Open Market Consultation Document
European Blockchain PCP

Introduction

- This document describes the background, objectives and implementation modalities of the upcoming open market consultation (OMC) that the European Commission is organising in preparation of the European Blockchain pre-commercial procurement (PCP). The European Commission's Directorate General for Communication Networks, Content and Technology and the Directorate General for Informatics are organising this OMC in cooperation.

- The OMC aims to inform the market about the upcoming European Blockchain PCP. The OMC also aims to obtain market parties' input to assess the gap between the procurement need and ongoing market developments in the field of Blockchain. This will provide important information to the European Commission for scoping the pre-commercial procurement. The OMC is therefore an opportunity for market parties to provide their feedback on the scope of the future PCP and to be involved in and co-create the future development of innovative EU-wide blockchain solutions.

- The implementation timetable for the PCP tendering procedure has not yet been determined, however it is expected that it will start in the second quarter of 2020.

- The OMC starts on the date of its publication in the EU's Official Journal (TED) and ends on 31 March 2020, unless otherwise communicated. The market consultation is organised in the form of a webinar, an online questionnaire, an open OMC event and a number of closed individual meetings in Brussels. The Timetable at the end of this document provides more details on the dates and registration for the different steps of the OMC. The OMC will be conducted in English.

- All interested market parties, including in particular technology vendors, innovators (including start-ups) and the wider research and development community, are invited to take part in this OMC, regardless of their geographical location, size or governance structure of their organisation. Participation in the OMC is voluntary and non-binding. Participation in the OMC is not a preselection or prequalification to participate in the PCP. Moreover, participation in the PCP is done on your own account and risk. The EC does not offer any payment for market parties to participate in the OMC.

- Market parties are kindly invited to fill out at the latest by 2 March 2020 the questionnaire that was made available on 17 January 2020 at the following link: https://ec.europa.eu/eusurvey/runner/b33a9f4e-1e1a-27e1-e0ae-3d092366275b . As the questionnaire is intended to explore the market 'as-is', there can be no wrong or right answers. The answers provided will be used as input for our procurement strategy and conditions.

- After the OMC, we will publish the conclusions of the OMC here: https://ec.europa.eu/digital-single-market/en/news/european-blockchain-pre-commercial-procurement . Please indicate clearly in all your communications to the EC which pieces of information that you provide, if any, concern confidential or commercially sensitive information. In respect of equal treatment and confidentiality, we will not communicate in the summary of the OMC results any confidential or commercially sensitive information (no specific details about suppliers or their solutions will be published). Only the general conclusions of the OMC will be summarised and published in an anonymised way.

- During the OMC, market parties can also ask questions to the EC. Questions may be send this to the email address in the contact section below, before the end date of the market consultation. The responses that the European Commission will provide to all questions asked will be published here: https://ec.europa.eu/digital-single-market/en/news/european-blockchain-pre-commercial-procurement . In respect of equal treatment and confidentiality, confidential or commercially sensitive information will not be published in the Q&A. The Q&A will be published in an anonymised way without specific details about suppliers or their solutions.

- Any market party who desires to supply additional confidential information that is not revealed during the OMC process, may send such information (clearly marking confidential parts as confidential) to the email address in the contact section below, before the end date to fill out the EU Survey questionnaire of the market consultation.

Context

- The European Commission has a holistic approach to blockchain technologies, and Distributed Ledger Technologies (DLT) more generally[1], which aims at positioning Europe at the forefront of blockchain innovation and uptake.

- The European Blockchain Partnership (EBP)[2], created in April 2018, is a partnership endorsed at a political level, which establishes a cooperation between the European Commission, all EU Member States and some members of the European Economic Area (Norway and Liechtenstein). It is a joint public sector endeavour with the aim to reap the potential of blockchain to enhance the way that citizens, governments and businesses interact, by enhancing trust between entities and improving the efficiency of operations, and to help create new business opportunities and to establish new areas of leadership.

- The Partnership is building a European Blockchain Services Infrastructure (EBSI)[3], which aims to deliver EU-wide cross-border public services using blockchain technology with the highest standards of security and privacy. By 2020, EBSI will be materialised as a network of distributed nodes across Europe (the European blockchain), leveraging an increasing number of applications focused on specific use cases. By 2020, the EBSI will start to provide first sets of reusable software, specifications and services to support adoption by EU institutions and European public administrations.

- To make this happen, the EBSI has started in 2019 with developing four use cases on which Member States collaborate to develop a prototype application by early 2020. The EBP Policy Group will select a new set of use cases for 2020.

---

[1] Read more about the European Commission blockchain strategy and initiatives.: https://ec.europa.eu/digital-single-market/en/blockchain-technologies
[2] More info about the European Blockchain Partnership: https://ec.europa.eu/digital-single-market/en/news/european-countries-join-blockchain-partnership
[3] More info about the European Blockchain Service Infrastructure: https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/ebsi

1. Notarisation: Leveraging the power of blockchain to create trusted digital audit trails, automate compliance checks in time-sensitive processes and prove data integrity.

