Call for Interest for IP Rights holders to onboard EBSI-ELSA

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1 Background Information

1.1 Societal background related to fighting counterfeits

(1) The European Union is rich in intellectual resources, and creativity, innovation and entrepreneurship are the source of its growth. **Intellectual property rights (IPR) and their protection are fundamental to securing the EU economy and society** ([1]). Infringements of intellectual property (IP), such as counterfeiting and piracy, harm EU growth significantly. Alarmingly, the overall number and variety of counterfeit products detained at the EU borders has risen in volume and has increased the challenge for everyone.

(2) Buying counterfeits is not always an intentional act. On the contrary, as noted in various studies carried out by the European Union Intellectual Property Office (hereinafter the EUIPO), many people are tricked into buying counterfeits, and even more are unsure whether a product they have bought is in fact legitimate or not. In 2023, 15 % of EU consumers, which is around 110 million citizens, were **tricked into buying a fake product** instead of a genuine one. The study also found that a much larger proportion of EU citizens (39 %) was unsure as to whether a product they bought during the previous 12 months was genuine or a counterfeit ([2]). To summarise:

- 39 % of Europeans did not know whether a product they purchased was genuine or counterfeit;
- 15 % of Europeans bought counterfeit goods as a result of being misled in 2023 versus 9 % in 2020;
- 5.8 % of EU imports (EUR 119 billion) in 2019 are attributed to counterfeit and pirated goods ([3]).

(3) Consumers suffer not only an **economic loss** but could also be exposed to **health and safety risks** ([4]). Counterfeit products, such as foods, medicines, toys, mobile phones, luxury goods and high-end technology can be unsafe and dangerous. Their production can have a severe **environmental impact** and involve appalling conditions, such as child labour. Counterfeiting undermines trust in society and the economy and deprives legitimate businesses and citizens of revenue, incomes, and the means to make an honest living. The criminal groups involved are frequently linked to other serious crimes, such as drug trafficking, excise fraud, human trafficking, or money laundering.

(4) Numerous technologies, procedures and tools already exist that contribute to the control of supply chains and the fight against counterfeiting, such as track-and-trace systems, radio-frequency identification, customs controls, etc., and the EUIPO's IP Enforcement Portal (IPEP) ([5]). However, systems are scattered, often working in silos, which criminal networks use to their advantage. Therefore, the main actors must **work more closely** and find new ways of facing these growing challenges.

([1]) Further information on the protection of Intellectual Property in Europe can be referenced through the EUIPO website — https://euipo.europa.eu/ohimportal/en.
([2]) European Citizens and Intellectual Property: Perception, Awareness, and Behaviour – 2023 – Available here.
([3]) Global Trade in Fakes: A worrying threat, June 2021, OECD-EUIPO.https://euipo.europa.eu/ohimportal/en/web/observatory/report-on-trade-in-fakes.
([4]) Report on the EU enforcement of intellectual property rights: results at EU borders and in Member States 2013-2017 available here.
([5]) More information at: https://euipo.europa.eu/ohimportal/es/web/observatory/ip-enforcement-portal-home-page.

1.2 The European Union Intellectual Property Office

(5) The EUIPO is an Agency of the European Union (EU) located in Alicante that manages the registration of the EU Trade Mark and registered Community Designs, which are valid throughout the EU. In cooperation with national and regional EU Intellectual Property (IP) offices, users of the IP system and other institutional partners, the EUIPO works to strengthen IP at European and international level. The EUIPO has developed a multi-annual Strategic Plan ([6]) based on three strong drivers to guide the efforts towards delivering IP value for business and citizens in Europe. The Strategic Plan 2025 is a roadmap, guide and destination which includes the development of the Strategic Project Anti-counterfeiting Blockathon Infrastructure (herein after ACBI ([7])).

1.3 Anti-Counterfeiting Blockathon Infrastructure Project

(6) This project is founded on the provisions of Regulation (EU) No 386/2012 of the European Parliament and of the Council of 19 April 2012 establishing the mandate of the European Observatory on Infringements of Intellectual Property Rights (the Observatory) ([8]). In particular, Article 2(1)(j) calls for the Observatory to support 'identifying and promoting technical tools for professionals and benchmark techniques, including tracking and tracing systems which help to distinguish genuine products from counterfeit ones'. From a series of workshops in 2017 to a 48-hour Blockathon in 2018 ([9]), the EUIPO conducted various activities to investigate the benefits of blockchain technology for IPR enforcement. In 2019 and 2020, the EUIPO carried out in-depth meetings with the Blockathon 2018 winner and all stakeholders involved and created the Blockathon Forum ([10]) to define the use case and undertake a prototype, which proved the feasibility of the idea, and led to the official Strategic Project ACBI.

(7) The goal of this project is to develop a set of two open-source and free-of-charges modules ([11]) providing the means for IP rights holders to collect digital signatures about their existing trade mark rights, thus empowering them with the means to create products' digital twins as well as sharing transparent and secured information during the products' logistic journey with enforcement authorities and intermediaries. These modules will be integrated by IP rights holders in their enterprise resource planning (ERP) system and connect to the EUIPO IP Enforcement Portal as an interface with enforcement authorities.

(8) The two open-source modules of the ACBI infrastructure are as followed:

- **A digital signature module**, which provides a digital identity as well as existing EU trade mark claims to IP rights holders. This digital identity and claims can be downloaded and used to sign digital twins of physical products and logistics information. The EUIPO uses this module to build an Identity Register, a repository for verified IP rights holders' identity and opposable rights to all parties in the chain.
- **A peer-to-peer logistic module** to facilitate the exchange of information between IP rights holders, enforcement authorities and intermediaries on products and shipments through an open-source peer-to-peer layer and a blockchain timestamping notarisation service creating an audit trail of the history of a shipment and its provenance.

