercial Procurement (PCP). This PCP is funded by a Horizon 2020 Grant Agreement, which enables a competitive tendering process that is triggered by this Request for Tender (RFT). The Lead Procurer (in its own name and on behalf of the GOP) invites all prospective Tenderers to present their vision for technologies that enable a turn-key solution for a pan-European interoperable broadband mobile system for public safety and security, validated by sustainable testing facilities. The solution also has the potential for large scale sustainable deployment after this PCP.

Section 1 The PCP Procedure outlines the PCP approach and how it differs from traditional procurement. It also provides an overview of the timeline, budget and contracting approach.

Section 2 Parties of the BroadWay PCP Procedure captures the various PCP Participants. In particular, ASTRID SA as the Lead Procurer will act in its own name and on behalf of the Group of Procurers (GOP), which comprises of public safety practitioners in 11 European countries with responsibility for the provision of mobile communication services in their respective countries.

Section 3 Description of Services to be Procured introduces the overall Challenge that this PCP addresses and the motivation behind it. It explains the different Phases of the PCP and the expected outcome of each Phase. Finally, Intellectual Property Rights (IPR) considerations are addressed.

Section 4 Tender Components and Compliance outlines the preconditions for submitting your Tender.

Section 5 Assessment of Tenders provides an overview of the criteria to be used in the evaluation of Tenders.

Section 6 Other Tender Conditions describes other features of your Tender.

Section 7 Process Rules and Other Information provides you with insight regarding assessment.

Section 8 Conditions of Contracts provides an overview of payments for the Contractor's R&D Services. This RFT should be read in conjunction with the other documents associated with this BroadWay PCP, listed hereunder:

Tender Documents (TD)	Annexes to Tender Documents
TD1 – Request for Tender, including Annexes A to E	Annex A – European Single Procurement Document
TD2 – PCP Challenge	Annex B – Technical Offer
TD3 – Framework Agreement (template)	Annex C – Financial Offer and Cost Breakdown
TD4 – Specific Contract Phase 1 (template)	Annex D – Financial Offer Phase 1
	Annex E - Official Language Selection Form

¹ See Glossary for definitions

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GLOSSARY

Please note: A Glossary of technical terms can be found in accompanying document TD2 PCP Challenge.

Award Criteria	The criteria used to identify the most advantageous Tender.
Background or “Background IPR”	Any data, know-how, information or technology — whatever its form or nature (tangible or intangible), including any attached rights such as Intellectual Property Rights and Trade Secrets relating to such data, know-how, information or technology, that is owned, developed or controlled by either of the Parties at the date of signing of the Framework is Agreement or that shall at any time during the PCP become so owned, developed or controlled otherwise than as a result of the PCP or under this Agreement and that is identified by the parties involved in the PCP as background and that is needed to implement the PCP or exploit the Results of the PCP.
Bi-monthly Reporting Form	A presentation to be delivered by Contractors to the Monitoring Team as part of effective monitoring during all Phases.
Call-off	The procedure organised by the Lead Procurer to select the successful Contractor(s) who will participate in the next Phase of the Project under the Framework Agreement.
Competition	The BroadWay PCP tendering competition.
Contracts	Framework Agreement and Specific Contract(s)
Contractor	A Tenderer that is awarded the Contracts to execute the R&D Services.
Contractor’s Staff	The Contractor’s representative and all employees, consultants, agents and directors of the Contractor as well as any Subcontractors which the Contractor engages in relation to the Project and their employees, consultants, agents and directors.
Coordinator	The party that functions as an intermediary between the Group of Procurers and the European Union. See section 2 Parties of the BroadWay PCP Procedure.

Reporting Forms	An End of Phase Reporting Form shall contain a Report and be submitted by Contractors at the end of Phases 1 to 3, which will be reviewed by the TVC in order to determine whether the Contractor has suitably addressed the BroadWay Objectives. Bi-monthly Reporting Forms shall be completed and delivered as presentations in all Phases.
Data	All Trade Secrets, whether in oral or written (including electronic) form, created by or in any way originating with the Lead Procurer, (in its own name or on behalf of the Group of Procurers), and all information that is the output of any computer processing, or other electronic manipulation of any information that was created by or in any way originating with the Lead Procurer provided under this RFT and includes Personal Data under Data Protection Laws.
European Single Procurement Document (ESPD)	It is a self-declaration of suitability, financial status and abilities used as preliminary evidence by operators participating in public procurement.
Fair and Reasonable Conditions	Appropriate conditions, including possible financial terms or royalty - free conditions, taking into account the specific circumstances of the request for access, including in particular the actual or potential value of the Results or Background to which access is requested and/or the scope, duration or other characteristics of the exploitation envisaged.
Grant Agreement	The agreement, Number - 786912 – Broadway, that regulates the terms and conditions of the relation between the European Union, represented by the European Commission and a consortium composed by amongst others the Group of Procurers for the action entitled ‘Innovation activity to develop technology to enable a pan-European interoperable broadband mobile system for PPDR, validated by sustainable testing facilities.’
Framework Agreement	The contract between the Lead Procurer and the Contractor concerning the delivery of the R&D Services under this PCP, covering Phases 1 through 3 (TD3).
Generated in the PCP	In activities described in the PCP Framework Agreements or Specific Contracts.
Group of Procurers (GOP)	A consortium of parties comprising of public safety practitioner from 11 European countries, which seek R&D Services addressing the Project’s Objectives.
Group of Procurer (GOP) Member(s)	Individual member(s) of the Group of Procurers.

H2020 Associated Countries	The countries associated to Horizon 2020 are those listed as associated countries in the Participant Portal Online Manual 15. – see http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cp/h2020-hi-list-ac_en.pdf
Intellectual Property Rights (IPR)	Any and all patent rights (including but not limited to divisionals, extensions, improvement patents, supplementary protection certificates), inventions (whether or not patentable or capable of registration), trademarks, copyrights (including moral rights), topography rights, design rights, rights in and to software and databases (including the right to prevent the extraction or reutilisation of information from a database), trade secrets and rights of confidence, know-how, trade or business names, domain names, whether or not any of them are registered or registerable and including applications for registration, renewal or extension of any of them, and any other rights or forms of protection of a similar nature which have an equivalent or similar effect to any of them which may now or in the future exist anywhere in the world, and licenses or contractual rights on any of the aforementioned rights.
Lead Contractor	A single entity designated by a group of undertakings in a consortium who will carry overall responsibility for the Framework Agreement and all subsequent Specific Contracts.
Lead Procurer	The entity within the Group of Procurers, supported by the Coordinator, entrusted with the mission to conduct the PCP Process towards third parties in its own name and on behalf of the Group of Procurers. The Lead Procurer is ASTRID SA (ASTRID).
Monitoring Team	The parties appointed by the Lead Procurer to manage monitoring and reporting in all Phases.
Not generated in the PCP	Not generated in activities described in the PCP Framework Agreement or Specific Contracts.
Objective	Agreed Objectives that constitute the BroadWay Common Challenge (as defined in PCP Challenge (TD2)). References to “Challenge” in the Tender Documents refers to the BroadWay Common Challenge, unless otherwise stated.
Offer	The proposal of the Contractor for the following Phase.
Open Market Consultation (OMC)	A consultative process involving the Lead Procurer and operators, which is separate from the competitive phase of the PCP triggered by the RFT. See Project website for more information: www.broadway-info.eu

Partnering Tool	The Partnering Tool on www.broadway-info.eu/partnering-tool/ facilitates partnering between potential consortium members by sharing information regarding expertise needed or offered.
PCP	Pre-Commercial Procurement, which is procurement of R&D services involving risk-benefit sharing under market conditions, and competitive development in phases, where there is a clear separation between the procurement of the R&D services produced from the deployment of commercial volumes of end-products.
PCP Participant	Entities participating in the PCP Process.
PCP Process	The process comprising of several stages to select, through a Request for Tender, selected Tenderers to perform R&D Services in line with Project Objectives.
Phase	An individual and separate part of the Project, where Phase 1 comprises feasibility study ("Phase 1"), Phase 2 comprises prototyping ("Phase 2"), and Phase 3 comprises Pilot ("Phase 3").
Practitioner Evaluation Team (PEVT)	The parties established with the purpose of discussing and updating details of user (practitioner) requirements. See section 2.6.
Price	The total price (excluding VAT) agreed between the Parties for each Phase of the Project, to be paid by the Lead Procurer to the Contractor for each such Phase, subject to the terms and conditions of the Framework Agreement.
Procurement Committee (PCe)	The committee which is responsible for the legal process of the PCP. See section 2.4.
Project	The BroadWay Project, which challenges industry to develop technologies to enable a pan-European interoperable broadband mobile system for PPDR, validated by sustainable testing facilities.
Request for Tenders	The document containing BroadWay's invitation to Tender, included in which are all documents issued or published by the Project team as part of the PCP Process and made available on www.publicprocurement.be , which set out the basis on which the Tenders for the award of the Framework Agreement and the Specific Contract for Phase 1 are submitted, and the subsequently issued invitations to Tender for the Phase 2 and Phase 3.

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Results	Any data, knowledge, information or technology, whatever its form or nature (tangible or intangible), whether or not it can be protected, including any attached rights such as Intellectual Property Rights and Trade Secrets relating to data, know-how, information or technology, that is generated in the framework of the PCP.
R&D Services	R&D activities as described in the Request for Tender (TD1) and PCP Challenge (TD2)
Single Authorised Representative	A representative of a consortium with authority to represent all members of the group of undertakings (in the tendering phase prior to the award of Contracts). See Lead Contractor.
Specific Contract	The specific contract for each Phase of the R&D Services under the Framework Agreement, to be concluded between the Lead Procurer and the Lead Contractor in addition to the Framework Agreement.
Standstill Period	Period of 5 working days post-award of the Framework Agreement as well as a Phase, before signature of Contracts.
Subcontract	Any contract or agreement between the Tenderer and any third party whereby that third party (Subcontractor) agrees to provide services to the Tenderer to enable or assist the Tenderer to provide the R&D Services or any part thereof to the Group of Procurers.
Sub-objective	Agreed Sub-objective of Objectives.
Sustainability Team	The parties that will manage the sustainability of the PCP Project beyond the end of the Project.
Tender	The formal and commercial bid/offer submitted by the Tenderer for the Framework Agreement, for Phase 1,2 and 3, as well as any documents and/or information submitted by the Contractor on the basis of the Tender Documents. When used to indicate a bid for Phase 1, 2 or 3, it shall have the same meaning as "Offer".
Tenderer(s)	The Consortium or economic operator(s) that submit a Tender/Joint Tender on the basis of the Tender Documents.
Tender Documents	The following documents on the basis of which a Tenderer makes a submission: Request for Tender (TD1), PCP Challenge (TD2), Framework Agreement (TD3), Specific Contract (TD4), Annexes A-E and subsequent Call-off documents

Technical Validation Committee (TVC)	The parties within the Group of Procurers that will collectively make technical decisions to support the different Phases of the PCP, including the formation of award criteria for the selection of Tenderers in the three (3) Phases of the PCP: (1) Solution Design (2) Solution Prototype (3) Pilot. See section 2.5.
Trade Secrets	Information which (a) is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question, (b) has commercial value because it is secret and (c) has been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret, but excluding information whose acquisition, use or disclosure is deemed lawful in accordance with article 3 of Directive (EU) 2016/943 of 8 June 2016 (trade secrets).

SECTION 1: THE PCP PROCEDURE

1.1 Introduction

The Lead Procurer invites Tenders to the RFT from Tenderers for the provision of R&D Services for the Project.

This PCP Competition will be conducted in accordance with the procedure explained in section 1.4 below.

The budget for the PCP Competition amounts to **9,192,000 EUR**, inclusive of VAT. Please see section 1.5 below.

Tenderers should aim at a market introduction of their new solution at a maximum of 3 years after the end of the PCP.

When tendering for this PCP, it should be considered that the tendered price should reflect the fact that the Intellectual Property Rights (IPR) stay with the Contractor as provided for in clause 7 of the Framework Agreement.

While every effort has been made to provide comprehensive and accurate information in all notices and documents prepared for the purposes of this PCP, the Lead Procurer does not accept any liability or provide any express or implied warranty in respect of any such information. Tenderers must form their own conclusions about the solution needed to meet the requirements set out in the Tender Documents and may wish to consult their legal advisers.

The Lead Procurer does not bind itself to accept the lowest priced or any Tender.

The RFT does not constitute an offer or commitment to enter into a Framework Agreement.

No contractual rights in relation to the Lead Procurer will exist unless and until a formal written Framework Agreement has been executed by the Lead Procurer.

Any notification of a successful Contractor status by the Lead Procurer shall not give rise to any enforceable rights by the Contractor.

The Lead Procurer may cancel this PCP Competition at any time prior to a formal written Framework Agreement and Specific Contract being executed by the Lead Procurer.

The RFT supersedes and replaces any and all previous documentation, communications and correspondence between the Lead Procurer (in its own name and on behalf of the Group of Procurers) and Tenderers, and Tenderers should place no reliance on such previous documentation and correspondence.

This PCP is an open tendering procedure and participation is on equal terms to all types of operators from any country, regardless of their geographic location, size or governance structure. There will, however, be a requirement relating to the place of performance of the R&D Services. Please see clause 19 of the Framework Agreement for more information regarding this PCP's requirement.

For Phases 2 and 3, participation is limited to Contractors that successfully completed the preceding Phase.

Tenders may be submitted in collaboration with others. This approach can involve either submitting a Joint Tender or Subcontracting.

Participation in the Open Market Consultation is not a condition for submitting a Tender.

1.2 Overview of the PCP Procedure

This procurement is a Pre-Commercial Procurement (PCP).

The Lead Procurer expects that this PCP will trigger innovative solutions to be developed and tested to address the following challenge: R&D to develop pan-European interoperable mobile broadband for public safety, improve collaboration between responders from different countries and enable the mobility of responders between different countries.

PCP means that public procurers challenge innovative players on the market, via an open, transparent and competitive process, to develop new solutions for a technologically demanding mid- to long-term challenge that is in the public interest and requires new R&D services.

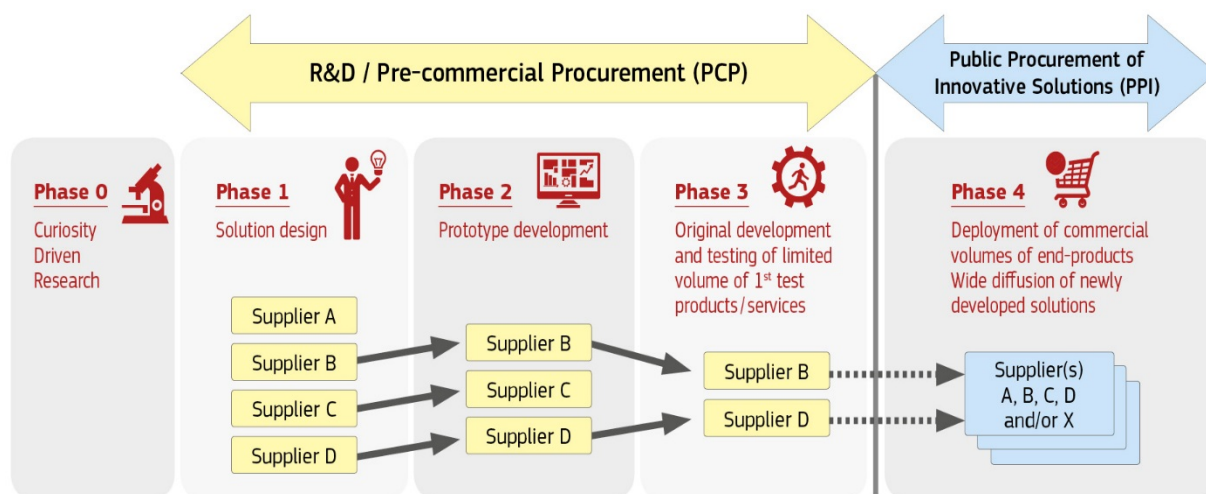


Figure 1: PCP Procedure

PCP is characterised by the following four **features**:

i. Competitive development in phases to identify the solutions offering the best value for money

PCP targets situations that require radical innovation or R&D and for which there are typically no solutions on or close to the market yet. Different competing providers may have different ideas for solutions to the problem. As R&D is yet to take place, there is not yet any proof as to which of these potential alternative solutions would best meet customers' needs.

PCP therefore awards R&D contracts to a number of competing contractors at the same time, in order to compare different approaches to solving the problem. It thus offers innovators an opportunity to show how well their solution compares with others. It also allows a first customer test reference to be obtained from countries of the Group of Procurers that will test the solutions.

The R&D is split into **3 phases** (solution design, solution prototype, pilot). Evaluations after each phase progressively identify the solutions that offer the best value for money and meet the customers' needs. This phased approach allows successful contractors to improve their offers for the next phase based on lessons learnt and feedback from the procurers in the previous phase. Using a phased approach with gradually growing contract sizes per phase also makes it easier for smaller companies to participate in the PCP and enables SMEs to grow their business step-by-step with each phase.

Depending on the outcome of this PCP, GOP Members may or may not decide to follow-up the PCP with a public procurement to deploy the innovative solutions (PPI).

ii. Public procurement of R&D services

PCP addresses mid-to long-term public procurement needs for which either no commercially stable solutions yet exist on the market, or existing solutions exhibit structural shortcomings such that it requires further R&D to resolve. PCP is a way for procurers to trigger the market to develop new solutions that address these shortcomings. PCP focuses on specific identified needs and provides customer feedback to businesses from the early stages of R&D. This improves the likelihood of commercial exploitation of the newly developed solutions.

PCP is explained in the [PCP communication COM/2007/799](https://ec.europa.eu/digital-single-market/en/news/eu-policy-initiatives-pcp-and-ppi)² and the associated [staff working document SEC/2007/1668](https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007SC1668:EN:HTML)³. The R&D services can cover research and development activities ranging from solution exploration and design, to prototyping, right through to the original development of a limited set of ‘first’ products or services in the form of a test series. Original development of a first product or service may include limited production or supply in order to incorporate the results of field-testing and demonstrate that the product or service is suitable for production or supply in quantity to acceptable quality standards. R&D does not include quantity production or supply to establish the commercial viability or to recover R&D costs.⁴ It also excludes commercial development activities such as incremental adaptations or routine or periodic changes to existing products, services, production lines, processes or other operations in progress, even if such changes may constitute improvements.

iii. Open, transparent, non-discriminatory approach — No large-scale deployments

PCP is open to all operators on equal terms, regardless of the size, geographical location or governance structure. There is, however, a place of performance requirement that they must perform a predefined minimum percentage of the contracted R&D services in EU Member States or Horizon 2020 Associated Countries. Please refer to clause 19 of the Framework Agreement for confirmation of the requirements of this PCP.

Any subsequent public procurement of innovative solutions (PPI), for the supply of commercial volumes of the solutions, will be carried out under a separate procurement procedure. Providers that did not take part in this PCP (or were not chosen to go through as far as the last Phase) will thus still be able to compete on an equal basis in any subsequent procurement looking for contractors to provide a solution on a commercial scale.

iv. Sharing of IPR-related risks and benefits under market conditions

PCP procures R&D services at **market price**, thus providing contractors with a transparent, competitive and reliable source of financing for the early stages of their research and development. Giving each contractor the ownership of the IPRs attached to the Results it generates during the PCP means that they can widely exploit the newly developed solutions commercially. This means in return, the tendered price in this PCP **must contain** a financial compensation for keeping the IPR ownership compared to the case where the IPRs would be transferred to any GOP Member (the tendered price must be the ‘non-exclusive development price’). Moreover, any GOP Member **must receive** rights to use the R&D Results for internal use and licensing rights subject to certain conditions. Please refer to clause 7 of the Framework Agreement.

For more information regarding Horizon 2020 PCP Principles, please see Appendix 1 PCP Principles Horizon 2020.

1.2.1 Exemptions

This PCP is exempted from the **EU public procurement directives** because GOP Members do not retain all the benefits of the R&D (the IPR ownership stays with the Contractors).⁵

It is also exempted from the **WTO Government Procurement Agreement (GPA)** because the GPA does not cover R&D services⁶ (the PCP being limited to such services — and any subsequent PPI procurements relating to commercial-scale supply of such solutions not being part of the PCP procurement).

This PCP procurement does not constitute state aid under the **EU state aid rules**⁷ because it follows an open, transparent, competitive procedure with risk- and benefit-sharing at market price. The division of all rights and

² <https://ec.europa.eu/digital-single-market/en/news/eu-policy-initiatives-pcp-and-ppi>

³ <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007SC1668:EN:HTML>

⁴ See also Article XV(1)(e) [WTO GPA 1994](#) and the Article XIII(1)(f) of the [revised WTO GPA 2014](#).

⁵ See Article 16(f) of Directive [2004/18/EC](#) (Article 14 of Directive [2014/24/EU](#)), Article 24(e) of [Directive 2004/17/EC](#) (Article 32 of Directive [2014/25/EU](#)) and Article 13 of Directive [2009/81/EC](#).

⁶ See the EU’s Annex IV of Appendix I to the [WTO GPA](#).

⁷ See Point 33 of the [Commission Communication on a framework for state aid for research and development and innovation](#) (C(2014) 3282).

obligations (including IPRs) and the selection and Award Criteria for all phases are published at the outset; the PCP is limited to R&D services and is clearly separated from any potential follow-up PPI procurements; PCP Contractors are not given any preferential treatment in a subsequent procurement for provision of the final products or services on a commercial scale.

1.2.2 EU Funding

This PCP is part of a project that is co-financed by the European Union's Horizon 2020 Research and Innovation Programme, under Grant Agreement No. 786912 – BroadWay (see <http://www.broadway-info.eu/>).

This procurement must therefore comply with the rules imposed by the EU Horizon 2020 Grant Agreement.

The EU is not participating as a contracting authority in this procurement.

1.2.3 Open Market Consultation

The start of this PCP was preceded by an Open Market Consultation (OMC). Participation (or non-participation) in OMC activities does not preclude or disadvantage/ advantage any Tenderer's ability to participate in this PCP.

For full details of the OMC, including a summary and Q&A, Tenderers are asked to refer to the Project website <http://www.broadway-info.eu/>.

1.3 BroadWay PCP Background

The BroadWay Group of Procurers, as a whole, believe that mission critical services is an area in which PCP can have significant potential to ensure high quality affordable pan-European interoperable broadband mobile systems for PPDR.

The BroadWay Group of Procurers, as a whole, believe that a shared commercial mobile network infrastructure, including a harmonised spectrum, is the only solution for interoperable broadband public safety communications in Europe.

There are several factors behind this:

- The public safety sector has not kept pace with developments in broadband technology in the commercial sector, which has enjoyed exponential growth,
- Public safety operations should be able to benefit from commercial innovations, such as Artificial Intelligence (AI), Internet of Things (IoT), Virtual and Augmented Reality (VR, AR) and cloud computing, which are driving forces in mobile technology that enable the provision of rich and intelligent services in the commercial sphere,
- Commercial mobile technology has the best maturity combined with the right volume scale, which can be utilised by the public safety sector to tackle aging narrowband technologies that carry a legacy of high costs and a small number of vendors,
- There is a shared need to break down the vendor-lock situations that allows only a minor scope for technology enhancements, which has arisen because of the relatively small size of the public safety sector compared to the global cellular marketplace,
- The focus on standards-based solutions will maintain open competition and a dynamic market place. This coupled with a large-scale joint procurement will keep costs down for the public sector and the tax payer, whilst maintaining a leading innovative benefit for public safety practitioners and the lives that they safeguard.

For a closer look at the motivation behind this PCP, please see section 3 Description of Services to be Procured.

1.4 BroadWay PCP Procedure

This PCP shall follow the **Phased PCP model** described by the European Commission in the Communication referred to in section 1.2 above, aiming at conducting R&D services up to the development of a limited volume of systems in the form of a test series.

ASTRID SA is the Lead Procurer and in this regard shall act as a single procuring entity to launch the BroadWay PCP Tender process in its own name and on behalf of the Group of Procurers.

This PCP shall be divided into **three Phases**. Each Phase will result in a competition between the Tenderers in such a way that the number of Tenderers shall decrease from one Phase to the next one to ensure selecting those that best address the technical challenge on which this PCP is based.

Interested, natural or legal persons, are entitled to submit an offer in accordance with this phased procedure, as summarised below:

- **Phase 1 Solution Design:** This Phase is a feasibility study of the selected technologies and proposals, which aims to verify the technical, economic and organisational feasibility of each Tender. The expected output from Contractors is a report describing the results of the feasibility study, solution design and the conclusions for the start of the development activities in Phase 2, as well as a business/commercialisation plan.
- **Phase 2 Solution Prototype:** Selected Contractors shall be entitled to develop, install and technically test and validate TRL7 prototypes on the basis of the final innovative solution designs selected at the end of Phase 1.
- **Phase 3 Pilot:** Selected Contractors shall be entitled to extend Phase 2 prototypes to TRL8 pilot (see section 3.5 Expected Outcomes), including technical test and validation as well as availability of the pilot for practitioner evaluation, on the basis of the prototypes selected at the end of Phase 2.

