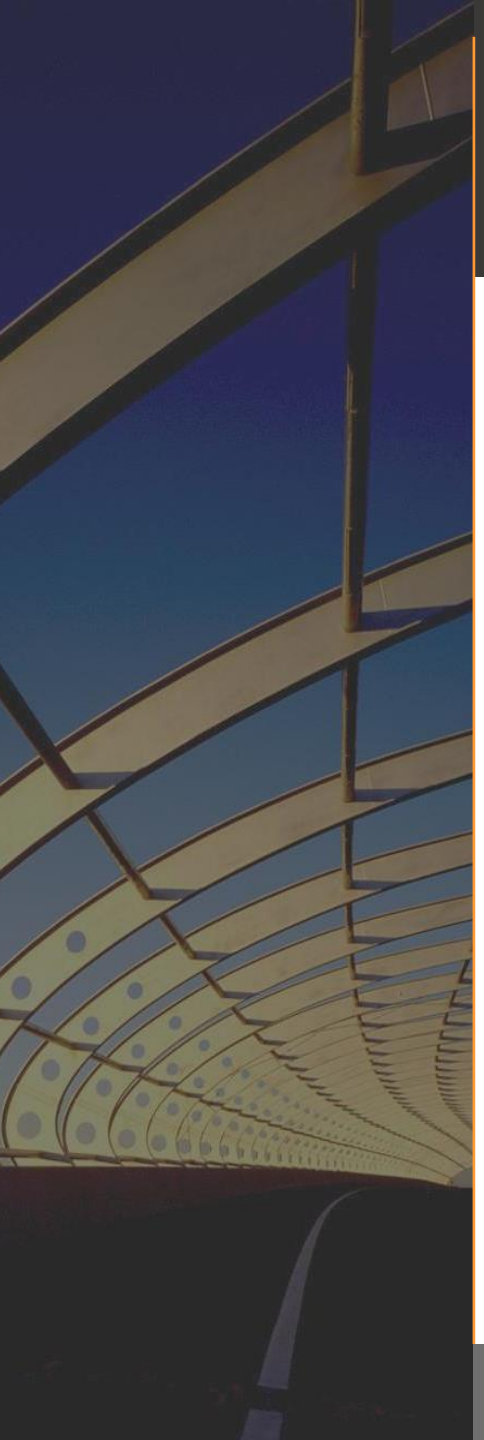
Strengthening EU Strategic Autonomy and Resilience through Innovation Procurement

WORKSHOP-WEBINAR

16 Nov 2021

Watch the replay video of the webinar via: https://youtu.be/Zd_DgC-i12I

Introduction & Agenda



Poll

PART I

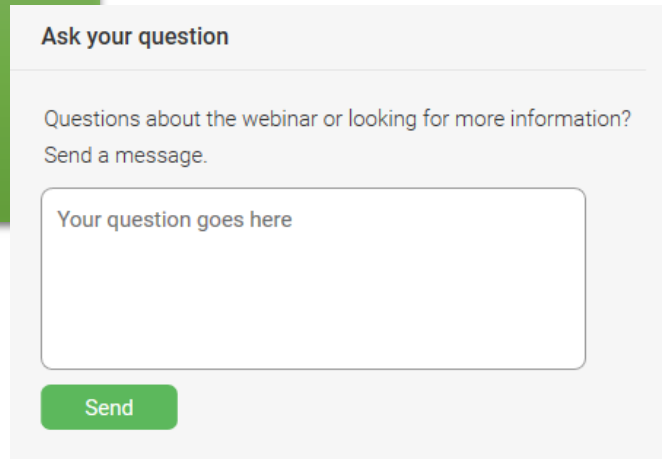
TIME	TOPIC	SPEAKER/PARTICIPANTS
9:25 – 9:30	Registration to the platform	Participants can ensure that the platform's functionalities are working fine
POLICY FRAMEWORK AND LEGAL OPPORTUNITIES		
9:30 – 9:40	Introduction	Stephan Corvers
9:40 – 10:00	Policy rationale for EU strategic autonomy and resilience	Lieve Bos (EC, DG CNECT)
10:00 - 10:20	Legal possibilities for strengthening EU strategic autonomy and resilience through innovation procurement	Anabel Peiró Baquedano (Corvers)
10:20 – 10:50	Q&A session	Participants are welcome to send questions before and during the webinar
10:50 – 11:00	**Coffee break**	

PART II

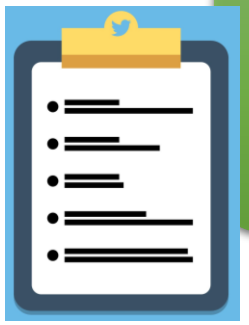
TIME	TOPIC	SPEAKER/PARTICIPANTS
PRACTICAL CASE STUDIES		
11:00 – 11:30	Broadway Pre-Commercial Procurement (PCP): *European strategic autonomy and resilience in the security and Public Safety sector*	Marc Martens & Domien Op de Beeck (Bird & Bird)
11:30 – 12:00	The EU Blockchain PCP: *European strategic autonomy and resilience in the software sector – Highly scalable, secure and energy efficient European blockchain*	Lieve Bos (EC, DG Connect)
12:00 – 12:30	European Payment Initiative: *European strategic autonomy & resilience in the financial sector – Banking sector*	Martina Weimert (EPI Company)
12:30 – 13:00	UVD Robots: *From innovation procurement to successful worldwide leadership in disinfection robots to tackle the Covid-19 sanitary crisis*	Jacob Mortensen (UVD Robots)
13:00 – 13:25	Q&A session	Participants are welcome to send questions before and during the webinar
13:25 – 13:30	Wrap up and lessons learned	Stephan Corvers

