Peers 2 block chain

DESIGN OPTIONS PAPER

Innovation Support Programs for SMEs

12/09/2020





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I- INTRODUCTION

Framed in the European Union programme H2020 (Horizon 2020), Peers to Blockchain (P2B) shares the objective of business innovation support within its framework project, and it focuses its mission in the promotion of Blockchain technology for the implementation in small and medium size enterprises.

Blockchain technology is destinated to significantly transform business transactional models and management operations. The P2B consortium investigated the strategic impacts that this disruptive technology represents for SMEs and targeted its efforts in capturing best practices and in boosting the exchange of knowledge.

The initial objective of the project was to characterize the Blockchain ecosystem in each region of the participating entities (Algarve, Andalusia, and Luxembourg). Secondly, the benefits of Blockchain for SMEs and real cases serving as a reference were captured and analysed. According to these initial phases, findings and solutions have been shared, and an online platform of good practices on Blockchain has been developed and published, with the application of innovative methodology oriented to SMEs.

The project identity is summarized below: **Project**: 851033 PEERS TO BLOCKCHAIN **Program**: H2020-INNOSUP-2018-2019-5 **Duration**: 12 months **Budget**: 50 000€, 100% EU funded **Partnership**:

| Table 1. | PEERS TO BLOCKCHAIN Partnership | | |
|--------------------|---------------------------------------|--------------------|--------------|
| Partner number | Partner name | Partner acronym | Member state |
| PP1 (lead partner) | PARQUE TECNOLOGICO DE ANDALUCIA SA | ΡΤΑ | Spain |
| PP2 | TECHNOPORT SA | TECHNOPORT | Luxembourg |
| PP3 | UNIVERSIDADE DO ALGARVE | UALG | Portugal |





The Peers to Blockchain project plan was organized into four actions:

ACTION 1 - Analysis of the state of art in each regional ecosystem from the partners, and the collaborative partners as well. Two main topics will be peer to peer reviewed: on the one side, the definition of blockchain, main targets, uses and benefits for SMEs; and, on the other side, to get to know the actual Blockchain pilot projects and good practices (use cases) implemented. (under the leadership of the PTA).

ACTION 2 - Sharing of the results obtained and identification of the most efficient solutions for the design of the guide of a Blockchain Good Practice Handbook and the establishment of an innovative methodology. (under the leadership of the Technoport)

ACTION 3 – Design of a strategy to promote the creation of synergies, and collaboration between the actors involved in the project. (under the leadership of the University of Algarve)

Transversal Action 4 Dissemination and exploitation and Action 5 project management were implemented in parrallel with the technical actions.





II- BLOCKCHAIN: Opportunities for Innovation Agencies, Science and Technology Parks and SMES

Blockchain is a transparent, secure, distributed ledger technology (DLT) that facilitates a community of users, or peers, to execute and store operations in a shared ledger. In this



community of users there is no need for a central control body or trusted third party, and individuals and organizations with limited knowledge of each other can perform transactions directly. Moreover, all operations recorded in the shared ledger are tamper evident and tamper resistant, with a guarantee of replication and synchronization between peers.

WHY SUCH AN INTEREST IN BLOCKCHAIN:

DLT is an optimal mean to ensure automated trust at a relatively contained cost. There is no need of third entity to ensure trust among trading parties. The DLT solves the Byzantine Generals' Problem (henceforth mentioned as BGP). BGP is an allegory describing a classic problem faced by any distributed computer system network. BGP describe a situation in which, in order to avoid failure/corrupted information across a network, the network actors must agree on a concerted strategy to validate the network's trustworthiness.

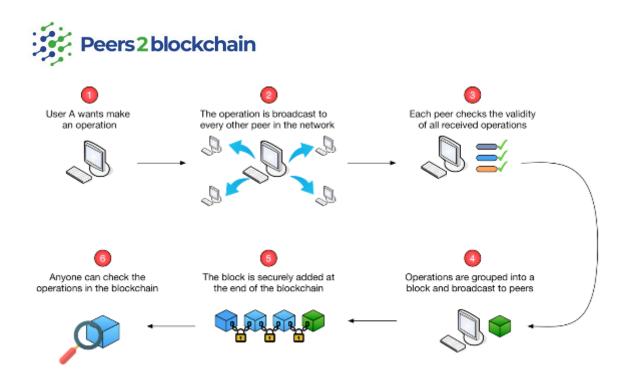
The network seeks consensus. Meaning that all actors of a network agree on every message transferred message across the network to avoid transmitting corrupted information. DLT is the technology ensuring through algorithms that consensus is reach across a network.

Ref: https://medium.com/all-things-ledger/the-byzantine-generals-problem-168553f31480

HOW DOES IT WORKS

The technical base of Blockchain is a peer-to-peer (P2P) network with consensus and cryptographic algorithms, which enables the creation of a secure, immutable and transparent decentralized database comprised by cryptographically linked blocks. Depending on the Blockchain being used, these blocks can contain different sorts of operations, ranging from monetary transactions (e.g., Bitcoin) to the state of program executions (e.g., Ethereum).





TYPES OF BLOCKCHAINS

Depending on who have access to the Blockchain, what kind of access is granted, who and how is the integrity maintained; we can have different types of Blockchain.

- **Public**: Everyone has access to the blockchain, being able to read and create operations on it. As members are unknown to each other, it is necessary to incentivize parties to work together to keep the consistency of the Blockchain. This usually requires of the integration of slow consensus mechanisms, such as Proof of Work (PoW).
- **Private/Consortium**: They are run a by single entity or a group of known members who already trust each other. Because of this, it is straightforward to implement faster consensus mechanisms such as Proof of Authority (PoA) or Proof of Stake (PoS).
- **Permissioned**: Access to the blockchain can be restricted in different ways. In some scenarios access to certain operations can be restricted to a particular set of entities. Parties can have different roles: providing integrity, creating new operations, inspecting operations, etc. They can use the same consensus mechanisms as Private Blockchains.

MAIN FIELDS OF APPLICATION

The decentralized nature of the Blockchain, coupled with its security and transparency properties, promises many applications in several fields described next. It should be mentioned that the benefits of using such technology are impressive and highly perceptible when a group of entities and companies work jointly and cooperate in the development and implementation of a project.





| Automated management Traceability of products | Integrity of data interoperability and security solutions | Traceability Transparency Control of contents | Simplification in the value chain Automation of tasks Securing artists' rights |
|---|---|---|--|
| TOURISM | HEALTH & PHARMA- CEUTICAL INDUSTRY | DIGITAL OVERTISING | |
| Automation of contracts without intermediaries Facilitation of declarations Reduction of infrastructure costs | Crowdfunding Money transfer Asset management Authenticity of transactions | Shorten transaction duration Purchases authentication Titles of property transparency | Blockch ain allows the clean energy supplied by Smart Grids to be resold directly to its neigh bour without going through major suppliers |
| INSURANCE | FINANCE | REAL ESTATE | ENERGY |
| Data preservation and security Store transactions endlessly and the data is immutable | Real-time data shared Transparency of these exchanges Trazability of the products | Members' interactions are secured Restore users'privacy Control of personal data | Platform models without intermediaries, without commisions, without personal data trading or rating traffic Possibility to remunerate transparently the contributions made by users |
| DATA STORAGE | SUPPLY CHAINS | SOCIAL NETWORKS | |

PRINCIPAL BENEFITS FOR BUSINESS

- ✓ Supply Chain Management
- ✓ Quality control/ product safety
- ✓ Guarantee of accounting information
- ✓ Generating smart contracts
- ✓ Efficiency benefits in the equity market
- ✓ Tracking energy supplies
- ✓ Peer-to-peer global transactions
- ✓ Traceability and transparency
- ✓ Fighting fraud
- ✓ Direct exchange between users without intermediaries
- ✓ Inalterability and inviolability of information





III- Actions performed during the P2B project

During the 15 months of the project, all the actions foreseen where designed and implemented. You will find next a short resume of each one:

ACTION 1 – Analysis of the state of art in each regional ecosystem from the partners, and the collaborative partners as well. Two main topics will be peer to peer reviewed: on the one side, the definition of blockchain, main targets, uses and benefits for SMEs; and, on the other side, to get to know the actual Blockchain pilot projects and good practices implemented.

Partner coordinator: Technology Park of Andalucía - PTA

Duration: 4 months

Steps to implement:

<u>Step 1.</u> Creation of a questionnaire to interview experts in Blockchain in each participating region. The target audience has been:

- Companies (16 good practices)
- Universities and research groups (3 good practices)
- Associations (3 good practices)

<u>Step 2.</u> Realization of interviews within each regional ecosystem, from the partners, and the collaborative partners as well

Step 3. Round table to analyse the data received and classify the information

Step 4. Peer review and conclusions by the partners

<u>Step 5.</u> Design of a P2P Blockchain Evolution digital leaflet to explain concretely what is Blockchain, the activities and use that can be performed, and the benefits for SMEs

<u>Step 6.</u> Promotion of the leaflet, and realization of a workshop for SMEs in each participating region





ACTION 2 – Once performed this analysis of the good practices and use cases detected, the project included the realization of the ACTION 2 - Sharing of the results obtained and identification of the most efficient solutions for the design of a Blockchain Good Practice Handbook and the establishment of an innovative methodology.

Partner coordinator: Technoport

Duration: 4 months

Steps to implement:

<u>Step 1.</u> Initially, the project foreseen the design of a Blockchain Good Practice Handbook classified by type of initiative. For the dissemination and the capitalization of the results obtained during the Action 1, the partnership decided to go beyond that and to create and make available an online platform, using their own resources, where each good practice can be seen, with possibility to contact directly the persons in charge of the initiatives.

Link: https://peers2blockchain.eu/



<u>Step 2.</u> An effective Campaign of Promotion and Awareness was designed and implemented within each participating region, including regional Peer to Peer Workshops. To make the most of the resources available, each partner identified existing regional, national and international events foreseen within the thematic of the P2P Blockchain Evolution, to present the project there, and include a peer to peer activity within the foreseen events. Each partner worked on the following measures:

Technoport:

- Use of start-ups channels to promote the P2B project and present the use cases and the entities who designed it
- Articles/mailings to present the good practices and the entities who designed it
- Individual meetings



9



University of Algarve:

- Creation of a Blockchain sub working group within the Association Algarve Evolution
- Creation of a Blockchain working group within the University of Algarve
- Individual meetings
- Organization of Networking events LUNCH&LEARN organized by CRIA/UALg for the incubated SMEs

Technology Park of Andalucia:

- Individual meetings
- Updates of the P2B project in the next meetings of the Blockchain Working Group of the Technology Park of Andalucía and the University of Malaga.
- Presentation of the P2B project and results in other European Project meetings the PTA participated
- Updates of the P2B project in the next meeting of the Joint International Strategy Group, coordinated by PTA which counts with the participation of several public entities such as University of Malaga, Chamber of Commerce of Málaga, local, regional and national government, business associations, etc...
- Presentation of the Blockchain Good Practice Platform in APTE (network and APTE FORMA?)
- Presentation of the Blockchain Good Practice Platform in the International Association of Science Parks and Areas of Innovation IASP
- Presentation in Transfiere 2020 (Málaga, February)

Step 3. With the creation of an online platform, the partners from Luxembourg, Portugal and Spain promoted the use cases and good practices detected in the first action of the project. In this way, an effective tool for SMES has been made available to promote these Blockchain initiatives, to inform about the advantages, benefits and added value this technology can provide to the companies, and furthermore to ease the connection between the different actors.