1.5 BroadWay PCP Budgeting

The total **budget for this PCP is 7,596,700 EUR** (VAT excluded). The Group of Procurers has contributed **1,313,144 EUR**. With the exception of Phase 1, the final budget, exclusive of VAT, is not yet fixed. The final price will be fixed at the signing of the contracts stage, which shall be determined by the VAT regime applicable for the Tenderers, the Lead Procurer and the Group of Procurers.

The total budget is divided as follows:

BroadWay PCP: Division of Budget		Maximum Total Budget (VAT Excluded)	Expected Maximum Number of Contractors	Maximum Budget per contractor (VAT Excluded)	Maximum Phase duration (in months)
Phase 1	Solution Design	€ 368,439.95	5	€ 73,687.99	6
Phase 2	Solution Prototype	€ 4,223,765.20	3	€ 1,407,921.73	12
Phase 3	Pilot	€ 3,004,494.85	2	€ 1,502,247.43	11
	TOTAL	€ 7,596,700.00			

Figure 2 Budget & number of Contractors

- **Phase 1: Solution Design (6 months 11 days, including 1 month for evaluation):** A maximum of 5 Contractors awarded with the Phase 1 shall be entitled to submit a final design for an innovative solution, for which each Contractor shall receive a maximum payment of **73,687.99 EUR (VAT excluded)**.
- **Phase 2: Solution Prototype (11 months 18 days, including 1 month for evaluation):** A maximum of 3 Contractors awarded with the Phase 2 shall be entitled to develop prototypes on the basis of the final

innovative solutions selected at the end of Phase 1, for which each Contractor shall receive an indicative maximum payment of **1,407,921.73 EUR (VAT excluded)**.

- **Phase 3: Pilot (10 months including 17 days for evaluation):** A maximum of 2 Contractors awarded with the Phase 3 shall be entitled to produce and test a range of products on the basis of the prototypes finally selected at the end of Phase 2, for which each Contractor shall receive an indicative maximum payment of **1,502,247.43 EUR (VAT excluded)**.

Unallocated leftover budget from Phases 1 and 2 may be transferred to Phase 2 and/or 3. Therefore the total budget available for Phases 2 and 3 may eventually be higher than stated here. Conversely, the budget might be less than stated here to take into account the VAT situation of Tenderers, the Lead Procurer and the Group of Procurers.

In the event that the maximum number of Contractors in each Phase is not reached as specified above, the Lead Procurer may exercise its discretion to cancel the Competition.

Since all Contractors will be paid by the Lead Procurer by way of centralised payments, and as ASTRID is based in Brussels, the valid Belgian and EU VAT legislation will be applied to the Project.

Notice to Tenderers: This is to inform Tenderers that they shall be required to allocate a contribution from their PCP budget to involve members of Practitioner Evaluation Team (PEVT) to attend the preparation and evaluation of related activities in Phases 2 and 3. Further information shall be provided in the future Call-offs. Please refer to section 2.2.11 of TD2.

1.6 BroadWay PCP Contracting Approach

This PCP will be implemented by means of a **Framework Agreement (TD3)** with Call-offs for **Specific Contracts (TD4)** for each of the three (3) R&D Phases. The law governing the Contracts is Belgian law, because of the location of the Lead Procurer.

The Framework Agreement regulates all the terms and conditions for the entire duration of the PCP. There will be no renegotiation. The Framework Agreement will remain binding for the duration of all Phases for which Contractors remain in the PCP.

ASTRID as the Lead Procurer will sign Framework Agreements in its own name and on behalf of the Group of Procurers.

- **Phase 1: Solution Design** Following the tendering stage, a Framework Agreement and a Specific Contract governing Phase 1 are expected to be awarded to a maximum of five (5) Contractors. Evaluation of Tenders for the Framework Agreement and Phase 1 are combined.

Tenderers are asked not only to submit their detailed Offer for Phase 1 in their Tender, but also to state their goals, and to outline their plans (including price conditions) for Phases 2 and 3, thus giving specific details of the steps that would lead to commercial exploitation of the R&D Results.

The TVC will evaluate the deliverables set out in the Phase 1 Specific Contract and the Offer in order to determine whether the Contractor has suitably addressed the BroadWay Objectives.

- **Phase 2: Solution Prototype** No later than one week after notification of End of Phase Report Results for Phase 1, the Lead Procurer will issue a Call-off for Phase 2, with the aim of awarding a maximum of three (3) Phase 2 Specific Contracts. Only Offers from Contractors that “**successfully**” completed Phase 1 will be eligible for Phase 2. The Call-off will set out the Award Criteria of the Phase 2 Specific Contract. Contractors will have just under one (1) month to submit an Offer to the Call-off. The TVC will assess the Offers during

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the four (4) week period following the deadline for submission of the Phase 2 Call-off. Phase 2 Specific Contracts will be awarded if the TVC has determined that the Contractors have demonstrated that the BroadWay Objectives have been suitably addressed using the Award Criteria for Phase 2.

The Technical Validation Committee (TVC) will also evaluate the technical and non-technical milestones and deliverables comprised in the End of Phase 2 Report.

- **Phase 3: Pilot** No later than one (1) week after notification of End of Phase Report Results for Phase 2, the Lead Procurer will issue a Call-off for Phase 3, with the aim of awarding a maximum of two (2) Phase 3 Contracts. Only Offers from Contractors that successfully completed Phase 2 will be eligible for Phase 3. Contractors will have one (1) month to submit an offer to the Call-off. The TVC will assess the Offers during the four (4) week period following the deadline for submission of the Phase 3 Call-off. The Phase 3 Specific Contracts will be awarded if the TVC has determined that the Contractors have demonstrated that the BroadWay Objectives have been suitably addressed using the Award Criteria for Phase 3.

A Contractor must have been awarded a Specific Contract for Phase 1 in order to be considered for Phase 2; a Contractor must have been awarded Specific Contracts for Phases 1 and 2 in order to be considered for Phase 3.

1.7 BroadWay PCP Schedule

The estimated planned schedule for the BroadWay PCP is presented in the following time schedule:

Planned time schedule	
Date	Activity
	First Tender procedure (Framework Agreement and Phase 1 Specific Contracts)
15 th February 2019 (approximately)	Publication of Contract Notice in TED
15 th March 2019	Webinar to discuss and take questions about Tender Documents
26 th March 2019	Briefing meeting to present BroadWay PCP Tender Documents – Brussels city centre
18 th April 2019	Deadline for submitting questions about Tender Documents
30 th April 2019	Deadline for Lead Procurer to publish replies to questions (Q&A document)
3rd June 2019 1200 NOON CEST	Deadline for submission of Tenders for the Framework Agreement and Phase 1 Specific Contracts
3 June 2019 1600 CEST	Opening of Tenders

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12 th July 2019	Tenderers notified of decision on awarding of the Framework Agreement and Phase 1 Specific Contracts
19 th July 2019	End of Stand-Still Period: unsuccessful Tenderers have 5 working days to contest the decision

Estimated Schedule of Phase 1

Date	Activity
20 th July 2019	Signing of Framework Agreements and Phase 1 Contracts. Start of Phase 1 work
31 st July 2019	Publication of Contracts Award Notice in TED
31 st July 2019	Names of successful Phase 1 Contractors and their project abstracts sent to EU and published on www.broadway-info.eu Project website. Kick-off meetings take place around this date.
31st December 2019	Deadline for End of Phase 1 Report and deliverables
31st January 2020	End of Phase 1: Phase 1 Contractors notified as to whether they have completed this Phase satisfactorily and successfully. Payment as per clause 2 of the Framework Agreement.

Estimated Schedule of Phase 2

Date	Activity
3rd February 2020	Call-off Phase 2 open: expected Request for Tender for Phase 2. Only Contractors that 'Successfully' completed Phase 1 are eligible to submit Offers.
28th February 2020 1200 NOON CEST	Deadline for submitting Phase 2 Offers
28 th February 2020	Opening of Phase 2 Offers
31 st March 2020	Contractors notified of decision on awarding Phase 2 Specific Contracts
7 th April 2020	End of Stand-Still Period: unsuccessful Contractors have 5 working days to contest the decision
8 th April 2020	Signing of Phase 2 Specific Contracts
8th April 2020	Start of Phase 2

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24 th April 2020	Names of successful Phase 2 Contractors and their project abstracts published on www.broadway-info.eu Project website. Kick-off meetings take place around this date.
Early Sept 2020	Interim Demonstration of prototype activity to TVC, including direct feedback
30 th November 2020	Submission of D2.1 Prototype implementation report and test plan (start of testing/PlugTest activity)
26 th February 2021	Deadline for End of Phase 2 Report and deliverables
26 th March 2021	End of Phase 2: Phase 2 Contractors notified as to whether they have completed this Phase satisfactorily and successfully. Payment as per clause 2 of the Framework Agreement.

Estimated Schedule of Phase 3

1st April 2021	Call-off Phase 3 open: expected Request for Tender for Phase 3. Only Contractors that 'Successfully' completed Phase 2 are eligible to submit their Offers.
30th April 2021 1200 NOON CEST	Deadline for submitting Phase 3 Offers
30 th April 2021	Opening of Phase 3 Offers
28 th May 2021	Contractors notified of decision on awarding Phase 3 Specific Contracts
4 th June 2021	End of Stand-Still Period: unsuccessful Contractors have 5 working days to contest the decision
5 th June 2021	Signing of Phase 3 Specific Contracts
5 th June 2021	Start of Phase 3
29 th October 2021	Submission of SD3.1 Pilot implementation report and test plan (start of testing)
November 2021	Demonstration to TVC
31 st December 2021	Submission of SD3.2 Pilot test results
31 st January 2022	Integrated pilots ready for Practitioner Evaluation
31st March 2022	Deadline for End of Phase 3 Report and deliverables
22nd April 2022	End of Phase 3: Phase 3 Contractors notified as to whether they have completed this Phase satisfactorily and successfully. Payment as per clause 2 of the Framework Agreement

22 nd April 2022	First SpiceNet certificates awarded
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Table 1 Planned Time Schedule

SECTION 2: PARTIES OF THE BROADWAY PCP PROCEDURE

2.1 Lead Procurer

This PCP relates to a joint procurement that will be carried out by the Lead Procurer, ASTRID.

The Lead Procurer is a member of the Group of Procurers entrusted with the mission to conduct the BroadWay PCP procedure towards third parties in its own name and on behalf of the Group of Procurers and in compliance with decisions of the Technical Validation Committee (TVC). It acts as the only entity towards PCP Participants and other third parties. It has been appointed to coordinate and lead the joint PCP, and to sign and award the Framework Agreement and the Specific Contracts for all Phases of the PCP. It receives administrative and logistical support from the Coordinator in the exercise of its functions.

2.2 Coordinator

The Coordinator role is provided by Public Safety Communication Europe (PSCE), which will provide administrative, and logistical support to the Lead Procurer. It manages the Project website (www.broadway-info.eu) and arranges activities relating to the Open Market Consultation (OMC), which included two webinars (20.07.18 and 9.08.18), a briefing event in Brussels on 13.09.18 and a questionnaire. It also acts as the intermediary between the Group of Procurers and the European Commission.

2.3 Group of Procurers (GOP)

The consortium behind the BroadWay PCP consists of 11 public bodies based across Europe, which are either nationally responsible for public safety or are public safety responders, who face the same challenges and thus seek similar solutions. These are collectively referred to as the Group of Procurers and individually as a GOP Member.

For a closer look at the Group of Procurers, please consult Appendix 3.

2.4 Procurement Committee (PCe)

The Procurement Committee (PCe) plays an active role in each of the PCP Phases and is composed of the following members:

- Representatives of the Lead Procurer,
- Representatives of the Coordinator,
- An external legal member.

2.5 Technical Validation Committee (TVC)

The Technical Validation Committee (TVC) consists of all GOP Members which collectively make technical decisions to support the different Phases of the PCP, including the formation of technical criteria for the selection of Tenderers and the provision of a technical skill base for the procurement decision-making.

2.6 Practitioner Evaluation Team (PEVT)

The Practitioner Evaluation Team (PEVT) is comprised of the organisations, which have all expressed their support to the BroadWay PCP. The PEVT is headed up by Bayerisches Rotes Kreuz (DEBRK). A number of these organisations will take part in the Pilot evaluation activities. The organisations under the remit of the PEVT are listed in Appendix 2 and include representation from:

- Police
- Fire
- Ambulance
- Rescue
- Healthcare
- Border Guard
- Coast Guard
- Customs
- Prison
- VIP Protection
- Utilities
- Defence

The PEVT aims to meet five (5) times during the BroadWay PCP in parallel to Sustainability Team meetings, with the aim of prioritising and expressing end-user (practitioner) requirements.

The PEVT will define the real-world evaluation scenarios for the final Pilot system and adopt a methodology for practitioner evaluation and criteria. During the Phase 3 Pilot evaluation, the PEVT will use this methodology and criteria to assess the utility of the pan-European interoperable broadband pilot from a public safety operations perspective (primarily non-technical). The PEVT evaluation results will be delivered to the TVC, which will collectively make the final decision regarding the Pilot solutions.

2.7 Sustainability Team (ST)

The Sustainability Team (ST) comprises of representatives of the Group of Procurers, which will meet to discuss the sustainability of the BroadWay activity beyond the end of the PCP. This will relate to policy and standardisation activity.

2.8 Joint Tenderers – Consortia Tenders

A Consortium (a combination of firms) may submit a Joint Tender. Any type of natural or legal persons (including non-profit entities properly registered like universities) shall be entitled to submit Tenders by way of an association or consortium comprising of several Tenderers set up temporarily for the purposes of this PCP.

Subject to sections 2.10 and 5.3.3 of the RFT, each Tenderer may present no more than one Tender. This means that Tenderers may only appear in one temporary consortium and/or may only present itself on one occasion jointly with other Tenderers with an undertaking to set up a company. Failure to comply with this rule will lead to the automatic rejection of everything that it has presented.

Where a group of undertakings (in whatever form and regardless of the legal relationship between them) come together to submit a Tender in response to the RFT, the Lead Procurer will deal with all matters relating to this PCP through a **single authorised representative (Lead Tenderer)** authorised to represent all members of the group of undertakings and to whom all communications shall be directed and accepted until this Competition has been

completed or terminated. Correspondence from any other person or entity will NOT be accepted, acknowledged or responded to.

All undertakings which agree to set up a temporary Consortium of Tenderers for the BroadWay PCP Competition shall complete **Part VII: Consortia Statement of the ESPD in Annex A**. Please see section 5.1 for more information.

Prior to and as a condition of award of the Contracts, the successful Tenderer shall be required to designate a **single authorised representative (Lead Contractor)**, who will carry overall responsibility for the Contracts irrespective of whether or not tasks are to be performed by a Subcontractor (see below) or other consortium member.

The **Lead Contractor** shall sign the Tender and Contracts in the name of and on behalf of all members, and shall be responsible for all aspects and execution of the contracts without prejudice to the existence of joint powers that they may grant for receiving and making payments of a significant amount.

All members of the consortium shall be jointly and separately bound to fulfil the terms of the Framework Agreement and Specific Contracts. The **Lead Contractor** shall be mandated to act on behalf of the consortium for the purposes of the contracts and shall have the authority to bind the consortium.

2.8.1 Changes in the composition of a Joint Tender and Consortium

If the **Lead Contractor** needs to change or add new undertakings, these new undertakings shall have to prove that they have at least the same competencies as the undertakings they will replace and that they comply with all the other contractual conditions, rights and obligations that are in the Contracts e.g. complying with the place of performance conditions, respecting the same IPR conditions and the *binding unit prices* etc.

Proposed replacement consortium members shall complete the relevant sections of the **ESPD in Annex A**, which must be submitted to the Lead Procurer for authorisation. Please see section 5.1 for more information.

The composition of the consortium shall not be altered without submission of updated ESPD forms upon which the authorisation of the Lead Procurer will be based. Any alteration in the composition of the consortium without the prior authorisation of the Lead Procurer may result in termination of the Contracts.

The Lead Procurer may exceptionally authorise changes in the composition of a Consortium that tendered at the beginning of this Competition and/or the formation of a new Consortium different from the ones that tendered at the beginning of this Competition.

Nevertheless, this authorisation shall not apply if:

- The new undertaking resulting from the changes does not meet the requirements of the ESPD, as appropriate.
- It implies the entry of new Participants different from those bidding in consortium at the beginning of this Competition or if participants previously withdrew or were excluded from that procedure or in default under the Framework Agreement or under the Phase Contracts.
- It leads to a reduction of the PCP Participants in the Process;
- It leads, according to an independent legal report, to IPR/confidentiality issues (i.e. if associated Participants selected for Phase 1 decide to continue as individual entities or to join other consortia).
- It occurs during the execution of the relevant Phase Contract. Nevertheless a change during the execution of the Phase contracts could be exceptionally allowed by the Lead Procurer in case of insolvency of one of the members of the Consortium or of corporate restructuring operations affecting one or several of the members of the bidding consortia, because of merger, take over, transformation or assignment of a company or business unit.

2.9 Subcontractors

Subcontracting refers to any contract or agreement between the Tenderer and any third party, whereby that third party agrees to provide services to the Tenderer to enable or assist the Tenderer to provide the R&D Services or any part thereof to the Lead Procurer.

Subcontracting is permitted in each Phase of this Competition. However, no essential parts of the Contracts can be subcontracted, nor the management of the PCP.

Each Subcontractor shall complete the relevant sections of the **ESPD in Annex A**, which must be submitted with the Tender. Please see section 5.1 for more information.

- The Tenderer shall state in **Part VIII: Subcontracting Statement** of the **ESPD in Annex** which part of the PCP obligations and contract performance, if any, is intended to be subcontracted to other operators (Phase 1 through 3). Also in this form, the Tenderer will identify who the Subcontractor(s) is/are and which services they will deliver in the Project.
- Furthermore, the Tenderer shall describe its approach in selecting and managing its Subcontractors. The Tenderer must have adequate processes and procedures in place for managing and monitoring all of the Sub-contractors which the Tenderer proposes to use in the delivery of the Contracts.
- The Tenderers must assure that Subcontractors are aware of the provisions set out in the Tender documents including those relating to IPRs.
- Each Subcontractor shall also complete **Part VIII: Subcontracting Statement**, appended to the **European Single Procurement Document (ESPD)** at **Annex A**.

The **Lead Contractor** remains responsible to the Lead Procurer for the performance and observance of all its obligations under the Contracts and for the consequences of any negligent acts of the Subcontractors. The **Lead Contractor** will be responsible for the acts and omissions of its Subcontractors as though those acts and omissions were its own.

2.9.1 Replacement of a Subcontractor

If the **Lead Contractor** needs to change or add new Subcontractors, these new Subcontractors shall prove that they have at least the same competencies as the Subcontractors or partners they will replace and that they comply with all the other contractual conditions, rights and obligations that are in the Framework Agreement and Specific Contracts: e.g. complying with the place of performance conditions, respecting the same IPR conditions, the *binding unit prices*.

Proposed replacement Subcontractors shall complete the relevant sections of the **ESPD in Annex A**, which must be submitted to the Lead Procurer for authorisation. Please see section 5.1 for more information.

Replacement Subcontractors shall not be effective without submission of updated ESPD forms upon which the authorisation of the Lead Procurer will be based. Any alteration in the composition of Subcontractors without the prior authorisation of the Lead Procurer may result in termination of the Contracts.

The Lead Procurer may authorise all changes to Subcontractors upon submission and consideration of the above-mentioned documents by the **Lead Contractor**.

Nevertheless, the authorisation shall not apply if:

- It leads to a reduction of the BroadWay PCP Participants throughout the PCP procedure below three (3) in Phase 1, below three (3) in Phase 2 or below two (2) in Phase 3,
- It leads, according to an independent legal report, to IPR, confidentiality issues (i.e. if associated participants selected for Phase 1 decide to continue to as Subcontractor for another Tenderer),
- It does not allow the Tenderer maintain the technical and financial capacity required.

The execution of the tasks assigned to a Subcontractor shall not be the subject of further subcontracting.

2.10 Subcontracting for BroadWay Objectives

This section is to make Tenderers aware that they **must engage at least one Subcontractor** for all Phases of the Project in order to fulfil the following Objectives in an impartial and independent manner:

- 1) Technical Validation (including security assurance)
- 2) Practitioner Evaluation support

Please refer to section 5.3(4) Selection Criteria for more information.

2.11 BroadWay PCP Partnering Tool

This PCP encourages participation on a fair and equal basis by Small and Medium Enterprises (SME's) in this Competition. SMEs that believe the scope of this PCP is beyond their technical or business capacity are encouraged to explore the possibilities of forming relationships with other SMEs or with larger enterprises. Through such relationships they can participate and contribute to the successful implementation of any Framework Agreement or Specific Contract that may result from this PCP and therefore increase their social and economic benefits.

Larger enterprises are also encouraged to consider the practical ways that SMEs can be included in their proposals to maximise the social and economic benefits of any Contracts that may result from this PCP.

All operators, regardless of size, are therefore encouraged to consult the BroadWay PCP **Partnering Tool** especially created on www.broadway-info.eu/partnering-tool/. The aim of this Partnering Tool is to facilitate partnering between potential consortium members by sharing information regarding expertise needed or offered. Potential Tenderers can be added to the list of operators on the Partnering Tool page by completing the **registration form**. The Coordinator will facilitate inter-operator connections and invites operators to get in touch via the **Contact Page** about any particular company that they are interested in forming partnerships with for the purposes of the BroadWay PCP. The Coordinator will duly inform the operator in question and contact details will only be exchanged provided that express consent is given.

SECTION 3: DESCRIPTION OF SERVICES TO BE PROCURED⁷

3.1 Motivation for the PCP

In cases of industrial or natural disasters and big traffic accidents, communications between rescue teams from different countries is always the first challenge because of the lack of PPDR roaming/interoperability between existing communication systems. The lack of interoperability experienced during PPDR incidents is mainly because each responder uses their own communication systems or because they work in terminal to terminal communication, without using network. Communication between the involved teams of the different countries can be impossible due to the differences in the operational communication systems used. In situations such as this, where disasters do not know borders, **sharing information is crucial**.

3.2 Preparation for the PCP

This PCP takes the form of a Pre-Commercial Procurement (PCP) with the purpose of realising innovative solutions for the implementation of the 'SpiceNet Reference' architecture to all European countries. The 'SpiceNet Reference' architecture was a major outcome of the forerunner to this PCP, project BroadMap (see section 3.3 below). This implementation will include, and will not be limited to, those important mission critical broadband services, and provision for an application and service eco-system that will make use of these services. This PCP expects important outcomes regarding the availability of technology solutions.

Features of expected technology solutions ...

- ...used in each country will be interoperable
- ...will become more technically mature, catalysed by PCP activity
- ...will become lowest cost, due a richer and competitive supplier eco-system
- ...will not be locked into individual suppliers
- ...will provide efficiency gains to and not provide hindrance to PPDR operations

The Common Challenge of the BroadWay Project is the design, development and testing of the innovation activity to develop technologies to enable a pan-European interoperable broadband mobile system for PPDR, based on national networks and service providers, validated by sustainable testing facilities and practitioner evaluation.

3.3 BroadMap "Phase 0 – Curiosity Driven Research"

The forerunner to this PCP was the BroadMap project. This preparatory stage of the BroadWay Project was funded under topic DRS-18-2015 and commenced in May 2016 and concluded in April 2017.

The BroadMap project involved the participation of 15 partner countries. National and international workshops were organised with the purpose of gathering requirements from PPDRs. Over 270 organisations from 18 countries attended workshops which included participants from the police, ambulance, fire brigades, ministry of defence, coast guard, customs, prisons, utilities and critical infrastructure. In total there were more than 600+ participants involved.

BroadMap delivered on the following **goals**:

- To collect, assess and validate the PPDR's wireless broadband communication existing requirements,
- To establish a core set of specifications to fulfil the requirements,
- To define transition roadmaps for research and standardisation for future evolution of European interoperable radio communication solutions, within legal procurement constraints,

⁷Please refer to the Glossary in PCP Challenge (TD2) for definitions of technical terms.