([6]) https://euipo.europa.eu/ohimportal/en/strategic-drivers/ipnetwork
([7]) Project Card available here.
([8]) Regulation (EU) No 386/2012 of the European Parliament and of the Council of 19 April 2012 on entrusting the European Union Intellectual Property Office with tasks related to the enforcement of intellectual property rights, including the assembling of public and private-sector representatives as a European Observatory on Infringements of Intellectual Property Rights.
([9]) More information at: https://euipo.europa.eu/ohimportal/en/web/observatory/blockathon-2018.
([10]) More information at: https://euipo.europa.eu/ohimportal/en/web/observatory/blockathon/acbi.
([11]) Based on the European Union Public License Free/Open Source Software (EUPL – F/OSS) model. More information at: https://commission.europa.eu/content/european-union-public-licence_en.

(9) The overall infrastructure is also designed to be flexible and interoperable with the following services:

- IP rights holders can choose their own Non-Fungible Token (NFT) platform to leverage the verifiable credentials provided by the EUIPO to create their product digital twins;
- IP rights holders can choose their own interaction tool to link the scan of the serialisation of the product and the data confirming its authenticity, including a product's trade mark rights, against the EUIPO Identity Register;
- Manufacturers can use their existing physical identification and serialisation technology, which ensures for each product a persistent unique identification, a persistent digitally enabled data carrier and a persistent weblink connector;
- Transport and logistic operators can use their existing track and trace system and ensure connection with the blockchain for product journey notarisation;
- Customs authorities can collect data on the journey into their risk analysis tools through an API call to the blockchain used for product journey notarisation.

(10) The solution is further detailed within the blockathon use case in annex 1 hereafter. It can be used on all products possessing a digitally enabled serialisation technique that are imported or exported from/to the EU.

1.4 Proof of Concept and roadmap towards Minimum Viable Product

(11) The EUIPO leveraged the lessons learned in 2022 to adapt the main requirements for the infrastructure from study visits conducted in manufacturing and production sites, customs offices, and transport and logistic operators' distribution centres. This infrastructure was then put to the test during a Proof of Concept carried out in 2023.

(12) The objective of the Proof of Concept was to demonstrate that real products created outside the EU and using the digital EUIPO infrastructure can then be shipped to the Netherlands, where they can be seized, inspected, and then released by customs authorities to then pass onto the end retailer or distribution site inside the EU, all the while using all EUIPO elements (digital twin, digital signature, peer-to-peer logistical layer). This led to the deployment of four products (depicted hereafter Annex 2 and 3) from different worldwide locations (Atlanta, Hong Kong, Beijing, Ho Chi Minh), using air and maritime freight transport.

(13) Taking stock of the results of the Proof of Concept and the discussion during the Blockathon Forum ([12]), the project enters the final stage of definition and deployment of the Minimum Viable Product expected to go live by end of Q1 2024. As it will by default use part of the services provided by the European Blockchain Service Infrastructure (EBSI ([13])) for digital signature and timestamping services, the project was renamed EBSI-ELSA ([14]) in May 2023.

(14) In 2024, adoption by interested parties such as rights holders, customs authorities, intermediaries, serialisation providers, private track and trace services, NFT and blockchain service providers, will be of paramount to the success of its adoption in a live production and distribution environment. To ensure sufficient arrays of practices and take-up in the adoption of the EBSI-ELSA infrastructure, the EUIPO launches this call for expression of interest to extend cooperation between rights holders, transport and logistic operators and customs authorities, using EBSI-ELSA modules to authenticate and enhance the provenance of products throughout the supply and logistics chain of goods imported into the EU.

([12]) op.cit https://euipo.europa.eu/ohimportal/en/web/observatory/report-on-trade-in-fakes.
([13]) More information at: https://ec.europa.eu/digital-building-blocks/wikis/display/EBSI/Home.
([14]) European Blockchain Service Infrastructure – European products and Logistic Service Authentication.

2 Objective of this call

2.1 General considerations

(15) Under this Call, the EUIPO aims to select and collaborate with up to five IP rights holders under five pilots in a live environment in the supply and distribution chain from June to November 2024. Each pilot is expected to be completed at the latest by November 2024, with the publication of the end report and public presentation of the results.

(16) Each pilot will:

a. be led by one IP rights holder with the support of at least one transport and logistic operator **and** one customs authority;
b. use EBSI-ELSA modules on a voluntary basis and following a similar product journey as the one proposed in the EBSI-ELSA Proof of Concept ([15]);
c. cover at least 50 products from a specific distribution line and from the following sectors that are most impacted by counterfeits ([16]): footwear and/or clothing, electrical equipment, watches, medical equipment and/or pharmaceuticals, perfumes and/or cosmetics, automotive spare parts, and toys;
d. use a part of the IP Enforcement Portal functionalities.

(17) Notwithstanding IP rights holders' own efforts and existing cooperation on the matter, the EUIPO has pre-identified a list of customs authorities that are already aware and interested in undertaking such a pilot. Access to the latest pool of national customs authorities can be requested electronically at the following address: ebsi-elsa@euipo.europa.eu.

(18) This Call will result in a notification letter of the results and a signed acceptance by applicants of the conditions of the call for expression of interest and the conditions of use. This Call will not result in the transfer of financial resources to the selected IP rights holders.

(19) Through the deployment of the selected pilots, the EUIPO seeks to:

a) test and assess the usage of the digital signature and the logistic modules in real-life manufacturing and distribution systems as part of the IP rights holders' ERP;
b) test and assess throughout the product journey the level of access by customs officers as well as the quality of information contained in the digital shipment contract and digital twin of the products. This is important to know given that customs officers are expected to assess the products' authenticity both at pre-arrival and at inspection phases;
c) identify the conditions, actions and resources necessary to build strong and long-lasting partnerships between rights holders and customs authorities in using EBSI-ELSA modules;
d) provide a compendium of all pilot end reports with supporting documentation relating to the implementation, results, and lessons learned in the use of these modules through real-life business operations. These will then be shared beyond the pilots' lifecycle;
e) provide peer learning and support community of EBSI-ELSA practitioners within the Blockathon Forum.