ACTION 3 – Design of a strategy to promote the creation of synergies, and collaboration between the actors involved in the project.

For the capitalization of the results obtained, the partnership, under the coordination of the University of Algarve established a specific strategy in term of implementation the methodology at local, regional, national and international levels. Different forms of collaboration were defined to create institutional, technological and commercial synergies between SMEs, partners, strategic actors and blockchain enablers.

Partner coordinator: University of Algarve

Duration: 4 months

Steps to implement:





Once identified the good practices in the previous work packages, the aim of this action has been to promote the synergies between strategic actors (SMEs and companies, Higher Education Institutions, Science and Technology Parks, Public Institutions).





IV- Communication Activities

IV.I. P2B Plan for Information and Communication Measures

At the very beginning of the P2B project, a Communication Plan was designed and delivered to promote the project and its findings during the period of the grant, with clear objectives defined in the delivered document. In this sense, the University of Algarve, through its Division of Entrepreneurship and Technology Transfer – CRIA was the coordinator of this activity, with the active participation of all the partnership. Due to the to the scale of the project, each partner has been using its own website, social media channels, to promote the project and the activities undertaken as the main tool. The Technology Park of Andalucía used the blockchain technology subnetwork as well and its forum to disseminate the project internationally, as well as several international networks. The promotion and dissemination of the project and its main outcomes has been a common activity supported by all partners of the project. This Communication Plan included:

- ✓ Definition of target, message and objectives
- ✓ Design of Logo, visual identity and Project Templates
- ✓ Selection and use of the best suited media to reach the identified target
- ✓ Spread tailored messages for target groups
- ✓ Promotional materials (leaflets, etc...)
- ✓ Use of Partners website
- ✓ Final event

The document is available in Annex I.





IV.II. Plan for Capitalization of results

For the sustainability of the project Peers2blockchain and a major impact beyond the limits initially foreseen, a Plan for Capitalization of results was designed during the first months of the project to warrant the results obtained. The capitalisation strategy focussed mainly on the project itself, synergies with other projects and possible mainstreaming actions, through organisation of meetings and/or participation in institutional networks of the partners.

The main objectives were:

- ✓ Optimizing the value and the impact of the P2B Project
- ✓ Wide-spreading dissemination
- ✓ Optimal use of resources
- ✓ Transferring results to upgrade innovation systems and practices
- ✓ Sustainable use of results

Therefore, the main purpose of this capitalization strategy was to inform, transfer and promote the project Peers2blockchain, improving and maintaining a long-term impact of the results achieved, to ensure greater assimilation of the results of the project, improving its territorial effect.

During the activities of the project P2B, two methodologies designed in the previous European project *In-Business Growth*, the TRANSNATIONAL TRANSFER and the JOINT WORKING methodologies, were implemented to ensure the adequate exploitation and sustainability of Peers2blockchain beyond project's execution. For more information on the two methodologies conceived, you can have a look to the *Annex II* enclosed.





IV.III. P2B Corporate Image Manual

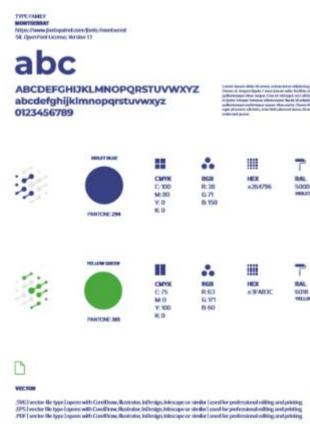
As foreseen in the Plan for Information and Communication Measures, at the beginning of the project, a corporate image manual was designed by the University of Portugal, and approved by the partnership, including the design of the logo, flyer, forms for the project and for materials:

1- Creation of the logo

At the beginning of the project, the logo was delivered by the University of Algarve, and approved by all the partners, for its use in all the materials of the project.







INTERAP IMAGE

PHG (compressed bit map No type) opens with all kinds of suffavor (used for web, documents, Office ... PhG compressed hit map No type) opens with all kinds of suffavor (used for web, documents, Office ...





3- Creation of templates

Templates in Word and PowerPoint have been designed for its use by all the partners, to be more efficient.

WORD



POWERPOINT









4- Design of the flyer of the project

For the promotion and communication activities of the P2B project, a specific flyer has been designed, in collaboration with all the partners, who participated in the preparation of the contents.









Products of the intermediate sector of page 5 and 5 an

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5- Promotion Material

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IV.IV. Promotion in national and international networks

As defined in the project proposal, the project has been promoted through several national and international networks such as:

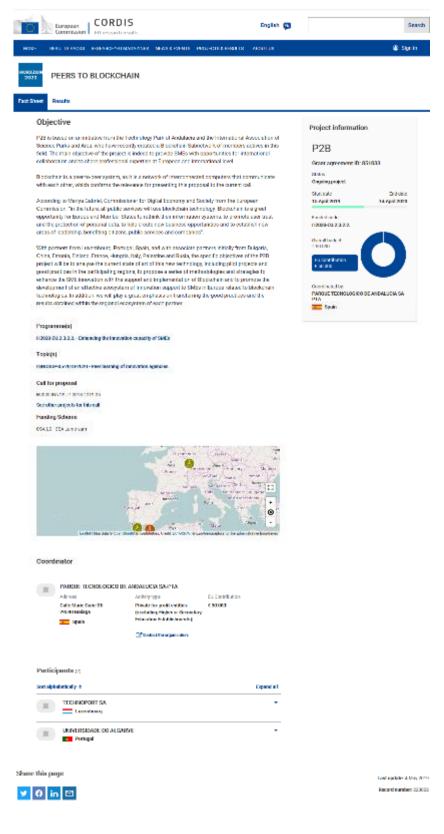
- Community Research and Development Information Service (CORDIS)
- European Cluster Collaboration Platform
- Association of Science and Technology Parks of Spain
- Blockchain Observatory
- International Association of Science Parks and Areas of Innovation
- Newsletter from the Delegation of the Junta de Andalucía in Brussels
- Trade fairs & Congress Centre of Malaga (City Council)
- Spanish Blockchain Association Alastria





Community Research and Development Information Service (CORDIS)

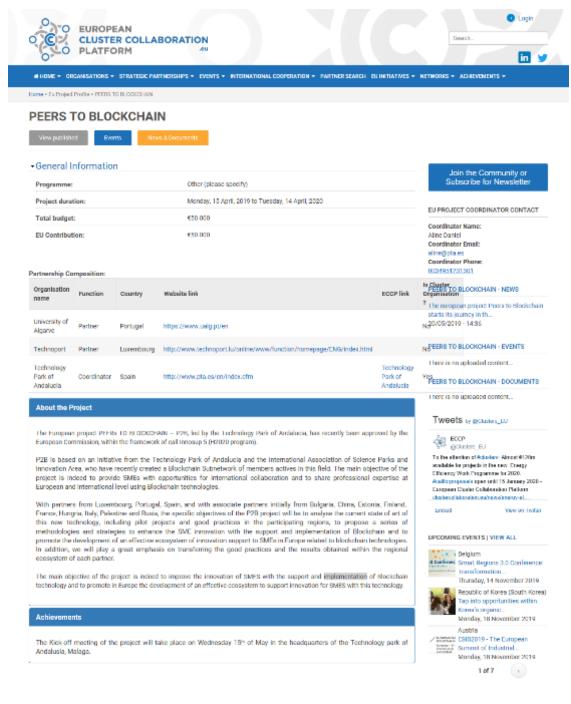
https://cordis.europa.eu/project/rcn/223002/factsheet/en





European Cluster Collaboration Platform

https://www.clustercollaboration.eu/eu-project-profile/peers-blockchain







Association of Science and Technology Parks of Spain

https://www.apte.org/en/european-project-peers-to-blockchain-starts-journey-pta



The Technology Park of Andalusia coordinates this project, focused on implementing Biockchain technolog in the European SMTs

Within the international projection stackage, the PTA is achieved working in several Europeer projects constraint to based introduced and redrepresentation. One to the next induced work added to the important international agentiably the PTA has been to project People is Bioscienta, which has today stand to operation in Margar.

Francel in the European Union programme (12020 Ulerizen 2020), Poors to Dieckchain (P2D) shares the objective of business innovation support within its framework project, but it focuses its attention in the promition of Biodedienn lectrology for the implementation in small and medium sized enlargences. The Technology Park of Analassia will coordinate the project, leading each execution and control phase. This leading role conces from the fact that the PTA has sponsored the programme lounch, which has taken place taken in the headquarkees of the PTA.



What Peers to Blockchain consists of?

Peers to Blockchain (P2B) starts up loakly in the PTA, and it switches its work plan on by establishing a range of objectives. Frashy, the propert should serve for techning a Blockchain exception for each region of the perturbative characterized by the terms to all Blockchain for SWI sured need review serving per a reference should be lockchain.

According to this analysis, results and solutions will be shared, and a handbook of good practices on Biodixhain will be developed, with the application of innovative methodology oriented to SMEs.

Biodochain technology is destinated to transform good part of the transactional and management operations that economic in the world. The PTA has realized the strategic incontance that this discretive technology has.





Biodochen fechnology is destinated to transform good part of the transactional and management operations that operate in the work. The FTA has realized the strangic importance that the disruptive technology has, and it has focused its inferent in toosting the workshape of transfector and promote its development from the Lectrospice. There is a last that, instead, contributive to the previous of Melage and Archivers as identifying Biodochein hearts. In fact, the Jaunching of Poers to Biodochein opers the curitain to other relevant events in the capital in this area: the AFTE Informational Biodochein Controlect that the PTA is organizing for next. Thatsays of the flacts's Office (the threeworky of Malega.

Peers to Blockchain participants

The role of the Technology Park of Andalusia in this project is to coordinate the different actions planned. The News to Biochchein constraint is composed of the proper PTA, the University of Approve ("Antapat) and Lecthograph (Losendocarg). To have, which keeply interscience) whiles all acted to the programme much be added.