- To prepare the ground for a new eco-system to catalyse new applications, services and processes making use of broadband capabilities for public safety and security,

To utilise the strength of the PPDR community through our partners, their expertise, knowledge, networks and relations with the aim to achieving interoperability across Europe. This importantly includes nuances of societal differences, including different cultures, geography, processes and legal frameworks. Please see www.broadmap.eu for more information regarding this project. Public safety services shall address a series of new challenges such as disasters, crime and terrorism which are not confined to geopolitical borders. Sharing information between national and international agencies **is critical**. Also, technology capable of sending and receiving large amounts of data can help emergency and security services to do their work more effectively and safely.

With this in mind, a major aspect carried forward from BroadMap to BroadWay is the **SpiceNet Architecture Reference: the Standardised PPDR Interoperable Communication Service for Europe (SpiceNet)**.

The SpiceNet model proposes a reference architecture for harmonised pan-European PPDR mission critical broadband services which contains three layers:

1. Harmonisation

- a) Organisational schemes,
- b) Harmonised tuning ranges
- c) Standardised commercial solutions

2. Interoperability and governance

- a) Standardised Mission Critical Solutions for public safety,
- b) SpiceNet governance
- c) Standardised PPDR Interoperable Communication for Europe (SpiceNet)

3. Networks and users

1. PPDR Networks,
2. PPDR Users

1. Harmonisation

a) Organisational schemes:

Organisational schemes can vary from dedicated networks and services to full MVNO services and to all combinations between hybrid and OSP (Outsourced Service Provider).

a) Harmonised tuning ranges:

Harmonised tuning ranges allow commercial devices to operate globally with all tuning ranges used by commercial operators. Chipsets and devices are manufactured based on 3GPP standards. This means that PPDR users can use SpiceNet services in any commercial network adopted for SpiceNet services.

2. Interoperability and governance

a) Standardised MC PPDR solutions:

MC broadband services are now part of the commercial 3GPP standards. Those standards enable a set of mission critical features and services supporting mission critical communications.

b) SpiceNet governance:

A pan-European governance function is needed to allow countries and agencies to use SpiceNet services. This function needs to be defined and appointed to some legal entity or organisation at the EU level. In addition, each

SpiceNet user organisation must have a SpiceNet function, which consists of administration, finance, technology and security and maintenance functions.

A global agreement is needed for pan-European organisations to confirm governance above national legislations and in conformity with the current common regulations at the EU level

c) Standardised PPDR Interoperable Communication for Europe (SpiceNet):

Pan-European cooperation and operational mobility is based on harmonised 3GPP tuning ranges and standardised infrastructure. Regardless of their location, PPDR users must be able to communicate based on agreements with other users and organisations in different countries.

3. Network and users

a) PPDR networks:

The integration of SpiceNet services must be established by national network operators and service providers.

b) PPDR users:

Depending on agreed user specified SpiceNet services in international agreements, PPDR end-users will be able to communicate, using their devices, with PPDR users within their own country and across borders, assuming local PPDR MC broadband service availability.

3.4 Open Market Consultation

The objective of the Open Market Consultation (OMC) was to collect the information on what is the state of art, keeping in mind that BroadWay has to procure innovations to develop and demonstrate TRL8 technologies that will enable a pan-European interoperable broadband mobile system for PPDRs.

The BroadWay OMC included two webinars (20.7.18 and 9.08.18), a briefing event in Brussels on 13.09.18 and a questionnaire. Altogether, over 80 people participated in the various events. This newly formed community provides a good basis for the promotion of the PCP, and has given potential Tenderers a strong understanding of the intentions and needs of the Lead Procurer.

The full OMC report is available on the BroadWay website: www.broadway-info.eu

3.5 Expected Outcomes

BroadWay-specific Security requirements

When it comes to information that can be created, exchanged and stored on the pan-European PPDR broadband network, security is one of the most important aspects to address due to physical and cyberthreats for the PPDR communications. Users must have trust that the information they transmit or receive has been exchanged in a confidential manner and that the integrity of that information has not been compromised. The services required will, amongst other things, be used for sensitive operations in the emergency and security areas. Consequently, security is paramount.

The scope of this PCP is pan-European PPDR broadband network, with an emphasis on Europe. Therefore, and in order to protect the essential interest of the security in the European Union and/or its Member States, the BroadWay PCP shall be **restricted to legal entities established or deemed to be established in Member States and ultimately controlled by Member States and/or nationals (entities or natural persons) of Member States**. Legal entities established in H2020 Associated Countries and legal entities established in the EU but controlled from third countries are **not eligible** for participation in the BroadWay PCP for security reasons.

A predefined minimum percentage of the contracted R&D services in EU Member States or Horizon 2020 Associated Countries for a performance place requirement must be 75% (see clause 19 of the Framework Agreement (TD3)).

The list of all software components has to be provided indicating EAL target level. All security-related software components developed during the BroadWay PCP should reach EAL4+ for procurement of the BroadNet and for a final TRL9 system after BroadWay. This requirement is set out further in a Sub-objectives for Objective Pan-European Security- PESAr13 Software Quality Assurance and PESAr15 Harmonised Security Assurance in TD2. Where levels below EAL4+ is achieved, Contractors must provide justification.

Phase 1: Solution Design

In this Phase, the Contractors have to deliver designs for solutions, test platform and practitioner evaluation, accommodating all of BroadWay's Objectives (See PCP Challenge TD2). This includes a written detailed **design report** regarding architecture, implementation of services, security, management, used standards, applications, devices, innovation functionalities and detailed descriptions of the test platform designs for availability, security, governance tools, operational mobility and applications. Practitioner methodology is also a key Objective (throughout all Phases).

The technical progress of the Contractors will be monitored through the Solution Design Phase by way of a Bi-monthly Report from the Contractors (Appendix 10), which shall commence upon signature of the Contracts (throughout all Phases). The Lead Procurer will appoint a Monitoring Team to achieve effective monitoring. Monitoring meetings can be held physically or online and will be agreed between the Contractor and the Monitoring Team. The Contractor shall deliver a Presentation in the form presented in Appendix 10. If there are issues to be discussed or clarified with the Contractors, separate online meetings will be organised.

Bi-monthly monitoring will be used for reviewing against the expected outcomes (milestones, deliverables and output or results) for the Solution Design Phase.

Contractors shall submit an End of Phase Reporting Form (Appendix 9), which will be evaluated on the basis of an objective scoring mechanism (Appendix 7 Scoring Model for Outcome of the Phase), which describes the scoring model that will be used by the TVC to assess the successful completion of the Phase. End of Phase Reports will first be scored independently by each member of the TVC. Once all solution designs have been individually scored, a face-to-face meeting of the TVC will then be held to reach a unanimous decision, and to select the designs which fulfilled the expected outcomes satisfactory or successfully. Only Contractors who "successfully" completed the End of Phase Reports will be invited to submit an Offer for Phase 2. For more information on the assessment of the satisfactory completion of the End of Phase Reports, please see section 8.4 Payments based on Satisfactory Completion of Milestones and Deliverables of the Phase.

The Lead Procurer will issue a Call-off with requirements to Contractors who successfully completed the End of Phase Reports for Phase 1 for the development of solution prototypes within the scope of Phase 2. The TVC will assess the submitted Offers for the Solution Prototype Phase to determine if the BroadWay Objectives have been suitably addressed using the Award Criteria. First it will be scored independently by each member of the TVC. Once all Offers for solution prototypes have been individually scored, a face-to-face meeting of the TVC will then be held to reach a unanimous decision, and to select the Contractors offering the preferred solution prototypes and propositions to be taken forward into the Prototype Phase.

Contractors will be selected to progress to the Solution Prototype Phase, and Specific Contracts for the Solution Prototype Phase will be signed.

Phase 2: Solution Prototype

In this Phase, the Contractors have to deliver prototypes for solutions, test platform and practitioner evaluation accommodating all of BroadWay's Objectives (See PCP Challenge TD2).

The technical progress of the Contractors will be monitored through the Solution Prototype Phase by way of Bi-monthly Reports from the Contractors (Appendix 10), which shall commence upon signature of the Contracts (throughout all Phases). The Lead Procurer will appoint a Monitoring Team to achieve effective monitoring. Monitoring meetings can be held physically or online and will be agreed between the Contractor and the Monitoring

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Team. The Contractor shall deliver a Presentation in the form presented in Appendix 10. If there are issues to be discussed or clarified with the Contractors, separate online meetings will be organised.

Bi-monthly monitoring will be used for reviewing against the expected outcomes (milestones, deliverables and output or results) for the Solution Prototype Phase.

Documentation for test platform prototypes and solutions will be due for submission 2 months before the prototype validation (Deliverable D2.1). Documentation will consist of testing processes, final prototype specification and description of implementation.

Contractors shall confirm that they have finished test platform prototypes and technology solutions. During the next 2 months they will test the solution.

One or more (maximum 2) Plugtest style events will take place combining the test platform prototypes and prototype solutions with all Contractors and this will be done within the following 2 months. Prototype testing has to be on the TRL7- system prototype demonstration in an operational environment.

After testing, the Contractors shall provide testing results (Deliverable D2.2).

Contractors shall submit an End of Phase Reporting Form (Appendix 9), which will be evaluated on the basis of an objective scoring mechanism. Please refer to Appendix 7 Scoring Model for Outcome of the Phase, in which a description of the scoring model that will be used by the TVC to assess the successful completion of the Phase is provided. End of Phase Reports will first be scored independently by each member of the TVC. Once all solution prototypes have been individually scored, a face-to-face meeting of the TVC will then be held to reach a unanimous decision, and to select the designs which fulfilled the expected outcomes satisfactory or successfully. Only Contractors who “successfully” completed the End of Phase Reports will be invited to submit an Offer for Phase 3. For more information on the assessment of the satisfactory completion of the End of Phase Report, please see section 8.4 Payments based on Satisfactory Completion of Milestones and Deliverables of the Phase.

The Lead Procurer will issue a Call-off with requirements to Contractors who successfully completed the End of Phase Reports for Phase 2 for the development of a Pilot within the scope of Phase 3.

The TVC will assess the submitted Offers for the Pilot Phase to determine if the BroadWay Objectives have been suitably addressed using the Award Criteria. First it will be scored independently by each member of the TVC. Once all Offers for the Pilot Phase have been individually scored, a face-to-face meeting of the TVC will then be held to reach a unanimous decision, and to select the Contractors offering the preferred Pilot and propositions to be taken forward into the Pilot Phase.

Contractors will be selected to progress to the Pilot Phase, and Specific Contracts for the Pilot Phase will be signed.

Phase 3: Pilot

Contractors have to deliver pilot solutions, test platform and practitioner evaluation accommodating all of BroadWay's Objectives (See PCP Challenge TD2).

The final BroadWay pilot is required to reach Technology Readiness Level 8: TRL8 'System Complete and Qualified'.

TRL8 represents a 'complete' and fully operational system achieving the best performance possible for all 11 BroadWay Objectives.

Solutions will be tested and evaluated as described in a) and b). The BroadWay TVC will witness and assess the results of testing and evaluation. They will make a judgement and 'qualify' their decision that TRL8 has been reached. Qualification will result in the award of the first SpiceNet certificates. Please refer to TD2, Phase 3 Pilot for further information.

Final TRL8 solutions must leave minimal or no further development of the solution required except for activities required to put the solution into live TRL9 use. Putting the system into live use as 'TRL 9 – actual system proven in operational environment', will be subject of a further procurement process and is not to be achieved during BroadWay PCP.

The technical progress of the Contractors will be monitored through the Pilot Phase by way of Bi-monthly Reports from the Contractors, which shall commence upon signature of the Contracts. The Lead Procurer will appoint a Monitoring Team to achieve effective monitoring. Monitoring meetings can be held physically or online and will be agreed between the Contractor and the Monitoring Team. The Contractor shall deliver a Presentation in the form presented in Appendix 10. If there are issues to be discussed or clarified with the Contractors, separate online meetings will be organised.

Bi-monthly monitoring will be used for reviewing against the expected outcomes (milestones, deliverables and output or results) for the Pilot Phase.

Pilot installation will be delivered and submission of the pilot solutions for assessment by the TVC. Final testing of solutions deployed in the Pilot Phase will be assessed using two (2) methods (see a) and b) below) during the final three (3) months of the Project. This will include one (1) or more (maximum 2) Plugtest style events which will take place combining the test platform pilots and pilot solutions with the Contractors. Pilot testing has to be on the TRL8-system complete and qualified.

a) Technical and Objective Testing will consist of delivered documents and witnessing of the testing

Tests will be carried out across the pilot system of the chosen test Contractors, using the test systems supplied.

The TVC will assess the outcome of this Phase by way of a submitted End of Phase Report (Appendix 9) and witnessing of the testing. The End of Phase Report will be evaluated on the basis of an objective scoring mechanism. Please see Appendix 7 Scoring Model for Outcome of the Phase, in which a description of the scoring model that will be used by the TVC to assess the successful completion of the Phase is provided. End of Phase Reports will first be scored independently by each member of the TVC. Once all the End of Phase Reports have been individually scored, a face-to-face meeting of the TVC will then be held to reach a unanimous decision, and to select the Contractor(s) which fulfilled the expected outcomes satisfactory or successfully and the awarding of BroadWay (SpiceNet) certification (see below).

b) Operational Evaluation by Practitioners

The Pilot will be utilised in several operational test scenarios (trials), with the involvement of practitioners (PEVT). This activity will be led by DEBRK, which will coordinate the trials. A series of operational non-functional evaluation criteria will be used to guide practitioners on their assessment of the utility of the pilot system.

Once the technical testing and operational evaluation have been assessed, a meeting of the TVC will be held to reach a unanimous decision the grounds of **a) Technical and Objective Testing and also b) Operational Evaluation**. Preferred solution(s) will be selected to receive a formal BroadWay (SpiceNet) certification.

Expected Outcomes (per Phase)

Expected Outcomes		
Phase 1: Solution Design		
	Objective:	During this Phase, the selected Contractors are asked to provide a solution design that will address all BroadWay Objectives and test platform designs. On the basis of the Objectives; PCP Challenge (TD2), the goal is to demonstrate the technical, financial and commercial feasibility of the proposed concepts and approach to meet the procurement needs.
	Output results: and	The Contractors shall provide an End of Phase Report, which includes a written detailed design report regarding architecture, implementation of services, security, management, used standards, applications, devices, innovation functionalities and

		detailed description of the test platform designs. Practitioner methodology is also a key Objective.			
	Milestones and deliverables		By when?	How?	Output and results
	Milestones:	M1.1) Kick off	Month 1	Physical and/or online meeting	Presentation of Contractor’s team Design solution for all Objectives Technical validation according to the Tender Practitioner evaluation according to the Tender Q&A
		M1.2) Prototype Contracts concluded	Month 9	Physical signature	Receipt of signed Contracts
	Deliverables:	D1.1) Designs Submitted	Month 5	Electronic submission of deliverable	Detailed description of the design solution, technical validation and practitioner evaluation
		D1.2 End of Design Phase Report	Month 5	Electronic submission of deliverable	End of Phase Report
	Points to be addressed in End of Phase Report:	Description of the state-of-the-art versus innovation Measures taken to protect Results (IPR) List of names and location of personnel that carried out the R&D activities Abstract of the main results achieved See also Appendix 9 for template End of Phase Reporting Form			
Phase 2: Solution Prototype Phase					
	Objective:	Throughout this Phase, the Contractors for Phase 2 will develop their designs into working prototypes, practitioner evaluation and necessary test platforms for testing. In the Prototype Phase, Contractors will provide tests for availability, security, management, operational mobility and applications. To monitor the progress and facilitate the dialogue, Bi-monthly Reports, supplemented by a teleconference chaired by the Monitoring Team will be organised.			
	Output results: and	The Contractors shall provide an End of Phase Report, which includes a written detailed prototype report regarding architecture, implementation of services, security, management, used standards, applications, devices, innovation functionalities and detailed description of the test platform prototypes. Practitioner methodology is also a key Objective.			

Milestones and deliverables		By when?	How?	Output and results
Milestones:	M2.1) Beginning of Prototype Phase	Month 9	Physical and/or online meeting	Reviewing Action Plan between Monitoring Team and Contractors / Q&A
	M2.2) Interim Demonstration of prototypes to the TVC	Month 14	Physical meeting- location may not be on the site of the prototype	Draft D2.2 Presenting achieved levels of the prototype and demonstration of the results
	M2.3) Demonstration of prototypes to TVC	Month 20	Physical meeting- location may not be on the site of the prototype	D2.2
	M2.4) Pilot Contracts concluded	Month 23	Physical signature	Receipt of signed Specific Contract
Deliverables:	D2.1) Prototype implementation report and test plan	Month 16	Electronic submission of deliverable	Deliverable will consist of testing processes, final prototype specification and description of implementation.
	D2.2) Prototype test results	Month 20	Electronic submission of deliverable	Objective of the testing Summary of the features which are tested For each test it has to be delivered: <ul style="list-style-type: none"> - Detailed testing strategy– name all prerequisites which are necessary for testing and how they will be achieved - Operational environment – where the tests have been performed, and detailed information which

					<div>hardware, software and developed tools were used</div> <div><div>- Detailed information regarding testing process team with description of the roles</div><div>- Test plan description with detailed documentation of the steps that need to be done in order to run the test</div><div>- Results for each test - where is applicable, testing criteria should be specified as well as the range of values that will determine the passing of the test.</div></div>
		D2.3 End of Prototype Phase Report	Month 20	Electronic submission of deliverable	End of Phase Report
	Points to be addressed in End of Phase Report:	<div>Description of the state-of-the-art versus innovation</div> <div>Measures taken to protect Results (IPR)</div> <div>List of names and location of personnel that carried out the R&D activities</div> <div>Abstract of the main results achieved</div> <div>See also Appendix 9 for template End of Phase Reporting Form</div>			
Phase 3: Pilot					
	Objective:	In this final Phase, the prototypes are developed further into solutions that are piloted, validated through test platforms and evaluated in live test scenarios.			
	Output results: and	The Contractors shall provide an End of Phase Report, which includes a written detailed pilot report regarding architecture, implementation of services, security, management, used standards, applications, devices, innovation functionalities and			

		detailed description of the test platform designs. Practitioner methodology is also a key Objective.			
	Milestones and deliverables		By when?	How?	Output and results
	Milestones:	M3.1) Beginning of Pilot Phase	Month 23	Physical and/or online meeting	Reviewing Action Plan between Monitoring Team and Contractors / Q&A
		M3.2) Demonstration of pilot to the TVC	Month 28	Physical meeting- at a suitable location which will act as the site of the pilot	D3.2
		M3.3) Pilot ready for Practitioner Evaluation	Month 30	Physical meeting- at a suitable location which will act as the site of the pilot	Description of the pilot implementation with emphasis on TRL8 of demonstrated features
		M3.4) 1st SpiceNet certificates awarded	Month 33	Physical meeting	Certificate
	Deliverables:	D3.1) Pilot implementation report and test plan	Month 27	Electronic submission of deliverable	Technical test plan report Documentation will consist of testing processes, final pilot specification and description of implementation.
		D3.2 Pilot test results	Month 30	Electronic submission of deliverable	Objective of the demonstrating Summary of the features which are demonstrated For each test it has to be delivered: - Detailed testing strategy– name all prerequisites which are necessary for testing and how

					<p>they will be achieved</p> <ul style="list-style-type: none"> - Operational environment – where the tests have been performed, and detailed information which hardware, software and developed tools were used - Detailed information regarding testing process team with description of the roles - Test plan description with detailed documentation of the steps that need to be done in order to run the test - Results for each test - where is applicable, testing criteria should be specified as well as the range of values that will determine the passing of the test.
		D3.3 Pilot Practitioner Evaluation Report	Month 32	Electronic submission of deliverable	<p>Practitioner evaluation report:</p> <p>Objective of the demonstrating</p> <p>Summary of the features which were demonstrated</p>

					Functionality on TRL8 of all demonstrated features
		D3.4 End of Pilot Phase Report	Month 32	Electronic submission of deliverable	End of Phase Report
	Points to be addressed in End of Phase Report:	Description of the state-of-the-art versus innovation Measures taken to protect Results (IPR) List of names and location of personnel that carried out the R&D activities Abstract of the main results achieved See also Appendix 9 for template End of Phase Reporting Form			

Table 2 Expected Outcomes per Phase

3.6 IPR

3.6.1 Ownership of the Background and Results (Foreground)

R&D risks and benefits will be shared between Contractors and the Lead Procurer in such a way that all parties have an incentive to pursue wide commercialisation and take up of the new solutions.

All Background Intellectual Property Rights (IPRs) and Trade Secrets shall remain the exclusive property of the party providing it.

Each Contractor will keep ownership of the IPRs and Trade Secrets attached to the Results they generate during the PCP implementation. The tendered price is expected to take this into account. The Lead Procurer and the Group of Procurers have the right to monitor the management of the IPRs and Trade Secrets.

The Contractors must inform the Group of Procurers (via the Lead Procurer) of Results that can be exploited, regardless of whether they can be protected or not, at the end of each Phase. The information submitted to the Lead Procurer must include information about the contents of the Results, the Background IPRs and Trade Secrets, the confirmation by the Contractor to protect them and the planned timing for protection.

If a Contractor does not seek protection for Results that should be protected, the GOP Members have the right to request that the Results are transferred to them.

The Contractors grant to each GOP Member, an irrevocable, unlimited, worldwide, fully paid-up, royalty-free, non-exclusive licence and right to use the Results, including prototypes or pilot systems, (and the Background for all uses by the BroadWay Group of Procurers of the Results) for the purpose of setting up, using, managing and maintaining a European broadband mobile system, interconnecting new and existing public safety broadband mobile communication systems during and after the termination of the Framework Agreement until the expiry of the last of the respective Intellectual Property Rights.

The GOP Members further have the right to use the Results for other purposes on significantly better terms and conditions than those prevailing on the market, reflecting the fact that such GOP Member partly funded the research having led to the Results (7.4.2 of the Framework Agreement), with a best price offer for products resulting from Results (7.5.3 of the Framework Agreement);

There will be ownership of samples of physical prototypes or pilot system (please see clause 7.2.4 of the Framework Agreement).

The GOP Members further have the right to grant (or to require the Contractors to grant) non-exclusive licences to third parties to exploit the Results under fair and reasonable conditions (without the right to sub-license) as

provided for under clause 7.5.2 of the Framework Agreement, i.e. if the Contractor fails to comply with their obligation to commercially exploit the Results in the following three (3) years after the end of the Project or use the Results to the detriment of the public interest, including security interests.

The Contractors may transfer ownership of their Results – unless this is prohibited (or restricted) by the security obligations and provided that they ensure that their obligations (in respect of the Results) apply to the new owner and that this new owner is obliged to pass them on in any subsequent manner. In that situation, the Contractor must give them at least ninety (90) days advance notice of its intention to transfer ownership of the Results and that this notification must include sufficient information on the new owner to enable the GOP Members to assess the effects on their access rights. Any GOP Member may object with forty-five (45) days of receiving notification, if it can show that the transfer would adversely affect its access rights. Should an objection be raised, the transfer may not take place until agreement has been reached between the parties concerned. The new owner will be bound by the Framework Agreement and must explicitly undertake to perform all of the obligations of the Contractor under the Framework Agreement (including respecting the Group of Procurers' rights under this Framework Agreement) and to include an identical obligation in any subsequent assignment of rights or grant of licenses.

To ensure that a **fair market price** is offered, Tenderers must state: _

The **hypothetical price** that they would have quoted if all IPRs, including the ownership of Results under the PCP, would have been fully retained by the Group of Procurers and Tenderers would not have the possibility to exploit the Results (the "**Virtual Price**"); and the **price** that takes into account the fact that they keep ownership of the IPRs attached to the Results under the PCP, in accordance with the provisions of the Framework Agreement, and that they can exploit these Results (the "**Actual Price**").

In subsequent public procurement relating to the final Results, GOP Members must only be required to pay a price, which is a fair share corresponding to their investment during the PCP.

3.6.2 Commercial Exploitation of Results

The market potential of the results is estimated at 1,4 million public safety responders.

The Contractors are expected to protect their IPRs and Trade Secrets and to commercially exploit the results of the R&D undertaken in the PCP within a period of **three (3) years** after the end of the Framework Agreement. With respect to this, the Lead Procurer invites Tenderers (in section 3 Commercial Feasibility of the Technical Offer in Annex B) to explore several innovative approaches and propose them with a future proof business model and commercialisation plan that is in line with state-of-the-art software development and exploitation like community development, e.g. FOSS (free and open-source licenses), etc., in line with software best practice. The Contractors need to make a credible plan to secure access for the GOP Members to the solutions resulting from the R&D work done within the BroadWay PCP. It should be ensured that GOP Members can continue to benefit from the solutions after the Project has ended.