House rules

It is possible to ask questions in the private chat

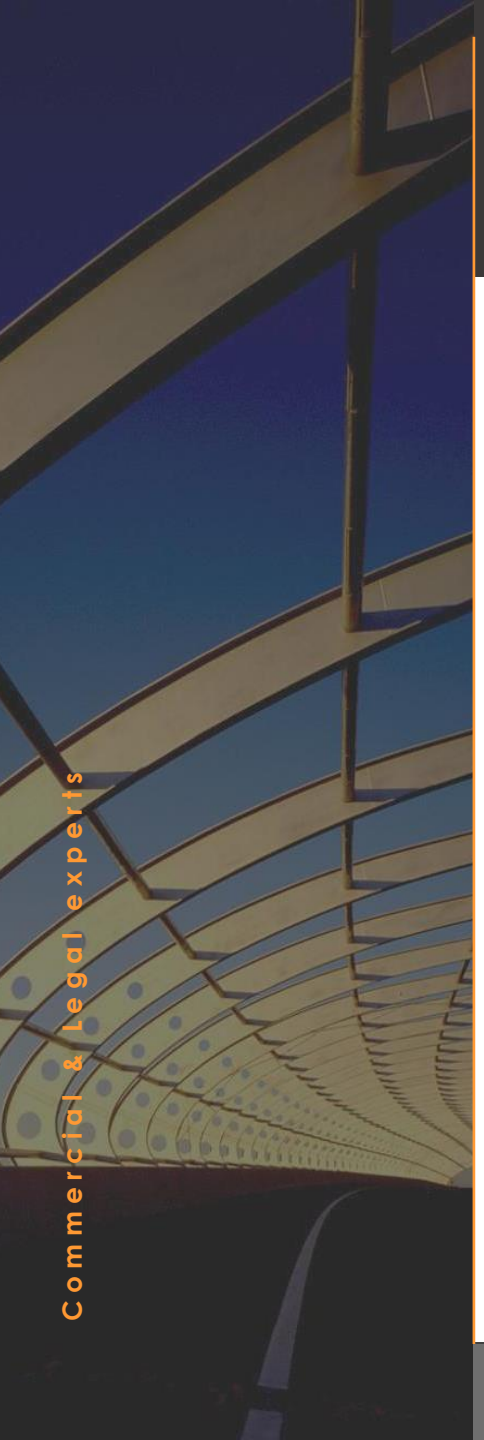


The recording of the webinar will be made available on the EAFIP website



The list of participants will not be disseminated

In case there are technical problems, the session will be recorded and published

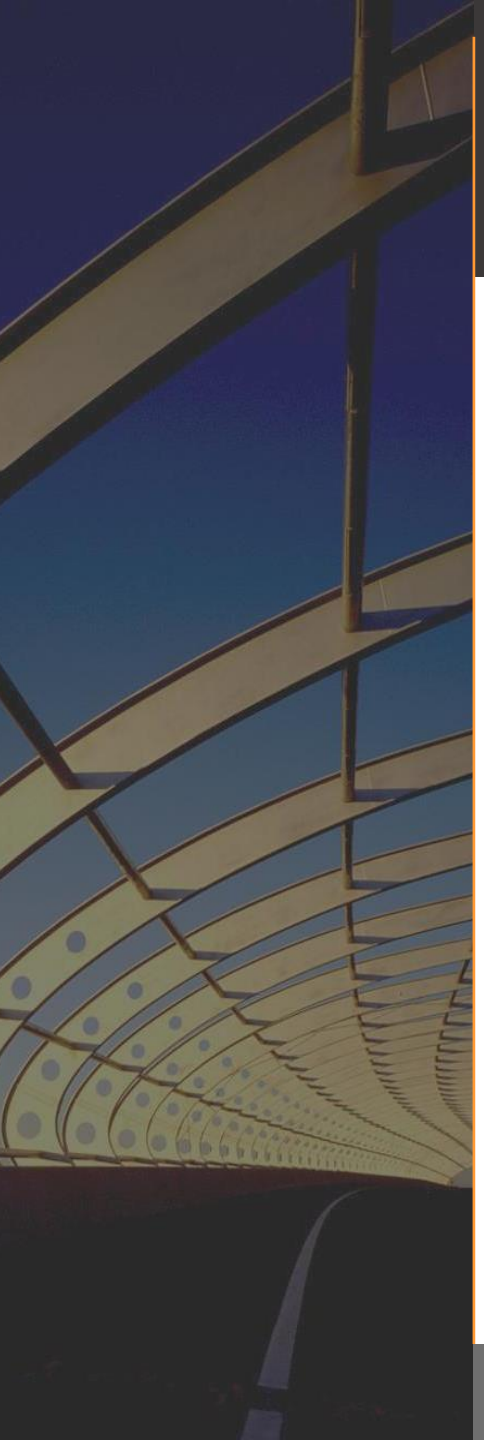


CORVERS
COMMERCIAL & LEGAL AFFAIRS

European Assistance For Innovation Procurement