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Spanish version next: https://www.apte.org/nuevo-proyecto-europeo-aprobado-parque-tecnologico-andalucia

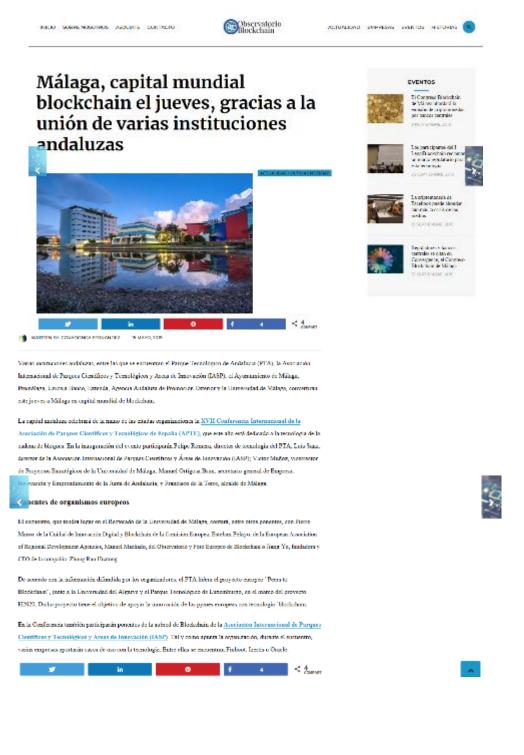




Blockchain Observatory

The Blockchain Observatory is the Spanish platform that promotes the creation of collaborative networks for the development of this technology and its application in our society.

https://observatorioblockchain.com/malaga-capital-mundial-blockchain-el-jueves-gracias-a-la-union-de-varias-instituciones-andaluzas/







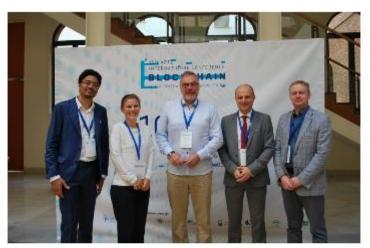
International Association of Science Parks and Areas of Innovation

https://www.iasp.ws/activities/news/blockchain-in-science-parks



Blockchain in science parks

21 May 2019



Bacterials technologies are learned give set in a carge of interactive, from employ to Reares to no sile applications, and address parts are terms to many of the comparise in the wingoard of this new sectionary.

The recent APTL international Conference in Malage, Spain, Socials on this there, exploring the impact of biockholn technologies on science parks in different sectors and its implementation on a Biochemical Web. The second path-residue 200 delegates exercising aclence parks universities. But institutions and both startups are malinearously. With the Meyer of Malage Functions on the Technology Rock of Annahesia Briles Removes at the University of Malage, joined by the Director of the Technology Rock of Annahesia Briles Removes. (ASP: Director General Join Sanz and Manuel Ortigous Bras, Incod of the regional Ministry of Innovation, Longophies and Entropomentality, the stry is consolidating its position as a hab of blockchein expertise.

The event also provided an opportunity for reverbers of USP's blockchain subsetwork to haid their fino necting. Coordinated by Sonia Polone of the Antalasia Technology Park (PTA), the group tryings together science parks from 19 different countries who are active in the hald of blockchain.

IASP COO Bote Land precented data from a recent survey of blockdrain use in science parts from 24 different contains, indicating that 75% of the surveyed bill history have readers comparies who use blockdrain section legistic than other new budiese models and measures. The comparies get support from the science parks where they are leaded, as more and more STPs provide services related to blockdrain other new technologies. The survey related a med to increase the knowledge have about blockdrain, and STPs play an increase more facilitating learning events for their companies.

Cryptocurrencies may be the best-known application for Notichin, but they are by no means the only one, and members of the IASP Biochemia submemories dated source of exception of their work in other fields. Diver applies of behaviour beamboard generation a blockhain-based of giptal ansis contactions that can support creative industries such as marke & photography, creating trust and helping creators mech directs and incourse. In Bulgaria, Solis Tool Plan is avoiding with tools methods are startups on to be behavior applications of incourses products, explanated CED Tools Planet and the blockhain while the transition of the block planet planet products and the block of the solid planet of a European project developing diverse versions tabled by explanetation and planet planet planet in a planet planet by the constraint of the solid planet planet

Resident companies from STPs cross Spain also give an insight into the current use of blockchain in a resolute modestand by APTE general manager. Solieded Diar, with applications inducing the shipping instantry, relevant, and logistics all benefiting from its guarantee of security & trust in business.





Some memory of the WSP Blockman subnetwork also accorded the bideoff meeting of the BL project. There to bioscidularilies the day prior to the event, where three 51% thre 11%. References Latenberg and Agence Science and Technology Sard, will be will be working closely regetive supporting locativities SMEs also use these technologies.

Click to find out more about AFTE and the IASP Blockshull subactivery.



IASP members around the world

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Newsletter from the Delegation of the Junta de Andalucía in Brussels

30th of March 2020 | Num. 960



The newsletter is available as well in the next link:

https://www.juntadeandalucia.es/organismos/presidenciaadministracionpublicaeinterior/areas/accion-exterior/delegacion-bruselas/paginas/newsletter-bruselas.html





International Association of Science Parks and Areas of Innovation

https://www.iasp.ws/activities/news/Peers-to-Blockchain-project-concludes?q=P2B







Trade fairs & Congress Centre of Malaga (City Council)

https://transfiere.fycma.com/peers-to-blockchain-project-concludes/

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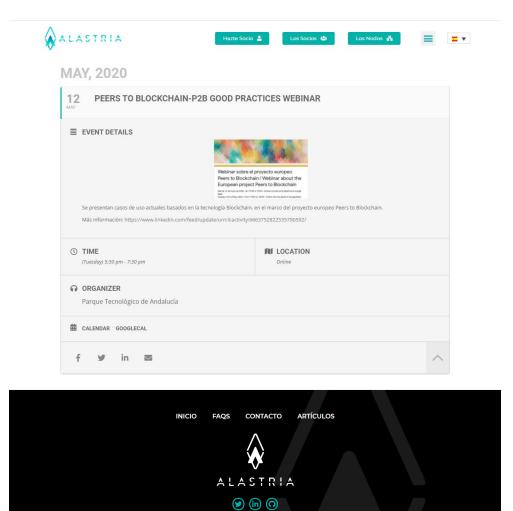




Spanish Blockchain Association Alastria

Alastria is a non-profit association that promotes the digital economy through the development of decentralised ledger technologies/Blockchain.

https://alastria.io/events/peers-to-blockchain-p2b-good-practices-webinar/







IV.V. Press Releases

Articles were published in press releases (online and writing) by the partners for the most relevant activities of the project such as partner meetings, workshops, participation in national and international events.

- Diario SUR (Spanish Newspaper)
- 20 Minutos (Spanish Newspaper)
- Blockchain Economia (Blockchain Spanish Industry Website)
- malagaldia.es (collaborative online Platform)
- Malaga Investment Attraction Centre (Spanish Platform)
- Europa Press (Spanish News Agency)
- La Opinión de Málaga (Spanish Newspaper)
- Criptonoticias (Digital newspaper for Spanish speaking readers)
- Digital Newspaper Teleprensa (Regional Newspaper from the region of Almeria)
- Cibersur (Digital Newspaper specialized in Science, Technology, and Innovation)
- Vida Económica (Malaga Business Newspaper)

See next all these news:





1. Online newspapers

Diario SUR (Spanish Newspaper)

Enlace: https://www.diariosur.es/malaga-capital/comienza-proyecto-europeo-20190516000936ntvo.html

| Málaga dapital | |
|---|---|
| Comienza en el PTA el proyecto europeo 'Peers to Blockchain' | Lo + leído Devis Sur Milinge capari 1. El metro alberza el mayor yacimiento |
| SUR MÁLAGA. Joeves 16 noyo 2019, 00:09 Dentro de su estrategia de proyección internacional, el Parque Tecnológico de Andalucía (PTA) participa en diversos proyectos europeos orientados a impulsar la innovación y el emprendimiento. Una de las últimas iniciativas que el PTA ha sumado a esta importante agenda internacional es el proyecto 'Peers to Blockchain', que ayer echó a andar en Málaga. Encuadrado en el programa de la Unión Europea H2020 (Horizon 2020), 'Peers to Blockchain' (P2B) comparte el objetivo de apoyo a la innovación empresarial de su proyecto marco, pero se centra en el fomento de la tecnología Blockchain para su implantación en las pequeñas y medianas empresas, según explicó el PTA en una nota de prensa. El Parque Tecnológico de Andalucía coordinará el proyecto, liderando todas sus fases de ejecución y control. Un rol protagonista corroborado por el hecho de auspiciar la sesión de lanzamiento del programa, desarrollada este miércoles en la sede del PTA. | arqueológico en excavación en España Aviso amerrillo en Malaga por fuertes vientos y fenómenos costeros Kilómatros de Pizza abre en Larios Centro su primer restaurante fuera de Madrid La Palma-Palmilla, territorio Vos Carlos Bautista asegura que Salud cumplirá todas las promesas hechas y pide perdón por el retraso |
| Peers to Blockchain (P2B) arrancó ayer en el PTA y pone en marcha su plan de trabajo estableciendo una serie de objetivos. En primer lugar, servir para definir un ecosistema de Blockchain para cada una de las regiones de las entidades participantes. En segundo lugar, deben quedar identificados los beneficios del Blockchain para las Pyrnes y pilotos reales que sirvan de modelo. De acuerdo con este anàlisis, se pondrán en común resultados y soluciones, y se elaborará un manual de buenas prácticas en Blockchain, con aplicación de metodologías innovadoras, orientado a Pyrnes. La tecnología Blockchain está llamada a transformar buena parte de las operativas transaccionales y de gestión que funcionan en el mundo. El PTA entiende la importancia estratégica que tiene esta tecnología distuptiva, y de ahí su interés por impulsar el intercambio de conocimiento y fomentar su desarrollo desde la tecnópolis; un becho que contribuye a posicionar a Málaga y Andalucía como centros estratégicos. De hecho, el lanzamiento del Peers to Blockchain abre el telón a otro evento de capital relevancia en este ámbito: la APTE International Blockchain Conterence que organiza el PTA este jueves en el Rectorado de la Universidad de Málaga. | |





20 Minutos (Spanish Newspaper)

Enlace: https://www.20minutos.es/noticia/3641272/0/proyecto-europeo-peers-to-blockchaincomienza-parque-tecnologico-andalucia/







Blockchain Economia (Blockchain Spanish Industry Website)

Enlace: https://www.blockchaineconomia.es/hacemos-la-red-blockchain-de-los-parques-tecnologicos-espanoles/







Pedemos teneria operativa tras el verano. De momento, se han apuntado al proyecto 17 parques, pelo ector convendido de que estada todas. APTE sontes 51 parques operativos con 8.157 empresas, ingresos de 28.994 miliones de curos, y 175.773 empleados, de los que 34.291 trabajan en 1-D. No hay ora nel jugal.