2.2 Activities foreseen

(20) For each pilot, each selected IP rights holder involved agrees to perform the following actions:

([15]) All documentation available at this address: https://www.euipo.europa.eu/en/news/euipo-unveils-ebsi-elsa-a-ground-breaking-step-in-global-supply-chain-product-authentication.
([16]) Op cit. EUIPO /OECD report on *Trends in Trade in Counterfeit and Pirated Goods*.

a) To commit to make the necessary resources (financial and human) available to participate in this pilot, including for the participation in training, discussions, meetings and workshops, and to contribute to reviewing documents;
b) To commit to use IT blockchain services with a governance model that is not based on Proof of Work;
c) To involve transport and logistic operators in charge of the logistic journey to use the EBSI-ELSA logistic module in their own system, thus ensuring the exchange and sharing of information related to product authenticity and provenance;
d) To ensure that user permissions are provided to customs authorities expected to perform cross border control for the EU market in the EBSI-ELSA logistic module where logistic data is located. This will allow them to perform pre-arrival and inspection checks;
e) Only if part of the pilot is put forward in the application, the IP rights holder or the transport and logistics operator in charge of the logistic journey will provide access to the EBSI-ELSA digital signature and/or logistic modules to additional intermediaries involved in the supply and logistic chain. This can include, amongst others, carriers, online marketplaces, NFT platform providers or end-to-end logistic blockchain services providers;
f) Provide a pilot end report compiling information and supporting documentation relating to the implementation, results and lessons learned, as well as a roadmap in the use of these modules through real-life business operations on a larger scale.

(21) To support IP rights holders in the technical integration of the EBSI-ELSA modules in their system, the EUIPO will cooperate with and use the expertise and technical assistance services of an IT development and maintenance framework contract provider who will:

a) provide all the technical documentation required for the use of the EBSI-ELSA modules;
b) accompany IP rights holders in establishing the right methodology towards rights, access and implementation of the EBSI-ELSA modules;
c) support IP rights holders in building an enabling environment for collaboration and partnership;
d) support IP rights holder in setting-up and learn the use of EBSI-ELSA module on creation of digital twin;
e) support IP rights holders to provide permissions to the transport and logistics operator in charge of the logistic journey as well as the customs authorities in charge of border control to access digital information on digital twins of products and key information on digital shipment contracts;
f) advise IP rights holders in technical collaboration with any additional third-party providers or services to complete the logistic journey, such as online platform marketplaces and/or end-to-end blockchain solution providers.

3 Who can apply under this call

(22) The Call for expression of interest targets IP rights holders (legal entities holding trade mark rights registered at the EUIPO) manufacturing products outside the EU with the destination being the EU internal market.

4 Procedure for submission of expression of interest

(23) IP rights holders expressing their interest to participate in this pilot should complete the application form, letter of intent and declaration on honour provided in Annex of this Call.

(24) All documentation can be completed in all EU languages, but applicants are invited to submit their application in English as it is the working language for the entire pilot lifecycle.

(25) The expression of interest should be submitted electronically by no later than 30 April 2024 to the following email address: ebsi-elsa@euipo.europa.eu. In case of doubt prior to the submission of the application, please contact ebsi-elsa@euipo.europa.eu. Expressions of interest submitted after this date will not be considered.

(26) With the submission of the application, applicants accept the terms set out in this call for interest, the EBSI-ELSA terms and conditions (referred to in the Annex) as well as EBSI credential issuance guidelines ([17]), which will govern the collaboration of the parties during the implementation of these activities.

(27) Four weeks after 30 April 2024 or when five pilots have been selected, whichever comes first, the Office will notify candidate IP rights holders of the outcome of this Call by email. The Office will use the email address indicated by the applicant in the application form for this and all other communication with the candidates. It is the candidate's responsibility to provide a valid email address and to check it regularly.

(28) By applying, candidates agree to receive notifications on the procedure by electronic means. The notifications shall be deemed to have been received on the date when the Office sends it to the electronic address referred to in the application.

5 Eligibility criteria

(29) To be eligible, the expression of interest will have to meet all the following eligibility criteria:

a) It is submitted by an IP rights holder (holding trade mark rights registered at the EUIPO) manufacturing products outside the EU with the EU internal market as the destination. Expressions of interest submitted by natural persons are not eligible.
b) The IP rights holder has completed the application form and declaration on honour provided in Annex of this Call, as well as the letter of intent, also in annex, declaring that:
    a. the production line used to test the EBSI-ELSA module is geographically located outside of the EU, with at least 50 products from this production line using the EBSI-ELSA modules during their logistic journey into the EU.
    b. the transport and logistics operator in charge of the logistic journey using the EBSI-ELSA modules has been approached, understood the pilot scope and purpose and have in principle accepted to participate and allocate the required resources to carry out the activities envisaged.
    c. the customs authority that will be in charge of EU clearance for the imported products using the EBSI-ELSA modules has been approached, understood the pilot scope and purpose, and have in principle accepted to participate and allocate the required resources to carry out the activities envisaged.

6 Selection Criteria for shortlisting expressions of interest

(30) The eligible expressions of interest will be assessed according to the following selection criteria.

a) Quality and effectiveness of pilot methodology (minimum: 22.5 points / maximum 45 points).
b) Proposed measures to ensure the continuity of the service and a proper management of confidential information (minimum: 20 points / maximum 40 points).
c) Contingency measures and cooperation with third parties (minimum: 5 points / maximum 10 points).
d) Environmental quality of the pilot (minimum: 2.5 points / maximum 5 points).

([17]) credential issuance guidelines of EBSI: https://api-pilot.ebsi.eu/docs/ct/credential-issuance-guidelines.

Each criterion has a minimum and a maximum mark. Should an offer fail to meet one of the minimum score requirements of one or more of the criteria, the offer submitted cannot be further considered.