eafip

Commercial & Legal experts

PART I

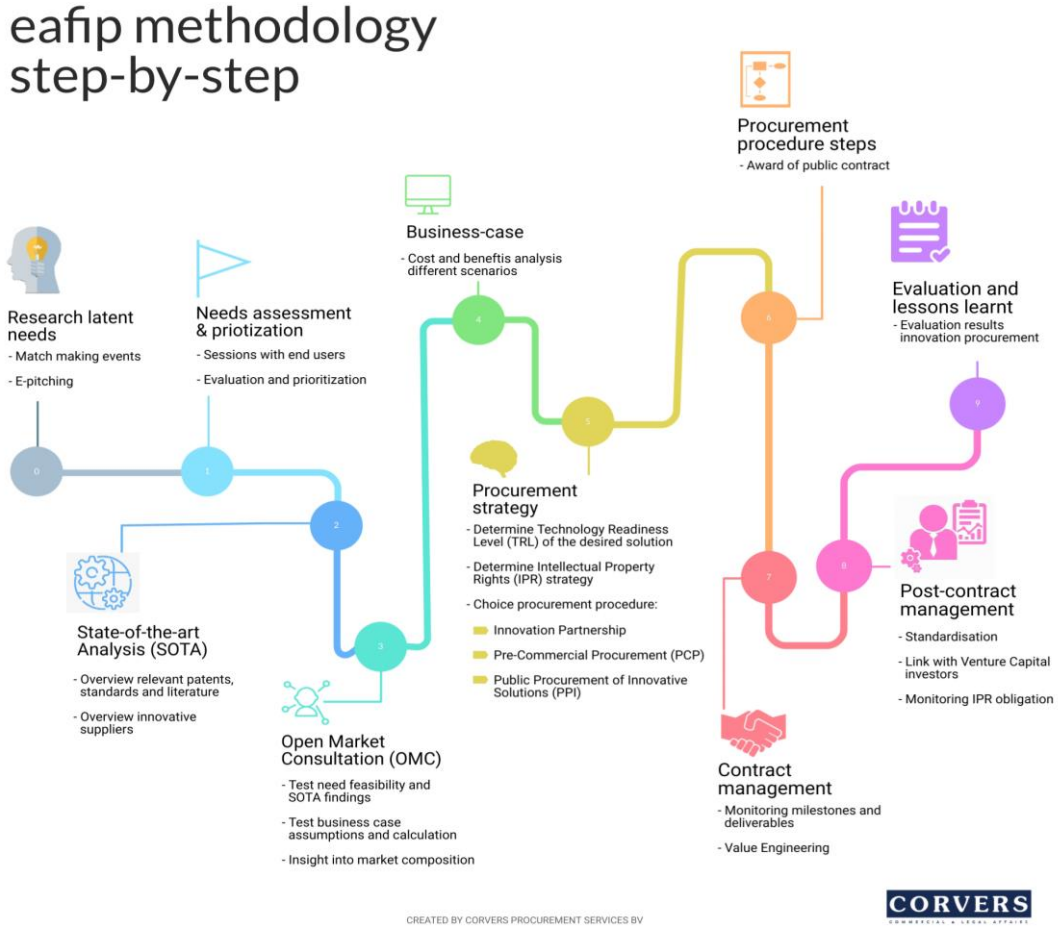


Introduction

Stephan Corvers
CEO & Founder
Corvers Procurement Services BV

EAFIP successful cases: WBL & IHSI

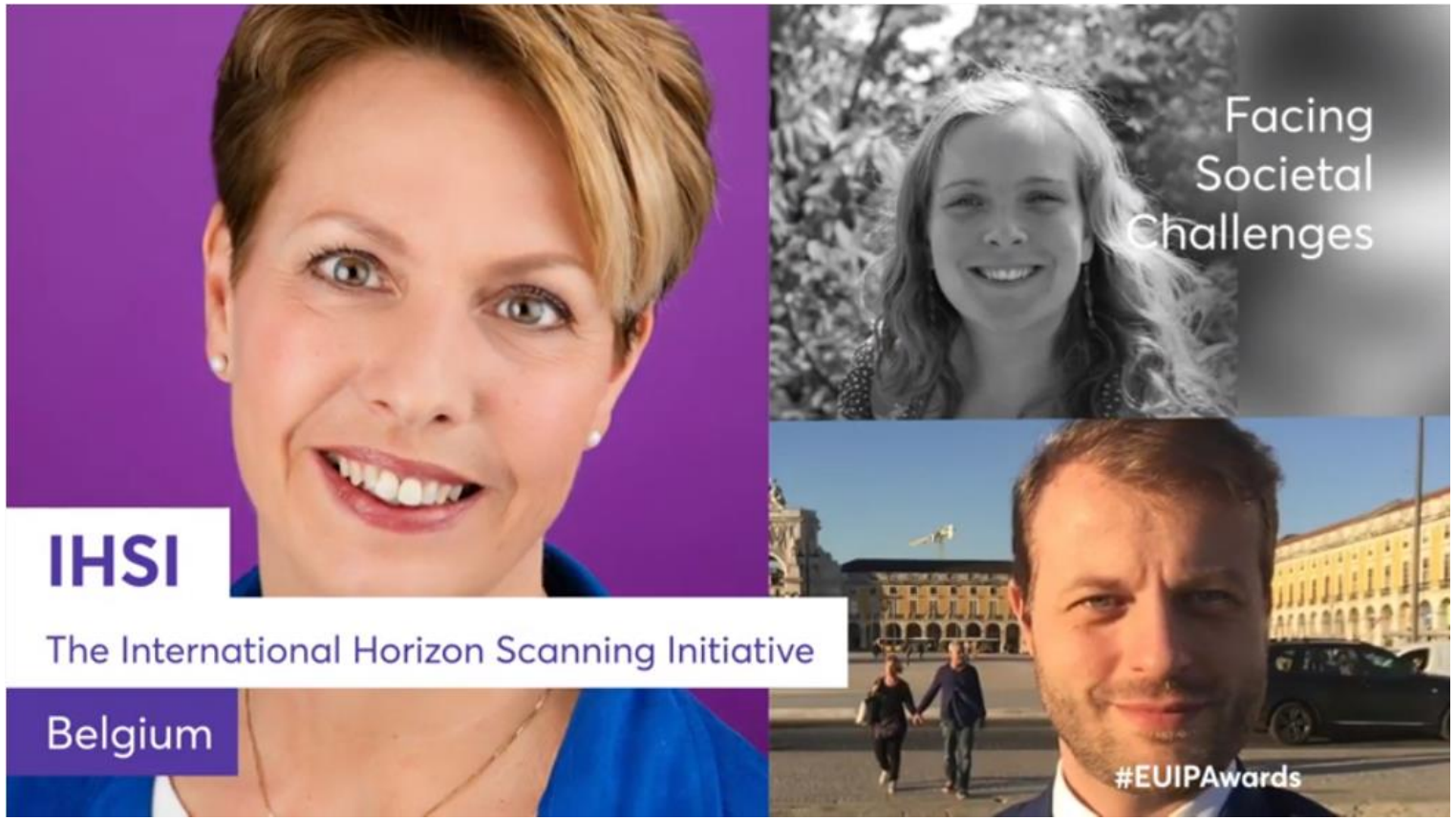
Finalists announced
applied the EAFIP-methodology



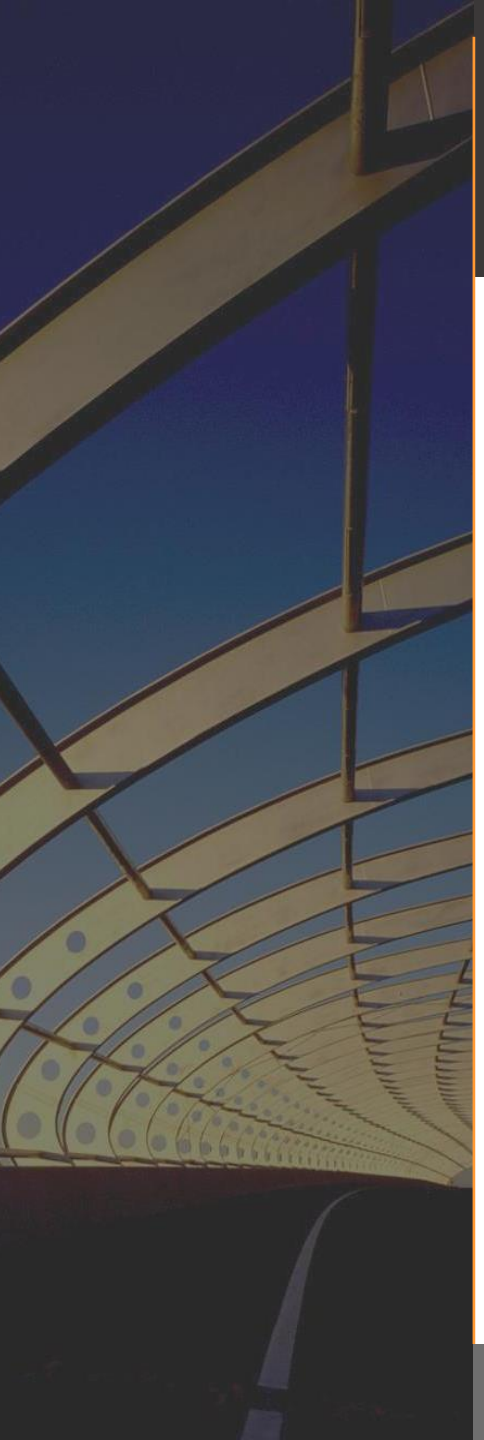
WBL is a project supported by EAFIP

[EIC Innovation Procurement Award Finalists 2021 - YouTube]