P: gCômo será la red?

8: Querentos que los empresos de los parques lengan sola plataforma para su propio uso, y para que deservollen y prueben proyectos biockchan. Es una tecnología recolucionaria que cantolerá la marcha de los engresos, y lene este nel propio da la propio de la estimación de la engresos, y lene este nel propio de la estimación de la engresos, y lene este nel propio de la estimación de la engresos, y lene este nel propio de la propio de las estimación de la propio de la

Naestra nel serà una subred de Alastina que, el linal, territo varios autorates. Los porques esfarrars en Aborita, tierre gran valor para nossitos porque es un relevante donde querennos estar y participar. De fectos el PTA litera la fusi de Anchinola de Aborita.

P: Aborden otros proyectos?

R:SI, EI PTA acaba de lanzar el proyecto europeo Peers to Biodobalin (P2B), para implantar biodobale en las PYMES. Lo coordinamos, y lideramos todas las fases de ejecución y control. Nos lo han concedido las autoritisdos europeas. El consorcio P2B está formado por el PTA, la Universidad del Agareo (Pertugal) y Technopor de Luxemburgo, además de hasta una veintano de emidades internacionales adheridas al programa. P2B está dentro del programa de la UE Horizonte 2020 Recise apoyo de 20 instituciones europeas.

Propositione el balance de la 17 Conferencia Internacional APTE, celebrada en Málaga la semana pasada? R: Nos hennos comvertido en la capital mandial del Blackchain, parque en el terra central de la conferencia de este año. Han acualdo más de 200 espertos de lavor países de lado el mando. Pueteros en acruín sus estatico, averces o previsiones obrevesta la terratoga. Ca clerch a consor los inteloja real acuadado por la conteción funciones para países de la conteción progresos en Málaga del 11 al 12 de noviembre, nos esteremistos a concertínente capital mandial de Blackchain.

A naiz de la conferencia, el PTA ha firmado un acuerdo de contornación en investigación científica y desarrollo tecnologico con la empresa china 2. Pan Well fon Industry. En crea gran firma que abarca máltiples asobres como la construcción, la legislica, la instante agranámentana, la gual ón ambienta, la medicina, la energia, las mentaciones y las finances. El accento avenso el desarrollo de la estandarimación y aglicación de lacrologico como el libercionary super Super Su.

Comparie este:

🖬 Santania 🖉 Letter 🛛 🔯 Letter 🖉 Kales 🖉 Materije 🔛 Generalektriska 🖉 Letter







malagaldia.es (collaborative online Platform)

Enlace: https://www.malagaldia.es/2019/05/14/el-pta-situa-a-malaga-como-centro-mundial-de-la-tecnologia-blockchain/







Así, desce el Prist han recordado que han here en accesse como a constitución de la diserce de blockamientos empresense de la recorda de maleguéña; el permendidos PCA Ascelaca de la recel Asabas de la dede en blockamiento el como de vera la Valdériang Chann en The Green Save a la concellon del Tituía de Diperto II naver tado en Tecno aglias de Blockami, couto des de masemanies vez promovados parte como Universa de Savega de Blockami, couto des de masemanies vez promovados parte como Universa de Savega.

Notion de estares caregos a suppres relación la face transference totoricamente de 201 supore fun hata de encome importance?, statardo a la capital en el ciertos de esta teoridaga, con la antidencia de las mayores espectos en la materia, que competitaria mante a care de una presidencia na activa presidencia la transfera de actual de Electricaria

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El FLA, ademis, term antiagamento o need international on longer tradects allo technique blockhole", donne el categorio europeo. Pares in Biodentalis (en el moreo de proyecto etablic), debato por el proyecto parto al la tima estada del Aguero te hartago el administra Tecnologi por del Las entranzo, ad como 24 estádere europeos admentare y que estad entranzo a lagora la intervación en las penter esti continente sublectos y ten estad entranzo a lagora la intervación en las penter esti continente sublecante y ten elegar "Biodeline".

CUMBRE MUNDIAL

El aventio contanti con espertos de renombre como Pierre Nerro, de la Unidad de Innovacion Digital y Biodochain de la Contañen Baropae; Estadoan Polayo, de la European Assanciana di Inconat Revelopment Agenaro, Piennel Madania, del discunstantes func Europea de Biodochain; Jorge Ordevia, el Centro de Competencias Nodochain de Telefonica. O Protector Biodocha, director de Actante.

en la journala participaran membros de la sabred de "blockdram" de la Asecuador International de Farnase Chertificar y Ternalityione y America Internation (EUAFR), que está coordinate por al TAA. Además, charasas empresas compartinin casos de uno maise con Internation, "blochdram" (tan de las compresas que darán o compartinis sua conces en este compo será Gracia, que se escuerora utilizada en la nechoo la mángueño.

El evento culminani con una entrega de premios en reconccimiento a las mejores prácticas, reviendas en los parques científicos y recológicos españoles durante el año 2010.

La organización de esta conferencia l'internacional ha sida posible con la minimum de la Austicular l'internaciona de Panques Clerithices y Transfergicos y Arama de Entervador (1647), el Aram termento de Mákaya, Francúleza, Unacada terco, totendo, Agencia Andréas de Panancien Dereico y la Universitad de Mákaya.







Malaga Investment Attraction Centre (Spanish Platform)

Enlace: https://forinvestormalaga.com/malaga-congreso-global-blockchain-convergence/



Freienstandin - Inventie en Malaga 🐐 - Information avanzada a la inversión 🐇 - Koticula - 🕮 - Zrivado 🖨 - 58 - Q



Málaga celebra el primer Congreso Global de Blockchain 'Convergence'

Un war to complexe per la Genéral Daropen, IMATEA (Aussiación i transciencia a Aplicación a Se conta su Bacconin). El desenvolve y fore surges de Bacconin y Austria (portación can provise la societte à graf) harte parties à promet el don de "Convergence, the Gabes Daconin". El velle conta in Convergence, the Gabes Daconin Congress". El velle per entre el Li y 3 de noviembre en el Paracia de Faite y Congresse de Nillage (PVDA).

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La organización españa seción mande L.200 esterante estra españas, reguladores, política lovestigadores y empresa de diference industriar de todo el mande. Agunta participantes que y tem cardinande es asterantes en la Oppolanción mandel del contento, al baros de lapos, al formanda el partecipantes cardo Tembrar o Partecipantes en la Oppolanción mandel del contento, al baros de lapos.

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Málaga y la tecnologia blockchain

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Con esta posición consolicióa, machas empresas de todo el mando están lagando a Milaga pera esentar equí sus negocias. Los expentos aciosan que se recos tan más de 100 mandos políticación de esta tecnología. En esta sentido la Universidad de Milaga obrea formación específica con guardes salidas prefesionales.

while ϵ 110, 2019] while κ -





Europa Press (Spanish News Agency)

https://www.europapress.es/esandalucia/malaga/noticia-proyecto-europeo-peers-to-blockchain-comienza-parque-tecnologico-andalucia-20190515134546.html







Digital Newspaper Teleprensa

https://www.teleprensa.com/es/malaga/el-proyecto-europeo-peers-to-blockchain-comienza-en-el-parque-tecnologico-de-andalucia.html.html

15/05/2019







Cibersur (Digital Newspaper specialized in Science, Technology, and Innovation)

http://w.cibersur.com/cibersur/impe/portada/andalucia/020322/proyecto/europeo/peers/to/blockchai n/inicia/andadura/pta?d=print







Vida Económica (Malaga Business Newspaper)

https://www.vidaeconomica.com/2019/05/proyecto-europeo-blockchain-pta/ 16/05/2019







Blockhain para PYMES

Peers to Blockchain (P2B) arrancó ayer en el PTA y puso en marcha su plan de trabajo estableciendo una serie de objetivos. En primer lugar, el proyecto deberá servir para definir un ecosistema de Blockchain para cada una de las regiones de las entidades participantes. En segundo lugar, deberán quedar identificados los beneficios del Blockchain para las PYMES y pilotos reales que sirvan de modelo. De acuerdo con este análisis, se pondrán en común resultados y soluciones, y se elaborará un manual de buenas prácticas en Blockchain, con aplicación de metodologías innovadoras, orientado a PYMES.

La tecnología *Blockchain* está llamada a transformar buena parte de las operativas transaccionales y de gestión que hoy funcionan en el mundo. El PTA ha comprendido la importancia estratégica que tiene esta tecnología disruptiva, y de ahí su interés por impulsar el intercambio de conocimiento y fomentar su desarrollo desde la tecnôpolis; un hecho que contribuye a **posicionar a Málaga y Andalucía como centros estratégicos de** *Blockchain***. De hecho, el lanzamiento del Peers to Blockchain abre el telón a otro evento de capital relevancia en este ámbito: la APTE International Blockchain Conference que organiza el PTA este jueves en el Rectorado de la Universidad de Málaga.**

Participantes en Peers to Blockchain

El papel del Parque Tecnológico de Andalucía en este proyecto es el de coordinar las diferentes acciones previstas. El consorcio del Peers to Blockchain está compuesto por el propio PTA, la Universidad del Algarve (Portugal) y Technoport (Luxemburgo), a las que hay que sumar hasta una veintena de entidades internacionales adheridas al

Drograma ETIQUETAS innovación malaga

DE SIEMPRE Economía Emprendimiento ESTILO DIRECTO Finanzas Formación Gestión GRAN ANGULAR Industria Instituciones Legal Marketing MÁS QUE EMPRESAS Restauración Sanidad Sin categoría Social Tecnología Transporte TRIBUNA Turiemo Formación

Gestión

ACTUALIDAD Y EMPRESAS

Agroalimentario Automoción

Comercio

Cultura

Construcción





La Opinión de Málaga (Spanish Newspaper)

https://www.laopiniondemalaga.es/malaga/2019/05/16/pta-pone-marcha-proyectoeuropeo/1088639.html

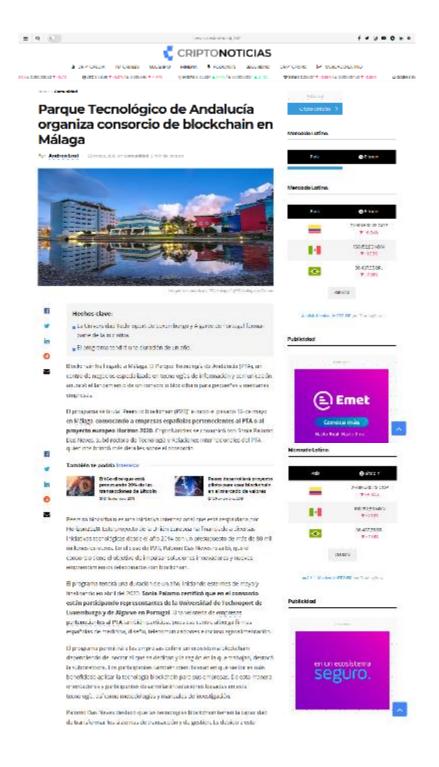






Criptonoticias (Digital newspaper for spanish speaking readers)

https://www.criptonoticias.com/comunidad/parque-tecnologico-andalucia-consorcio-blockchain-malaga/







2. Writing Press

Writing press was released about the Global Blockchain Congress CONVERGENCE that took place in Málaga (Spain), in November 2019, where the project P2B was presented.