The business and commercialisation plan should explain the proposed approach to commercially exploit the Results of the PCP and to bring a viable product or service to market. The business plan is expected to take into account the involved stakeholders and value chain. Also, an indicative investment- and exploitation plan as well as an indicative costing plan (traveller fees and or public authority funding) for the pilot sites is expected. Based on the market analysis a first outlook should be made on the cost/benefit ratio in the transition towards full scale deployment. The plan should also list those topics that are very relevant for the commercialisation, but for which no quantitative data are available yet.

Furthermore, a market analysis is meant to give a global qualitative insight in the market potential of the PCP services in both the pilot regions as well as on a European scale. The market analysis should at least indicate possible first-to-target deployment areas (geographical/services) and possible deployment barriers (e.g. political, technical, organisational, financial, ethical). Feasibility regarding principles for licensing, business models, pricing, and distribution should also be included.

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Describe the innovation aspects of the proposed solution in respect to the state-of-the-art. This part should focus on the added value of the BroadWay solution compared to the current state-of-the-art on the market services (not compared to solutions still in pilot phases) with respect to:

- Comfort for users and impact on “willingness to pay”
- Cost-benefit ratio for public safety operators
- Required public funding

Contractors must consider the future certification of their solutions or contribution to standardisation. The feasibility of the business plan to commercially exploit the R&D results (Technical Offer) will be assessed as part of the Award Criteria. Furthermore, the commercialisation plan will be part of the End-of-Phase Reports of all three Phases, as well as of the offers for the Phases 2 and 3.

In addition to the commercialisation activities performed by the Contractors, the GOP Members will promote the R&D Results. The GOP Members will also actively disseminate the Contractors’ Results at the end of each Phase via relevant public and industry related events. It is the goal of the Group of Procurers to help develop a working market for such type of solutions in order to ensure their usability and sustainability and to help to overcome possible, commonly defined deployment barriers.

One larger final event organised by the Lead Procurer is foreseen. During the event all end solutions will be presented and potential follow-up initiatives will be discussed at that time with the extended network of partners.

3.7 Declaration of pre-existing rights (Background)

The ownership of pre-existing rights will remain unchanged by the PCP. In order to be able to distinguish clearly between results and pre-existing rights (and to establish which pre-existing rights are held by whom): Contractors shall be required to provide the Lead Procurer with a complete written list of its Intellectual Property Rights and Trade Secrets relating to the Background (see clause 7.2.2 of the Framework Agreement).

SECTION 4: TENDER COMPONENTS AND COMPLIANCE

4.1 List of PCP documents

This PCP Competition consists of the following documents:

- TD1 Request for Tender (RFT) including Appendix and Annex (this document)
- TD2 PCP Challenge
- TD3 Framework Agreement (template)
- TD4 Specific Contract Phase 1 (template)

As per Schedule A clause 1 of the Framework Agreement (TD3), the Framework Agreement consists of the following documents, and in the case of discrepancy between the Framework Agreement and/or a Specific Contract, on the one hand, and the Tender Documents on the other hand, the documents shall prevail in the following order:

- i. TD1- RFT and TD2- PCP Challenge
- ii. Framework Agreement and other tender documents
- iii. Specific Contract
- iv. Contractor's Tender

4.2 Tender submission requirements

Tenderers are required:

- To submit all documentation which the RFT requires to be submitted with their Tender;
- To follow the format of the RFT and respond to each element in the order as set out in the RFT;
- To conform to and comply with all instructions and requirements set out in the RFT;
- To submit the ESPD;
- Not to alter or edit the RFT in any way.

Tenders shall be received **no later than (3rd June 2019 at 12.00 NOON CEST).**

All Tenderers must use the BroadWay Tender Documents, which can be accessed along with all of the other Tender Documents by following the instructions in the Contract Notice on [TED](#) and www.publicprocurement.be. The Tender Documents are published on the BroadWay website – www.broadway-info.eu.

All Tenders must be submitted as follows;

- Tenders have **to be submitted electronically** via the e-platform of the Belgian Federal Government e-Tendering www.publicprocurement.be Tenders **shall contain an Administrative, a Technical and a Financial Section**, see Annexes A through D; and all attachments, mandatory or not, will be **signed by the Tenderer**, electronically.

The Belgian e-Tendering website provides information for the electronic handling of the public tendering system, starting from the publication of the Contract Notice up to the awarding of Contracts. The full details can be found on the web portal: <https://www.publicprocurement.be/fr/publicprocurementbe-english-0>

Tenderers are strongly advised to read the guidance in Appendix 4 Electronic Submission of the BroadWay Tender before submitting a Tender.

Each Tenderer carries the sole responsibility for the accurate, timely and complete uploading of its unique and only Tender. Tenders which are late and/or not compliant with the above-mentioned conditions will be regarded as non-compliant and will be excluded.

Only one Tender from a Tenderer as **Lead Tenderer** will be accepted. Please do not submit the Tender on paper or submit more than one electronic Tender. The submission of a backup copy in any form is not allowed.

Please do not send completed Tenders by post or any other means other than as directed.

If the Tender exceeds a page limit then all words and/or pages in excess of the specified limit may not be considered further. Tenderers will use a minimum font size of 10. For page limits see Appendix 8 Table of page limits.

More specific information about the requirements for the Phase 2 and 3 Tenders will be provided in the Phase 2 and 3 Call-offs.

4.3 Compliant Tenders

If a Tenderer fails to comply in any respect with the requirements of the RFT, the Lead Procurer reserves the right to reject the Tenderer's Tender as non-compliant or, without prejudice to this right and subject to its obligations at law, to take any other action it considers appropriate including but not limited to:

- Seeking written clarification from the Tenderer;
- Seeking further information from the Tenderer; or
- Waiving a requirement, which in the Lead Procurer's view, is non-material or procedural.

Tenderers are required:

- a) To complete and submit with their Tender the **European Single Procurement Document (ESPD)**⁸ attached at **Annex A - ESPD**. The ESPD is also available on <https://ec.europa.eu/tools/espd>, which may be completed and downloaded by Tenderers. Alternatively, Tenderers may submit an ESPD which has already been used in a previous procurement procedure PROVIDED THAT they confirm that:
 - (i) The information contained in it continues to be correct; and
 - (ii) That they satisfy the Selection and Compliance Criteria for this completion as set out in sections 5.3 and 5.4 below.

Important notice: As BroadWay is committed to implementing the recommendations in C(2018) 3051, BroadWay has tailored its own ESPD to suit the needs of this PCP. Therefore, please pay due regard to the additional Parts I-IX of the ESPD (located in Annex A), some/all of which will require completion and submission.

- b) To submit all documentation which the RFT requires to be submitted with their Tender;
- c) To follow the format of this RFT and respond to each element in the order as set out in the RFT.
- d) To confirm to and comply with all instructions and requirements set out in the RFT.

Not to alter or edit the RFT in any way.

4.4 Administrative Section of the Tender

In order to be eligible, Tenderers shall submit the following documents and declarations as listed in the indicated order below:

Annex A - ESPD

Annex B - Technical Offer

Annex C - Financial Offer and Cost Breakdown

Annex D - Financial Offer & Cost Breakdown Phase 1

⁸ As recommended in C(2018) 3051 "Guidance on Innovation Procurement" 15.5.2018, para 3.1, BroadWay PCP adopts the use of the ESPD in its competition for Tenderers - <https://ec.europa.eu/docsroom/documents/29261>

The Tenderer is by its Tender bound by a validity period of 120 calendar days, starting from ultimate deadline for submission, i.e. 3rd October 2019.

The Lead Procurer may request clarification or additional evidence, or amplification of details provided. In accordance with the principle of equal treatment, no alterations to Tenders are to be sought or accepted through requests for clarifications. In case the provided clarification is found not compliant with what was requested, the Tender will be excluded from further evaluation.

The information provided in the Administrative Section of the Tender will be used to evaluate the Tenders.

4.5 Technical Section of the Tender

Tenders must include a detailed **Technical Offer** for Phase 1, containing:

- A **technical plan** that outlines the Tenderer's idea for addressing all the eleven (11) Objectives given in PCP Challenge (TD2), relating both to functionality and performance; and the technical details of how this would be implemented. This **technical plan** must include an explanation of the method, a work plan including time schedule, deliverables and milestones as detailed in the RFT (TD1) and the PCP Challenge (TD2). The Tender must specify the plans and Objectives of the subsequent Phases 2 and 3 and beyond.
- A **draft business plan** that explains the proposed approach to commercially exploit the results of the PCP and to bring a viable product or service onto the market (**commercial feasibility**).
- A plan evaluating the **solution and sustainability of testing outside** of this PCP.
- A **risk assessment and risk mitigation strategy**.
- A reply to the question "Does this Tender involve ethical issues? (YES/NO) and if YES, an ethics self-assessment, with explanations how the ethical issues will be addressed".
- A reply to the question "Does this Tender involve activities or results that may raise security issues and/or EU-classified information as background or results?"
- A list of the **pre-existing rights (Background)** relevant to the Tenderer's proposed solution, in order to allow IPR dependencies to be assessed within 30 days following the awarding of the Framework Agreement. Please clause 7 of the Framework Agreement.

The Technical Section of the Tender is outlined in **Annex B**. Tenders failing to meet these requirements will be excluded.

The information provided in the Technical Section of the Tender will be used to evaluate the Tenders.

4.6 Financial Section of the Tender

The Tender must include a detailed **Financial Offer** specifying:

- **Binding unit prices** for all items needed for carrying out Phase 1 and for items that are expected to be needed for Phases 2 and 3 (given in euros, excluding VAT but including any other taxes and duties). The Tenderers must quote binding unit prices/hourly rates for each category of R&D resources (e.g. junior, senior researchers, developers, etc.) and specify other costs. The Tenderers must also quote binding unit prices for their own resources for Phases 2 and 3 that are not expected to be used in Phase 1 and quote estimated unit costs for resources of Third Parties to be used in Phases 2 and 3;

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- A fixed **total price** for Phase 1 and an estimated total price for Phases 2 and 3, broken down to show unit prices and the number of each unit needed to carry out Phase 1 (given in euros, excluding VAT but including any other taxes and duties).

In addition, the **Financial Section** must include:

- A **price breakdown** that shows the price for R&D services (to demonstrate compliance with the definition of R&D in compliance criterion A, Compliance with the definition of R&D services);
- A **price breakdown** that shows the location or country in which the different categories of activities are to be carried out (*e.g. x hours of senior researchers in country L at y euro/hour; hours of junior developers in country M at b Euro/hour*) (to demonstrate compliance with the requirement relating to place of performance in compliance criterion C, Compliance with requirements relating to the place of performance of the contract);
- the **financial compensation** valuing the benefits and risks of the allocation of ownership of the IPRs to the supplier (i.e. IPRs generated by the supplier during the PCP), by giving an absolute value for the price reduction between the price offered in the tender compared to the exclusive development price (i.e. the price that would have been quoted were IPR ownership to be transferred to the procurers)- In order to ensure compliance with the EU R&D&I state aid framework

The unit prices quoted for each category of items (e.g. hourly rates for junior and senior researchers, developers and testers) remain binding for all Phases (i.e. for the duration of the framework agreement).

The information provided in the Financial Section of the Tender will be used to evaluate the Tenders on the basis of the Price Award Criteria.

More detailed information for the Phase 2 and 3 Offers will be provided in the Call-offs. The Price for Phase 2 and 3 Offers must be based on the binding unit prices in the Tender and the Price conditions set out in the Framework Agreement. Where new units/unit prices (e.g. for new tasks or equipment) are subsequently added to the Phase 2 or 3 Offers, they will become binding for the remaining Phases.

Similar Price breakdowns will be requested for the Call-offs for Phase 2 and 3.

The financial compensation for IPRs 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 IPRs and bringing the products onto the market).

To ensure that a fair market price is offered, Tenderers must state two prices:

- 1) The hypothetical price that they would have quoted if all Intellectual Property Rights, including the ownership of Results under the PCP, would have been fully retained by the Buyers Group and Tenderers would not have the possibility to exploit the Results (the **“Virtual Price”**); and
- 2) The price that takes into account the fact that they keep ownership of the Intellectual Property Rights attached to the Results under PCP, in accordance with the provisions of the contracts, and that they can exploit these Results (the **“Actual Price”**).

The **Actual Price** will be evaluated according to the formula set out in Appendix 6.

The unit prices quoted for each category of items (e.g. hourly rates for junior and senior researchers, developers and testers) remain binding for all Phases (i.e. for the duration of the framework agreement).

Since all Contractors will be paid by the Lead Procurer and as ASTRID is the Lead Procurer in this PCP the Belgian VAT regime will apply.

In the Offers for Phases 2 and 3, the Tenderers must also provide a breakdown of price, as in Phase 1.

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The BroadWay PCP Financial Section of the Tender has to be submitted by means of **Annexes C and D**. The information provided in this section of the Tender will be used to evaluate the Tenders on the basis of the Price Award Criteria and the Compliance Criteria.

The Lead Procurer may reject a Tender if it has determined that the submitted price, in combination with other constituent elements of the submission, is abnormally low in relation to the subject matter of the procurement and raises concerns with the Lead Procurer as regards the ability of the Tenderer to perform the Contracts. If the Lead Procurer considers that a Tender may be abnormally low, he will request the Lead Tenderer to provide, in writing, details of the constituent elements of the Tender, in particular with respect to:

- The economy of the services provided;
- The technical solutions chosen;
- Potential exceptionally favourable conditions available to the Tenderer for the execution of the work;
- The compliance with the provisions relating to employment protection and working conditions in force at the place where the work is performed.

SECTION 5: ASSESSMENT OF TENDERS

5.1 Assessment Overview

This PCP to award the Contracts is based on the following four categories:

1. **Section 5.2 - The Exclusion Grounds:** evaluate the individual situation of a Tenderer;
2. **Section 5.3 - The Selection Criteria:** determine whether a Tenderer has the financial, technical and professional capacity necessary to carry out and perform the work;
3. **Section 5.4 - The Compliance Criteria:** evaluate if the submitted Tender is compliant with the principles of PCP, public financing, place of performance, research integrity and security;
4. **Section 5.5 - The Award Criteria:** awards contracts to the best ranked Tenders.

Only those Tenderers who have:

- a) Submitted compliant Tenders pursuant to section 4.3 above, and
- b) Declared by way of **Part III: Exclusion Grounds** in the **ESPD** in Annex A that either:
 - (i) No mandatory grounds for exclusion of the Tenderer apply to them, or
 - (ii) In circumstances where any mandatory Exclusion Grounds apply to the Tenderer, that it can provide evidence to the effect that measures taken by it are sufficient to demonstrate its reliability despite the existence of any such relevant exclusion ground, and
- c) Declared by way of **Part IV of the ESPD** that they satisfy the **Selection Criteria** for this PCP Competition as set out in section 5.3, and provided supporting evidence,
- d) Declared by way of a **Part V of the ESPD** that they satisfy the **Compliance Criteria** for this PCP Competition as set out in section 5.4,

will be evaluated in accordance with the Award Criteria at section 5.6.

- Tenderers should note that the where a Tenderer/Lead Tenderer **is relying** on the capacity of other entities (for example, Subcontractors) for the purposes of fulfilling any of the Selection Criteria in section 5.3, it must ensure that each such entity:
 - (i) Completes and submits a separate ESPD in respect of each such entity; and
 - (ii) As requested by the Lead Procurer, submit proof that each such entity will place the necessary resources at the disposal of the Tenderer.
- Where a Tenderer/Lead Tenderer intends to Subcontract any share of a Specific Contract to a Subcontractor, but is **not relying** on the capacity of such Subcontractor for the purposes of fulfilling any of the Selection Criteria in section 5.3 below, it must ensure that each Subcontractor submits a separate ESPD in respect of such Subcontractor completing those sections of the ESPD which are specified in section 2.D of the ESPD for this Competition.

The Lead Procurer reserves the right to ask Tenderers at any moment during the Competition to submit any or all of the following for the purposes of verification of the status of the Tenderer (including the Lead Contractor and any Subcontractor):

- (i) Evidence to the effect that measures taken by the entity concerned are sufficient to demonstrate its reliability despite the existence of a relevant Exclusion Ground, and
- (ii) In the case of the Lead Contractor and any Subcontractor on whose capacity the Lead Contractor **relies**, all or any of the supporting documents specified at sections 5.2 - Exclusion Grounds (Part 3 of ESPD: Exclusion Grounds) and 5.3 – Selection Criteria (Part IV ESPD: Selection Criteria).

If a Tenderer does not, upon request by the Lead Procurer, provide evidence which is considered by the Lead Procurer as sufficient to demonstrate:

- (i) its fulfilment of the Selection Criteria (or any one of them) in accordance with the RFT and
- (ii) the absence of Exclusion Grounds, or its reliability despite the existence of a relevant Exclusion Ground, it shall be **excluded** from further participation in this Competition.

If a Tenderer does not, upon request by the Lead Procurer, provide evidence which is considered by the Lead Procurer as sufficient to demonstrate:

- (i) the fulfilment by any Subcontractor on whose capacity the Lead Contractor relies for the Selection Criteria (or any of them) in accordance with the RFT and
- (ii) the absence of Exclusion Grounds in respect of any Subcontractor, or the reliability of any Subcontractor despite the existence of a relevant Exclusion Ground, it shall be **excluded** from further participation in this Competition unless it replaces the Subcontractor with one which meets all relevant requirements of the RFT.

5.2 Exclusion Grounds

The purpose of the Exclusion Grounds is to determine the situation of the Tenderers and Subcontractors.

A Tenderer will be excluded from further participation in the BroadWay PCP, if it or any Subcontractor on whose resources it relies upon in this Competition fails to satisfy the Exclusion Grounds set out in Part III: Exclusion Grounds of the ESPD and listed below for convenience:

Part A – Bankruptcy & professional misconduct

- Bankruptcy, insolvency, compulsory winding up, receivership, composition with creditors, or subject to relevant proceedings.
- A conviction (or convictions) for a criminal offence related to business or professional conduct.
- Legal or administrative finding of a commission of an act of grave misconduct in the course of business.
- Failure to fulfil obligations related to payment of social security contributions.
- Failure to fulfil obligations related to the payment of taxes.
- Failure to provide information required or providing inaccurate / misleading information when participating in procurement exercise.
- Failure to obtain and maintain relevant licensing or membership of an appropriate trading or professional organisation where required by law.
- Shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity or a prior concession contract which led to early termination of that prior contract, condemned for damages or other comparable sanctions.

Part B – Criminal offences

- Criminal offences defined in Article 2 of Council Framework Decision 2008/841/JHA of 24 October 2008 on the fight against organised crime (OJ L 300, 11.11.2008, p. 42).
- Corruption as defined in Article 3 of the Convention on the fight against corruption involving officials of the European Communities or officials of Member States of the European Union, OJ C 195, 25.6.1997, p. 1, and in Article 2(1) of Council Framework Decision 2003/568/JHA of 22 July 2003 on combating corruption in the private sector (OJ L 192, 31.7.2003, p. 54). This exclusion ground also includes corruption as defined in the national law of the contracting authority (contracting entity) or the economic operator.
- Fraud within the meaning of Article 1 of the Convention on the protection of the European Communities' financial interests (OJ C 316, 27.11.1995, p. 48).
- Terrorist offences as defined in Articles 1 and 3 of Council Framework Decision of 13 June 2002 on combating terrorism (OJ L 164, 22.6.2002, p. 3). This exclusion ground also includes inciting or aiding or abetting or attempting to commit an offence, as referred to in Article 4 of that Framework Decision.

- Money laundering or terrorist financing as defined in Article 1 of Directive 2005/60/EC of the European Parliament and of the Council of 26 October 2005 on the prevention of the use of the financial system for the purpose of money laundering and terrorist financing (OJ L 309, 25.11.2005, p. 15).
- Child labour and other forms of trafficking defined in Article 2 of Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011 on preventing and combating trafficking in human beings and protecting its victims and replacing Council Framework Decision 2002/629/JHA (OJ L 101, 15.4.2011, p. 1).
- Is guilty of serious misrepresentation in supplying the information required under this section or has not supplied such information.

Part C – Conflict of Interest

- Conflict of Interest: A conflict of interest is any situation where the impartial and objective implementation of the evaluation of Tenders and/or implementation of the contract is compromised for reasons relating to personal and professional conflicts.
- Personal conflicts are any situation where the impartial and objective evaluation of tenders and/or implementation of the contract is compromised for reasons relating to economic interests, political or national affinity, family, personal life (e.g. family of emotional ties) or any other shared interest.
- Professional conflicts are any situation in which the Tenderer's (previous or ongoing) professional activities affect the impartial and objective evaluation of tenders and/or implementation of the contract.
- If an actual or potential conflict of interest arises at a later stage (i.e. during the implementation of the Contracts), the Tenderer must contact the Lead Procurer, who is required to notify the EU and to take steps to rectify the situation. The EU may verify the measures taken and require additional information to be provided and/or further measures to be taken.

Tenderers shall - for each of the PCP Phases - explicitly confirm that they are not subject to any of the Exclusion Grounds listed above and shall sign Part III: Exclusion grounds of ESPD.

5.3 Selection Criteria

The purpose of the Selection Criteria is to determine whether a Tenderer has the financial, economic, technical and professional capacity necessary to carry out and perform the work.

Tenderers will **either pass OR fail** each of the Selection Criteria in this section. A Tenderer who fails a selection criterion will be excluded from participating in this PCP. "Fail" means that the evidence does not provide sufficient indication of the Tenderer's expertise, ability and/or equipment to meet Project's Objectives.

Tenderers must (i) declare by way of **Part IV: Selection Criteria of the ESPD** that they satisfy the financial and economic standing requirements set out below and (ii) provide the supporting documentation specified below to the Lead Procurer in the Tender.

However, where the Tenderer is unable, for a valid reason, to provide the specified documentation, the Tenderer must inform the Lead Procurer of the valid reason as to why the documentation cannot be supplied and, if the Lead Procurer considers the reason given to be valid, provide such other suitable alternative documentation to prove, to the satisfaction of the Lead Procurer, their economic and financial capacity.

Each Tenderer shall - **for each of the PCP Phases** - describe, present and confirm the required references and competences to the Lead Procurer. Should there be any doubt as to any of these criteria, the Tenderer may be requested to provide additional information.

The Selection Criteria are as follows:

1. Demonstrate the ability to perform R&D Services up to original development of the first products or services and to commercially exploit the results of the PCP, including intangible results in particular IPRs.

To do so Tenderers are asked to provide in the Tender the following evidence:

- **A description of relevant reference and/or previous projects** which reflect the competences and capacity of the Tenderer in the different Phases and domains of the BroadWay Project.
- Provide **a list of current/previous services performed/developed**. These references can be provided based on previous projects of the Tenderer or one or several of the Consortium members and/or Subcontractors who will be working on the Project.
- These references should be recent and should have been finalised during the last five years. Examples of areas in which references can be provided: **mission critical mobile networks, services, security, applications and devices**.

If you cannot provide at least one reference, please explain briefly why.

2. Demonstrate the Tenderer's expertise and working experience required to undertake an innovative R&D project that entails mission critical mobile networks, service, security, applications and devices:

- List the names and include a **brief description of the profile of the key personnel** (10 lines per person) including competences and skills necessary to complete the Project.

Identify who the Subcontractor(s) is/are and what they will deliver. Include at least the name, position in the organisation, role in the Project and main skills and competences to develop the R&D Services.

3. Describe the involvement of mobile and/or satellite network operators (MNO)

Every Tenderer shall include at least one (1) Mobile and/or Satellite Network Operator (operating national and/or international mobile telephony networks including radio access) in the overall Tender, in order to include appropriate consideration of different organisational schemes and operating models. Please see in PCP Challenge (TD2) – Section 2.2.1.1 PEAR Pan-European Architecture Sub-objectives. Include clear details about the operator in the ESPD where appropriate, please refer to section 5.1 of the RFT.

- Provide a **company profile** in which the competencies and capacities as well as regulator approved licences and network codes are included.

4. Describe the involvement of an independent and impartial Subcontracting for BroadWay-specific Objectives.

Every Tenderer shall arrange for at least one Subcontractor to carry out tasks to fulfil the following Objectives in all Phases in an impartial and independent manner.

- (i) Testing and Validation including Security assurance
- (ii) Practitioner evaluation support

Subcontractors shall ensure that the required EAL4+ levels for security components are achievable as per Sub-objectives of 2.2.3. Objective "Pan-European Security" in TD2. Please include clear details about the Subcontractor in the ESPD where appropriate, please refer to sections 2.8 and 5.1 of the RFT. Tenderer's shall also submit, as part of the Tender, the Declaration appended to **Part IX - Declaration of Impartiality and Independence of the ESPD**.

Describe the **competencies and capacities** of the Subcontractor with respect to the PCP Phases.