IHSI applied the EAFIP-methodology



[EIC Innovation Procurement Award Finalists 2021 - YouTube]



Policy rationale for EU strategic autonomy and resilience

Lieve Bos
Policy Office
DG Connect, European Commission

Policy rationale for EU strategic autonomy and resilience

Lieve Bos

DG CONNECT F3 unit (“Digital Innovation and Blockchain”)

European Commission

1. Introduction to European autonomy & resilience

European Commission

Commission Staff Working Document accompanying the COM 'Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery'

Resilience: The ability to withstand and cope with challenges (e.g. demand/supply shocks as during pandemic, disruptions or vulnerabilities in supply chain) and to undergo transitions in a sustainable, fair, and democratic manner. This includes to diversify and solidify global supply chains to enhance resilience to future crises. Necessary for the green and digital transitions, while maintaining EU values/integrity in a dynamic environment.

Open strategic *autonomy*: The EU's ability to chart its own course (autonomously) in line with its interests and values. The ability to shape the new system of global economic governance and develop mutually beneficial bilateral relations, while protecting the EU from unfair and abusive practices. This includes strengthening EU strategic capacities & reducing strategic dependencies on non-EU products in particular for advanced technologies.

Strategic capacity: a certain level of capabilities held within the EU allowing to produce, provide or rely on strategic goods, services, data, infrastructures, skills, industrial knowhow and technologies.

Dependencies: reliance on a limited number of actors for the supply of goods, services, data, infrastructures, skills and technologies combined with a limited capacity for internal production to substitute imports;

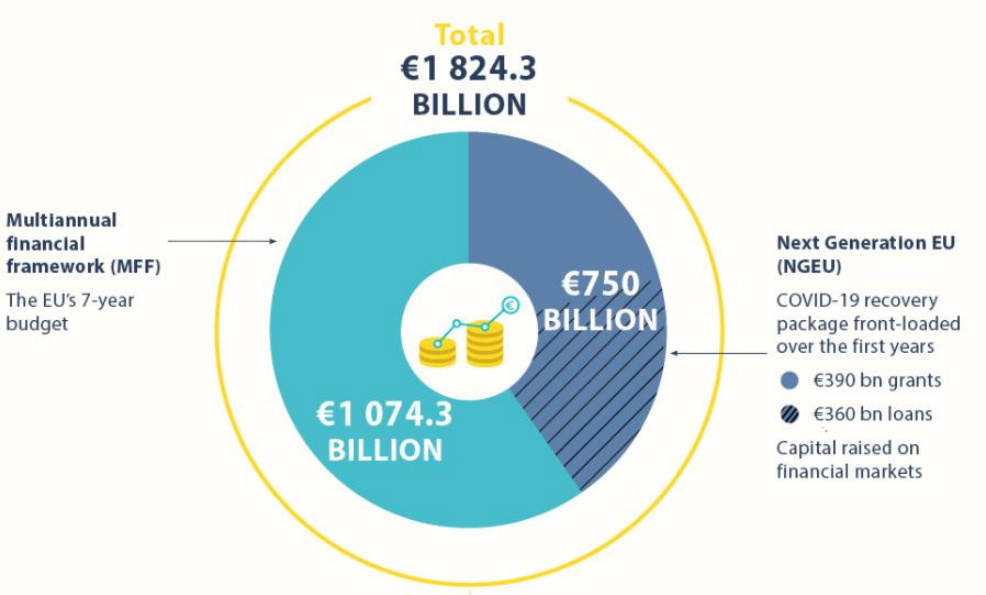
- *Strategic dependencies: dependencies that are considered of critical importance to the EU and its Member States' **strategic interests such as security, safety, health and the green and digital transformation***

European Commission

- A bottom-up mapping for more than 5,000 products → 137 products where the EU can be considered highly dependent on imports from third countries.
- 3 main foreign sources for these dependent products are China, Vietnam and Brazil.
- The identified dependent products mainly in the energy intensive industries ecosystem, the health ecosystem and other inputs relevant to support the green and digital transformation.
  - Some more vulnerable due to low potential for further diversification and substitution with EU production.
- The EU is less dependent on the US than vice-versa and both countries have important dependencies vis-à-vis China.

EU has certain strengths but is also at risk of falling behind in other areas of future competitiveness.

The EU faces challenges in comparison with its global competitors for technologies in the digital ecosystem: **AI, High Performance Computing, Big Data, cloud, industrial biotech and micro-electronics (including semi-conductors).**



EU expenditure 2021-2027

Achieving strategic autonomy while preserving an open economy is a key objective of the Union → Developing EU autonomy in the space sector and a more integrated defence industrial base.

European Council Conclusions, EUCO 13/20 of 2 October 2020

Recovery and Resilience Facility: Temporary recovery instrument to repair the economic and social damage caused by COVID-19 and to ensure a sustainable and inclusive recovery that promotes the green and digital transitions.

Multiannual Financial Framework: More long term EU budgetary framework (2021-2027) financing several programs that can support strategic autonomy and resilience.

European Green deal: Target to reduce CO2 emissions with 50% by 2030 and target of climate neutral Europe by 2050

Chemicals strategy for sustainability:

1. Boosting the investment and innovative capacity for production and use of chemicals that are safe and sustainable by design, and throughout their life cycle
2. Promoting the EU's resilience of supply and sustainability of critical chemicals

EU's digital strategy: Importance of EU leadership in digital technologies and cybersecurity + High investment in the EU's digital transition + Legislation to strengthen EU digital sector

Action Plans / strategies in civil, defence, space and health industries

Action Plan on Synergies between civil, defence and space industries: EU funding to reinforce European innovation by exploring and exploiting the disruptive potential of technologies between defence, space and civil uses (e.g., cloud, processors, cyber, quantum and artificial intelligence).

1. EU Multiannual Financial Framework 2021-2027 significantly scales up investment in technologies for defence or related civilian use → Synergies
2. Increased investment in defence must also present a dividend for the economy at large → Spin-offs
3. Where possible, Europe's defence industry should be able to draw on EU civilian industry research achievements to avoid costly duplicated research → Spin-ins

COVID-19 showed that the EU lacked effective mechanisms in cross-border health threats

- ✓ European Medicines Agency's mandate will be reinforced to facilitate a coordinated Union-level response by monitoring and mitigating the risk of shortages of critical medicines and medical devices
- ✓ ***Pharmaceutical Strategy for Europe*** → ensure Europe's supply of safe and affordable medicines, boost the global competitiveness of the EU pharmaceutical manufacturing value chain and secure the EU's strategic autonomy in this area.