Important news in the field of the Blockchain Technology which counts of the collaboration of the Technology Park of Andalucia was released in January 2020.

LaOpinión

PAIS: España PÁGINAS: 10 TARIFA: 577 € AREA: 149 CMF - 19% FRECUENCIA: Diano O.J.D.: 1748 E.G.M : 16000 SECCIÓN: MALAGA



+ 9 Enero, 2020

El PTA se suma a la nueva red de APTE y Telefónica para lanzar el Blockchain

▶ Una red independiente dará servicio a las más de 8.000 empresas que se alojan en los 52 parques científicos

LA OPINIÓN MÁLASA

■La Asociación de Parques Cien-tíficos y Tecnológicos de España (APTE) ha firmado un convenio de colaboración con Telefónica paraponer en marcha unared pri-vada e independiente de blockchain v ofrecer un acceso rápido y seguro a esta tecnología a las más de 8.000 empresas y entidades ubicadas en los 52 parques cientí-



La firma del acuerdo entre APTE y Telefónica. Lo

ficos y tecnológicos operativos miembros de la Asociación. El Par-que Tecnológicos de Antálucia (PTA), en Málaga, se ha sumado a esta nueva rest, que supone otro hito en el processo de impliantación hito en el processo de impliantación de trata de suporte de la construcción de l hitoen el proceso de inspanitación del Blockchain. La red se denomi-na BLOCKPCT y está construida bajo la tecnología propia de Tele-fónica, denominada TrustOS. El director del PTA y presidente de ANTE Unita Desenaria APTE, Folipe Romera, destacó que Arrie, People Nomena destaco que los parques «senán los primeros en oficerer a sus empresas y entidades acceso rúptido a blockchain». La consejava delegada de Telefónica, Maria Jesús Almaror, añadió que, gracias a este convenio, las empre sas alojadas en estos parques «po-drán beneficiarse de las ventajas de esta tecnología sin tener que enfrentarse a la complejidad inhe rente de la misma o tener que de dicar recursos».





IV.VI. Participation in national and international events

A total of 19 events (conferences, workshops and meetings) took place to promote the project and the activities implemented: The following ones took place:

- Kick-off meeting of the project in Malaga
- International Blockchain Conference, Málaga, Spain (16h of May 2019)
- Presentation of the project in the University of Applied Sciences in Saarbrücken, Germany (22/05/2019)
- Presentation of the project in the incubator Eurodev, France (04/07/2019)
- Presentation of the project within a EU-Africa Networking Meeting, Nairobi, Kenya (11-18 September 2019)
- Presentation of the project in EdTech meetup & conference, Luxembourg city (24/09/2019)
- Presentation of the project in a brokerage event of the European Higher Institute of Enterprises and Techniques (ISEETECH), France (16/10/2019)
- Workshop at the EU University Business Forum and DLT4ALL, Brussels (24-25 october 2019)
- Presentation of the project at Grand E-Nov Innovation Agency during ConnectInGR event, a matchmaking event of business players of the Greater Region, Luxembourg (05/11/2019)
- Presentation of the project during a during a EU-India innovation partnership event in New-Delhi, India (11-15 November 2019)
- Global Blockchain Congress CONVERGENCE, Málaga, Spain (11-13 November 2019)
- Meeting of the Blockchain Working Group from the University of Malaga and the Technology Park of Andalucia Málaga, Spain (11th of November 2019)
- P2B partner meeting in Luxembourg (January 2020)
- Presentation of the P2B in partner meeting of European projects:
 - Presentation of the project at the Innorate H2020 project advisory board meeting, Brussels (27th & 28th of May 2019)
 - Fablabia project meeting at Brigk (AUDI automotive innovation centre), Ingolstadt, Germany (28-29 november 2019)
 - TargetSME from the Innosup-5 call, Poznan (Poland), 2nd & 3rd of December 2019)
 - Recycling Business Models RBM from the Innosup-5 call, Malaga (Spain), 4th of December 2019)
 - eLead from the Erasmus Plus call, Pesaro (Italy), 26th and 27th of November 2019
- Webinar about the European project Peers to Blockchain (12th of May 2020)

The project concluded with the realization of a final International event in Faro, to present the results of the project, and created synergies and opportunities to capitalise the outcomes obtained.





1. International Blockchain Conference

In the framework of the Kick-off meeting of the P2B project, the partners participated in the International Blockchain Conference that took place at the Rector's Office Building of the University of Malaga on the 16th of May 2019. The event coincided with the XVII International Conference of the Association of Science and Technology Parks of Spain (APTE), as well as with the I Meeting of the Blockchain Subnetwork of the International Association of Science Parks and Areas of Innovation (IASP).









2. Presentation of the P2B project at University of Applied Sciences in Saarbrücken, Germany

P2B Project was presented at HTW SAAR within a Greater Region meeting on digital information and communication platform for entrepreneurs. The Greater Region is the cross-border area spanning five regions and four founding countries of the European Union: Germany, France, Luxembourg.



3. Presentation of the P2B project at Eurodev, France

P2B Project was introduced within a presentation on Technoport EU project at Eurodev Pépinière d'entreprise in the context of a Greater Region Business matchmaking.







4. EdTech meetup & conference

24 September 2019 EdTech meetup & conference, Luxembourg city (Meetup event) P2B project was introduced to the Education Technology community in Luxembourg within an Ed-Tech meetup.



5. Capitalization with the Innorate H2020 project

On the 27th and 28th of May 2019 the project was presented to the Innorate H2020 project advisory board meeting, in Brussels.







6. EU-Africa Networking Meeting, Nairobi, Kenya

P2P was presented withing an EU-Africa Networking meeting. 21 tech hubs from Europe and Africa hubs gathered to share on Africa Europe innovation partnership for intercontinental cooperation in the area of innovation.



7. EU-India Networking Meeting, Delhi, India

The P2B Project was presented during a EU-India innovation partnership event in New-Delhi (11-15 November 2019). Technoport presented its EU projects participations and communicated about the Peers to Blockchain objectives.







8. 8th EU University Business Forum and DLT4ALL, Brussels

P2B project was presented with DLT4ALL initiative, sharing perspective on a Knowledge Alliance for Blockchain in Academic, Entrepreneurial and Investment Training, to address effectively the lack of European entrepreneurs', students', investors' and incubator managers' understanding of Blockchain and Distributed Ledger Technologies (DLT) and their applications.

24-25 October 2019, 8th EU University Business Forum and DLT4ALL, Brussels (Workshop)



9. Global Blockchain Congress CONVERGENCE

On **11-13 November 2019**, the city of **Màlaga**, **Spain** (Trade Fair and Congress Center of Malaga) hosted **Convergence**, an event designed to be **the first truly global and interdisciplinary blockchain congress**. By providing a direct dialogue with *regulators*, *policymakers*, *industry influencers*



The Global Blockchain Congress 2019

and members of the social impact community from North and South America, Africa, Asia, Japan and the Middle East joining in, as well as a direct say in setting global blockchain priorities for the coming year, Convergence also offers participants a unique opportunity to not just discuss blockchain but also actively shape the industry.

The event included a number of **high-level panels**, **roundtables and working groups** which will explore the future of blockchain in domains of *AI*, *IoT*, *Finance*, *Mobility*, *Energy*, *Logistics*, *Identity*, *Privacy*, *Interoperability*, *Education*, *Governance*, *Standardisation*, and many others. With participation from thought leaders and executives in key technologies and



Horizon 2020 European Union Funding for Research & Innovation



industries outside of blockchain, Convergence is the first global conference to aim for a truly transversal experience – exploring convergent trends in blockchain technology, regulation and research as well as blockchain's impact on the economy, business, and society as a whole. More than **1.300 participants** from all over the work were present in this event.



Members of the P2B project togetner with international delegation during the event.



Partners of the P2B project during a public session.

In such context, Hugo Barro, representative from the P2B Portuguese partner, the University of Algarve, participated in a **panel session focusing on EU Funding: Opportunities for Traditional, Innovative SME's and Start-ups (12 November 2019, 17:15 – 18:00 CET)**. This information session offered attendees an opportunity to understand more about the EU's blockchain policy and funding initiatives.







The speech of Hugo Barros is been uploaded in YouTube for the promotion of the P2B project. The video is available in the next link: https://youtu.be/_tokqFYxNWc

More videos about the Congress Convergence area available at: https://www.youtube.com/watch?v=-pNO9oDJj64&list=PLyMUk47rPuqqXbwekCGXV4f7zPwCl_MUZ

10. Blockchain Working Group of the Technology Park of Andalucia

In the framework of the Global Blockchain Congress CONVERGENCE, which took place on the 11-13 November 2019, in Malaga, Spain, several partners of the Peers to Blockchain project participated in the meeting of the Blockchain Working Group of the Technology Park of Andalucia, which counts with the leading companies of the Technopolis in this field, representatives from the University of Málaga.

The Group meets frequently to analyses the state of art of this technology and the challenges the companies have in this field.







11. Workshop BLOCKPCT (APTE)

On the 6th of February 2020, the Spanish partner of the Peers to Blockchain project participated in a workshop organised by Association of Science and Technology Parks of Spain (APTE), to present the Blockchain network BLOCKPCT the association launched in Spain.

With this initiative, APTE will make it easier to use blockchain to the 8.000 companies located in Spanish science and technology parks.



12. Webinar P2B





Within the framework of the European project Peers to Blockchain the Technology Park of Andalucia organized in collaboration with the partners from Portugal and Luxembourg, a webinar on the Tuesday 12th of May from 17h30, to present the good practices and use cases selected by the European partners participating in the initiative, and to promote the current uses of Blockchain technology and the added value it can bring to the entities that use it.