5. Provide evidence on the economic or financial capacity of the Tenderer, proving that, in addition to the payments that it could receive in Phases 1 to 3, during those Phases it shall have resources in-kind available for, at least, 845,000.000 EUR to ensure being in the position to make the investments necessary for the Project.

Such evidence can be provided by means of:

- a statement/any other document to be produced by one Tenderer or various Joint Tender or Consortia members, proving the accumulative availability of the abovementioned amount.

6. Confirm that the Tenderer has a Business Continuity / Disaster Recovery / Risk Management plan that ensures that the described services are delivered in the event of a disruption affecting its business and ensures continuity of supply / service from its critical suppliers.

5.4 Compliance Criteria

The Lead Procurer requires that the Tenders meet all the Compliance Criteria as listed below. The purpose of the Compliance Criteria is to determine whether the Tender is compliant with the principles of PCP, public financing, place of performance, research integrity and security. These Compliance Criteria will be evaluated on a pass/fail basis, based on the responses to the questions in **Part V: Compliance Criteria of the ESPD at Annex A.**

The Offers for each Phase will be evaluated against the Compliance criteria A to E.

A) Compliance with the definition of R&D Services

Tenders that go beyond the provision of R&D services will be excluded.

This procurement is carried out under the explicit exemption for R&D services under Article 14 of the EU Public Procurement Directive 2014/24/EC. Tenderers are asked to observe that the object of the procurement thus is restricted to cover research and development services (basic research, applied research, and experimental development), and not products or other supplies, or commercial development activities. Tenderers are therefore asked to observe that their price offer only includes items that are inseparable from and indispensable to deliver the R&D Service that is purchased through the PCP Framework Agreement and Specific Contracts.

Please refer to Annex C: Financial offer and Cost Breakdown for more information on items that can be included in the price offer in addition to the labour price for executing the R&D activities needed to address the PCP Challenge (e.g. the price of equipment needed to develop the prototypes or test products, the price for installing such prototype or test equipment for the duration of the test phase, the price of travel and accommodation to test sites). Please note that contracts providing more than only services are only still considered a public service contract if the value of the services (in this case the labour price for executing the R&D activities needed to address the PCP Challenge) exceeds that of the products covered by the Contract (e.g. equipment needed to perform the R&D Service as explained above). For further examples of R&D services, please see the Frascati Manual, Guidelines for collecting and reporting data on research and experimental development (OECD, latest edition 2015).⁹

- It is an absolute requirement that the Services offered by the Tenderer are within the scope of the above definition of R&D services.
- The Tender shall contain clear information about the Tenderer's intended allocation of monies paid by the Lead Procurer, in order to allow control of this requirement being fulfilled (that more than 50% of the contract value is attributable directly and exclusively to legitimate services).

The Tenderer accepts to provide additional such information upon request from the Lead Procurer, whether during the procurement period or during the Contractual period. This requirement and these obligations on the part of the Tenderer/Contractor apply also, where applicable, for Phase 2 and Phase 3.

B) Compatibility with other Public Financing

Tenders that receive public financing from other sources will be excluded if this leads to double public financing or an accumulation of different types of public financing that is not permitted by EU legislation, including EU state aid rules.

Tenderers must for each of the Phases sign **Part V: Compliance Criteria** of the ESPD at Annex A.

⁹ <http://www.oecd.org/innovation/inno/frascati-manual.htm>

C) Compliance with the requirements regarding the Place of Performance of the Contract

BroadWay-specific place of performance requirements

Tenders will be excluded if they do not meet the following requirements relating to the place of performance of the contract:

- At least 75% of the total value of activities covered by the Framework Agreement must be performed in the EU Member States or H2020 Associated Countries. The principal R&D personnel working on the PCP must be located in the EU Member States or H2020 Associated Countries.
- At least 75% of the total value of activities covered by each Specific Contract for each PCP Phase must be performed in the EU Member States or in H2020 associated countries. The key R&D personnel working on each Specific Contract must be located in EU Member States or H2020 Associated Countries.
- 100% of the total value of activities related to **development of security components** covered by the Framework Agreement for each PCP Phase must be performed in the EU Member States or in H2020 Associated Countries. The key R&D personnel working on each Specific Contract must be located in the EU Member States.
- 100% of the total value of activities related to **development of security components** covered by each Specific Contract for each PCP Phase must be performed in the EU Member States or in H2020 Associated Countries. The key R&D personnel working on each Specific Contract must be located in the EU Member States.

There are corresponding clauses in the Framework Agreement (TD3).

The percentage is calculated as the part of the total monetary value of the contract that is allocated to activities performed in the EU Member States or in other countries associated to Horizon 2020.

All activities covered by the Contracts are included in the calculation, i.e. all R&D and operational activities that are needed to perform the R&D Services (e.g. research, development, testing and certifying solutions). This includes all activities performed under the Contracts by Contractors and, if applicable, their Subcontractors.

The key R&D personnel are the main researchers, developers and testers responsible for leading the R&D activities covered by the Contracts.

The countries associated to Horizon 2020 are those listed as Associated Countries in the Participant Portal Online Manual 15.

The following evidence is required:

- the financial part of the Tender must provide binding unit prices for all foreseeable items for the duration of the whole Framework Agreement and give a breakdown of the price for the current phase in terms of units and unit prices (hours and unit price per hour), for every type of item in the contract (e.g. junior and senior researchers),
- a list of staff working on the Specific Contract (including for Subcontractors), indicating clearly their role in performing the contract (i.e. whether they are principal R&D staff or not) and the location (country) where they will carry out their tasks under the contract,
- a confirmation or declaration of honour that, where certain activities forming part of the contract are subcontracted, Subcontractors will be required to comply with the place of performance obligation to ensure that the minimum percentage of the total amount of activities that has to be performed in the EU Member States or in countries participating in Horizon 2020 is respected.

Tenderers shall - for each of the PCP Phases - provide a financial Offer and present a list of staff working as well as a Consortia and/or a Subcontracting Statement, in the ESPD, as appropriate.

D) Compliance with Ethics Requirements

Tenders will be excluded if they do not comply with the following rules:

- ethical principles (including the highest standards of research integrity, notably as set out in the European Code of Conduct for Research Integrity¹⁰, and, in particular, avoiding fabrication, falsification, plagiarism and other research misconduct)
- applicable international, EU and national law, including those on checks, reviews and audits by the European Commission and the European Anti-Fraud Office (OLAF) and data protection.
- Tenderers must not include plans to carry out activities that are prohibited in all Member States, even if the activities are allowed in a country outside the EU.

If the Tender involves activities that raise ethical issues, the Tenderer must submit an ethics self-assessment (see guidance for EU grant beneficiaries):

There shall be an ongoing obligation throughout the Phases to provide updated information.

E) Compliance with Security Requirements

BroadWay-specific security requirements

In order to protect the essential interest of the security in the European Union and/or its Member States, the BroadWay PCP shall be **restricted to legal entities established or deemed to be established in Member States and ultimately controlled by Member States and/or nationals (entities or natural persons) of Member States**. Legal entities established in H2020 Associated Countries and legal entities established in the EU but controlled from third countries are **not eligible** for participation in the BroadWay PCP for security reasons.

A "national" means any legal entity with registered offices in a Member States as well as any natural person with a nationality of a Member State.

Control has the meaning provided in articles 5 to 9 of the Belgian Companies Code. It means the power, factual or by right, to exercise a decisive influence on the designation of the majority of the directors of an entity, or on its management. Notably, there is legal control when it results from the possession of the majority of the voting rights linked to the shares of the controlled company.

Please refer to Section 5.4 C regarding Place of Performance requirement for development of security components.

Other security requirements

Tenderers must also comply with EU, national and international law on dual-use goods or dangerous materials and substances.

Tenders themselves and the Results of the executed work must not contain any classified information.

If the output of activities or Results proposed in the Tender raise security issues or uses EU-classified information, the Tenderer must show that these issues are being handled correctly. In such a case, Tenderers are required to ensure and to provide evidence of the adequate clearance of all relevant facilities. They must examine any issues (such as those relating to access to classified information or export or transfer control) with the national authorities before submitting their offer. Tenders must include a draft security classification guide (SCG), indicating the expected levels of security classification.

¹⁰ https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics_code-of-conduct_en.pdf

The following evidence is required:

- Confirmation and proof that the legal entity(ies) of the Tenderer (i.e. all entities submitting a Joint Tender or all members of the tendering Consortium) has/have their registered office in a Member State.
- Confirmation that the legal entity(ies) of the Tenderer (i.e. all entities submitting a Joint Tender or all members of the tendering Consortium) are not ultimately controlled from third countries. Proof of the ultimate controlling entity or natural person will be provided by the Tenderer at first demand of the Lead Procurer.
- If necessary, for the Tender procedure or for performing the Contracts, Tenderers/Contractors will be requested to ensure appropriate security clearance for third parties (e.g. for external experts needed to evaluate the proposal).

Tenders will be excluded if they do not comply with the above.

Please note that these requirements will also remain applicable during the performance and after the termination of the Contracts.

In case the Contractor does not comply with these requirements anymore during or after the performance of the Framework Agreement, it shall notify this to the Lead Procurer and any other Contractor (i.e. the other entities having submitted a Joint Tender or the other members of the tendering Consortium under the concerned Framework Agreement) and, whether or not such notification has happened, the Framework Agreement and any relevant Specific Contract shall terminate in its respect as provided for in Clause 27.2, with immediate effect and without further notice. In case said Contractor has derived assets or rights as a result of performing this Framework Agreement or any Specific Contract, and in particular all Intellectual Property Rights and Trade Secrets on the Results, then the ownership or benefit thereof shall be deemed transferred to all the other Contractors, if any, in equal parts or in any other agreed proportion, with immediate effect and without further notice and without any other consideration than the benefits already derived by said Contractor from the activities conducted under this Framework Agreement and any Specific Contract. In case there is no other Contractor (left), then the ownership or benefit thereof shall be transferred to an entity designated by the Lead Procurer, within fifteen (15) calendar days as from such designation, without further notice and for a consideration either negotiated between such Contractor and the assignee or, barring agreement between such Contractor and the assignee within thirty (30) calendar days from designation, at the fair market value thereof, as determined by the Lead Procurer in its full discretion.

Call-offs for Phases 2 and 3 may request that this security information be updated in the offers submitted for that phase.

Before starting the particular task that raises security issues, Contractors must provide a copy of any export or transfer licenses required under EU, national or international law.

The Framework Agreement and/or the Specific Contract contains a provision on security.

5.5 Award Criteria

A Framework Agreement and Specific Contracts will be awarded on the basis of the most economically advantageous Tender(s) as identified in accordance with the Award Criteria below.

In PCP Challenge (TD2), the BroadWay **Objectives** are described in detail. Each **Objective** consists of several **Sub-objectives**, whose purpose is to encourage Tenderers to provide “sufficient information to describe how each Sub-objective will be achieved” and/or “nice to have”.

- As regards “sufficient information to describe how each Sub-objective will be achieved, the Scoring Model for the Award Criteria in Appendix 5 will be applied.
- As regards “Nice to have”, they will not be formally assessed individually as Sub-objectives but shall have an impact in selecting a successful Tenderer from an unsuccessful Tenderer in a situation where two Tenderers receive the same scores for their Tenders.

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In the Technical Offer (in Annex B), Tenderers need to make clear how they intend to achieve the **Sub-objectives**, providing sufficient information on how they will be achieved and/or for the optional "nice to have".

As regards the Award Criteria, **Objectives** are evaluated in the category **Impact on Challenge** (see below). The final score of points for each **Objective** will be discussed and decided by the Technical Validation Committee (TVC) and the final value will be determined according to the fulfilment of the **Sub-objectives**.

These **Objectives** are expected to be a part of the end-solution, by the time the BroadWay Project finishes. The Lead Procurer does not expect Tenderers to already have all of these features in place when submitting their Tender; this work is part of the R&D Process.

In the Technical Offer, in **Impact on Challenge**, **eleven (11) Objectives** are defined. These include:

- 1) Pan-European Architecture,
- 2) Pan-European Availability,
- 3) Pan-European Security,
- 4) Pan-European SpiceNet Governance,
- 5) Pan-European Operational Mobility,
- 6) Standardised solutions,
- 7) Application Eco-system,
- 8) Device Eco-system,
- 9) Innovation Eco-system,
- 10) Technical validation and Practitioner evaluation
- 11) Practitioner Evaluation and Acceptance

Please note:

- 1) If two of the Sub-objectives seeking "**sufficient information for achieving Sub-objective**" derived from the above Objectives, receives a score of 0, that shall lead to the **exclusion of the Tenderer**.
- 2) In the Technical Offer under the category of **Impact on Challenge**, if any one of the Objectives receives a score of 0, this shall lead to **exclusion of the Tenderer**.
- 3) If Sub-objective PESAr13 Software Quality Assurance in Pan-European Security and/or PESAr15 Harmonised Security Assurance receives a score of 0, that shall **lead to exclusion of the Tenderer** (see section 2.2.3.1 Broadway PCP Challenge (TD2)).
- 4) If the price offered for a Phase is above the Ceiling Price for that Phase, the Tenderer shall **be excluded**.

The evaluation will be assessed based on the following Award Criteria.

A minimum threshold of 60 % of the total amount of points as well as or certain criteria must be reached (see Section 7.5 below).

The model presented in Appendix 5 "Scoring Model for the Award Criteria" will be used by the TVC to assess and score the extent to which a Tender meets the Award Criteria.

Award Criteria	Maximum points	Total Weighting
Award Criteria Phase 1: Solution Design and framework agreement		

1. Project Management		10%
Feasibility of the project plan and schedule	5	
Methodology of the project, including risk management and quality assurance	5	
2. Impact on Challenge		55%
Objective 1 - Pan-European Architecture 1.1: Describe how your solution will achieve this Objective. 1.2: Describe how your solution will be innovative in this domain.	5	
Objective 2- Pan-European Availability 2.1: Describe how your solution will achieve this Objective. 2.2: Describe how your solution will be innovative in this domain.	5	
Objective 3- Pan-European Security 3.1: Describe how your solution will achieve this Objective. 3.2: Describe how your solution will be innovative in this domain.	5	
Objective 4- Pan-European SpiceNet Governance 4.1: Describe how your solution will achieve this Objective. 4.2: Describe how your solution will be innovative in this domain.	5	
Objective 5- Pan-European Operational Mobility 5.1: Describe how your solution will achieve this Objective. 5.2: Describe how your solution will be innovative in this domain.	5	
Objective 6- Standardised Solutions 6.1: Describe how your solution will achieve this Objective. 6.2: Describe how your solution will be innovative in this domain.	5	
Objective 7- Application Eco-System 7.1: Describe how your solution will achieve this Objective. 7.2: Describe how your solution will be innovative in this domain.	5	
Objective 8- Device Eco-System 8.1: Describe how your solution will achieve this Objective. 8.2: Describe how your solution will be innovative in this domain.	5	
Objective 9- Innovation Eco-System 9.1: Describe how your solution will achieve this Objective.	5	

9.2: Describe how your solution will be innovative in this domain.		
Objective 10- Technical Validation 10.1: Describe how your solution will achieve this Objective. 10.2: Describe how your solution will be innovative in this domain.	5	
Objective 11 - Practitioner Evaluation and Acceptance 11.1: Describe how activities to support practitioner evaluation by the PEVT will support evaluation of your solution. 11.2: Describe how will practitioner evaluation support future evaluation for public safety solutions.	5	
3. Commercial Feasibility		5%
Completeness, sense of reality and feasibility of the commercialisation plan including the market analysis and risk management Sense of reality and feasibility of the principles for licensing, pricing, packaging, distribution	5	
4. Evaluation of the solution and sustainability of testing		10%
Describe your vision and plan on executing prototype and pilot testing taking into account the plug test style approach, which shall integrate your solution with other solution providers and test capabilities. Describe how your approach for testing shall be useable for testing of solutions that are developed outside of the BroadWay PCP.	5	
5. Price		20%
Binding contract price for carrying out the work in the present Phase	5	

Award Criteria	Maximum points	Total Weighting
Award Criteria Phase 2: Solution Prototype		
1. Project Management		10%
Feasibility of the Project plan and schedule	5	
Methodology of the Project, including risk management and quality assurance	5	
2. Impact on Challenge		45%
Objective 1 - Pan-European Architecture	5	

1.1: Show how your solution will achieve this Objective. 1.2: Show how your solution will be innovative in this domain.		
Objective 2- Pan-European Availability 2.1: Show how your solution will achieve this Objective. 2.2: Show how your solution will be innovative in this domain.	5	
Objective 3- Pan-European Security 3.1: Show how your solution will achieve this Objective. 3.2: Show how your solution will be innovative in this domain.	5	
Objective 4- Pan-European SpiceNet Governance 4.1: Show how your solution will achieve this Objective. 4.2: Show how your solution will be innovative in this domain.	5	
Objective 5- Pan-European Operational Mobility 5.1: Show how your solution will achieve this Objective. 5.2: Show how your solution will be innovative in this domain.	5	
Objective 6- Standardised Solutions 6.1: Show how your solution will achieve this Objective. 6.2: Show how your solution will be innovative in this domain.	5	
Objective 7- Application Eco-System 7.1: Show how your solution will achieve this Objective. 7.2: Show how your solution will be innovative in this domain.	5	
Objective 8- Device Eco-System 8.1: Show how your solution will achieve this Objective. 8.2: Show how your solution will be innovative in this domain.	5	
Objective 9- Innovation Eco-System 9.1: Show how your solution will achieve this Objective. 9.2: Show how your solution will be innovative in this domain.	5	
Objective 10- Technical Validation 10.1: Show how your solution will achieve this Objective. 10.2: Show how your solution will be innovative in this domain.	5	
Objective 11 - Practitioner Evaluation and Acceptance 11.1: Describe how activities to support practitioner evaluation by the PEVT will support evaluation of your solution.	5	

11.2: Describe how will practitioner evaluation support future evaluation for public safety solutions.		
3. Commercial Feasibility		10%
Completeness, sense of reality and feasibility of the commercialisation plan including the market analysis and risk management. Sense of reality and feasibility of the principles for licensing, pricing, packaging, distribution	5	
4. Evaluation of the solution and sustainability of testing		15%
Show your vision and plan on executing prototype and pilot testing (TRL7- operational environment) taking into account the plug test style approach, which shall integrate your solution with other solution providers and test capabilities. Show how your approach for testing shall be useable for testing of solutions that are developed outside of the BroadWay PCP.	5	
5. Price		20%
Binding contract price for carrying out the work in the present Phase	5	

Award Criteria	Maximum points	Total Weighting
Award Criteria Phase 3: Pilot		
1. Project Management		10%
Feasibility of the project plan and schedule	5	
Methodology of the project, including risk management and quality assurance	5	
2. Impact on Challenge		40%
Objective 1 - Pan-European Architecture 1.1: Demonstrate how your solution will achieve this Objective. 1.2: Demonstrate how your solution will be innovative in this domain.	5	
Objective 2- Pan-European Availability 2.1: Demonstrate how your solution will achieve this Objective. 2.2: Demonstrate how your solution will be innovative in this domain.	5	
Objective 3- Pan-European Security 3.1: Demonstrate how your solution will achieve this Objective. 3.2: Demonstrate how your solution will be innovative in this domain.	5	

Objective 4- Pan-European SpiceNet Governance 4.1: Demonstrate how your solution will achieve this Objective. 4.2: Demonstrate how your solution will be innovative in this domain.	5	
Objective 5- Pan-European Operational Mobility 5.1: Demonstrate how your solution will achieve this Objective. 5.2: Demonstrate how your solution will be innovative in this domain.	5	
Objective 6- Standardised Solutions 6.1: Demonstrate how your solution will achieve this Objective. 6.2: Demonstrate how your solution will be innovative in this domain.	5	
Objective 7- Application Eco-System 7.1: Demonstrate how your solution will achieve this Objective. 7.2: Demonstrate how your solution will be innovative in this domain.	5	
Objective 8- Device Eco-System 8.1: Demonstrate how your solution will achieve this Objective. 8.2: Demonstrate how your solution will be innovative in this domain.	5	
Objective 9- Innovation Eco-System 9.1: Demonstrate how your solution will achieve this Objective. 9.2: Demonstrate how your solution will be innovative in this domain.	5	
Objective 10- Technical Validation 10.1: S Demonstrate how your solution will achieve this Objective. 10.2: Demonstrate how your solution will be innovative in this domain.	5	
Objective 11- Practitioner Evaluation and Acceptance 11.1: Describe how activities to support practitioner evaluation by the PEVT will support evaluation of your solution. 11.2: Demonstrate how will practitioner evaluation support future evaluation for public safety solutions.	5	
3. Commercial Feasibility		10%
Completeness, sense of reality and feasibility of the commercialisation plan including the market analysis and risk management Sense of reality and feasibility of the principles for licensing, pricing, packaging, distribution	5	
4. Evaluation of the solution and sustainability of testing		20%

Demonstrate your vision and plan on executing prototype and pilot testing (TRL8-system complete and qualified) taking into account the plug test style approach which shall integrate your solution with other solution providers and test capabilities.	5	
Demonstrate how your approach for testing shall be useable for testing of solutions that are developed outside of the BroadWay PCP.		
5. Price		20%
Binding contract price for carrying out the work in the present Phase	5	

Calculation example

Each Award Criteria has specified Maximum points and weighting in each Phase. Appendix 5 “Scoring Model for the Award Criteria” will be used to determine points per criteria. When determined, the final score of points will be multiplied by a weighting percentage which will lead to a final score for that criteria. For Project Management and Impact on Challenge, where there are several items within, all scores are added, leading to a final score of points. This will be multiplied by the weighting percentage per particular title (Project Management or Impact on Challenge) leading to a final score for that criteria.

The emphasis in R&D is on fulfilling the Challenge, price has a minor impact. For that reason, price has a weighting value 20% and it will be assessed on the basis of the formula foreseen in the Appendix 6 -Scoring Model for the Price.

The final score of points from each criterion will be added and it will lead to a total amount of points per Tenderer.

Note: The weighted Award Criteria must ensure that the Lead Procurer gets the best value for money. It is therefore not permitted to use either lowest price as the sole criteria, without taking quality into account, or highest quality as the sole criteria, without taking price into account.

All the Award Criteria will be evaluated by examining the written Tender.

Tender prices for the assessment shall be stated in euros currency, exclusive of VAT. The Tenderer shall for Phase 2 and Phase 3 give an indication of the price in the Tender in Annex C.

It is incumbent upon the Tenderer who seeks to obtain points to supply information which enables the scoring of the Tender. The scoring will be made according to an absolute scale, meaning that several Tenderers can receive the same score and that the points a particular Tenderer receives is not affected by the points other Tenderers have received.

The Scoring Model for the Award Criteria in Appendix 5 will be applied for “sufficient information to describe how each Sub-objective will be achieved”.

“Nice to have” will not be formally assessed individually as Sub-objectives but shall have an impact in selecting a successful Tenderer from an unsuccessful Tenderer in a situation where two Tenderers receive the same scores for their Tenders.

If two Tenders are awarded the same number of total points in the evaluation process, the Tender with the *highest points on Impact on Challenge* shall be ranked higher. If they are awarded the same number of points on Impact as well, the Tender with the lowest price shall be ranked higher. If they are awarded the same number of points on Price as well, they will, if necessary, be separated by drawing of lots performed by two representatives of the Lead Procurer. This will also apply to awards made for Phase 2 and Phase 3.

Successful Tenderers will be advised according to the published key dates and will be, if awarded the Contracts, expected to mobilise rapidly to start the Project. It is important that Phase 1 Projects start soon after the Contracts

have been issued, so that all Projects can be assessed fairly and move on to Phase 2 and Phase 3 concurrently and smoothly.

5.6 Assessment Criteria for Phase 2 and 3

The above criteria and weight per selection criterion, and evaluation method will also subsequently be used for Call-offs for Phase 2 and Phase 3, though elaborated and developed in further detail for the specific purposes of each such Phase. Additional sub-criteria may be added for the Call-offs for Phases 2 and 3, as a way of making the Award Criteria more precise, provided that they do not substantially change the existing criteria. The final list of criteria for these Phases will be provided with the Call-off documentation. The weight and points per selection criterion for Phases 2 and 3 are also subject to confirmation in the Call-off documents.

Before the start of Phase 2, the Lead Procurer shall issue a Call-off to relevant Contractors, in which Contractors will be informed of:

- the economic and financial requirements.
- the scope, objectives and deliverables of the Specific Contract for Phase 2 and 3.
- the formula for the Price criterion will be applied for the next Phases.
- the deadline for the receipt of responses to the Call-off.

5.7 General Assessment Process

Based on TVC assessments, a preliminary ranking of the Tenders is made. For more information, see section 7.3 Evaluation of the submitted Tenderers and initial Contract Award.