Increasing strategic autonomy & resilience in digital sector

Strengthen investments in digital transition (R&I and deployment)

Minimum 20% of RRF investments must be on digital, increased R&I and deployment investments in MFF programs (e.g. Horizon Europe, Connecting European Facility 2, Digital European Program)

Semiconductors -> European Chips Act (first Q 2022)

Ensure EU's security of supply by reducing dependency on non-EU suppliers and encourage innovation

Cloud -> Digital Markets Act (2020)

Achieve a fairer and more competitive business environment between business users of cloud services and so-called gatekeepers among the providers of cloud computing services

AI action plan (2021) -> Adopt AI programme (incl. innovation procurement actions)

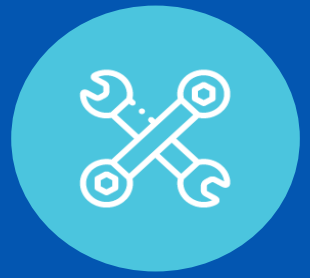
Big Data -> European strategy for data (2020)

Creation of 9 initial Common European data spaces: industrial, green deal, mobility, health, financial, energy, agriculture, public administrations, skills

High Performance Computing -> Joint Undertaking between MS and EU (structural joint procurement)

Cybersecurity -> EU Cybersecurity competence center & cybersecurity certification

2. European autonomy & resilience in EU funded innovation procurements



European Commission

Innovation procurement, engine for economic recovery, strategic autonomy & resilience

Commissioner Breton:

*To recover from the pandemic, the EU **economy** needs to be **significantly strengthened** so that it will be **more resilient and more competitive** to face future crises.*
Significant public investment** is imperative to further **the green and digital transitions:
*- Investments to ensure enhanced **sustainability** of our human and natural resources; and*
*- **Innovative** investments to accelerate the **digital transition** and develop technical leadership.*

Public procurement is a key engine for recovery (2,8 Trillion or 17% of EU GDP / year)

Public buyers, you, will be the agents of recovery and change.
*The mission is **not to just repair what is broken** by the virus,*
*but to invest in **smart digital and green transformation** of our economy,*
so that Europe comes out stronger after the crisis than before.
***Modernisation** and **innovation** are therefore key pillars of recovery*

European Commission

Key trends and EU position in the world

How well are we leveraging innovation procurement as a driver for economic growth?

25% Innov proc

South Korea

- 5% of PP / 0,63% GDP -> R&D
- 20% of PP / 2,5% of GDP -> PPI

Dependence of economy on PP

- PP = 12,5% of GDP

20% Innov proc

United States

- 3% of PP / 0,26% GDP -> R&D
- 2X innov ICTs adopted as in EU

Dependence of economy on PP

- PP = 10,8% of GDP

10% Innov proc*

Europe

- 0,5% PP / 0,1% GDP -> R&D**
- MS targets: 2-10% of PP -> innov

Dependence of economy on PP

- PP = 17% of GDP

* EU wide Benchmarking of innovation procurement investments

** EU report on R&D procurement investments across Europe

Several EU programs (2021-2027) in which innovation procurement plays a growing role

New Defense program
Support for PCPs

Horizon Europe

Reinforcing PCP / PPI support and
the link with startup / SME support
EIC and startup Europe

Connecting Europe Facility

RECOVERY AND RESILIENCE FACILITY

DIGITAL EUROPE

Deployment of digital technologies
to modernize the public sector
Training / education on digital
Testing / experimentation with public sector - DIHs

INNOVATION FUND
Driving clean innovative technologies towards the market

Support for green
innovation procurement &
Demonstration / go to market

Regional Development programs
Support for innovation procurement

Strategic autonomy & resilience in EU funded innovation procurements

Example Horizon Europe program (similar provisions in some other programs):

- Pooling buying power (ad-hoc or more permanent)
- Multiple sourcing mandatory in PCPs, possible also in PPIs
- Preliminary market consultations mandatory for PCPs/PPIs, except if PPI follows PCP
- All PINs for market consultations, contract (award) notices published on TED, except possibly for low value PPIs (< national thresholds) and security contracts
- Access for 3rd country bidders based on reciprocity
- Restriction to EU-established & EU-controlled bidders possible in security PCP/PPIs
- Place of performance conditions mandatory in PCPs, possible also in security PPIs
- Mandatory IPR allocation in PCPs: suppliers retain IPR ownership, procurers retain rights to use, license to 3rd parties, call back IPR (incl. if strategic autonomy issue)
- IPR allocation approach from PCPs generalized to all procurements (also PPIs)
- EU strategic autonomy clauses (for procs not covered by international proc rules/Treaty): possible to require sourcing strategic components from EU, restrict exclusive licensing / transfer of IPR outside EU, require min level of commercialisation in EU
- FDI screening for large projects of Common European interest

Examples: Benefits for economic recovery

Procurement of R&D
Pre-commercial procurement

Solution design, prototyping, development, testing and installation of first products

- Co-creation shortens time-to-market for innovations
- First customer reference
- Attract financial investors / Scale up internationally
- Create jobs / technological leadership ‘in Europe’

EXAMPLE
FP7 / H2020 EU funded PCPs & PPIs about more powerful and energy efficient supercomputers lead to Joint Undertaking EUROHPC, a structural long term EU-Member States joint procurement cooperation that invests > € 1Bn and aims to increase EU strategic autonomy in HPC.

More success case examples

Public procurement of innovative solutions

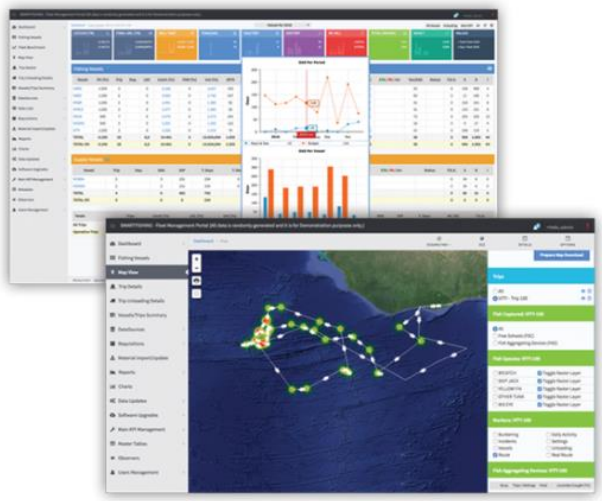
Wider diffusion of solutions across different customers and markets

- Diffuse solutions widely
- Diversify the offering to new market segments
- Business expansion: Grow really big

EXAMPLE
PCP by Norwegian government resulted in deployment (EFTA funding) of the world’s first and largest full scale carbon capture, transport and storage facility. This will reduce by 14% the CO2 emissions across the entire EU.