Next you can find information about all the speakers from the seminar:



Several articles were published in online newspaper:

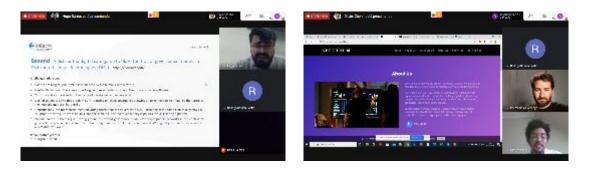
- https://www.europapress.es/andalucia/malaga-00356/noticia-proyecto-europeopeers-to-blockchain-coordinado-pta-reune-webinar-casos-exito-tecnologia-20200512212534.html
- https://alastria.io/events/peers-to-blockchain-p2b-good-practices-webinar/
- https://www.vidaeconomica.com/2020/05/peers-blockchain-pta/
- https://www.innsitu.es/el-proyecto-europeo-peers-to-blockchain-coordinado-por-elpta-reune-en-un-webinar-casos-de-exito-de-esta-tecnologia/

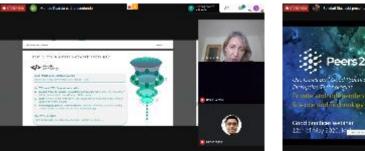
The seminar counted with 34 participants.

Next some pictures of the event:



















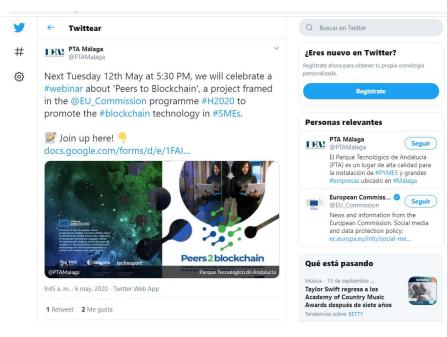
IV.VII. Social Medias

The social medias have been an essential part for the comunication and promotion activities of the P2B project. Medias such as LinkedIn, Facebook or Twitter have been used frequently to disseminate the progress of the project and its results. See some examples next:

https://www.linkedin.com/groups/12330657/



https://twitter.com/PTAMalaga/status/1257939461817671681







13 Retwitteado por ti

Ebba Lund @lund_ebba · 15 may. Great to see #sciencepark & #incubator colleagues from @Technoport_Lux and Algarve this morning in #Malaga for their kick-off meeting of the "Peers to Blockchain" project hosted by @PTAMalaga #blockchain @EU_H2020 #BlockchainPTA Traducir Tweet



11 17 4

EXElente antesala a la Conferencia Internacional #APTEBlockchainMalaga de

PTA Málaga @PTAMalaga

Mostrar este hilo

121 06

PTA Málaga @PTAMalaga · 15 may.

APTE, IASP, Universidade Algarve y 5 más

12 1 0 6

#BlockchainPTA

0

PYMES pta.es/es/noticia.cfm... #EASME Y mañana 🖄 ... #APTEBlockchainMalaga

mañana. El #PTA ejerce hoy de anfitrión en el lanzamiento del programa 'Peers to #Blockchain', un proyecto enmarcado en @EU_H2020

#EASME #BlockchainPTA #PTAInternational

di.

Peers to Blockchain' ha iniciado su andadura en el #PTA. Coordinamos este

proyecto europeo orientado a implementar la tecnología #Blockchain en las

ilt

Coffee Break before the first working session of the 'Peers to #Blockchain' Project at the #PTA.

Parque Tecnológico de Ano

PTA Málaga @PTAMalaga · 15 may.

#EASME #BlockchainPTA

0

PTA Málaga @PTAMalaga · 15 may. The #PTA is hosting today the kick-off meeting of the 'Peers to Blockchain' Project, a program part of the @EU_H2020 to facilitate the implementation of #Blockchain by SMEs. #BlockchainPTA



Technoport y a Universidade Algarve 01 t] 2 0 3 dt Mostrar este hilo

PTA Málaga @PTAMalaga · 15 may.

I DEA! Presentation of the 'Peers to #Blockchain' Project by @erickochbarneda, Project Advisor @EU_H2020 | Innovation in #SMEs at the @EU_Commission. #BlockchainPTA S Traducir Tweet



O Q 1 17 ilt. Mostrar este hilo

PTA Málaga @PTAMalaga · 15 may.

Coffee Break before the first working session of the 'Peers to #Blockchain' Project at the #PTA.

#EASME #BlockchainPTA #PTAInternational





Universidade Algarve, Technoport, SciencePark Mjärdevi y 5 más

Q 11 0 1 di.

Mostrar este hilo





https://www.linkedin.com/company/iasp---international-association-of-science-parks-and-areas-of-innovation/

date: 15/07/2020

the International Association of Science Parks and Areas of Innovation published an article for the finalization of the project. The IASP counts with 3.972 followers in LinkedIn.

| ALC: N.C.P. | anal Association of Science Parks and Areas of Innovation nato: - Companilas, Malaga- 1972 coguidants - sele primate en company enc | + Seguit Visitar sitio web 🕼 |
|--|---|--|
| Inicio Acerca de Empleos Personas Videos Amuncios | ASP - International Association of Science Parks an + Seguir *** 2020 equidants There is a Bolockhain project, doerdinated by Parque Technologico de Andalucia Ser and international revelues of Good Practice Istantinos for MMI - , de mos Nor tradución Peers Zblockchain Peers Zblockchain P | Paginas similares International Association for the cospect of the cospect of <tr< th=""></tr<> |
| | Peers to Blockchain project conductes ungers + 2 min do lockers | Almadena Sirodey Rotocinado + Ta perfética. |
| | o i ∆ Recommundar ⊟ Communitar ⇔ Compartir √Envira | interrep MID Programme Interrep Dear Falorets, In- |

With link to the website of the IASP: https://www.iasp.ws/activities/news/peers-to-blockchain-project-concludes





IV.VIII. Synthesis of the communication activities performed

During the implementation of the P2B project, the following communication actions were executed:

| | TOTAL | |
|---|-------|--|
| Design of the Plan for Information and Communication Measures | 1 | |
| Design of the Plan for Capitalization of results | 1 | |
| P2B Corporate Image Manual (including logo, templates, etc) | 1 | |
| Design of the flyer of the project | 1 | |
| P2B Blockchain Good Practices Platform | 1 | |
| Promotion Activities in national and internacional networks | 9 | |
| Press Releases | | |
| Online newspapers | 11 | |
| Writing Press | 2 | |
| Participation in national and international events | | |





V-Main results

V.I. Good practices detected

During the action 1 (Analysis of the state of art) of the P2B project, more than 20 use cases and good practices in Blockchain were selected for the project within the fields of Public Administration, Retail & Customer Applications, Industry Value Chain Applications, Creative Industries and Distributed Ledger Technology (DLT) Resources, as described next:

| PUBLIC ADMINISTRATION | RETAIL & CUSTOMER APPLICATIONS | INDUSTRY VALUE CHAIN APPLICATIONS | CREATIVE INDUSTRIES: | DLT RESOURCES |
|--|--|---|---|--|
| Blockchain4all (Izertis, Spain) | e-PARTICIPATION or CUSTOMER LOYALTY | AGRI-FOOD | GAMING | TRAINING |
| Luxembourg Public Sector Blockchain (Intech, Luxembourg) | Neural Distributed Ledgers (ByEvolution, Spain) | TRUST4OLIVE (University of Cordoba, Spain) | Baeond (Portugal) | APTEFORMA (APTE, Spain) |
| European Financial Transparency Gateway (Grand Thornton, Luxembourg) | CBET Blockchain network (Wearoft, Spain) | ShareBeef (University of Cordoba, Spain) | MUSIC | University Expert in Blockchain Technologies (University of Malaga, Spain) |
| | KMP – Kilometre Platform (Wearoft, Spain) | IBISA Network (Bit Valley, Luxembourg) | ANote Music (ANote Music SARL, Luxembourg) | DigitalAgri Máster (University of Cordoba) |
| | TOURISM | ENERGY | | BLOCKCHAIN PLATFORMS |
| | Development of a direct distribution system for dynamic packages of touristic products based on Blockchain technology (Guadaltel, Spain) | Efichain (Magtel, Spain) | | BLOCKPCT (APTE, Spain) |
| | PAYMENT GATEWAY CryptAPI (Portugal) | DIGITAL IDENTIFY ZKP project for third parties (Algorath, Spain) | | DIGITAL CURRENCY Decred (Portugal) |
| | ICT (SOFTWARE, MARKETING) | INDUSTRY 4.0 | | |
| | Dengun (Portugal) Algardata (Portugal) | Euskate (Izertis, Spain) | | |





V.II. Description of the good practices

INITIATIVE 1: EUSKATE: Blockchain based technologies for the industries

Generation of new knowledge based on the use and applicability of Blockchain technology in industry and in particular in Advanced Manufacturing. Development of a Blockchain platform for Industry 4.0 will be created, allowing the creation of prototypes in laboratory environments, validation, experimentation and analysis of new products and services that can offer added value to the companies.

Field(s) of application: Industry

INITIATIVE 2: EUSKATE: Blockchain4all

Blockchain platform including integration another set of projects that are part of Hyperledger Foundation, as well as an existing PKI and certification system (IZENPE). Also, it was created a learning environment through a didactic platform. The ultimate goal was to create a Blockchain platform that could be provided as a service for individuals or organizations perform their tests and validations, as well as for the production Blockchain projects of the institutions..

Field(s) of application: Public administration

INITIATIVE 3: Blockchain-based innovation network between Spanish Science and Technology Parks (BLOCKPCT)

This project consists of creating a private Blockchain network in Hyperledger, between all the science and technology parks that are APTE members, with the objective to return science and technology parks to the attractiveness they once had when they were the only place where companies could access the latest technologies. More than 8,000 companies in the parks will have the opportunity to access a reliable, safe and trustworthy environment (sandbox) where they can develop activities in Blockchain.

Field(s) of application: Smart contrat and Digital Identity

INITIATIVE 4: APTEFORMA

APTE's digital training classroom (APTEFORMA) provides online training to promote knowledge of disruptive technologies in the Spanish science and technology parks environment, among its more than 8,000 companies and 175,000 workers, in order to increase the competitiveness, professionalism and, ultimately, the digital talent of these professionals and the digital transformation of their companies Blockchain, Artificial Intelligence, Cybersecurity, Industry 4.0., Digital Transformation, Edge Computing, Smart Cities, Big Data, among others.

Field(s) of application: Training





INITIATIVE 5: ZKP project for third parties

The initiative use the Zero Knowledge Proof, part of blockchain technology, in order to validate data from users. Verifiers ask for some information of a client and only get access to that information, so clients maintain privacy of data, but they confirm required information.

Field(s) of application: Smart contrat and Digital Identity

INITIATIVE 6: Development of a direct distribution system for dynamic packages of touristic products based on Blockchain technology

The project allows the creation of dynamic packages of touristic products (Prototype) in order to face the hybridization revolution. At the same time, the distribution chain is exposed thus empowering those intermediaries that provide added value to the products and eliminating those that are unnecessary for the process. (Ethereum with the Parity client).