The process for evaluating the Offers in Phase 2 and 3 will be based on the Award Criteria and the method used in evaluating the original Tenders as set out above but may be elaborated or developed in further detail within those frames.

SECTION 6: OTHER TENDER CONDITIONS

6.1 Tenderer's Statement

Each Tenderer is required to accept the provisions of the RFT. All Tenderers must return, with their Tender, a scanned copy of the Tenderer's Statement, as set out in **Part VI – Tenderer's Statement of the ESPD**, printed on the Tenderer's letterhead. The Lead Procurer must be able to read the scanned signature of the Tenderer. If possible, please sign documents using blue ink. If the Lead Procurer cannot read the scanned signature, Tenderers may be requested to re-submit. Tenderers may not amend the Tenderer's Statement.

6.2 Data Protection

The Lead Procurer will be a data controller (where data controller has the meaning under the Data Protection Laws) in respect of any Personal Data (where Personal Data has the meaning under the Data Protection Laws) required to be provided by the Tenderer in response to the RFT.

The Tenderer, as data controller in respect of any Personal Data provided by it in its Tender is required to confirm in **Part VI – Tenderer's Statement of the ESPD** that all data subjects (where data subject has the meaning given under the Data Protection laws) whose Personal Data is provided by the Tenderer have consented to the processing of such Personal Data by the Tenderer, the Lead Procurer, Group of Procurers, the Procurement Committee (PCe) and the supplier of the www.publicprocurement.be website, for the purposes of the participation of the Tenderer in this Competition or that the Tenderer otherwise has a legal basis for providing such Personal Data to the Lead Procurer for the purposes of its participation in this Competition.

6.3 Signed Tenders

Tenderers shall submit their Tender by means of the predefined Tender Documents, Annexes and all related correspondence. This applies to the Tenders for the Request for Tender and Phase 1, as well as for the Tenders for the Phase 2 and 3 Call-offs.

A signed Tender will be considered to constitute a firm, irrevocable, unchangeable and binding offer from the Tenderer. The Tenderers signatory must have the proven power and capacity. A signature of an authorized representative will be considered as the signature of the Tender (and will be binding on the Tenderer or, for joint Tenders, the group of Tenderers).

Each document, Technical Offer or attachment, every correction, alteration and/or addition which may impact the original conditions of the Tender must also be signed by the signatory or his representative(s).

For the submission of the BroadWay Tender, e-Tendering is used. Tenderers are asked to have an authorized representative sign each of the submission forms (Annexes A through E) separately, either manually ("blue ink") in the foreseen signature box, or electronically, and upload them separately.

More information on the electronic submitting of the Tenders in Appendix 4 Electronic Submission of the BroadWay Tender.

6.4 Language

As the Lead Procurer is located in Belgium, the official language of the PCP must be French and Dutch. All Tendering Documents will be published in the official languages as well as in English. All Tender Documents, in each language, will be made available on the Project website www.broadway-info.eu. Tenderers are requested to expressly indicate their choice of official language in Annex E, which shall be submitted with the Tender. This language shall remain the language of official communication from the Lead Procurer to the Tenderer/Contractor for the duration of the PCP procedure. This language shall also be the language of the competent court for the procedures described in section 7.7 of this RFT.

Please note that as the working language of the PCP is English, all Tenderer submissions (Tender, Offer, Annex forms and monitoring forms etc.) shall be made in English. All communication and/or requests for clarification (relating to either the Tender procedure or the implementation of the Contracts) shall be carried out in English and published on the Project website, where applicable.

6.5 Confidentiality/Trade Secrets

All documentation, data, statistics, drawings, information, samples or material disclosed or furnished by the Lead Procurer to Tenderers during the course of this Competition:

- (a) are furnished for the sole purpose of replying to this PCP only;
- (b) may not be used, communicated, reproduced or published for any other purpose without the prior written permission of the Lead Procurer;
- (c) shall be treated as confidential by the Tenderer and by any third parties (including Subcontractors) engaged or consulted by the Tenderer; and
- (d) must be returned immediately to the Lead Procurer upon cancellation or completion of this PCP if so required by the Lead Procurer.

In respect of any Trade Secrets such as business plans, R&D maps or trajectories, customer lists etc. that it may receive from the Tenderer, the Lead Procurer undertakes to keep secret and strictly confidential and to ensure that all members of the Group of Procurers will be bound by the same confidentiality obligations towards the Contractor.

See clauses 8 and 18 of the Framework Agreement.

6.6 Publicity

No publicity regarding this Competition or the Contracts pursuant to this Competition is permitted unless and until the Lead Procurer has given its prior written consent to the relevant communication. See clauses 18 and 26 of the Framework Agreement.

6.7 Freedom of Information

The principle of public access to official documents means that public documents and records (with a few exceptions) should be made available to whoever asks for them. The principle is balanced by the obligation of professional secrecy, that sets down that public authorities are obliged to protect business secrets of others, if disclosure may seriously harm their interests.

Without prejudice to the confidentiality rules under Clause 8 of the Framework Agreement, Tenderers are asked to consider if any of the information supplied by them in their Tender should not be disclosed because of its confidentiality or commercial sensitivity. If Tenderers consider that certain information is not to be disclosed because of its confidentiality or commercial sensitivity, Tenderers must, when providing such information, clearly identify the specific sections of their Tender containing such information and specify the reasons for its confidentiality or commercial sensitivity.

For the avoidance of doubt, Tenderers may not assert confidentiality or commercial sensitivity over the entire Tender but must clearly identify the specific section containing such information. If Tenderers do not identify information as confidential or commercially sensitive, it is liable to be released in response to a request for information without further notice to or consultation with the Tenderer. The Lead Procurer will, where possible, consult with Tenderers about confidential or commercially sensitive information so identified before making its decision on a request received. Moreover, exceptions to the confidentiality obligations provided for by Clause 8 of the Framework Agreement will remain fully applicable notwithstanding any contrary statement or declaration by the Tenderers. The Lead Procurer accepts no liability whatsoever in respect of any information provided which is

subsequently released (irrespective of notification) or in respect of any consequential damage suffered as a result of such obligations.

Tenderers should however be aware that the Lead Procurer reserves the right to publish public summaries of the results of the BroadWay PCP Projects (Phase 1, 2 and 3), including information of the key R&D Results attained and lessons learned by the BroadWay Project team. Details will not be disclosed that will harm the legitimate business interest of the Contractors involved in the BroadWay PCP or that would distort fair competition on the market.

The Lead Procurer will also distribute and publish the following information about the Contractors that are awarded with contracts:

- The name of the organisation
- Their location
- The title of the Project
- A short summary of the Project
- Contract value

The aforesaid award information will be sent to the contact information stated in the Tender.

Experts, employees of the Lead Procurer and other persons contracted to aid in the tendering and award process will handle all information confidentially in accordance to above. Experts with a conflict of interest with one or more of the Tenders will not assess these Tenders.

6.8 Anti- Competitive Conduct

Tenderer's attention is drawn to the Code of Economic Law of 2013, which makes it a criminal offence for Tenderers to collude on prices or terms in a public procurement competition.

6.9 Industry Terms used in this RFT

Where reference is made to a particular item, source, process, trademark, or type in the RFT then all such references are to be given the meaning generally understood in the relevant industry and operational environment.

6.10 Cancellation of the Tender Procedure

The Lead Procurer may, at any moment, including during the intra-Phase procedure, cease to proceed with the Tender procedure and cancel it. The Lead Procurer reserves the right not to award any Contracts at the end of the Tender procedure. The Lead Procurer may also decide, after an award decision, not to sign the Framework Agreement or any Specific Contract, for instance but not only in case of litigation initiated during the Standstill Period. The Lead Procurer is not liable for any expense or loss the Tenderers may have incurred in preparing their Tender.

6.11 Decision

After 30 days after the final date for receipt of Tenders, an award decision will be sent to Tenderers, also containing the reasons for the decisions taken. Contracts will be sent shortly after that.

The award decision given to the highest ranked Tenderers will be conditional upon:

- a) The Tenderer submitting the following evidence in respect of the Tenderer (including the Lead Contractor and any Subcontractors, as applicable, to the extent not already provided, within seven (7) days of request by the Lead Procurer:
- b) The evidence specified at section 5.3 above demonstrating that each entity concerned meets the Selection Criteria and the other requirements specified at section 5.1 b), c) and d). See section 7.3 for further information.

SECTION 7: PROCESS RULES AND OTHER INFORMATION

7.1 Overview

There are two types of evaluations under this PCP:

- 1) Evaluation process intended to rank the Tenderers in order to award Contracts to the best ranked Tenders;
- 2) Evaluation process intended to assess the outcome of the work executed in a particular Phase. This evaluation will lead to the decision of payments and regarding the eligibility of a Contractor to bid for the next Phase.

Tenders will be evaluated in a non-discriminatory and transparent manner.

First, Tenders are checked on the basis of content and format compliance with the conditions of the Tender. Then, the Administrative Section is checked, and finally, if proven to be compliant, the Technical Section will be evaluated. The Financial Section will be assessed on the condition that the Technical Section has been evaluated and proven to comply with BroadWay's Objectives.

7.2 Opening of Tenders

Tender submission takes place electronically, via the e-procurement.be website. There will be a formal opening session with the opening of the electronic safe on e-Tendering on 3 June 2019 @ 16.00 CEST. Tenderers cannot be present.

For the opening of the Tenders, the Lead Procurer will organise a team composed of two representatives of ASTRID and the Coordinator to attend and verify the opening of Tenders.

This team will be in charge of opening the Tenders and checking the general administrative compliance with the conditions on the content and format of the Tender.

The Lead Procurer will receive the Offers filed before the corresponding deadline in each Phase of the BroadWay PCP Process, opening them in the term described in the RFT, as well as in the Specific Contract Call-offs.

A **report** is compiled of this opening session. This report contains all the information about the opening. All submitted Tenders are automatically included in the report. The report is then signed by the representatives of the team.

After the general administrative compliance check, Tenders compliant with the procedural requirements and formalities and not in conflict with the exclusion and Compliance Criteria will be passed on to the TVC.

Tenders not complying with the formal and procedural requirements will be excluded from the Tender evaluation.

7.3 Evaluation of the submitted Tenders and initial Contract Award

The evaluation process will be conducted as follows:

The PCe and the TVC will evaluate the Tenders, carrying out the following four steps:

Step 1 — Checking whether the Exclusion Grounds apply to the Tenderer (pass/fail; based on the ESPD)

Step 2 — For Tenderers passing Step 1, evaluating the Tender based on the Compliance Criteria (pass/fail; based on the ESPD)

Step 3 — For Tenderers passing Step 2, assessing whether the Tenderer has the capacities necessary to perform the contract, on the basis of the Selection Criteria (based on the ESPD)

Step 4 — For Tenders passing Step 3, evaluating the Tender based on the weighted Award Criteria (Technical Offer, Annex C)

For the evaluation of the Tenders, the Lead Procurer will chair the TVC. The Lead Procurer has the right to ask the PCe for support for **Step 4**.

TD1 BroadWay Request for Tender

Tenders to the RFT, as well as the Tenders for the Phase 2 and 3 Call-offs, will preferably be assessed and ranked by the same members of the TVC.

When carrying out its tasks, the TVC shall not seek or take instructions from the Lead Procurer, from any government of a procurer or from any other body.

The evaluation process will be conducted as follows:

Steps 1-3

Steps 1-3 are verified and agreed by the PCe, which may also consult the TVC. The Compliance Criteria will be assessed on the basis of the declaration made in the ESPD. An assessment of the Tenderer's capacity to perform the Contracts will be done on the basis of the Selection Criteria and the declaration made in the ESPD. The Tenderers must be able to satisfy all of the criteria. These will be evaluated on a pass/fail (yes/no) basis.

Step 4

Only Tenders passing this step will be further evaluated by the TVC. The evaluation of the Technical Offer will be done based on technical and non-technical Award Criteria and according to the scoring model (see Appendix 5 - Scoring Model for the Award Criteria to the RFT). **A minimum threshold of 60% of the total amount of points must be reached as well as of certain criteria** (see section 7.5 below).

The **Financial Section** of Tenders passing this step will then be evaluated. The Financial Offer (Annex C and D) will be assessed on the basis of the formula foreseen in the scoring model (Appendix 6 Scoring Model for the Price). **The price that will be evaluated is the Actual Price.**

First of all, the TVC will independently and individually assess all Tenders. The more points a Tender scores in total, the higher it is ranked. Based on the evaluators' individual assessments, which are all equally weighted, a preliminary ranking of the Tenders will be made.

If deemed necessary, an online hearing will take place, where Tenderers will be asked to clarify aspects of their Tender.

Subsequently, the TVC will meet to collect, compare and discuss the comments of each evaluator for each Tender, and to review the preliminary scoring and ranking to ensure that the assessment of all Tenders is consistent and non-discriminatory.

The TVC will make a final recommendation for the award of the contracts to the Lead Procurer.

The Lead Procurer will ultimately decide on:

- 1) The final ranking of the Tenders;
- 2) The award of the Contracts.

Large differences in assessment by the evaluators will be identified. If the reasoning given by the evaluators requires further clarification, this will be provided by them.

Appointment to the Framework Agreement will be awarded on the basis of the Most Economically Advantageous Tender (MEAT).

After the award decision has been taken, the Tenderers will be informed about their ranking. To the selected Tenderers a Framework Contract and Specific Contract for Phase 1 will be sent shortly thereafter. Tenderers will sign the Contracts in line with the schedule for this PCP in section 1.7.

Successful Tenderers must sign and return the Framework Agreement and Specific Contract for Phase 1 to the Lead Procurer within 5 days from the date of expiry of the Standstill Period, unless notified otherwise in writing by the Lead Procurer (see PCP Schedule in section 1.7 of the RFT). A signed Framework Agreement returned by the successful Tenderer(s) is not binding on the Lead Procurer until the Lead Procurer has signed the Framework Agreement in accordance with section 1.1 of the RFT.

Where the signed Framework Agreement and Specific Contract has not been received by the Lead Procurer within the period specified above, then the Lead Procurer may proceed to offer a Framework Agreement and Specific Contract to the next highest-ranked Tenderer.

Successful Tenderers will be, if awarded Contracts, expected to start and finish their Project in time. If the Project is not finished by the deadline, the Contractor will not be eligible to submit a Tender for the next Phase.

Successful Tenderers should also note that where a Specific Contract is awarded by way of a Call-off, the Lead Procurer will require the Contractor to whom it has decided to award a Specific Contract to supply up-to-date evidence to demonstrate that each entity concerned meets the Exclusion Grounds, Selection Criteria, Compliance Criteria and all other compliance requirements as per section 5 of the RFT.

Unsuccessful Tenderers may contact the Lead Procurer, within 5 days of the award decision, to obtain additional information about their Tender not being selected for a contract. Tenderers will be given feedback on their Tender.

7.4 Evaluation of Phases 2 and 3

The criteria and the method for evaluating the Tenders in Phase 2 and 3 will be the same as the criteria and the method used in evaluating the original Tenders as set out below but may be elaborated or developed in further detail within those frames. The weighting of each Award Criterion may differ from the initial weight in Phase 1 or Phase 2.

For Phase 2 and Phase 3, the composition of the TVC and evaluation process up to the award decision will, as much as possible, remain the same as for Phase 1. Nonetheless, the evaluation process may be described in more detail, in particular for Phase 3, in respect to the testing procedures.

7.5 Assessment and Scoring

Awarded points for each criterion (Project Management, Impact on Challenge, Commercial Feasibility, Evaluation of the solution and sustainability of testing) has to be multiplied by weighting percentage for particular criteria leading to a final score per criteria. Final scores for Tenderers is a sum of all final criteria scores. Only Tenders with the following minimum scores (threshold) are eligible for consideration for a Contract (Phases 1 to 3):

- minimum 60% of the final score of points for each of the following criteria, excluding price:
 - Project Management
 - Impact on Challenge
 - Commercial feasibility
 - Evaluation of the solution and sustainability of testing
- minimum 60% of the final score of points for the combined scores, including price.

Failure to achieve the minimum score for any of the Tender components will result in the Tender being excluded from further participation in the PCP.

Reminder (per section 5.5 above):

- 1) The If two of the Sub-objectives seeking “**sufficient information for achieving Sub-objective**” derived from the Objectives under the category of **Impact on Challenge**, receives a score of 0, that shall lead to the **exclusion of the Tenderer**.
- 2) In the Technical Offer under the category of **Impact on Challenge**, if any one of the Objectives receives a score of 0, this shall lead to **exclusion of the Tenderer**.
- 3) If Sub-objective PESAr13 Software Quality Assurance in Pan-European Security and/or PESAr15 Harmonised Security Assurance receives a score of 0, that shall **lead to exclusion of the Tenderer**. (see TD2-Broadway Challenge – 2.2.3.1).
- 4) If the price offered for a phase is above the Ceiling Price for that phase: the party shall **be excluded**.

TD1 BroadWay Request for Tender

The assessment criteria, weighting and the maximum points available are listed in 5.5. The scoring model is found in Appendix 5 Scoring Model for the Award Criteria.

The scoring will be made according to an absolute scale, meaning that several Tenders can receive the same score and that the score a particular Tender receives, is not affected by the scores other Tenders have received.

7.6 Communication – Q&A

A webinar will be held on 15 March 2019 to discuss the Tender Documents. This will be followed by a briefing meeting (face-to-face) on 26 March 2019 in Brussels to clarify the Tender Documents, the procedure and to answer potential Tenderers' questions or requests for clarification. Registration details will be made available on the Project website.

All questions or requests for clarification must be received by the Lead Procurer no later than 5 April 2019. Any questions received after this deadline will not be answered.

The questions or requests for clarification must be addressed to:

E-mail: secretariat@broadway-info.eu.

Please mention the BroadWay Procurement Reference No. XXXX in the subject line of your emails. With each question the correct document reference (TD 1, Annex A etc) and page number should be clearly stated.

The summary of all questions and answers will be presented in an anonymized Q&A document that will be published on <http://www.broadway-info.eu/tender> in English.

For Phases 2 and 3, the Q&A will not be published, but distributed to all Contractors that successfully completed the previous Phase.

Unless otherwise instructed, please do not use any other contact addresses or means or contact any other persons in connection with this procurement.

7.7 Procedures for Appeal

Any redress, dispute or claim arising out of or in connection with the BroadWay PCP Tender procedure or with regard to the award of Contract decisions between the Lead Procurer and the Contractor with inclusion of the award of Phases 2 and 3, must be brought promptly before/shall be heard by the Belgian Council of State (Conseil d'Etat, Raad van State).

Any dispute or claim arising out of or in connection with the performance of the Contracts entered into between the Lead Procurer and the Contractor, shall be heard by the Tribunal of First Instance of Brussels.

A Standstill Period of **five (5) working days** shall be provided after notification of any decision with regard to the award of the Framework Agreement (incl. Phase 1), as well as the award of Phases 2 and 3, during which unsuccessful Tenderers can make an extreme urgency application before the Council of State to suspend the contract award procedure and/or an application for annulment before the Council of State.

Tenderers should note that the Lead Procurer will clarify the above information when notifying Tenderers of the results of this Competition, including the evaluation scores obtained by the Tenderer concerned and the scores obtained by the lowest ranking successful Tenderer in respect of each Award Criterion assessed by the TVC.

SECTION 8: CONDITIONS OF CONTRACTS

8.1 Introduction

Successful Tenderers will be requested to sign both a Framework Agreement and a Specific Contract for Phase 1. For the Phases 2 and 3, selected Contractors will be asked to sign a Specific Contract for the given Phases (see the templates given in TD3 and TD4).

8.2 Monitoring

During each Phase, contract implementation will be monitored periodically and reviewed against the expected outcomes (milestones, deliverables and output or Results) for the Phase. See also Expected Outcomes in section 3.5 and clause 12 of the Framework Agreement.

Each Contractor must cover its own costs and thus foresee appropriate personnel and travel budgets in its Offer for monitoring meetings, in addition to end of Phase 2 and 3 Results demonstration to the EC.

8.3 Evaluation of the Outcome at the End of a Phase

On the end date of each Phase, the Contractors shall submit their End of Phase Reporting Forms, including all the listed deliverables and Results. The End of Phase Reporting Forms will be assessed by the TVC in order to determine whether the respective Contractors have satisfactorily or unsatisfactorily completed a Phase. The satisfactory/unsatisfactory completion will determine whether the Contractor shall be paid or not. A template of an End of Phase Reporting Form is included in Appendix 9 End of Phase Reporting Form [template].

The TVC will also evaluate, if the Contractors have successfully completed a particular Phase, and consequently, if they are eligible to participate in the Call-off for the next Phase.

Successful completion of a Phase will be assessed by the TVC against the End of Phase Reporting Form (including all deliverables) according to the evaluation criteria. Please refer to the scoring table in Appendix 7 Scoring Model for Outcome of the Phases and under the condition that the key milestones have been successfully completed and objectives suitably addressed.

8.4 Payments based on Satisfactory Completion of Milestones and Deliverables of the Phase

Payments corresponding to each PCP Phase will be subject to the **satisfactory** completion of the deliverables and milestones for that Phase.

Satisfactory completion will be assessed by the TVC, which will take the final decision on the acceptance or rejection of the milestones/deliverables/tests.

Satisfactory completion will be assessed according to the following requirements:

- If the work corresponding to that milestone/deliverable has been carried out;
- If a reasonable minimum quality has been delivered (see clarification below);
- If the reports have been submitted on time;
- If the money/resources have been allocated to the planned objectives;
- If the money/resources have been allocated and the work has been carried out according to the Compliance Criteria (place of performance, public funding and R&D definition criteria);

And

- If the work has been carried out in compliance with the provisions of the Contract (including in particular verification if the Contractor has duly protected and managed IPRs generated in the respective Phase);
 - 'Reasonable minimum quality' of a report means that:
 - The report can be read by somebody who is familiar with the topic, but not an expert;

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- The report gives insight into the tasks performed and the Results;
- The report is made using the End of Phase Report Form;

‘Reasonable minimum quality’ of a demonstration (for Phase 2 or 3) means:

- The demonstration can be understood by somebody who is familiar with the topic, but not an expert (for instance, somebody with operational but not technical knowledge);
- The demonstration shows how the innovation works, how it can be used and (if applicable) how it is operated and maintained;
- The demonstration is accessible to parties appointed by the Lead Procurer, unless these are direct competitors of the Contractor.

Satisfactory completion in each of the Phases does not mean successful completion. A PCP could, for instance, be satisfactorily completed even if it concludes that the innovation is not feasible.

The assessment will consider the efforts made by Contractors to take into account the feedback from the TVC Monitoring Team. The Lead Procurer will approve or reject the submitted deliverables as ‘satisfactory’ within 30 calendar days of their submission.

Where the TVC judges the completion of deliverables or milestones to be unsatisfactory, the Lead Procurer may decide to reduce or withdraw payments for that deliverable and/or may terminate the Contracts.

Invoices must be submitted to the Lead Procurer. The details regarding the payments by the Lead Procurer are set out in clause 2 the Framework Agreement.

Contractors’ invoices must provide:

- **price breakdown** showing the price for R&D Services and the price for supplies of products (in order to demonstrate compliance with the definition of R&D in compliance criterion A);
- A **price breakdown** showing the location or country in which the different categories of activities were performed (*e.g. x hours of senior researchers in country L at y euro/hour, a hours of junior developers in country M at b euro/hour*) (in order to demonstrate compliance with the requirement relating to the place of performance in Compliance Criterion C).

8.5 Payments Schedule

Payment for the Contractor's R&D Services for each Phase will be made according to the following provisions:

(i) Payment schedule for Phase 1 will be:

- 100% of the Price offered by the Contractor shall be paid within 30 days from the date of receipt by the Lead Procurer, of a correct and approved invoice, after the Lead Procurer declares the satisfactory completion of Phase 1, as described in TD2-PCP Challenge.

(ii) Payment schedule for Phase 2 will be:

- 40% of the Price offered by the Contractor shall be paid within 30 days from the date of receipt by the Lead Procurer, of a correct and approved invoice, after the commencement date of Phase 2,
- 60% of the Price offered by the Contractor within 30 days from the date of receipt by the Lead Procurer, of a correct and approved invoice, after the Lead Procurer declares the satisfactory completion of Phase 2, as described in TD2-PCP Challenge.

(iii) Payment schedule for Phase 3 will be:

- 40% of the Price offered by the Contractor shall be paid within 30 days from the date of receipt by the Lead Procurer, of a correct and approved invoice, after the commencement date of Phase 3,
- 37% of the Price offered by the Contractor within 30 days from the date of receipt by the Lead Procurer, of a correct and approved invoice, after the Lead Procurer declares the satisfactory completion of Phase 3, as described in TD2-PCP Challenge.