(31) Inside each criteria key aspects are to be considered, and points will be attributed on the following basis:

Criterion one – Quality and effectiveness of pilot methodology:

	Maximum	**Minimum**
The methodology to implement and use EBSI-ELSA modules and sub-modules in existing production and distribution environments is reliable and accurate. Detailing the pilot approach, the application explains how the EBSI-ELSA modules will be integrated with existing manufacturing and distribution tools and databases and how the implementation of technical processes (creation of digital twins, link to serialisation technique, creation of digital shipment requests, tracing and timestamping) and explains how the management of different geographical manufacturing and distribution sites will be handled.	20	N/A
The application details how the methodology during the piloting phase complies with the terms referred to in paragraph 16 of this Call in terms of product type, industry, as well as use of IPEP.	10	N/A
The application details how results gathered during the pilot will lead to the design and production of the pilot end report and lessons learned, explaining how the challenges and opportunities identified will feed a dedicated long-term strategy for the IP rights holder towards using EBSI-ELSA modules when producing and distributing products on a large scale, according to paragraph 20 of this Call.	15	N/A
TOTAL	**45**	**22.5**

Criterion two – Proposed measures to ensure the continuity of the service and a proper management of confidential information

	Maximum	**Minimum**
The application demonstrates that the level of expertise and background of the resources the applicant will provide are adequate to carry out the expected activities defined in paragraph 20 of this Call, and that the number of resources and task allocation are adequate to ensure the timely delivery of the pilot.	15	N/A
The work plan follows the timeframe for the pilot development as set out under paragraph 15 of this Call. It provides concrete activities to ensure a smooth undertaking of the pilot in a timely manner.	10	N/A
The application identifies potential risks along the different phases of the pilot and proposes mitigation measures.	10	N/A
The proposed methodology for the processing of confidential information and personal data indicates the technical and organisational security measures in place to ensure that confidential information, trade secrets, and personal data is protected in accordance with the GDPR and the corresponding provisions of Regulation (EU) 2018/1725 (EUDPR).	5	N/A
TOTAL	**40**	**20**

Criterion three – Contingency measures and cooperation with third parties

	Maximum	Minimum
The application clearly details how IP rights holders will manage the cooperation with transport and logistics operators, customs authorities and if proposed in the application, any other involved third-party intermediaries, to achieve the implementation of the pilot as described in paragraph 20 of this Call. It details the cooperation and responsibility of each actor during the product supply and logistic chain journey in using the different EBSI-ELSA modules and sub-modules.	10	N/A
TOTAL	**10**	**5**

Criterion four – Environmental quality of the pilot

	Maximum	Minimum
The application describes the measures proposed for the environmental management of the pilot, in particular, the minimisation of the environmental impact, including the IT blockchain services governance model as set out under Paragraph 20 of this Call.	5	N/A
TOTAL	**5**	**2.5**

7 Selection process

(32) The EUIPO will assess expressions of interest on a continuous basis and according to the criteria described above.

(33) Expressions of interest will be checked against the eligibility and selection criteria.

(34) The assessment will be carried out by a selection panel consisting of representatives of the EUIPO.

(35) The final results on the five shortlisted applications will be published within 4 weeks after the closing date of the Call or when five pilots have been selected, whichever comes first. Written notification is expected to be sent in May 2024. Once the applicants have been informed, the list of selected projects/proposals will be published on the Observatory Website.

(36) The shortlisting of an expression of interest does not constitute a binding commitment on the part of the EUIPO – either implicit or explicit –to provide support to IP rights holders.

8 Cases of termination of the collaboration

8.1 Case of suspension of collaboration

(37) If unforeseen circumstances temporarily prevent all or some of the pilot activities from being performed, the IP rights holder must communicate them to the EUIPO. The EUIPO may order the suspension of this collaboration and its subsequent resumption as soon as the grounds for that suspension cease to exist.

8.2 Grounds for termination by the Office

(38) The EUIPO may terminate the collaboration if:

a) the cooperation has not actually started within 15 days of the scheduled date and the Office considers that the new date proposed, if any, is not acceptable;
b) the IP rights holder, through their own fault, is unable to obtain any permit or licence required for the development of the pilot with the Office;
c) the IP rights holder is in one of the situations provided for in points (a) and (b) of Article 136(1) of the Financial Regulation;
d) the IP rights holder does not comply with the applicable obligations under environmental, social and labour law established by EU law, national law, and collective agreements or by the international environmental, social and labour law provisions listed in Annex X of Directive 2014/24/EU;
e) a change to the IP rights holder's legal, financial, technical, organisational or ownership situation is likely to substantially affect the implementation of the pilot or substantially modify the conditions under which the pilot was initially awarded or if there is a change regarding the exclusion situations listed in Article 136 of Regulation (EU) 2018/1046 that calls into question the decision to engage in the collaboration;
f) there is an event of force majeure;
g) the IP rights holder breaches the data protection obligations;
h) the IP rights holder does not comply with the applicable data protection obligations resulting from Regulation (EU) 2016/679.

8.3 Grounds for termination by the IP rights holder

(39) The IP rights holder may terminate the pilot if the EUIPO fails to comply with its technical support and advisory obligations.

8.4 Procedure for termination

(40) Any party can terminate the collaboration at any time by communicating to the other party in writing. A party must formally notify the other party of its intention to terminate the collaboration.

(41) The other party has 30 days following the date of receipt of the notification to submit its observations, including the measures it has taken or will take to continue fulfilling its obligations. Failing that, the decision to terminate will become enforceable the day after the time limit for submitting observations has elapsed. If the other party submits observations, the party intending to terminate must formally notify it, either of the withdrawal of its intention to terminate, or of its final decision to terminate.

(42) The date on which the termination will take effect must be specified in the formal notification.

8.5 Liability and damages

(43) The EUIPO shall not be held liable for any damage suffered by the collaborator in the execution of the collaboration, including its termination, except in the event of proven wilful misconduct or gross negligence on the part of the EUIPO. Should any dispute arise with any third party as a consequence of tasks executed by the IP rights holder in the execution of the pilot, the latter will hold the EUIPO blameless and remedy any damage which may be caused to the EUIPO.

8.6 Resolution of disputes and competent forum

(44) The parties agree to settle amicably any dispute that arises from the interpretation or implementation of the collaboration. Should amicable settlement fail, each party may bring the

dispute before the Court of Justice under Article 272 of the Treaty on the Functioning of the European Union.