Field(s) of application: Tourism

INITIATIVE 7: Neural Distributed Ledgers

VoteKeeper is a dApp and process management system of an e-Participation model that can configure a tokenizable system of the actions and processes that citizens exercise in democratic environments as an opportunity to guarantee greater participation and thus manage more effective local democratic spaces. Is a Blockchain solution in e-Democracy platform with a new pattern of management amongst the agents that participate in the public sphere. In order to develop a sustainable, scalable and resilient e-Participation system, we use a new blockchain concept that organizes the blocks as a neural system.

Field(s) of application: Smart Contract, Digital Identity and Government

INITIATIVE 8: Efichain

The main objective of the project is to investigate the feasibility of applying novel distributed registration/blockchain technologies in real market applications for individuals and companies aimed at positive influence on citizens' behaviour from promoting their energy efficiency. To achieve this Efichain develops an integrated collaborative system based on blockchain relationship between the different participants. In addition, the system will revert in a Social Project that provides energy to disadvantaged groups.

Field(s) of application: Smart Contract, Energy and Internet-of-Things (IoT)

INITIATIVE 9: CBET Blockchain network

Creation of an Ethereum private Blockchain network implementing a new rewards mechanism for customers, generating more engagement and longer times on platform in an Online Casino.





This initiative generates more engagement over the same user's base they already had. Customers get CBET coins (from the blockchain). The holders of these coins would earn a monthly reward in milibitcoins (mBTC). Customers checking their balance spend more time on the platform.

Field(s) of application: Smart Contract, Energy and Internet-of-Things (IoT)

INITIATIVE 10: KMP – Kilometre Platform

Creation of a Blockchain Platform to manage a Bus Transport company's tokens (similar to a Loyalty Program). Users buying a ticket receive the same distance (in km) in tokens. These tokens can then be exchanged for other free tickets or discounts.

Field(s) of application: Smart Contract

INITIATIVE 11: DigitalAgri Máster

Creation of a Blockchain Platform to manage a Bus Transport company's tokens (similar to a Loyalty Program). Users buying a ticket receive the same distance (in km) in tokens. These tokens can then be exchanged for other free tickets or discounts.

Field(s) of application: Training

INITIATIVE 12: TRUST4OLIVE

System for monitoring traceability of olive oil supply chain using blockchain is developed and tested. The olive oil supply chain has been described in deep from farm to fork for the Almazaras de la Subbética case.

Field(s) of application: Industry Value Chain Applications, Agro-food

INITIATIVE 13: ShareBeef

Creation of shared value in the beef cattle supply chain by means of data sharing along the different stages, taking account of consumer values (grass-fed meat and animal welfare and others). This demonstrative project will deal with IoT sensor data to feed the blockchain infrastructure. In terms of traceability, it will take advantage of the mandatory individual identification of each animal for beef cattle.

Field(s) of application: Industry Value Chain Applications, Agro-food





INITIATIVE 14: IBISA Network

IBISA means Inclusive Blockchain Risk Sharing using Space Assets. It is a decentralized marketplace that enables smallholder farmers to share crop loss risk globally, with low costs, fast assessment and payment, and no need to file a claim.

Field(s) of application: Industry Value Chain Applications, Agro-food

INITIATIVE 15: ANote Music

ANote Music operates an ecannge for music rights. As a new player in this field which requires a high level of trust from the users, ANote chose to prove mathematically to its customers that it operates according to its statement. This is done by registering on a blockchain all orders (buy/sell) from users on the blockchain, thanks to a ZKP that ANote server cannot forge. In the end, this allows any third party to rewind the history of transactions and make sure that the ANote state is indeed what it should be.

Field(s) of application: Creative Industries, Music

INITIATIVE 16: European Financial Transparency Gateway

In order to promote cross-border investment and provide investors with easy access to regulated financial information of companies listed on the European Union's (EU) regulated markets, the European Commission (EC) is developing a platform that offers a single view for such information currently stored within different Member States' infrastructures. Following a successful Proof of Concept (PoC) using Blockchain technology, the EC is launching the European Financial Transparency Gateway (EFTG) Pilot Project within the framework of the Capital Market Union and the legal obligations of the Directive 2013/50/EC.

Field(s) of application: Public Administration

INITIATIVE 17: Luxembourg Public Sector Blockchain

Government IT Centre (Centre des technologies de l'information de l'Etat - CTIE) and S.I.G.I. (SyndicatIntercommunal de Gestion informatique) are implementing a decentralized platform to streamline and secure flows of information between the various actors of the public sector.

Field(s) of application: Public Administration

INITIATIVE 18: BAEOND

Baeond is a crypto card game with on-chain governance. Players determine the future of the game, and its rules rely on player consensus achieved by a distributed ledger. On-Chain governance powered by play ensures the creative and economic forces of Baeond remain divorced from one another.





Baeond replaces shooter gameplay with a card game while retaining the hobbyistic nature of looter games that incentivize players to finish collections, complete challenges, creatively customize their avatars, and discover new unique lines of play. Players play matches to earn loot to upgrade their cards, which are tradable on an open market, just like a paper card.

Field(s) of application: Creative Industries, Gaming

INITIATIVE 19: CryptAPI

Easy to use, secure and privacy-oriented payment gateway that gives more choices to customers, by accepting payments in multiple cryptocurrencies, including Bitcoin, Bitcoin Cash, Litecoin, Ethereum, Monero, USDT and IOTA (more coming soon).

Field(s) of application: Retail & Customer Applications

INITIATIVE 20: Decentralized CREDITS (deCRED)

Decred is a multi-platform digital currency with support for Windows, macOS, and Linux. Easyto-use wallet apps enable sending, receiving, and mining Decred with just a few clicks. For those who like to tinker, Decred provides a full suite of command line tools allowing customization of the Decred experience. Decred employs a combination of PoW and PoS to yield the best of both systems, mitigate their weaknesses, and deliver a layered consensus mechanism that makes it far more secure than other cryptocurrencies. Decred uses conventional PoW with a BLAKE-256 hash algorithm, and it is mined exclusively by ASICs. Decred holders time-lock their funds to purchase tickets in a lottery. Those tickets are added to a pool of roughly 41,000 tickets, and five tickets are pseudorandomly selected to validate the Proof-of-Work for the previous block. If at least 50% of the tickets approve the work of the miner, the miner's reward is approved and the block is added to the blockchain.

Field(s) of application: Digital Currency

INITIATIVE 21: DENGUN

Dengun is a Digital Agency located in the Algarve, Portugal, specialized in the design and development of web and mobile applications and integrated marketing strategies. In the scope pf digital consultancy, the company acts in accordance with a general diagnosis of the potential client's digital footprint, translated into an assessment of needs, and then materialized in a work proposal based on specific models and tools to achieve the objective. The team builds and maintains the technology that powers the proposed solutions and allows the frontend and mobile applications to communicate with the databases and to be managed through a state-of-the-art instrument panel. On this sense, and towards the goals of each client, the company develops solutions based on Blockchain technology, increasing security and traceability.

Field(s) of application: ICT (software, marketing)





INITIATIVE 22: Málaga University Expert Course in Blockchain Technologies

The second edition of the program University Expert in Blockchain Technologies of the University of Malaga, pioneer in this field in Andalusia, will begin in January 2020. The overall objective of the degree is to provide a solid knowledge base for the training of professionals in Blockchain technologies, with teachers from Oracle, Telefónica and NuCypher companies, who will show the use of their own platforms, in addition to Accenture and The Workshop, which will show real cases of Blockchain use.

Field(s) of application: Training

V.III. P2B online Platform

Initially, the project foreseen the design of a Blockchain Good Practice Handbook classified by type of initiative (Action 2). For the dissemination and the capitalization of the good practices and use cases obtained during the Action 1, the partnership decided to go beyond that and to create and make available an online platform, using their own resources, where each good practice can be seen and promoted, with possibility to contact directly the persons in charge of the initiatives.

Link: https://peers2blockchain.eu/







Based on the previous analysis and the good practices and use cases selected, the online platform was structured as follows:

- 1- Public Administration
- 2- Retail & Customer Applications
- 3- Industry Value Chain Applications
- 4- Creative Industries
- 5- DLT Resources
- 6- Other





VI- Updates and follow-up in each country

The partners of the P2B worked on concrete activities during the project to facilitate the transfer and capitalization of the results of the peer learnings by national and regional innovation support programmes in each participating region, namely Luxembourg, Portugal and Spain.

PORTUGAL

The region of Algarve has one public university, overspecialized economy in term of tourism, which at this moment is particularly affected due to the COVID-19 situation, in term of unemployment, with a large impact on the economy. The strengths of the region in term of smart specialization has always been to focus on tourism. It's in fact the key factor, as it represents 74% of the regional GDP, but the strategic actors of the region are fostering actually as much as possible other areas such as ICT, sea, energy, agri-food, etc... Indeed, the idea has been to consider the creation of a Smart Destination Hub to consolidate this strategy. The region has a lot of companies and developers that come to work remotely, to retain this critical mass and to attract international companies in the ICT sector.

Technological Park of the Algarve

The public presentation of the Technological Park of the Algarve was held on May 4, 2020 at the campus of the University of Algarve, in Portugal. The Algarve Tech Park aims to be a focus of attraction for regional, national and Internacional companies, aligned with the Regional Development Strategy of the Algarve (RIS3), and with the objectives proposed by the Managing Authority (CCDR Algarve). The Tech Park, launched and managed by the University of Algarve, seeks to attract a significant number of innovative companies with research and development strategy, willing to develop a privileged relationship with the University and with the main regional stakeholders, aiming to grow their business, particularly to external markets.

The Technological Park is an output of INTRA, integrated in the Action Plan for Portugal, aiming to benefit SMEs in overcoming their internationalisation challenges and barriers, and increasing cooperation among the stakeholders. This work developed in Phase 1 of INTRA, formalized in the regional Action plans, is scheduled to be implemented and monitored in Phase 2.