- 23% of the Price offered by the Contractor shall be paid within 30 days from the date of receipt by the Lead Procurer, of a correct and approved invoice, after the date in which the EU COM officially authorises the final Grant payment.

See clause 2 of the Framework Agreement.

8.6 Eligibility for the next Phase based on Successful Completion of the Phase

Eligibility for participation in the next Phase will be subject to *successful* completion of the current Phase.

Successful completion of a Phase will be assessed by the TVC against the following requirements:

- If all milestones have been successfully completed (see section 3.5 Expected Outcomes for the Requested Milestones and Appendix 7 – Scoring Model for Outcome of the Phase(s).
- If the Contractor receives an overall score of 60% in the End of Phase Report. Only the highest-ranking Contractors will be invited to the next Call-off stage.

Note that there is a difference between satisfactory completion (requirement for payment) and successful completion (prerequisite for passing from one Phase to the next).

8.7 Finalisation of Phase 3: Link with possible follow-up PPI Procurement

A new call for Tenders could be launched should the procurers engage in a public procurement of innovative solutions (PPI) to deploy a commercial volume of the solutions provided under this PCP.

Appendix 1: PCP Principles Horizon 2020

The **PCP is split into three Phases** (solution design, prototyping, original development and testing of a limited set of 'first' products or services). Evaluations after each phase progressively identify the solutions that offer the best value for money and meet the customers' needs.

This phased approach allows successful contractors to improve their offers for the next phase based on lessons learnt and feedback from procurers in the previous phase.

Using a phased approach with gradually growing contract sizes per phase also makes it easier for smaller companies to participate in the PCP and enables SMEs to grow their business step-by-step with each phase.

The R&D services can cover research and development activities ranging from solution exploration and design, to prototyping, right through to the original development of a limited set of 'first' products or services in the form of a test series. Original development of a first product or service may include limited production or supply in order to incorporate the results of field testing and demonstrate that the product or service is suitable for production or supply in quantity to acceptable quality standards.

R&D does not include quantity production or supply to establish the commercial viability or to recover R&D costs.¹¹

It also excludes commercial development activities such as incremental adaptations or routine or periodic changes to existing products, services, production lines, processes or other operations in progress, even if such changes may constitute improvements.

The following information provides a generic introduction to the PCP instrument, in accordance with the documentation provided by the European Commission. For a more detailed description of the PCP concept be sure to read the following EU documents: (1) PCP Communication COM/2007/799 and (2) Staff Working document SEC/2007/1668.

Furthermore, the PCP is also characterised by the following key **features**:

- **Open, transparent, non-discriminatory approach**

PCP is open to all operators on equal terms, regardless of the size, geographical location or governance structure. There is, however, a place of performance requirement that they must perform a predefined minimum percentage of the contracted R&D services in EU Member States or Horizon 2020 Associated Countries. In BroadWay's case it is 75% (100% for security components).

- **Sharing of IPR-related risks and benefits under market conditions**

PCP procures R&D services at market price, thus providing contractors with a transparent, competitive and reliable source of financing for the early stages of their research and development.

Giving each contractor the ownership of the IPRs attached to the results it generates during the PCP means that they can widely exploit the newly developed solutions commercially. In return, the tendered Price must contain a financial compensation for keeping the IPR ownership. Moreover, the procurers must receive rights to use the R&D results for internal use and licensing rights subject to certain conditions.

Depending on the outcome of the PCP, procurers **may or may not decide to follow-up** the PCP with a Public Procurement to deploy the Innovative solutions' (PPI).

However, any subsequent PPI, for the supply of commercial volumes of the solutions, will be carried out under a separate procurement procedure. Suppliers that did not take part in this PCP (or were not chosen to go through as far as the last phase) will thus still be able to compete on an equal basis in any subsequent procurement looking for contractors to provide a solution on a commercial scale.

More information on PCP can be viewed on the European Commission PCP webpage.

¹¹ See also Article XV(1)(e) WTO GPA 1994 and the Article XIII(1)(f) of the revised WTO GPA 2014

Appendix 2: Practitioner Evaluation Team (PEVT)

Country	Supporting Organisation	PPDR Type
Austria	Austrian Red Cross	Health
Austria	Bundesministerium fur Landesverteidigung und Sport	MoD
Austria	Die Johanniter (St John's)	Health
Australia	Australian Radio Communications Industry Association	Australian Association
Australia	CDMPS University of Melbourne	Training & Research
Belgium	Police Federale	Police
Denmark	Danish National Police, Centre of Emergency Comms.	Police
Finland	Aland Police Authority	Police
Finland	Finnish Customs	Customs
Finland	Lapland Hospital District	Health
Finland	Lapland Rescue Department	Fire/Rescue
Finland	Ministry of the Interior	Mol
Finland	National Police Board	Police
Finland	Ostrobothnia Rescue Dept.	Rescue
Finland	The Finnish Border Guard	Border Guard
France	Gendarmerie Nationale (Mol)	Police
France	Police Nationale (Mol)	Police
France	Savoie Firefighter Brigade	Fire
Germany	Bayerisches Rotes Kreuz	Health
Greece	Hellenic Police	Police
Greece	Hellenic Rescue	Health/Rescue
Ireland	An Garda Siochana	Police
Ireland	Electricity Supply Board Networks	Utility
Ireland	Irish Ambulance Service	Ambulance

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Ireland	Irish Coast Guard	Coast Guard
Ireland	Irish Fire Service	Fire
Ireland	Irish Prison Service	Prison
Israel	Magen David Adom	Health
Italy	Carabinieri General HQ	Police
Italy	Guardia di Finanza	Finance Police
Italy	Italian Civil Protection Department	Civil Protection
Italy	National Fire Brigade	Fire
Lithuania	Information Technology and Communications Dept.	Mol
Norway	Norwegian Police ICT Service	Police
Romania	Directorate General Logistics	Mol
Romania	Department for Emergency Situations	Fire/Rescue/Ambulance
Romania	Inspectorate General of Aviation MMOI	Mol
Romania	Protection and Guard Service	VIP Protection
Slovenia	Mol Slovenia	Mol
Spain	DG of Communication and Information Systems for Security	Mol
Spain	Guardia Civil	Police
Spain	Ministry of Defence, Emergency Unit	MoD
Spain	Policia National	Police
Spain	Proteccion Civil Espana	Civil Protection
Spain	Empresa Publica de Emergencias Sanitarias	Health
UK/Northern Ireland	Police Service of Northern Ireland	Police
USA	NPSTC National Public Safety Telecommunications Council	US Agency

Appendix 3: Group of Procurers

1. BEASD: Astrid, Belgium

<http://www.astrid.be>



ASTRID is the operator of the national radio communications paging and dispatching network designed for emergency and security services in Belgium.

ASTRID enables the police, the fire services, emergency medical services and other organisations involved in public safety to improve both internal and interdisciplinary communications.

By establishing a reliable and transparent link between users, ASTRID aims to promote the smooth running of operations and the safety of users in the field and thus contribute to the safety and protection of the population as a whole.

ASTRID provides four important basic services: radio communications, paging, dispatching solutions and a mobile voice and data supply.

ASTRID expects BroadWay to accelerate and stimulate the development of mission-critical broadband technologies in general. BroadWay will undoubtedly push important specific features such as seamless cross-border roaming (terrorism and crime do not stop at the border) and trusted end-to-end encryption (an essential feature for critical communications) which may otherwise be left aside because of limited interest by the industry.

Moreover, since Brussels is the host city of many official seats of European institutions, it also hosts many international meetings. The international VIP's and delegates for these meetings need a local interoperable communication system for their accompanying safety officers. Smooth interoperability would allow security staff from different countries to communicate on common platforms to improve co-ordination and faultless operations.

Public safety services must address a series of new challenges such as terrorist attacks, climate change and social conflicts. Technology capable of sending and receiving large amounts of data can help emergency and security services to do their work more effectively and safely. Officers in the field and crisis managers need mobile broadband networks that allow them to share streaming real-time video, detailed maps or high-resolution photographs. ASTRID expects that its narrowband TETRA system will have to be replaced in the next decade with a broadband system supporting the growing data needs in the public safety sector. ASTRID expects that all current 70,000 current MC users will use the future MC BB services.

2. CZNAK: NAKIT, Czech Republic

<http://www.nakit.cz>



The National Agency for Communication and Information Technologies (NAKIT) is a new state agency, which was established on the basis of Resolution No. 1065 of the Government of the Czech Republic dated 21 December 2015.

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The founder of the state agency NAKIT is the Ministry of Interior of the Czech Republic . Its mission is to ensure for its founder the long-term and conceptual development of state-owned information and communication infrastructure so that all future investments in this area are subject to a unified strategy.

The NAKIT was entered in the Commercial Register on 1 February 2016 . On July 1, 2016, it merged with the state-owned company Česká pošta, sp, Odštěpný závod ICT Services. Thus, a state-owned enterprise, capable of providing a wide range of ICT services to the state's constituents, was created.

The main tasks of the Agency stemming from the Government Resolution include the mapping of the existing information and communication infrastructure of public institutions and their future needs in this area. Based on the analysis of this information, NAKIT is the strategy for the development of non-public communication networks, including proposals for the implementation of appropriate security measures. It then prepares recommendations and methodologies for realizing the construction of non-public networks in order to achieve the greatest possible synergy effect and hence financial savings.

The Agency's task is also to ensure the operation of communication networks for the needs of the components of the integrated rescue system, the operation and development of selected information systems of the state administration and the security oversight of them.

As part of the integrated rescue system, NAKIT operates and develops nationwide radio communication network for critical communication called "PEGAS". PEGAS is based on the Tetrapol technology and is used for almost 35k PPDR users (e.g. fire brigade, EMS, police, army, customs). Being built between years 1995 and 2003, PEGAS currently provides invaluable and reliable service for almost two decades.

PEGAS is currently facing significant modernization, however even after long years of operation it is clear that it has failed to deliver in one area – to provide unified and interoperable communication network for PPDR users, both domestically and internationally. Another important aspect is the need for reliable and secure broadband data services, which are gaining importance and are already widely used by PPDR users via commercial networks, however legacy PPDR networks such as Tetrapol can't provide them.

BroadWay provides unique opportunity to implement truly interoperable mission critical broadband solution for PPDR users in Europe through common execution, knowledge and experience sharing.

NAKIT has been given the task to prepare long term strategy for PPDR networks for the following 10 years, however the strategy is currently classified and further details can't be disclosed. Once the strategy is approved, NAKIT will be responsible for its implementation at the end of the decade with 80,000 PPDR users.

3. EERIKS: State Infocommunication Foundation, Estonia

<http://www.riks.ee>



Created at the end of 2000, RIKS (State Infocommunication Foundation) is a non-commercial foundation administered by the Ministry of Economic Affairs and Communications.

RIKS provides communication-related services for public institutions and other state-budgeted institutions and operative communication for particular purposes.

RIKS provides operative, radio and maritime communications, and telephone services.

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The mission of RIKS is to provide public institutions, local municipalities and other state-budgeted institutions with cohesive, high-quality, secure and cost-effective communication-related services, including communications for particular purposes through its own infrastructures and infocommunication services delivered from the free market.

Our operating principles stem from quality, rationality and security.

State Infocommunication Foundation (RIKS) is a non-profit organisation which operates Estonian Critical Communication networks (Maritime, PPDR TETRA, LTE/4G). There is a clear need for national BB PPDR system that can be integrated with similar networks in neighbouring European countries in the future, and it is clear that BroadWay provides input to next generation national MC BB strategy. At the moment, no single MC BB network is offering service availability that is comparable to integrated networks. National MC BB networks should not be designed with only PPDR service providers in mind, but also for vital service providers.

BroadWay will affect architecture of the future national BB PPDR system and the way of looking into interoperability aspect. Harmonised technical solutions will help harmonisation of work procedures during and after network interconnection with neighbouring countries. e-Police, e-Ambulance, etc, applications are already in use by PPDR agencies, but built on top of regular commercial BB services from commercial networks. There are significant information security risks that can be grounded by using the outcome of BroadWay Project.

Estonia expects to implement next generation PPDR MC BB services in between 2018 – 2025 with 10,000 PPDR users.

4. ESMIR: Ministry of the Interior, Spain

<http://www.interior.gob.es>



The private networks for security communications are suitable for police work, but technology has evolved quickly in the last years and technology solutions implemented by all Law Enforcement, Civil Protection, Emergency Services... need more and better capabilities. The growing need of broadband is a need to carry on better services and facilitate the interaction with the citizens.

The mobility services, just with early warning and assessing system will be able to allow the first responders and public authorities provide safer, more effective, and efficient service to the society. The development of mobility services became a key issue to transmit huge amounts of information recorded by sensors deployed in the street, patrol cars, even “Body worn” on the police officer.

Spain, as part of the European Union's southern flank, is involved in strategic missions on land, at sea and in the air, as part of the joint effort between PPDR agencies of different member countries. An efficient and versatile interagency communications system, which allows for joint operations both locally and remotely, is crucial to the success of any mission.

At the same time, the integration of broadband into PPDR communications will allow for the creation of new applications that will improve the service provided by the agencies to citizens.

For these reasons, the Spanish Ministry of Interior considers BroadWay a strategic project for the development of a new European communication system between PPDR agencies.

A project like BroadWay can be a major boost in the roadmap for migration to MC broadband solutions. On the one hand, it will show the advantages of new applications for PPDRs through concrete examples and, on the other hand, because it will encourage the use of a common technology that will enable interoperability between national and international agencies. Migration from the national network to a broadband network is not expected until the mid-2020s with 72,000 PPDR users.

5. FIVIR: Suomen Virveverkko Oy Finland

<https://www.erillisverkot.fi>



State Security Networks Group Finland secures the critical leadership and information society services in all circumstances. We provide secure and reliable ICT services for public authorities and other critical operators of national security. We develop overall security and safety in society, and our operations affect nearly everyone in Finland.

Solving customers' problems

Our fields of expertise are data centre and server capacity services as well as data communication networks and services. We are also increasingly providing data analysis and situational awareness services.

Our core customers are organisations for whom the ordinary is not enough. Our services are used by the Finnish Defence Forces, police, fire and rescue services, social services and health care providers, the Emergency Response Centre Administration, government and local authorities, as well as companies

We are a wholly state-owned special-purpose company. The Prime Minister's Office is responsible for the ownership steering of the company. Due to company structure, our service organisation is agile and funding flexible. The company combines the best aspects of a public authority and a private enterprise.

Our annual turnover in 2015 totalled approximately EUR 86 million. More detailed information is available on the website of the Prime Minister's Office.

The Finnish plan is to rely on commercial 3GPP based 4G and 5G services in the future. Primary commercial RAN will be chosen via public tendering process in 2018, and it has been decided that public safety users should have prioritized access, pre-emption and national roaming (SIM cards) in use by 2019 for data services. Selected RAN will be hardened, and coverage will be improved so that MC BB services can replace NB TETRA in the second half of 2020's. It is expected that the new MC BB services will have round 50,000 users in the beginning, but the amount of users will increase until the end of 2020's to approx. 80,000.

Finland has created the "Five Steps to Critical Broadband" which is the migration roadmap for the mission critical mobile infrastructure based on user needs and service platform. Participation in the SEC-04-DRS consortium guarantees that the Finnish solution is harmonised with the other EU Member States. Pointing the fact that Finland has been forerunner on using mission critical communication solutions, the Finnish team can add value to the consortium by bringing expertise, possibilities for benchmarking and innovation capabilities on next generation mission critical broadband solution development.

While Finland is focusing mostly on its national demands, it is very important to build an ecosystem that is 100% interoperable with solutions of all EU member states. Operational needs of Finnish PPDR demands, that the future of mission critical BB services don't offer less than the upcoming ISI interface with Norway and Sweden.

6. FRMOI: Ministry of the Interior, France

<https://www.interieur.gouv.fr>



For two centuries, the Ministry of the Interior has been at the heart of the French administration: it ensures throughout the territory the maintenance and cohesion of the country's institutions.

Its organisation, its human and material resources constitute the privileged tool of the State to guarantee the citizens the exercise of the rights, duties and freedoms reaffirmed by the Constitution of the Fifth Republic. Its five essential missions today revolve around two major clusters.

Administer the territory

- Ensure the representation and permanence of the State throughout the national territory.
- Guarantee the integrity of public institutions.
- Ensure respect for local freedoms and the powers of local and regional authorities in the context of decentralization.

Guaranteeing the safety of citizens and property

- Develop and enforce the rules guaranteeing citizens the exercise of public freedoms, including universal suffrage.
- Protect the population against risks or plagues of any kind and against the consequences of a possible conflict.

These missions are performed by the departments attached to the Minister, the General Secretariat, the Directorates General, the specialized directorates of the central administration of the Ministry, and provided throughout the country by the prefectures and sub-prefectures, the National Police, the national gendarmerie and the civil security. As the latter are confronted with the realities of French society, as close as possible to the expectations of the citizens, their activity bears witness to the deconcentration efforts undertaken by the state.

The Ministry of Interior is studying the best way to evolve towards broadband networks and has created a preconfiguration team to lead those studies. The prefiguration mission for future radio network (MPRRF) is part of the general secretariat of the French ministry of interior.

The French roadmap to broadband foresees a national rollout starting in 2021 with at least a one year transition period from the legacy networks to the LTE for the mission critical functions. The outcome of the BroadWay Project should be available during this time span, so the BroadWay roadmap is really helping the French transition roadmap to bridge the gap in the interoperability technology between MC services for PPDR users

Interoperability with border partners for police and firefighters has always been an important topic for French government and this need is urging more and more with increasing terrorist's attacks and migration issues in Europe.

The standardisation of the future networks, using broadband and MC user requirements will allow easier interoperability and it's important that all functional and technical needs be fulfilled by the design of the technical tools and organisation who will provide the interoperability service in the future.

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A unique LTE/4G/5G network for all the PPDR users should be available in 2021 (optimistic). The need for interoperability with neighbouring PPDR forces is increasing and the present solutions don't meet the need.

The result of the BroadWay Project should meet these needs and be shared by our neighbours and offer interoperability capabilities with non-neighbour countries. This would ease cooperation for police or fire fighters with the new use of these new networks: video and data mainly.

The interoperability requirements will be fulfilled during the transition period allowing a full opening of the mission critical service for PPDR broadband users within 2022 or 2023. The total amount of users will be from 300,000 to 500,000 users.

7. GRMOI: KEMEA, Greece

<http://www.kemea.gr>



The Center for Security Studies (KEMEA) has been established by the Law 3387/2005 as the Hellenic Ministry's of Public Order and Citizen Protection think tank on security policies.

KEMEA is supervised by the Minister of Public Order and Citizen Protection and it is a scientific, consulting and research agency, whose purpose is to conduct theoretical and applied research and to perform studies, particularly at the strategic level, on security policies. In 2011, KEMEA was appointed by Presidential Decree No39 (06.05.2011), as the "National Contact Point" for the protection of European Critical infrastructures (ECIs) - "ECIP contact point" – following the implementation of the 2008/114/EC Directive of the European Council of December 8th 2008 "regarding the definition and designation of the European Critical infrastructures and the assessment of the need to improve the protection of such infrastructures".

KEMEA is authorized to provide professional certification through examinations (in cooperation with the National Organisation for the Certification of Qualifications and Vocational Guidance-EOPPEP no 3200/09-02/2012) to Private Security personnel.

KEMEA represented the Hellenic Government to the European Research and Innovation Forum (ESRIF) of the European Commission (EC) and is a Member to the Board of Directors of the European Organisation for Security (EOS). KEMEA is also successfully participating in many funded projects by the EC and the European Space Agency (ESA).

In order to fulfill its mission, KEMEA:

- a. Implements research projects and studies on homeland security relating to the Ministry of Public Order and Citizen Protection and its associated agencies as well as other foreign organisations.
- b. Designs and carries out research projects as a representative of the Ministry of Public Order and Citizen Protection's subordinate organisations, on behalf of or in co-operation with respective EU, other state or international organisations according to the relevant rules and procedures.
- c. Develops collaborations on a national and international level with organisations and agencies, research and education centers and foundations, social, academic and productive Bodies, public and private, as well as NGOs.
- d. Studies criminality as a phenomenon along with its qualitative and quantitative trends in Greece as well as its geographic distribution. Additionally, KEMEA examines methods and practices which can help in the implementation of effective anti-crime policies.
- e. Makes suggestions on the harmonisation of preventive and anti-crime measures with established constitutional principles, personal and civil rights, lawfulness and the respect of the value of individuals.
- f. Monitors and studies the technological advancements of security systems and evaluates breakthroughs achieved.

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- g. Makes suggestions on the exploitation of the know-how it possesses.
- h. Supports cross-border collaborations procedures.
- i. Organises and conducts conventions, publishes research and general findings of scientific interest, conducts educational seminars, provides certified training on subjects pertaining to security and also designs and conducts certified studies on such subjects.
- j. Performs various activities that pertain to the accomplishment of its goals.
- k. Is a Certification body regarding procedures, studies, security plans, of various authorities and entities of the Public and Private Sector.

A main objective of KEMEA is to bring together all national Law Enforcement Agencies (Police, Fire Service, Coast Guard, Civil Protection agency, etc.) and to enable them to collaborate, interconnecting them with corresponding agencies, research institutions and the industry from around Europe. This dedicated approach to exploring synergies, establishing communication links and working together to produce end-user driven research on all fronts of the Security Sector during the last decade, has earned KEMEA its participation in numerous National and EC R&D projects.

Law Enforcement Agencies and First Responder forces in Greece are currently using various types of wireless communications means, ranging from legacy VHF networks for most of the mainland and sea territories, TETRA for the Attica region including Athens and even commercial GSM and 3G networks in areas where no other means are available. The country's complex landscape along with the extensive sea environment, are creating a challenging field for any type of wireless technology.

Based on the above described situation there is an urgent need for modernizing the wireless communications infrastructure throughout the country, considering emerging needs related to Data transmission. Although there are commercially available TETRA network providers, Hellenic authorities are reluctant in using them in order not to jeopardize their security issues.

New solutions based on LTE infrastructures have been examined and sound promising for covering all future needs.

Thus, the Hellenic authorities are seeking for future proof solutions that can effectively provide the emergency communication services to most of the First Responder organisations. Backwards interoperability issues are of interest, along with the hot subject of cross border communications with authorities from neighbouring countries, related mainly to the problem of illegal immigration and cross border criminal activities in general. BROADWAY will pave the way to the interoperable world of broadband PPDR radio communications and the participation of the Greek MOI through KEMEA will aid the Hellenic authorities to have an early insight and an influencing word to these emerging technologies.

The expected implementation of next generation interoperable MC BB services in Greece will be 2020 – 2024 with 20,000 PPDR users.

8. IEAGS: An Garda Síochána – Ireland

<https://www.garda.ie>



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An Garda Síochána has a proud tradition in serving communities and protecting the State with over 16,000 Garda members, Civilians and Reserve members who are committed to delivering a functioning police and security service. This is the cornerstone of a democratic and progressive society. We believe that effective and efficient policing depends on securing the confidence, support and cooperation of local communities and engaging with those communities. In order to ensure we achieve this, members of An Garda Síochána are guided by three simple Policing Principles which state that policing services must be provided:

- Independent and impartially
- In a manner that respects human rights
- In a manner that supports the proper and effective administration of justice.

Our Mission

To deliver professional policing and security services with the trust, confidence and support of the people we serve.

An Garda Síochána (Irish Police) have published a Modernisation and Renewal Plan (MRP) 2016 – 2021 which recognizes that technology is critical in supporting policing activities and that investment in advanced ICT systems so Police can spend less time on paperwork and more time among local communities. Police mobility will ensure patrols will have access to real-time information on mobile devices enabling them to react quicker to events. New systems will ensure the right people in the right places at the right times, higher police visibility in communities and provide a better response to calls for service from the public. The National Digital Radio Services contract (TETRA) expires in June 2019. It is planned that public safety in Ireland will continue to use TETRA into the middle of the next decade. A request for tender is currently being prepared to procure a supplier to provide a TETRA service contract in Ireland from June 2019 to at least the year 2025, the extent of the new TETRA service contract is dependent on the capability of future wireless broadband communications system to provide the functionality required in the public safety environment.

Broadway will impact on the readiness and suitability of wireless broadband systems to operate in the public safety environment. Broadway will lead the way in developing the core applications like group voice calls, real time messaging, user location mapping and video. Based on timelines above, the preparation of tenders for PPDR interoperable MC BB services will commence post 2023 with 25,000 PPDR users with a goal to have first implementations on 2025.