2. Diplomas: Giving control back to citizens when managing their education credentials; significantly reducing verification costs and improving authenticity trust.

3. European Self-Sovereign Identity: Implementing a generic Self-Sovereign Identity capability, allowing users to create and control their own identity across borders.

4. Trusted Data Sharing: Leveraging blockchain technology to securely share data (e.g. IOSS VAT identification numbers and import one-stop-shop) amongst customs and tax authorities in the EU.

- How will it work? While the European Commission operates the core EBSI building blocks, the Member States will also operate EBSI nodes. These nodes will be able to create and broadcast transactions that will update the ledger. The architecture of each node will be composed of two main layers:

1. A layer of Use Case-specific APIs developed to enable business applications to interface with the node.

2. An infrastructure layer with capabilities common to all Use Cases. This layer will include generic capabilities and connectivity to Blockchain networks.
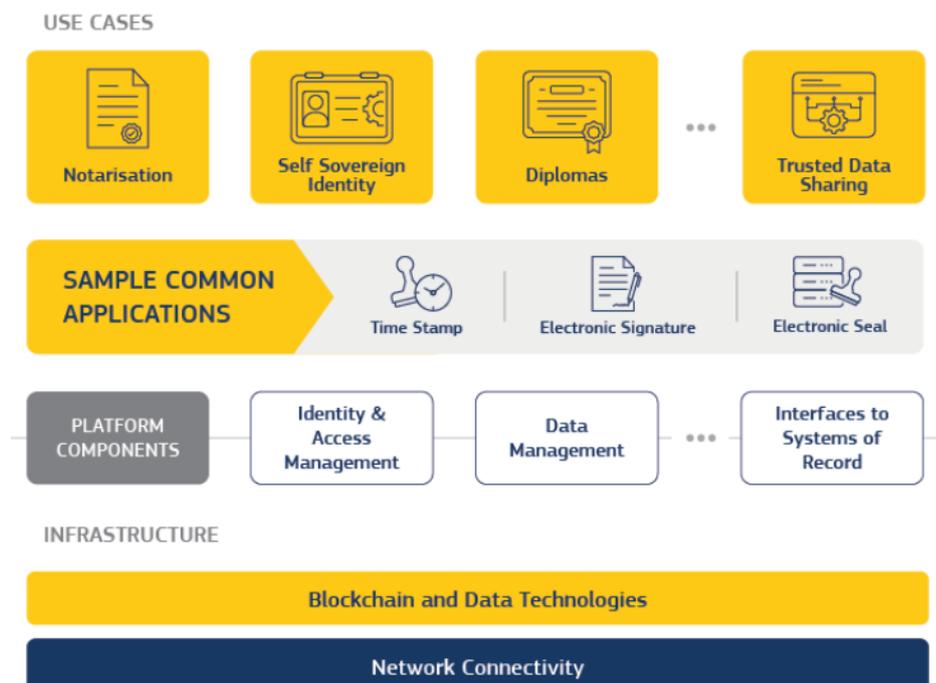
Objectives

- In order to deploy cross-border blockchain services across Europe as soon as possible, the current EBSI work done by the EBP is focusing mainly on developing use cases that can be implemented relatively easily by using existing blockchain technology.

- It is clear that there are gaps in existing blockchain solutions to enable the delivery of more demanding cross-border blockchain services (e.g. regarding full compliance with the EU legal framework, security, interoperability, robustness, sustainability). The future evolution of the EBSI thus requires new, improved blockchain solutions.

- The blockchain PCP therefore focuses on the development and testing of a novel distributed ledger or blockchain solution which builds on the EU legal framework, in particular the GDPR Regulation, the eIDAS Regulation, the NIS Directive. Such a public infrastructure should meet core requirements of scalability and throughput, interoperability with other systems, security, robustness, sustainability, energy efficiency and continuity of the service. It should anticipate the implementation of a wide range of new cross border use cases or services that could be public or private ones. The aim is to go significantly further than what is offered by existing solutions. The PCP should aim at setting a global standard for blockchain infrastructures. The PCP will start in 2020, with the objective to lead to the deployment of solutions within the next three years.

Scope of the Open Market Consultation

- The OMC topics is structured around two themes:
    1. Designing the future European Blockchain Services Infrastructure
    2. Creating a European blockchain benchmarking and integration environment
- The OMC will provide important information to the European Commission for scoping the PCP.

What is Pre-Commercial Procurement

PCP challenges 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 research and development.