9 IP rights ownership

(45) The EUIPO provides EBSI-ELSA modules as open source. All copyrights and any other IP rights pertaining to the use of these modules are covered under EBSI-ELSA terms and conditions of use.

(46) The EUIPO retains all copyrights and any other IP rights pertaining to the documents ([18]) sent to the selected candidates under the cooperation (the Documents) and the selected candidates will not acquire any rights in the Documents other than as provided herein.

(47) The selected candidates will be granted a royalty-free licence to reuse the Documents world-wide for the duration of the cooperation under the following conditions:

i) the source of the Documents must be acknowledged;
j) the Documents' original meaning or message must not be distorted; and
k) the EUIPO is not liable for any consequences stemming from the reuse.

(48) The licence granted will be non-sublicensable, non-exclusive and, if the above licencing conditions are met, cannot be revoked. The entitlement to reuse will cover commercial and non-commercial use.

(49) The license will, in particular, entitle the selected candidates to copy and redistribute the Documents in any medium or format and to translate them without any modification of the content. If the Documents or their translated versions are modified in any way, the selected candidates must state what changes have been made.

(50) If the Documents include any personal data, the selected candidates agree to process that personal data in accordance with Regulation (EU) 2016/679.

(51) The candidates retain all copyright and any other IP rights existing prior to the cooperation or related to work created independently from the EUIPO.

(52) Where the candidates intend to use the EUIPO's name, acronym or emblem, they must follow the Guidelines for Third Party Use of the Emblem of the European Intellectual Property Office ([19]).

10 Contact

(53) In case of any questions, please contact ebsi-elsa@euipo.europa.eu.