The timeline for public safety user in Ireland to commence operations on a public safety wireless broadband system is very much in line with the Broadway roadmap. The Broadway roadmap provides users with the opportunity to specify and validate core pilot applications and will go a long way towards developing the final design and suitability of business applications to meet public safety requirements.

9. ITMOI: Ministry of the Interior, Italy

<http://www.interno.gov.it>



The Ministry of the Interior is a complex structure whose organisational structure is governed by Legislative Decree n. 300/99 and by the implementing measures. At the central level, it is divided into offices of direct collaboration with the minister (Presidential Decree No. 98/2002) and five departments (Presidential Decree No. 398/2001 and subsequent amendments); at the peripheral level, in Prefectures - Territorial Offices of Government, Police Headquarters and Fire Brigade.

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Department of Public Security (DPS) has drawn a strategic plan for telecommunications in the medium to long term (3-5 years): It is now possible to draw the guidelines for the development of existing networks, take the opportunities offered by new technologies and create a single logical network. At the same time Ministry of Interior is defining its role (owner of the networks or virtual operator) and the economic terms and funding. Participation in the SEC-04 consortium will help the DPS to develop a target solution that will be harmonised and interoperable with the other EU Member States solutions.

The Public Security Administration plays a central role in defining the strategy: it's necessary to identify a clear picture of needs, constraints for the economic sustainability and a good balance between network ownership and virtual operator models.

LTE ensures the availability of mobile broadband, making it possible to take advantage of innovative value-added services. Participation in the SEC-04 consortium will help the DPS to develop a target solution that will be harmonised and interoperable with the other EU Member States solutions. The Italian team can provide added value to the consortium by bringing the outcome of the above-mentioned strategic study on next generation mission critical broadband solution development.

ITMOI expects BroadWay to accelerate and stimulate the development of mission-critical broadband technologies in general. BroadWay will help to introduce mission critical (TETRA like) standardised functionalities in a network capable of offering broadband capabilities. BroadWay will also offer solutions for interoperability between countries at borders that will facilitate police forces to fight against terrorism and crime as well as PPDR in general to cooperate at the incident scenes. BroadWay will help PPDRs exploit and rely on capabilities that are currently provided by non-MC services and create a wider market that will provide wider range of solutions and devices at a lower price. BroadWay will "force" industries and manufacturer to develop features and devices according to PPDRs' needs, based on to the requirements defined in the previous stage of the program, BroadMap.

The development of national MC BB network program is expected to start in 2018 and will be carried out over the next 10 years with roughly 270,000 PPDR users.

10. NLPOL: National Police, Netherlands

<https://www.government.nl>



The Ministry of Justice and Security is responsible for maintaining the rule of law in the Netherlands, so that people can live together in freedom, regardless of their life-style or views. The Ministry is working towards a safer, more just society by giving people legal protection and, where necessary, intervening in their lives. We sometimes have to take radical measures: divesting parents of parental responsibility, for example, or putting convicted criminals in prison. We also give people new prospects: for example, we help prisoners return to society and provide support for victims of crime. These are all measures that only the Ministry of Justice and Security is entitled to take. The law is about people.

Organisation of the Dutch police

The Dutch national police force consists of 10 Regional Units, the Central Unit and the Police Services Centre. The five-member Force Command has its own support section (Commissioner's Staff).

Central Unit

In addition to its own independent tasks, the Central Unit also carries out specialist tasks in support of the Regional Units. The Unit's Chief Constable is responsible for its day-to-day management. The Central Unit's tasks include:

- monitoring, supporting and coordinating major operations;

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- combating serious, organised forms of criminality of a national or international character which undermine the rule of law or vital infrastructure;
- providing security support in the fight against crime;
- deploying mounted police, sniffer dogs and forensic expertise;
- providing security and protection for members of the Royal House and other VIPs;
- carrying out and supporting police work on the motorways, the railway network, on the water and in the air;
- combating all forms of serious violence and terrorism (Special Interventions Division)

Regional Units

The national police force consists of 10 Regional Units. Each Unit is managed by a Chief Constable, and consists of districts divided into Frontline Teams. Each team provides basic police services in a municipality, part of a large municipality, or cluster of smaller ones. The teams, consisting of Constables and Senior Constables, neighbourhood police officers, detectives and one or more team chiefs, are responsible for ensuring that the neighbourhood, town or region is a safe and pleasant environment to live in. They answer calls for emergency assistance, patrol the streets, advise on crime prevention, resolve traffic-related issues, conduct basic investigative activities, assist the public, process official reports and share information within their networks.

Police Services Centre

The Police Services Centre (PDC) provides operational management services, such as finance, ICT, communications and human resources, leaving officers in the Regional Units free to spend more time on actual police work. Where possible, PDC staff are located at 1 of 3 central locations in the Netherlands.

Supervision of the national police force

The national police force is headed by the Commissioner. The Minister of Security and Justice has full ministerial accountability for the proper functioning of the police. The Security and Justice Inspectorate ensures that the police force performs its tasks properly. The mobile PPDR broadband communication systems, based on the 3GPP standards, will become operational in most of the EU member states in the next 10 years, eventually replacing the legacy PMR systems (TETRA or conventional).

Broadway is helping The Netherlands to make sure there will be a good working cross border connection to neighbouring countries. By joining BroadWay the situation is avoided that happened when TETRA was introduced.

A lot of effort was then put into the Inter System Interchange (ISI) but due to lack of a unified European approach no ISI was established. By joining forces now already this can be avoided within mobile broadband. Furthermore, Broadway strengthens our ability to share and obtain knowledge with colleagues from all over Europe. Adoption of broadband in The Netherlands for PPDR comes in phases. When looking at the replacement of the TETRA C2000 network by mobile broadband it will commence no earlier than 2027, which is the year that the current contract ends. From a mission critical communication perspective this is the roadmap that is being used. The next generation MC BB network is expected to serve 100,000 Dutch PPDR users.

Next to C2000, the adoption of mobile broadband is already in progress within the several disciplines. At current the Police, Ambulance and Fire Department use the commercial network and therewith the commercial subscriptions. Nowadays this is sufficient but it cannot be considered mission critical. Because these disciplines are more and more discovering the benefits of mobile data it becomes more and more mission critical.

11. ROSTS: Special Telecommunication Services, Romania

<http://www.stsnet.ro>



The Special Telecommunications Service is the central specialized structure, with legal status, which organises and coordinates the activities in the special telecommunications field for the Romanian public authorities and other users as provided for by the law. The institution has a military organisation and is part of the national defence system.

The special telecommunications comprise transmissions, emissions or receptions of signs, signals, writings, images, sounds or information of any kind, transmitted through wire, radio, optic system or other electromagnetic systems for the users approved by law.

The institution provides special telecommunications services for the following Romanian public authorities:

The institution provides special telecommunications services for the following Romanian public authorities:

- The Romanian Parliament;
- The Presidential Administration;
- The Romanian Government;
- The institutions carrying out activities in the national defense, national security and law enforcement field;
- The central and local public administration;
- The Judicial Authority:
 - The High Court of Cassation and Justice;
 - The Public Ministry;
 - The Supreme Council of Magistracy;
- The Romanian Court of Accounts;
- The Constitutional Court;
- The leading structures within the governmental and national-interest non-governmental bodies;

A high level of protection and confidentiality characterizes the special telecommunications. The activity of the Special Telecommunications Service is organised and coordinated by the Supreme Council of National Defence and is placed under the control of the Romanian Parliament, through the Defence, Law Enforcement and National Security Commissions in the two Chambers of Parliament.

More and more PPDR users in Romania which at present are using narrowband TETRA network requested broadband mobile data services for their specific applications. ROSTS together with PPDR users are in permanent contact with MNOs in Romania for identifying solutions to use their networks for MC services, like: MC-PTT, prioritization, national roaming, pre-emption.

As it is the case for most EU countries, Romania has formulated a PPDR strategy towards broadband, using a gradual step by step approach, utilising the commercial broadband networks, first for complementary data services, whilst mission critical voice and messaging will remain in its countrywide TETRA network, at least for the following 10

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years. When such broadband PPDR network will be established in Romania, it is in the national interest that it will comply with all the requirements and standards widely accepted at EU level, for the scope of scale economies and guaranteed interoperability of devices, services and applications and networks.

However, due to the nature of their users, the mobile PPDR broadband communication systems will be used for security purposes, which implies that the technical systems interoperability will not be sufficient to achieve the cross border operational cooperation. BroadMap project has defined the SPICE Architecture Model (Standardised PPDR Interoperable Communication Service for Europe), which envisions the establishment of a PPDR system node at national level, securely interconnected to an EU SpiceNet Hub.

ROSTS is expecting that BroadWay will provide deeper and clearer understanding (both technical and organisational), on implementing the national strategy and roadmap towards PPDR interoperable MC BB services in Romania.

Deeper understanding is needed on future secure MC BB PPDR services with network architecture, security and interoperability implementation, ecosystem of devices and applications. Also, spectrum allocation, proportion between dedicated and shared resources must be studied. Implementation of priority and pre-emption over commercial network is a key focus. Technical systems interoperability and cross border operational cooperation are also important to study deeper. ROSTS is expecting to launch MC BB services in Romania 2026 with 150,000 users.

Appendix 4: Electronic Submission of the BroadWay Tender

Tenderers are reminded to refer to section 6.4 and Annex E of TD1.

Tenders have to be submitted electronically via the e-platform of the Belgian Federal Government e-Tendering <https://www.publicprocurement.be/fr/publicprocurementbe-english-0>.

e-Tendering is a part of e-Procurement, the portal that provides for every stage of the tendering process an application that allows the electronic handling of the public tender, starting from the publication of the contract notice up to the awarding. The full details about these applications can be found on: www.publicprocurement.be.

More info and support manuals on <http://www.publicprocurement.be/fr/publicprocurementbe-english-0> or via the e-Procurement helpdesk +32 (0)2 740 80 00.

With e-Tendering the Lead Procurer can electronically open the Tender, generate electronically the report of opening and make it available to the TVC. Tenderers can electronically submit their Tender to participate and digitally sign it.

N.B. Registration is required to submit electronic tenders in e-Tendering. Please see section “Manuals-User management- Enterprises” on <https://www.publicprocurement.be>.

Requirements and guidelines e-Tendering

The eProcurement applications can be used in different software environments. In general, you will need **a computer equipped with:**

- An internet connection;
- A Windows, Linux or Mac OS operating system;
- A standard web browser: Internet Explorer, Google Chrome, Mozilla Firefox, Safari;
- Java 1.6 update 26 or higher.

Technical guidelines:

- An electronic tender or request to participate consists of one or more documents;
- You can send any kind of file type (.doc, .xls, .avi, .ppt...). Sending multiple documents is possible by using a ZIP file. The size of a single file cannot exceed 80 megabytes. The total file size of the tender cannot exceed 350 megabytes (printing documents, signing and scanning for sending to e-Tendering becomes difficult in this case due to file size);
- Give files a clear name (e.g. BroadWay_Annex A_...);
- Make sure you have the right software configuration (Java, e-ID, ...).

When in doubt, contact the helpdesk, but be sure to do this reasonably in advance.

Registering and logging in

You should first register as a new supplier at <https://my.publicprocurement.be> (user management).

Enterprises registered with the Belgian Crossroads Bank for Enterprises (CBE/KBO) have the possibility to retrieve the enterprise data from the Crossroads Bank for Enterprises. Enterprises with a non-Belgian enterprise number will need to select the "Country" first. They can then add their enterprise number (no fixed format).

After saving your profile, you will receive an email containing an activation link.

Submitting of the Tender

Once you have consulted the contract notice on TED or on e-Notification and downloaded the Tender Documents on the BroadWay website you can submit your tender electronically via e-Tendering. Via e-Notification you will automatically be redirected to the dossier you wish to submit a Tender for.

More information on submitting tenders via e-Tendering on:

<http://www.publicprocurement.be/fr/documents/submitting-tenders-internet-pdf>

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Signing of the BroadWay Tender

Tenderers are asked to have an authorized representative sign each of the Tender Forms (Annexes A through E) separately, either manually ("blue ink") in the foreseen signature box (when provided) or electronically and upload them separately.

Appendix 5: Scoring Model for the Award Criteria

Overall Scoring Model

This Appendix contains the Scoring Model that will be used by the TVC to assess and score the extent to which a Tender/Offer is meeting the Award Criteria.

Score	Textual Description
0	The description fails to address the Objective or cannot be assessed due to missing or incomplete information
1	Poor – Objective is inadequately addressed or there are serious inherent weaknesses
2	Fair – The description broadly addresses the Objective, but there are significant weaknesses
3	Good – The description addresses the Objective well, but a number of shortcomings are present
4	Very good – The description addresses the Objective very well, but a small number of shortcomings are present
5	Excellent – The description successfully addresses all relevant aspects of the Objective. Any shortcomings are minor.

Table 3 Scoring guide

Appendix 6: Scoring Model for the Price

1. Scoring of the Total PCP Price

If the Price offered for a Phase is between € 0 and the ceiling price for that Phase, the score will be linear between 5 and 1, using the formula:

$$\text{Score} = 1 + 4 * (1 - \text{Price Offered} / \text{Ceiling Price})$$

The ceiling price is the maximum budget per Contractor (VAT included) as set out in section 1.5 Budgeting.

Note that the Actual Price will be taken into account (see Annex C Financial Offer and Cost Breakdown), and not the Virtual Price, for the evaluation.

Appendix 7: Scoring Model for Outcome of the Phase(s)

This Appendix contains the **Scoring Model** that will be used by the TVC to assess the **successful completion** of each Phase.

Score	Textual Description
0	The description fails to address the Objective or cannot be assessed due to missing or incomplete information
1	Poor –Objective is inadequately addressed or there are serious inherent weaknesses
2	Fair – The description broadly addresses the Objective, but there are significant weaknesses
3	Good – The description addresses the Objective well, but a number of shortcomings are present
4	Very good – The description addresses the Objective very well, but a small number of shortcomings are present
5	Excellent – The description successfully addresses all relevant aspects of the Objective. Any shortcomings are minor.

Table 4 Scoring model for outcome of Phases

Quality of the End of Phase Report of Phase 1, 2 or 3

For the End of Phase Report, each Objective will be validated through all Sub-objectives according to the Scoring Model for Outcome of the Phase.

Appendix 8: Table of page limits

Follow the page limits specified below for the submission forms of your Tender, unless otherwise specified.

Tender Submission Forms	Page limits
Annex A – ESPD form	21 (in total) per entity as appropriate. Please see section 5.1 of the RFT)
Part III: Exclusion Grounds (declaration)	6
Part IV: Selection Criteria (declaration)	1
Supporting Evidence for Selection Criteria	25
Part V: Compliance Criteria (declaration)	1
Part VI: Tenderer's Statement	1
Part VII: Consortia Statement	2
Part VIII: Subcontracting Statement	1
Part IX: Concluding Statements	1
Annex B – Technical Offer	55
Annex C – Financial Offer and Cost Breakdown	30
Annex D – Financial Offer Phase 1	3
Annex E- Official Language Selection Form	1

Table 5 Table of Page Limits

Tenderers will use a minimum font size of 10. Use a minimal line spacing of 1.

Tenders exceeding a page limit: words and/or pages in excess of the specified limit may not be considered further.
Tenders not complying with the minimal font and spacing size may be eliminated.

Appendix 9: End of Phase Reporting Form

Below is a template of an End-of Phase Report to be used throughout the Project to document progress. A MS Word template will be provided.

Objective 1: Pan-European Architecture		Deliverable No. ¹	Where (pages) ¹ ?	Use of background ¹ ?	Beyond the state of the art ¹ ?
PEAr1	Involvement of Radio access provision and consumer/commercial operation				
PEAr2	Organisational schemes				
PEAr3	Harmonised tuning ranges				
PEAr4	Standardised commercial solutions				
PEAr5	Standardised mission critical broadband solution				
PEAr6	PPDR networks				
PEAr7	PPDR users				

Objective 2: Pan-European Availability		Deliverable No. ¹	Where (pages) ¹ ?	Use of background ¹ ?	Beyond the state of the art ¹ ?
PEAv1	Harmonised Availability				
PEAv2	Harmonised Quality of Service				
PEAv3	Capacity				
PEAv4	Seamless Operation				
PEAv5	Assuring Quality of Experience				

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PEAv6	Air Ground Air				
PEAv7	National Coverage (nice to have)				
PEAv8	Disconnected network (nice to have)				

Objective 3: Pan-European Security		Deliverable No.¹	Where (pages)¹ ?	Use of background¹?	Beyond the state of the art¹?
PESAr1	Fundamental Security				
PESAr2	Vulnerability				
PESAr3	Standardised and Certification encryption				
PESAr4	End 2 End Encryption				
PESAr5	User and Control Plane				
PESAr6	Device/User Authentication				
PESAr7	Mutual Authentication				
PESAr8	Rights Management				
PESAr9	Over the Air Re-keying				
PESAr10	Enterprise Mobility Management				
PESAr11	Integrity				
PESAr12	Security Policies				

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PESAr13	Software Quality Assurance				
PESAr14	Service Assurance				
PESAr15	Harmonised Security Assurance				
PESAr16	EMM innovations (nice to have)				

Objective 4: Pan-European SpiceNet Governance		Deliverable No.¹	Where (pages)¹ ?	Use of background¹?	Beyond the state of the art¹?
PESg1	Legal framework for SpiceNet governance				
PESg2	System management				
PESg3	Authorised Administration				
PESg4	Management technology				
PESg5	Monitoring				
PESg6	Provisioning				
PESg7	Billing				

Objective 5: Pan-European Operational Mobility		Deliverable No.¹	Where (pages)¹ ?	Use of background¹?	Beyond the state of the art¹?
PEOm1	Seamless communication groups spanning networks and authorities				

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PEOm2	Seamless Access to information sources				
PEOm3	Seamless Access to applications and databases				
PEOm4	Harmonised Operational mobility - Same as home				
PEOm5	Forced network selection (nice to have)				

Objective 6: Standardised Solutions		Deliverable No.¹	Where (pages)¹ ?	Use of background¹?	Beyond the state of the art¹?
Ss1	Use of Open Common Standards				
Ss2	3GPP Mission Critical Services				
Ss3	Release compatibility and upgradability				
Ss4	Radio Equipment Directive				
Ss5	3rd party Applications, Equipment and Users				
Ss6	Statement of Compliance				
Ss7	Standardisation roadmap				
Ss8	Locating Users				

Ss9	Security architecture framework				
Ss10	Standardised technical policies supporting information exchange				
Ss11	Standardisation contribution obligation				
Ss12	Informational interoperability				

Objective 7: Application Eco-system		Deliverable No.¹	Where (pages)¹ ?	Use of background¹?	Beyond the state of the art¹?
AEs1	Open APIs				
AEs2	MCX service APIs and extension				
AEs3	Platform compatibility				
AEs4	Standardised codecs				
AEs5	Audio and Video quality				
AEs6	Open Application Development Platform				
AEs7	Application acceptance by Practitioners				
AEs8	Application Scalability				
AEs9	Application reliability				

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AEs10	Notification of Degraded application operation				
AEs11	Availability of authorised MCX services				
AEs12	Application support for Operational Mobility				
AEs13	Internet of Public Safety Things (IoPST) (nice to have)				

Objective 8: Device Eco-system		Deliverable No.¹	Where (pages)¹ ?	Use of background¹?	Beyond the state of the art¹?
DEs1	Deployment of Applications				
DEs2	Ergonomic and User Friendly				
DEs3	Programmable buttons				
DEs4	Simple group selection				
DEs5	Mobile Device Management				
DEs6	Robust and Ruggedised				
DEs7	Battery Life				
DEs8	Peripheral Equipment Interfaces				

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DEs9	Open APIs/SDKs for MC application development				
DEs10	Device Management and Monitoring				
DEs11	Display quality				
DEs12	Induction charging (nice to have)				
DEs13	Bring your own Device (nice to have)				
DEs14	Terminal to Terminal (nice to have)				

Objective 9: Innovation Eco-system		Deliverable No.¹	Where (pages)¹ ?	Use of background¹?	Beyond the state of the art¹?
IEs1	New innovation				
IEs2	Common test facilities for new innovation				
IEs3	Integration of existing components (nice to have)				
IEs4	Supporting future Innovation (nice to have)				

Objective 10: Technical validation		Deliverable No.¹	Where (pages)¹ ?	Use of background¹?	Beyond the state of the art¹?
PEAv2	Harmonised Quality of Service				

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PEAv4	Seamless Operation				
PEAv5	Assuring Quality of Experience				
PESAr4	End 2 End Encryption				
PESAr5	User and Control Plane				
PESAr6	Device/User Authentication				
PESAr7	Mutual Authentication				
PESAr8	Rights Management				
PESAr9	Over the Air Re-keying				
PESAr10	Enterprise Mobility Management				
PESAr15	Harmonised Security Assurance				
PESg3	Authorised Administration				
PESg4	Management technology				
PESg5	Monitoring				
PEOm1	Seamless communication groups spanning networks and authorities				
PEOm2	Seamless Access to information sources				

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PEOm3	Seamless Access to applications and databases				
PEOm4	Harmonised Operational mobility - Same as home				
AEs1	Open APIs				
AEs5	Audio and Video quality				
AEs6	Open Application Development Platform				
AEs8	Application Scalability				
AEs9	Application reliability				
AEs10	Notification of Degraded application operation				
AEs11	Availability of authorised MCX services				
AEs12	Application support for Operational Mobility				

Objective 11: Practitioner evaluation		Deliverable No.¹	Where (pages)¹ ?	Use of background¹?	Beyond the state of the art¹?
PREv1	Practitioner Evaluation methodology and process				
PREv2	Practitioner Evaluation of MC services				
PREv3	Practitioner Evaluation of MC Applications,				

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	making use of MC services				
PREv4	Practitioner Evaluation of Information services enhanced by Operationally mobile MC Applications and Services				
PREv5	Existing or enhanced applications to support the pilot (nice to have)				

¹ If applicable

1. At the outset of this piece of work, what were your aims and objectives?
2. Please provide a summary of the outputs of this piece of work and relate these to the original objectives. How do the outputs address the requirements of this PCP?
3. Describe any changes to the original plan in the Tender. What was the reason for these changes? Please include any circumstances that aided or impeded the progress of the work and the actions taken to overcome them.
4. Please provide a short factual summary of the most significant outcomes of your work.
5. Describe the innovative aspects of the work, including any new findings or techniques.
6. Describe where the R&D and other management activities related to the Project have been performed.
7. Describe any potential long-term collaborations/ partnerships entered into since last report. Please list the organisation/s and the role they played in the work if any.
8. Describe the potential for exploiting the work. Please identify any new intellectual property which has been filed or for which filing is anticipated.
9. Please describe how your organisation has gained from participating in this Project. What new business opportunities have been created? Do you expect your organisation to grow as a result of participating in this Project?
(To be answered only for the Report on Phase I)
10. Describe the suitability of the Project results for: (a) developing a prototype, and (b) development of a pre-commercial solution – in order to facilitate assessments of progress into next phase.
(To be answered only for the report on Phase 2)
11. Describe the suitability of the Project results for the development of pre-commercial solution in order to facilitate assessments of progress into next phase.

12. Please insert additional information that may be pertinent. This may be in the form of text, pictures, diagrams, data, graphs that support the work undertaken during the phase to which this report refers.

Appendix 10: Bi-monthly Reporting Form

A MS PowerPoint template will be provided.

Appendix 10: Bi-monthly Report for period: (date) – (date)

Consortium: XY

Pre-Commercial Procurement towards Pan-European broadband mobile for Public Safety

Innovation activity to develop technologies to enable a pan-European interoperable broadband mobile system for PPDR, validated by sustainable testing facilities

Instructions

For each objective, please answer to written questions, no more than one slide.

Pan-European Architecture

1. Progress over the period about objective Pan-European Architecture with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European Availability

1. Progress over the period about objective Pan-European Availability with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European Security

1. Progress over the period about objective Pan-European Security with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European SpiceNet Governance

1. Progress over the period about objective Pan-European SpiceNet Governance with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European Operational Mobility

1. Progress over the period about objective Pan-European Operational Mobility with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European Standardised solutions

1. Progress over the period about objective Standardised solutions with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European Application Eco-system

1. Progress over the period about objective Application Eco-system with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European Device Eco-system

1. Progress over the period about objective Device Eco-system with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European Innovation Eco-system

1. Progress over the period about objective Innovation Eco-system with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European Technical validation

1. Progress over the period about objective Technical validation with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Pan-European Practitioner evaluation

1. Progress over the period about objective Practitioner evaluation with the emphasis on Innovation.
2. Any significant risks/delays and mitigation action(s) which has to be taken to recover the lost time to meet original Phase 1/2/3 timetable.

Any other relevant information for project?



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End of Document

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