Collaboration with local and regional governments

Together with local and regional governments such as the Algarve Regional Development and Coordination Commission (CCDR Algarve), which is the entity that manage the regional funds, the University of Algarve has been working together to analyse how they can intermediate international funds like Horizon 2020, Horizon Europe to learn from others and





then have the necessary financial tools in term of operation programs to support any company who wants to develop that. When the University of Algarve started to work with the ICT sector with the companies, they developed a matrix with them: what is ICT, what can be developed, they tried to understand what competences does the University have, what the companies want, and then they had to match where those things fit, because sometimes companies have necessities that the University cannot supply, and sometimes the University want to investigate of topics which are not relevant for companies. When they performed this analysis, a couple of things came up such as interests in IoT, virtual reality, Blockchain, security among others. When it came up to Blockchain, there is a trending the University and the region understood that had to be followed, but they lack critical mass and knowledge about this. So that's exactly how the University of Algarve started working in this field with the Spanish partners from the Technology Park of Andalucia, and Technoport from Luxembourg, to learn more about the technology Blockchain and to develop this technology in Algarve. This learning is the basis of a future development of new initiatives at operational level for specific projects and specific products that could be sold, and also in term of Horizon Europe in term of what else can we learn, what else can be developed, and this is something that the University of Algarve is been developing together with the companies and with the regional government. In this sense, the Techpark has been funded by regional funds and what the University of Algarve is doing with the operational programs is to follow this strategy, attracting companies, developing R&D activities and getting more critical mass, and meanwhile to continue to work with international partners to keep developing these exchanges of best practices in the field of Blockchain.

With the P2B project, the University of Algarve is completely in line with the strategy of the regional government, they continue to carry on this kind of programs to access and transfer knowledge needed in the region in order to increase the regional ecosystem.

Regional structural funds play an important role too. Indeed, with the realization of European projects, the University of Algarve can learn and identify practices, transfer them, and develop actions, and more specifically with the P2B project, the University of Algarve is been transferring best Blockchain practices and use cases to the companies of the ecosystem that will use this knowledge to develop their own products. In order to develop that, these companies will probably go to regional funds, which support R&D activities.

LUXEMBOURG

Most of the industries applications in Luxembourg are addressing regulations technologies, such as the company GCL Technologies, word wide producer of cups which is hosted by the incubator of the Technoport and who got in touch with a start-up managing Blockchain technologies to develop together a track and tray system in logistics with Blockchain technology. A local innovation fund support body called LUXINNOVATION, which is also the national contact point for structural fund is aware about the P2B project, and in this sense, is pushing strategic players to apply for national research funds, and also try to see for further structural fund projects in the field of logistic.

Application cases has been now developed as well in the **space technology industry**. Luxembourg is investing currently quite much within that industry and they are currently





structural funds under consideration for the trace of satellites, communication, and, making applications of Blockchain.

Indeed, there is an awareness regarding Blockchain applications in Luxembourg. But one of the steps that still need to be done, and that Technoport started with the P2B Blockchain Good Practices platform, is how to currently customize Blockchain applications for specific industries application use cases. Technoport applied locally on a regulation technology for logistic applications, management applications use cases, among others.

Apart for these two categories, there are also specific applications, when you apply Blockchain for following music rights, or in general funk industry. The different specificities of the application knowledge must be collected wisely, and the knowledge has to be correctly labelled within the industry players. Does the knowledge belong to the university players or to the research players? This is the actual tendance in Luxembourg, that Technoport detected. The Technopolis from Luxembourg has a centre of R&D knowledge, focusing on application use cases. There are inspirations to applying future structural funds in Luxembourg.

SPAIN

Joint International Strategy Group

The Technology Park of Andalucia, which is one of the entities attached to the Regional Government of Andalucia is coordinating a Joint International Strategy Group whose aim is to combine international development strategies as well as the implementation of projects at global level and the search for joint actions for the development of an international strategy with vision of medium and long term. The group is formed by the main representatives of the principal institutions of the city of Malaga, which include Chamber of Commerce, City council, Entrepreneur Confederations, European Business and Innovation Centre, several public entities from the city, ICEX Spain delegation export and investments from the national Government, the Regional Government of Andalusia and the University of Málaga.

PTA: Digital Innovation Hub

The Digital Business Action Plan (PAED) is the roadmap of the Andalusian Ministry of Employment, Enterprise and Trade to promote the digital transformation of Andalusian SMEs and their incorporation into the Digital Economy. It is one of the first actions launched to develop the Strategy to Promote the ICT Sector Andalusia 2020 (TIC2020). It is framed within the Axis of Incorporation of the TIC to other productive sectors, in the Program of Stimulation of the technological demand. The aim of this initiative is to promote the adaptation of companies to the changes imposed by the new digital environment, as a means of ensuring their competitiveness and long-term economic growth. To this end, it is considered essential to bring technological solutions, especially those developed by companies in the Andalusian ICT sector, to other productive sectors that have a low level of digitalisation, as well as to encourage the establishment of an innovation culture in companies that will contribute to the development





and strengthening of new business models. The Strategy to boost the ICT sector Andalucia 2020 (TIC 2020) has the following objectives:

- Increase the contribution of the ICT sector to the Andalusian GDP.
- Increase ICT employment.
- Improve the competitiveness of the Andalusian ICT sector.
- Stimulate innovation in the Andalusian ICT sector.
- Encourage the opening of the ICT sector to new markets.
- Contribute to the development of the Digital Economy in Andalusia.
- Improve the conditions of the development context of the Andalusian ICT sector.

To achieve these objectives, the following strategic axes are established:

- Human capital management
- Promotion of Entrepreneurship
- Innovation and technological specialization
- New markets and investment attraction
- Improvement of business management
- Vertebration of the ICT sector
- Incorporation of ICT to other productive sectors
- Business financing
- Tractor and dynamizing administration

In this context, and in line with this strategy and its objectives, the PTA, as official Digital Innovation Hub, has a relevant part of the innovation ecosystem of the region, focused mainly in ICT sector.

European Digital Innovation Hubs

Actually, the Spanish Technopolis is preparing a proposal of project together with the University of Algarve, in the framework of the Digital Europe Program for European Digital Innovation Hubs, to create a joint Digital Innovation Hub between Andalucia and Algarve. Indeed, European Digital Innovation Hubs (EDIH) will play a central role in the Digital Europe Programme to stimulate the broad uptake of Artificial Intelligence, High Performance





Computing (HPC) and Cybersecurity as well as other digital technologies by industry (in particular SMEs and midcaps) and public sector organisations in Europe.

EDIHs could serve local and regional public administrations and other public sector organisations that aspire to use the Transformation Platform Ecosystem, to be compliant with the Principles of the Tallinn declaration on E-Government6. Furthermore, EDIHs could help public administrations to use other agreed standards and open source solutions, access government platforms or shared infrastructures (offered on the European or MS level), experiment with Artificial Intelligence and Blockchain for real-time policy-making (e.g. traffic optimisation), or help public administrations improve their cybersecurity. In this context, EDIHs could in particular assist public authorities/buyers to fully use the potential of procuring innovation, and bring them into contact with companies that are ready to supply the necessary digital technology solutions ('technology providers'), stimulating further the development of the local ecosystem.





VII- Guideline for the implementation of Blockchain in the ecosystems

VI.I. Concept

Blockchain technology is a relatively new concept that could disrupt ordinary business practices. By providing companies the ability to access new alternative financing options, to offer secure data storing solutions, making processes more transparent, less risky and cheaper, it can streamline operations and reduce costs, while opening up new opportunities and markets.

Peers2Blockchain (P2B) is an EU initiative undertaken by the Andalusia Technology Park (Spain), in collaboration with the University of Algarve (Portugal) and Technoport SA (Luxembourg) to provide small and medium-sized enterprises (SMEs) with professional expertise on the field. P2B is based on an initiative from the Technology Park of Andalucía and the International Association of Science Parks.

Blockchain is a peer-to-peer system, as it is a network of interconnected computers that communicate with each other, which confirms the relevance for presenting this proposal to the current call.

With collaborative partners across 12 different countries, the goal is to study pilot projects and good practices at local level, proposing new methodologies to enhance SME innovation, and transfer know-how to significantly promote blockchain technology at a local level.

VI.II. National Blockchain Workgroups

The concept and approach of the P2B is based on the fact that less than 50% of small startups succeed the 5-year mark, and that an even smaller percentage grows into the large organizations that stand at the forefront of innovation. SMEs around the globe face similar problems, which includes limited managerial expertise, disproportionate regulatory requirements, and productivity issues, lack of clear business strategies and ineffective strategy execution and lack of funding.

Small and medium-sized companies represent most of the business structure in many countries, generating innovative processes, higher productivity and employment. SMEs are relevant players in the innovation system, promoting growth and job creation, necessary to revive the economy. Hence, P2B aims to reach SMEs that execute a product validated by market and that have the challenge to stay competitive trough time. Complementary, the project aims to decrease the start-ups failure rate, supporting product validation, both at a B2B and B2C strategy.





According with this diagnostic, it's crucial to address adequately the real needs detected of the SMEs' and to develop strategic methodologies for this purpose at national and international level which can be effectively implemented.

Innovation in technology helps companies to come up with new ideas, reach a wider audience, use special tools for organizing and managing work, but above all, to create a better product which makes customer happy, satisfied, and enhances their daily life.

Therefore, each participating partner aggregated critical regional and/or national stakeholders towards a joint contribution, participating in all events organized at local, regional and international level. The partners impulsed the establishment of cooperation activities and the implementation of partnerships with public and private institutions to capitalize and promote the results of the project.

Hence, ACTION 3 was designed towards the implementation of strategy to promote the creation of synergies, and collaboration betweenn the actors involved in the project.

Under the coordination of partner 3 – University of Algarve, Action 3 identified regional and/or national networks of relevant stakeholders, aggregating technical and institutional skills directed to support SME's and entrepreneurs in the innovation process.

The proposed model suggests the creation of workgroups in each participating region, namely:

Workgroups with SME's and Large Companies

The goal is to aggregate a Blockchain workgroup, develop to identify and foster the implementation of Blockchain solutions in SME's and large companies, mapping and disseminating best practices, able to be transferred and implemented at a regional/national level. This workgroup should be composed by micro, small, medium and large companies, under the coordination of a P2B partner, identifying technical demands, able to be solved by Blockchain technology, and exchanging good practices.

Workgroups with stakeholders and support agencies

The goal is to aggregate a Blockchain workgroup, develop to identify and foster the implementation of Blockchain solutions in SME's and large companies, mapping and disseminating best practices, able to be transferred and implemented at a regional/national level. This workgroup should be composed by development agencies, incubators, accelerators and science parks, municipalities and other support agencies, under the coordination of a P2B partner, identifying and disseminating good practices.





Workgroups with Universities and Research Centres

The goal is to aggregate a Blockchain workgroup, develop to identify foster the implementation of Blockchain solutions in SME's and large companies, mapping and disseminating best practices, able to be transferred and implemented at a regional/national level. This workgroup should be composed by Universities, Research Centres, and Technology Transfer Offices, under the coordination of a P2B partner, identifying and disseminating good practices, as well as promoting research and knowledge transfer actions to the private sector.

Given the existence of potentially heterogeneous realities at a national level, particularly among the partners of P2B project, the aggregation of relevant players under the scope of the workgroups can be different, whenever justified.