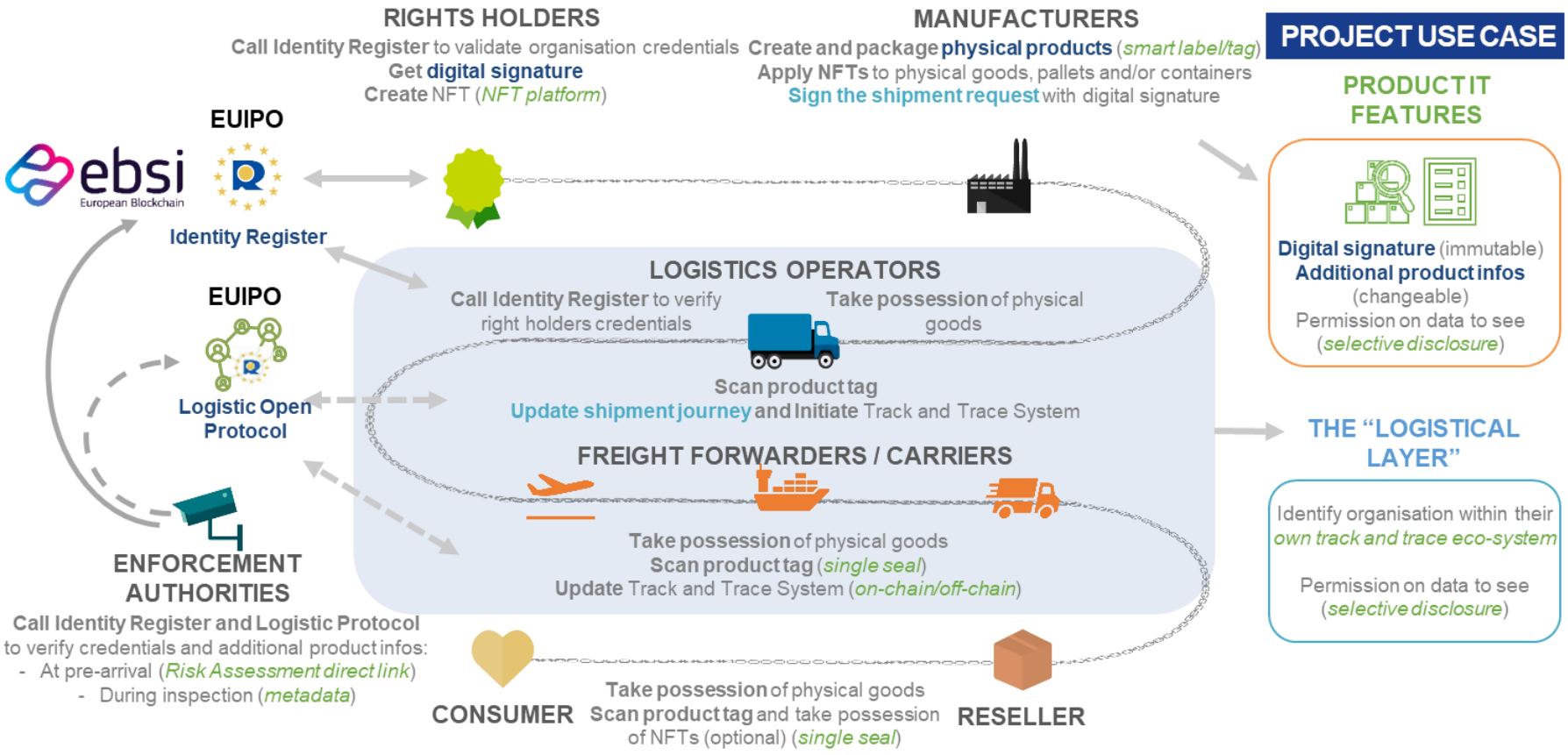
11 Annexes

11.1 Documentation of reference

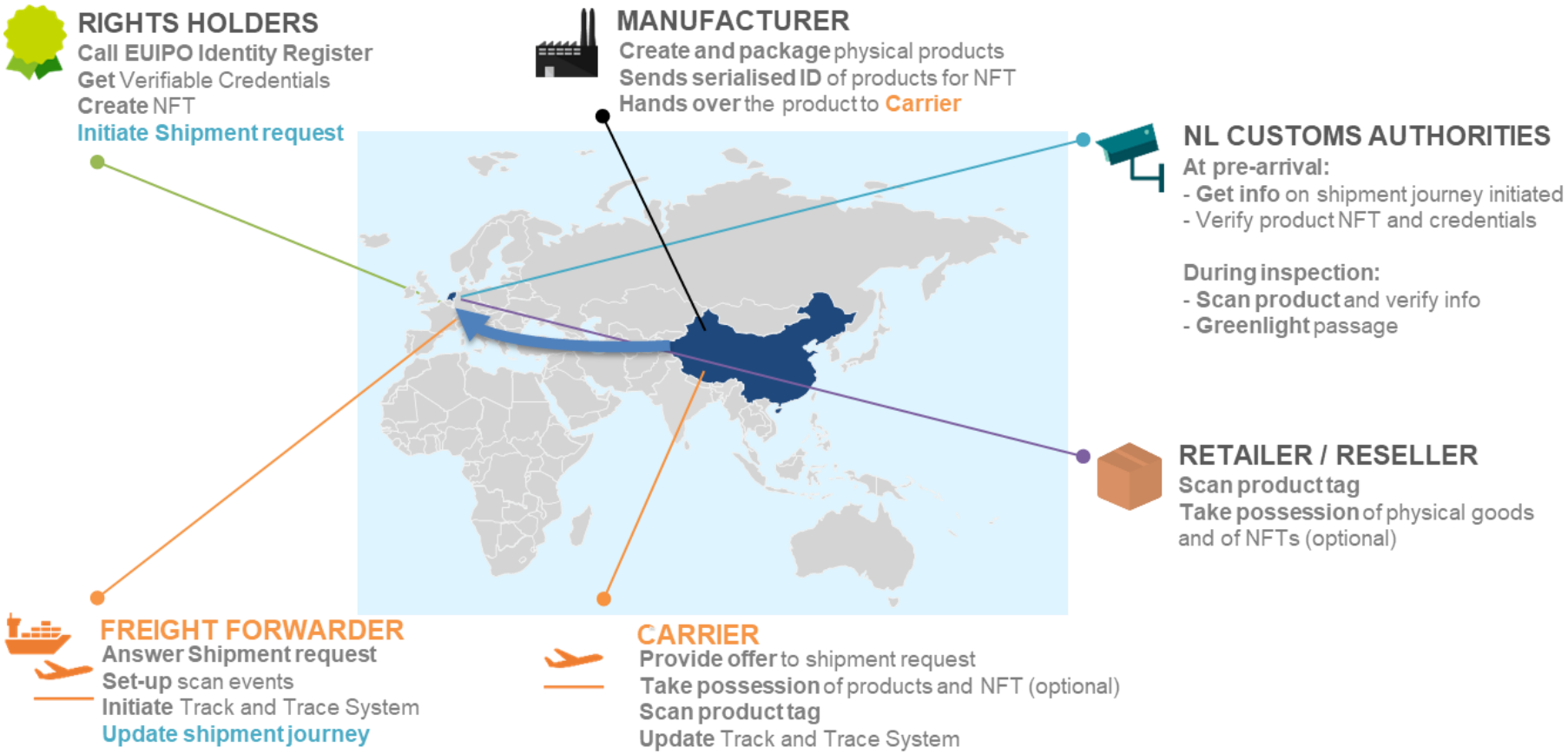
- Application form
- Letter of intent
- Declaration on honour
- EBSI-ELSA Terms and condition of use

([18]) Documents in the context of this Call for expression of interest cover any content (written, sound, visual or audio-visual recording) in any form.
([19]) Accessible at : https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/contentPdfs/about_euipo/resources/the_use_of_the_emblem_en.pdf

11.2 Annex 1 – Proof of Concept use case



11.3 Annex 2 – Proof of Concept Overall product journey



11.4 Annex 3 – Proof of Concept product journey technical details

Type of industry	**Automotive parts**	**Electronics**	**Pharmaceutical**	**Apparels (retailer)**
Type of product	Brake spare parts	Bluetooth speaker	Thermacare Heat Wrap	Back Packs
Volume of product	10	15, one container	**24 using two trade marks**	**Two products in +400 containers using different brands**
ID of product	Single Unique Product Identifier	UPI (**unique S/N label**)	**Serialised batch number**	**Barcode**
Type of data carrier	**Pre-printed Industrial label** (Data Matrix Code) – Not readable by consumers	Postproduction QR Code	Postproduction QR Code	Postproduction QR Code – 2 QR Code for 2 products, and one for the pallet
Location of connector	Product ID with scanning tool, digital link via GS1 link resolver, integrated in NFT Open Sea	Directly to Open Sea and IPFS	Directly to Open Sea and IPFS	Directly to Open Sea and IPFS
Main Transport and Logistic Operator	Jet Air Services			
Transport type	By Road and **by Air**	By Road and **by Air**	By Road and **by Air**	By Road and **by sea**
Transport Journey	China (Beijing), Netherlands (Schiphol), Germany (Stuttgart)	China (Hong Kong), Netherlands (Schiphol)	**USA (Georgia),** Netherlands (Schiphol)	**China & Viet Nam,** Netherlands (Rotterdam)
Journey end point	**Distribution site in Germany**	Distribution site in the Netherlands, with also **end consumer**	Distribution site in the Netherlands	Distribution site in the Netherlands

11.5 Annex 4 – Preliminary Assessment on cost/benefit for IP rights holders to onboard the EBSI-ELSA modules into their system

To fully leverage the potential of EBSI-ELSA, IP rights holders should have several technical components in place, both in terms of serialisation techniques and IT services. This, in turn, allows IP rights holders to secure certain benefits, which can be divided into two groups: direct benefits with immediate impact in the fight against counterfeits (authenticity and transparency); and value-added benefits (B2C revenue stream, reputation map and real-time notifications of the product's journey).