In this context, PCP enables the co-creation of innovative solutions by R&D suppliers (e.g. technology providers, researchers) and procurers.
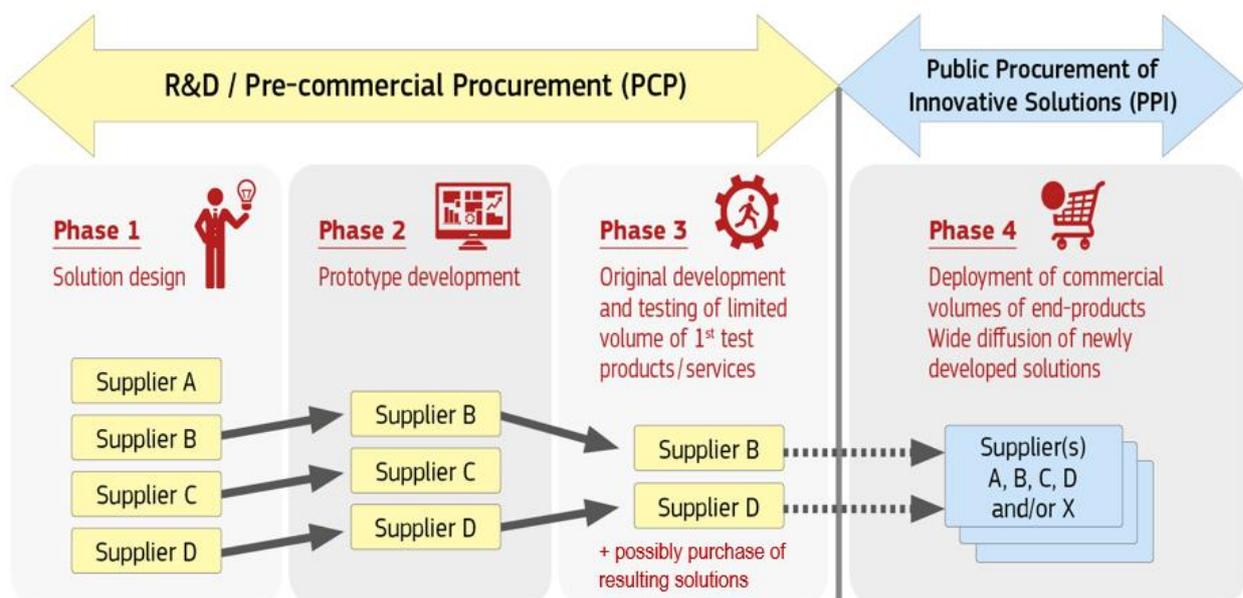
Pre-Commercial Procurement is an approach to procure R&D services that involves competitive development in phases, risk-benefit sharing under market conditions and that aims to create growth and jobs in Europe[4].

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 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.

Competitive development in phases (multiple sourcing)

- PCP targets situations that require R&D and for which there are typically no solutions on or close to the market yet. Different market parties 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 and to obtain a first customer test reference.

- The phased approach progressively identifies the solutions that offer the best value for money and best meet the customer needs. It allows successful contractors to improve their solutions gradually based on lessons learnt and feedback from the procurer. It also makes it easier for smaller companies (including SMEs and start-ups) to participate in the PCP and to grow their business step-by-step throughout the PCP.

- PCP may include the purchase of the limited set of innovative solutions that were developed and tested during the PCP. Depending on the outcome of the PCP, procurers may or may not decide to follow-up the PCP with a public procurement for wider diffusion of the innovative solutions (PPI).

Risk-benefit sharing at market conditions

- PCP gives each contractor the ownership of the IPRs attached to the results it generates during the PCP so that contractors can widely exploit the newly developed solutions commercially. The procurer receives the rights to use the R&D results and licensing rights subject to certain conditions.

- PCP is not a grant or subsidy. It is a public procurement of 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.

Creating growth and jobs in Europe

---

[4] For more info about pre-commercial procurement (PCP): https://ec.europa.eu/digital-single-market/en/pre-commercial-procurement

- PCP procurements are exempted from the EU public procurement directives, the WTO Government Procurement Agreement (GPA) and the EU's other bilateral procurements agreements with third countries outside of the European Neighbourhood Policy.

- PCP procurements can therefore include place of performance conditions that require selected R&D suppliers to locate the majority of the R&D activities for the PCP contract, including in particular the principal researcher(s) working for the PCP contract, in the EU Member States or countries associated to the EU Neighbourhood Policy.

Timetable Open Market Consultation

The key dates of the milestones for the OMC are the following:

Date	Milestone
13 December 2019	Publication of the Prior Information Notice for the Open Market Consultation in OJEU/TED
12th January 2020	Deadline for registration for the webinar
14th January 2020	Webinar with interested market parties
17th January 2020	Publication of the OMC questionnaire
2nd March 2020	Deadline for registration for the OMC event in Brussels
2nd March 2020	Deadline for registration for an individual face to face meeting with the European Commission
2th March 2020	Deadline for completing the OMC questionnaire
13th March 2020	OMC event in Brussels
12th March 2020	Individual face to face meetings with the European Commission
31st March 2020	Close of the OMC

Please note that the EC reserves the right to modify dates in this timetable for the OMC. In this case, the updated schedule will be posted on the European Blockchain PCP page below.

Contact

CNECT-F3@ec.europa.eu

https://ec.europa.eu/digital-single-market/en/news/european-blockchain-pre-commercial-procurement