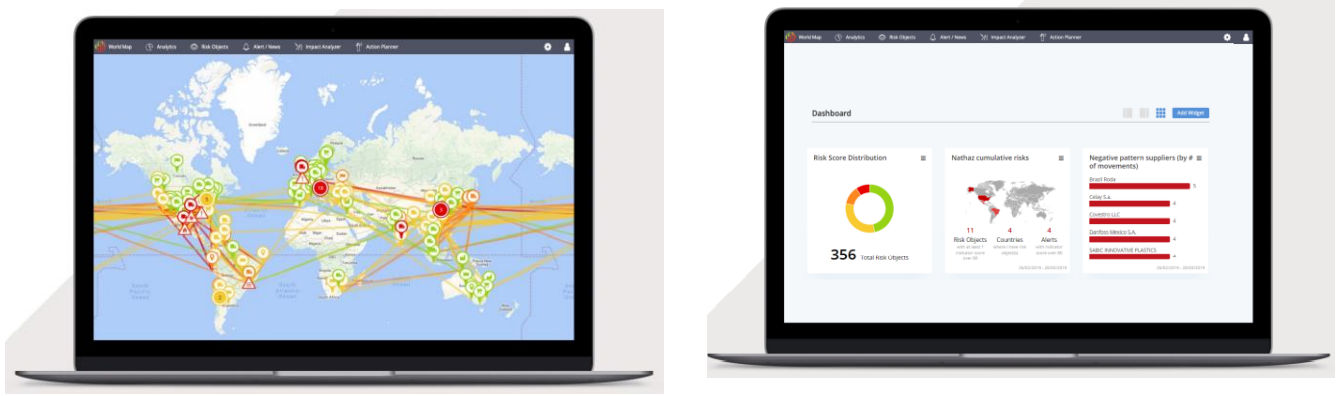
ICT technologies can also help identify and mitigate resilience issues

- Blockchain technology can track in transparent, reliable way every detailed event in your worldwide supply chain -> easier to identify issues in tier-N of supply chain



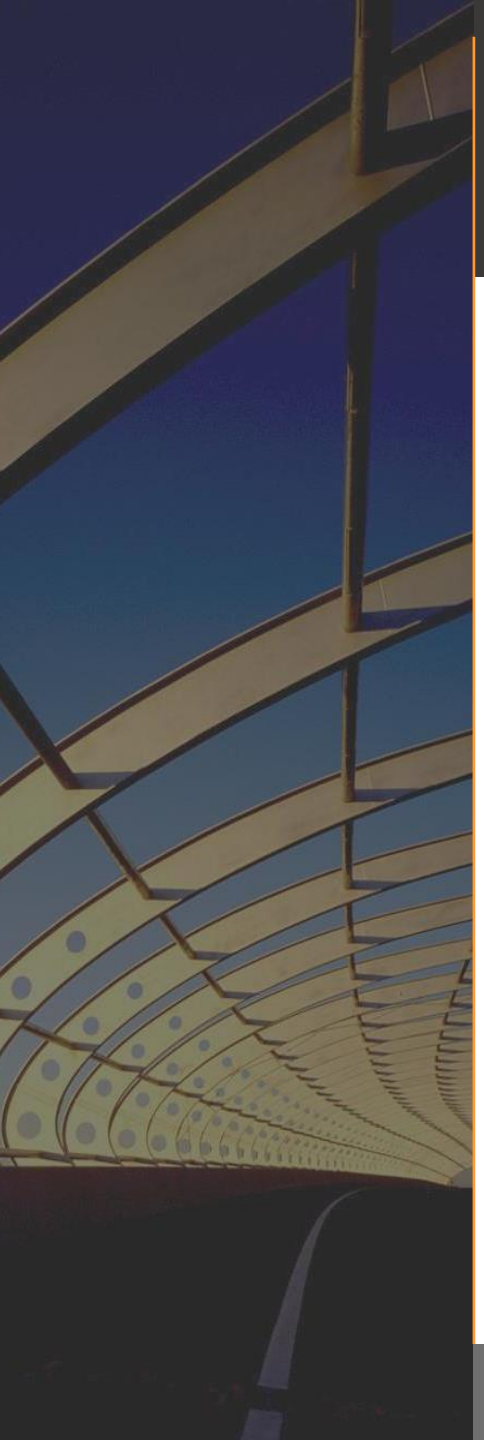
Tracking of fish supply chain @Bitcliq.com

- AI tools can automate/accelerate real-time monitoring and predication of pertinent risks in complex supply chains and propose adequate mitigation measures -> increased preparedness and ability to cope with supply chain disturbances



Risk maps and mitigation dashboard @Riskmethods.net

European Commission



Legal possibilities for strengthening EU strategic autonomy and resilience through innovation procurement

Anabel Peiró Baquedano
Legal Procurement Consultant
Corvers Procurement Services BV

Agenda

1. Introduction to resilience and European autonomy
2. What to do under the EU Public Procurement Directives
   - Incorporate social, labour and environmental considerations into the procurement process
   - IPR schemes as steering instrument
   - Directive 2009/81/CE – Defence Directive
   - Directive 2014/25/EU - Utilities Directive
3. Conclusions

1. Introduction to resilience and European autonomy

Commission Staff Working Document accompanying the Communication from the Commission 'Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery'

Resilience: the ability to withstand and **cope with challenges** and to **undergo transitions in a sustainable, fair, and democratic manner**. Necessary to undergo the green and digital transitions, while maintaining the EU's core purpose and integrity in a dynamic and at times turbulent environment.

Open strategic *autonomy*: the ability to shape the **new system of global economic governance** and **develop mutually beneficial bilateral relations**, while protecting the EU from unfair and abusive practices, including to diversify and solidify global supply chains to enhance resilience to future crises.

2. What to do under the EU Public Procurement Directives

Incorporate social, labour and environmental considerations into the procurement process

Contracting authorities can ensure that companies from non-EU countries do not benefit from unfair competitive advantages compared to EU companies.

EU Public Procurement Directives require high social and environmental standards in procurement + ensure that EU and third country bidders comply with high standards.

Technical specifications, exclusion, selection and award criteria and contract performance clauses → help to create a level playing field.

1. SUBJECT-MATTER

Contracting authorities are free to define the subject matter of each contract

Social and environmental criteria set as technical specifications and award criteria relate to the subject matter of the contract

Environmental, social and/or labour considerations that ensure a level playing-field in public procurement and that competition at EU level is not distorted.

2. SELECTION CRITERIA

Expressly stated in the tender, linked to the subject matter of the contract, proportionate and non-discriminatory

Social criteria as selection criteria: human and technical resources, experience, references and educational and professional qualifications of staff.