To this end, the EUIPO commissioned consulting services to conduct a preliminary assessment on the costs and benefits associated with onboarding the proposed EBSI-ELSA solution from an IP rights holder's perspective. To achieve this, the consulting services studied the EUIPO's EBSI-ELSA technical requirements and matched them against real-life operations in IP rights holders' production and supply chains. Adding primary and secondary researchers to analyse the costs associated with serialisation techniques and other IT components, this assessment drafted several as-is / to-be scenarios based on IP rights holders' current business situation costs and expected benefits.

The results deriving from this overall exercise led to the **creation of eight scenarios**, with a **costing for the first year ranging from EUR 127 000 to EUR 430 000**, and the ensuing **annual maintenance costing from EUR 14 000 to EUR 67 000**. This variation considers the following aspects:

- Existing business serialisation and available blockchain services;
- NFT creation done on each batch of products (baseline batch of 10 000 products produced yearly) or individual products (100 000 yearly);
- When serialisation changes are required, the cost range is based on a transition to QR code labels for one production line;
- Blockchain maintenance costs, which are either fully developed by IP rights holders or leverage existing blockchain-based third-party services.

For **100 000 products** yearly, the predicted maintenance cost per product is **between EUR 0.16 cents and EUR 0.31 cents**. A new serialisation costs an additional EUR 0.05 cents per product when a production line is transitioned to QR Code, while the transition to a blockchain self-hosting service costs **EUR 0.25 and EUR 0.30 cents per product**.

For a **batch** of **10 000** products yearly, the predicted maintenance cost per product is **between EUR 1.40 and EUR 2.90**. A new serialisation costs an additional EUR 0.30 cents per product when a production line is transitioned to QR Code, while the transition to a blockchain self-hosting service costs **EUR 2.5 and EUR 3.0 per product**.

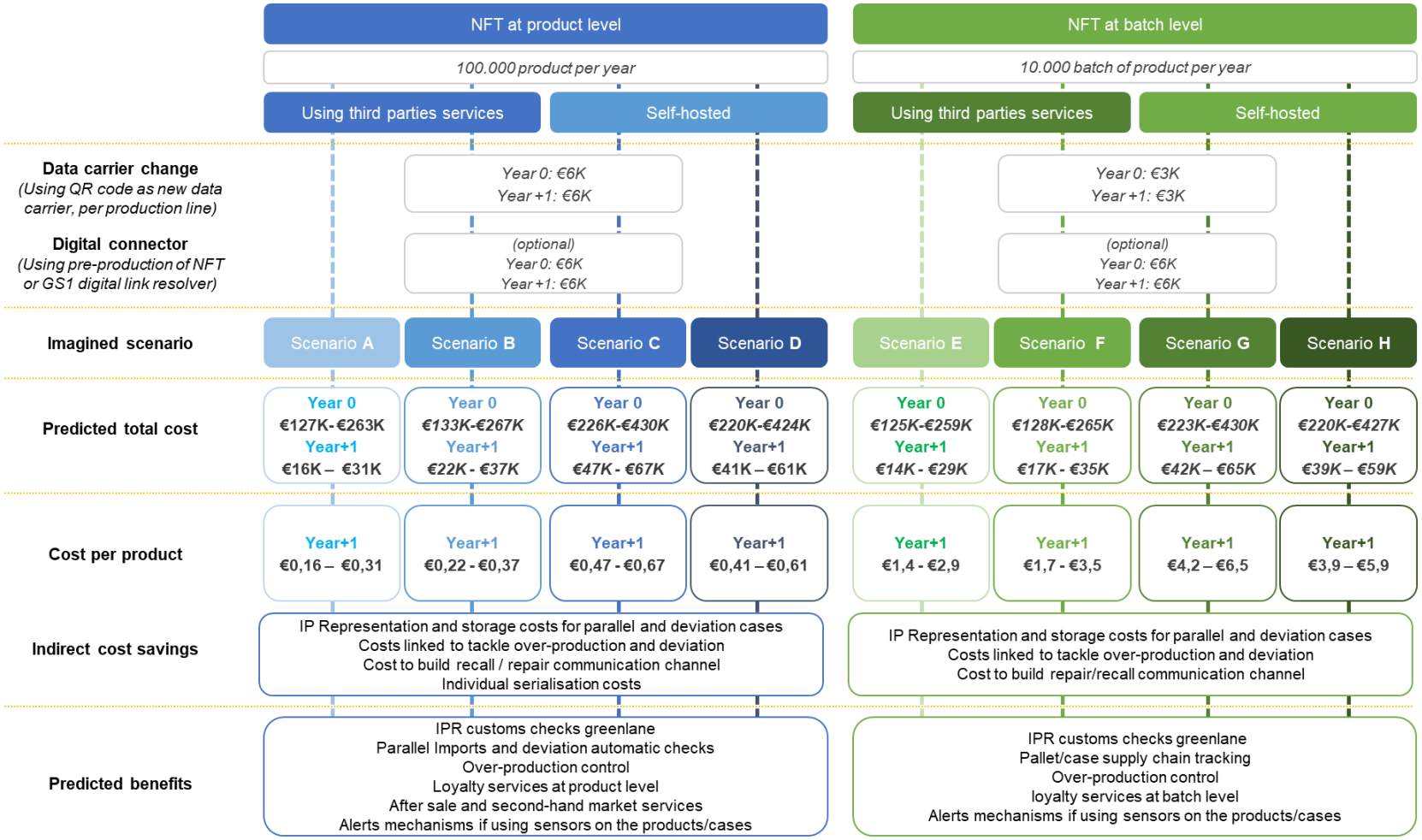
As a reference point, when using EBSI-ELSA on **1 million products yearly**, the predicted maintenance cost per product would be **between EUR 0.035 cents to EUR 0.05 cents**. A new serialisation will add EUR 0.024 cents per product when a production line is transitioned to QR Code, while the transition to a blockchain self-hosting service costs between EUR 0.025 to EUR 0.03 cents, which is added to the baseline cost.