E.g. technical knowledge and/or professional ability.

3. Exclusion Grounds

CA and MS can exclude a candidate if in violation of obligations in environmental, social and labour law established by Union and national law, collective agreements or in the international conventions listed in the Public Procurement Directives.

Subcontractors must also comply with these requirements.

An economic operator from a country that hasn't ratified the Conventions won't comply with their conditions and can be directly excluded from an procurement procedure.

⚠ Unless this exclusion is regulated in the national law, the Public Buyer will have to state this up front in the tendering documents.

4. Award Criteria

Public Procurement Directives → selection of Most Economically Advantageous Tender (various criteria).

LCC: take into account the social impact of the product, work or service, as well as the environmental impacts.

Best price/quality ratio: social and environmental requirements as technical specifications and/or award criteria.

⚠ Abnormally low tenders!

5. Performance Clauses

Performance clauses require the contractors to comply with specific social, labour or environmental obligations during the execution of the contract.

Ask compliance with fundamental International Labour Organisation (ILO) Conventions.

Include environmental considerations.

Not disguised as selection criteria, technical specifications and/or award criteria and are linked to the subject matter.

6. LABELS

Evidence of social and environmental considerations in technical specifications, award criteria and contract/concession performance conditions

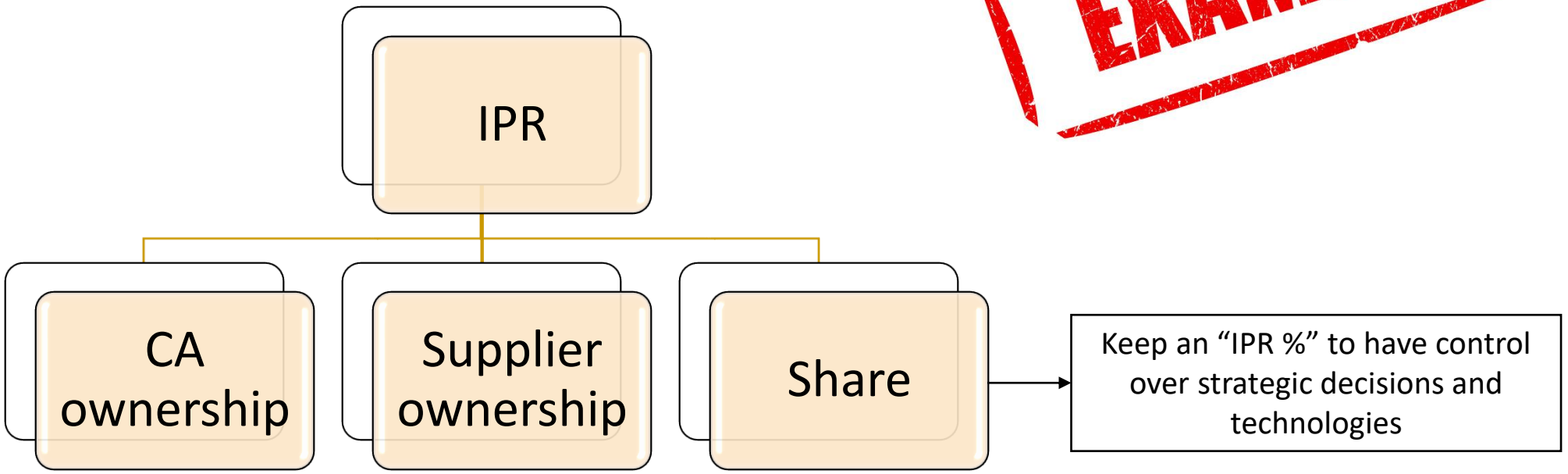
7. CONTRACT MANAGEMENT MONITORING

For social, labour and environmental considerations to be effectively implemented and have a real impact, monitoring the execution is key.

Ex. Clearly stated which penalties apply when the contractor and/or his subcontractors breach the obligations in the fields of environmental, social and labour law.

KPIs linked to payment → Contractor is complying with the environmental criteria and to which degree?

IPR schemes as steering instrument



Directive 2009/81/CE – Defense Directive

Recitals

(8) Defence and security equipment is vital for both the security and the sovereignty of Member States and for the autonomy of the Union.

(9) This results in ***specific requirements, particularly in the fields of security of supply*** *and security of information. These requirements relate especially to (…)* ***but also to certain particularly sensitive purchases in the field of nonmilitary security***

(18) (…) ***in the specific context of defence and security markets, Member States retain the power to decide whether or not their contracting authority/entity may allow economic operators from third countries to participate in contract award procedures.*** **Art 346 TFEU + Art XXIII (1) GPA**

(42) In particular, ***the conditions of performance may contain requirements by the contracting authorities/entities as regards security of information and security of supply****. These requirements (…)* ***concern the whole of the supply chain****.*

(44) ***Security of supply can imply a great variety of requirements,*** *including, for example, internal rules between subsidiaries and the parent company with respect to intellectual property rights, or the provision of critical service, maintenance and overhaul capacities to* ***ensure support for purchased equipment throughout its life-cycle****.*

*(67****) Given the sensitive nature of the defence and security sectors, the reliability of economic operators to which contracts are awarded is vital. This reliability depends,*** *in particular, on their ability to respond to requirements imposed by the contracting authority/entity with respect to* ***security of supply*** *and security of information.*

Directive 2009/81/CE – Defense Directive

Articles

Article 20 Conditions for performance of contracts

Contracting authorities/entities may lay down special conditions relating to the performance of a contract (…) ***These conditions may (…) seek to ensure the security of classified information and the security of supply*** *(…) or take environmental or social considerations into account.*

Article 21 Subcontracting

4. Member States may provide that the contracting authority/entity may ask or be required to ask the successful tenderer to subcontract to third parties a share of the contract. The contracting authority/entity that imposes such subcontracting shall express this minimal percentage in the form of a range of values, comprising a minimum and maximum percentage. The maximum percentage may not exceed 30 % of the value of the contract. *Such a range shall be proportionate to the object and value of the contract and the nature of the industry sector involved, including the level of competition in that market and the relevant technical capabilities of the industrial base.*

Article 39 *Personal situation of the candidate or tenderer*

2. Any ***economic operator may be excluded*** *from participation in a contract where that economic operator: (d) has been guilty of grave professional misconduct proven by any means which the contracting authority/entity can supply, such as a* ***breach of obligations regarding*** *security of information or* ***security of supply during a previous contract****;*

Article 47 Contract award criteria

1. (…) the criteria on which the contracting authorities/entities shall base the award of contracts shall be either: (a) when the award is made to the ***most economically advantageous tender*** *(…) various criteria linked to the subject-matter of the contract (…)* ***environmental characteristics*** *(…)* ***lifecycle costs****, (...)* ***security of supply****, interoperability and operational characteristics.*