In contrast, IP rights holders onboarding EBSI-ELSA will reap the following benefits and indirect cost saving:

- **Efficiency gains on IP Representation and storage costs** in parallel import and deviation cases;
- **Timesaving at EU border controls** on IPR checks performed by customs officers;
- **Efficiency gains** on system controls to **prevent over-production** in manufacturing sites;
- **Efficiency gains** on communication systems with the end consumer for **repair and/or recalls.**

With minimal investment for additional services, IP rights holders can further extend their benefits to loyalty services, aftersales and the second-hand market, as well as an alert mechanism and reputation maps for their product logistic journey. All the above is reflected in the tables presented hereafter.

Table 1 – Breakdown of costs and benefits per scenario



Scenario definition

Sc.	Business example – Product Level
A	A company sells products with a UPI and **QR code** and uses EBSI-ELSA on **each product**. The company uses **third-party services for NFT creation**, links the QR code directly to the NFT URI and/or have a scanning feature on the website to check token URI and product UPI.
B	A company sells products without a UPI with a **non-digitally enabled data carrier** (e.g. a barcode), and uses EBSI-ELSA on **each product**. The company uses **third-party services for NFT creation**, changes its data carrier or uses a GS1 link resolver. This will link directly to the NFT URI or will have a scanning feature on the website URL to check the token URI and the product serialisation number.
C	A company sells products without a UPI with a **non-digitally enabled data carrier** and uses EBSI-ELSA on **each product**. The company uses **self-hosted services for NFT creation**, changes its data carrier or uses a GS1 link resolver. This will link directly to the NFT URI or will have a scanning feature on the website URL to check the token URI and the product serialisation number.
D	A company sells products with a UPI and **QR Code** and uses EBSI-ELSA on **each product**. The company uses **self-hosted services for NFT creation**, links the QR code directly to the NFT URI and/or has a scanning feature on the website to check token URI and product UPI.
Sc.	**Business example – Batch Level**
E	A company sells products with a serialisation code and **a QR Code** on packaging, using EBSI-ELSA on **batches of products**. The company uses **third-party services for NFT creation**, links the QR Code directly to the NFT URI and/or has a scanning feature on the website to check token URI and product batch.
F	A company sells products with a serialisation number but **no digitally enabled data carrier** (e.g. a barcode) on packaging, using EBSI-ELSA on **batches of products**. The company will use **third-party services for NFT creation**, change its data carrier or use a GS1 link resolver. This will link directly to the NFT URI or will have a scanning feature on the website URL to check the token URI and the batch serialisation number.
G	A company sells products with a serialisation number but **no digitally enabled data carrier** (e.g. a barcode) on packaging, using EBSI-ELSA on **batches of products**. The company uses **self-hosted services for NFT creation**, changes its data carrier or uses a GS1 link resolver. This will link directly to the NFT URI or will have a scanning feature on the website URL to check the token URI and the batch serialisation number.
H	A company sells products with a serialisation code and **a QR Code** on packaging, using EBSI-ELSA on **batches of products**. The company uses **self-hosted services for NFT creation**, links the QR Code directly to the NFT URI and/or has a scanning feature on the website to check token URI and product batch.

EBSI-ELSA predicted cost per product and additional services ([20])

		1m Products		100k Products		10k Products		1k Products	
		Min range	Max Range	Min range	Max Range	Min range	Max Range	Min range	Max Range
EBSI-ELSA baseline	Total Year 0	€ 148 630	€ 282 980	€ 127 498	€ 261 848	€ 125 385	€ 259 735	€ 125.173	€ 259 523
	Total Year Y1+	€ 37 380	€ 52 980	€ 16 248	€ 31 848	€ 14 135	€ 29 735	€ 13.923	€ 29 523
	Total Y1+, per product	€ 0.037	€ 0.053	€ 0.162	€ 0.318	€ 1 41	€ 3.0	€ 13.9	€ 29.5
EBSI-ELSA with additional EUIPO Services	Total Year 0	€ 145 630	€ 230 250	€ 124 498	€ 230 250	€ 122 385	€ 230 250	€ 122 173	€ 230 250
	Total Year Y1+	€ 34 380	€ 49 980	€ 13 248	€ 28 848	€ 11 135	€ 26 735	€ 10 923	€ 26 523
	Total Y1+, per product	**€ 0.034**	**€ 0.050**	**€ 0.132**	**€ 0.288**	€ 1.1	€ 2.7	€ 10.9	€ 26.5
EBSI-ELSA with EUIPO Services and Blockchain providers	Total Year 0	€ 113 880	€ 195 980	€ 92 748	€ 174 848	€ 90 635	€ 172 735	€ 90 423	€ 172 523
	Total Year Y1+	€ 31 880	€ 42 480	€ 10 748	€ 21 348	€ 8 635	€ 19 235	€ 8 423	€ 19 023
	Total Y1+, per product	€ 0.032	€ 0.042	€ 0.107	€ 0.213	€ 0.863	€ 1 923	€ 8 423	€ 19 023
Additional serialisation costs	Total Year 0	€ 25 115	€ 25 115	€ 6 615	€ 6 615	€ 3 515	€ 3 515	€ 3.160	€ 3 160
	Total Year Y1+	€ 23 500	€ 23 500	€ 5 000	€ 5 000	€ 1 900	€ 1 900	€ 1 545	€ 1 545
	Total Y1+, per product	**€ 0.024**	**€ 0.024**	**€ 0.050**	**€ 0.050**	€ 0.190	€ 0.190	€ 0.190	€ 0.190
Additional self-host costs	Total Year 0	€ 95 000	€ 165 000	€ 95 000	€ 165 000	€ 95 000	€ 165 000	€ 95 000	€ 165 000
	Total Year Y1+	€ 25 000	€ 30 000	€ 25 000	€ 30 000	€ 25 000	€ 30 000	€ 25 000	€ 30 000
	Total Y1+, per product	€ 0.025	€ 0.03	€ 0.25	€ 0.3	€ 2.5	€ 3	€ 25	€ 30

([20]) The results of this exercise may vary depending on the EUIPO's final Software Requirement Specification as well as which blockchain provider is chosen, and it will be subject to an update in future based on a separate analysis.