Article 23 Security of supply

The contracting authority/entity shall ***specify in the contract documentation its security of supply requirements****. (…) may require, inter alia, (…):*

(a) ***certification or documentation demonstrating (…) the tenderer will be able to honour its obligations regarding the export, transfer and transit of goods associated with the contract*** *(…)*

(b) the indication of any ***restriction on the contracting authority/entity regarding disclosure, transfer or use of the products and services or any result of those products and services, which would result from export control or security arrangements****;*

(c) ***certification or documentation demonstrating that the organisation and location of the tenderer's supply chain will allow it to comply with the requirements of the contracting authority/entity concerning security of supply (..) and a commitment to ensure that possible changes in its supply chain during the execution of the contract will not affect adversely compliance with these requirements****;*

(g) a commitment from the tenderer to ***inform*** *(…) in due time* ***of any change in its organisation, supply chain or industrial strategy*** *that may affect its obligations to that authority/entity;*

(h) a ***commitment from the tenderer to provide the contracting authority/entity*** *(…)* ***with all specific means necessary for the production of spare parts, components, assemblies and special testing equipment, including technical drawings, licenses and instructions for use, in the event that it is no longer able to provide these supplies****.*

Procurement under the Defense Directive

Member States can decide whether or not their public buyers may allow economic operators from third countries to participate:

- ❑ Indicate such a general restriction in the tendering documents.
- ❑ Reject these offers individually in the award decision → indicate in the tender documents that they reserve the right to reject offers on defence and security grounds.

Public buyers can also require certification demonstrating:

- ❑ Capability to comply with obligations regarding the export, transfer and transit of goods associated with the contract.
- ❑ The tenderer's supply chain will ensure security of supply.
- ❑ Commitment to ensure that changes in the supply chain during the execution will not affect security of supply
- ❑ Commitment to provide with all specific means necessary for the production - in the event that the tenderer is no longer able to provide these supplies.

Public buyers can request contractors to open their supply chain (subcontracting)→ new players to join

Directive 2014/25/EU – Utilities Directive

Recitals

*(103) (…) award criteria or contract performance conditions (…) should n**ot be chosen or applied in a way that discriminates directly or indirectly against economic operators from other Member States or from third countries parties to the GPA or to Free Trade Agreements** (…) Contract performance conditions might also be intended to favour (…) the protection of the environment (…) and to comply (…) with fundamental International Labour Organisation (ILO) Conventions (…)*

Directive 2014/25/EU – Utilities Directive

Articles

Article 82 Contract award criteria

*2. The **most economically advantageous tender** (…) shall be identified on the basis of the price or cost, using a cost-effectiveness approach, such as life-cycle costing (…) and may include the best price-quality ratio, which shall be assessed on the basis of criteria(…) linked to the subject-matter of the contract (…). Such criteria may comprise(…) : (a) (…) **social, environmental and innovative characteristics** (…); (b) **organisation, qualification and experience of staff assigned to performing the contract**, (…) (c) (…) commitments with regard to parts and **security of supply**.*

Article 85 Tenders comprising products originating in third countries

1. *This Article shall apply to **tenders covering products originating in third countries with which the Union has not concluded** (…) an **agreement ensuring comparable and effective access for Union undertakings to the markets of those third countries.***

2. ***Any tender submitted for the award of a supply contract may be rejected where the proportion of the products originating in third countries** (…) **exceeds 50 % of the total value of the products constituting the tender**.*

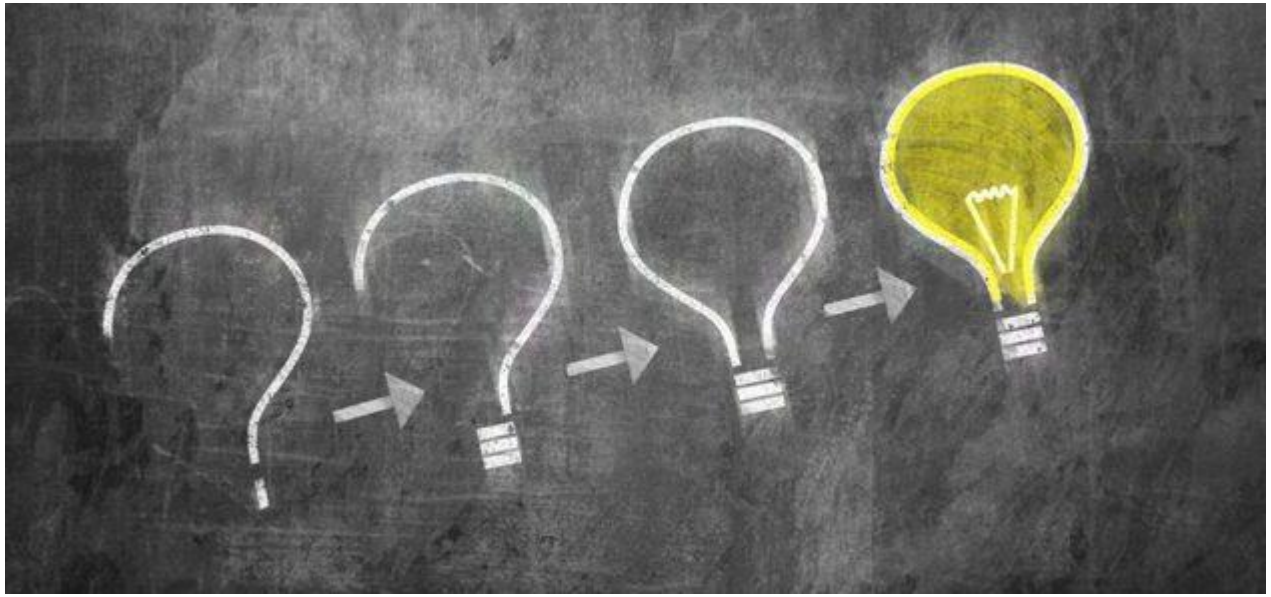
3. *(…) **where two or more tenders are equivalent (…) preference shall be given to those tenders which may not be rejected pursuant to paragraph 2 of this Article. The prices of those tenders shall be considered equivalent (…) if the price difference does not exceed 3 %.***

Procurement under the Utilities Directive

Public buyers operating in the water, energy, transport and postal services sectors can reject tenders for supply contracts, if the proportion of the products originating in a third country exceed 50% of the total value of the products constituting the tender.

- ❑ Only to products originating in third countries that are not covered by the WTO GPA or another trade Agreement.
- ❑ A public buyer can allow this participation, BUT is required to give preference to equivalent tenders with less than 50% of the products originating in third countries**.**

3. Conclusions



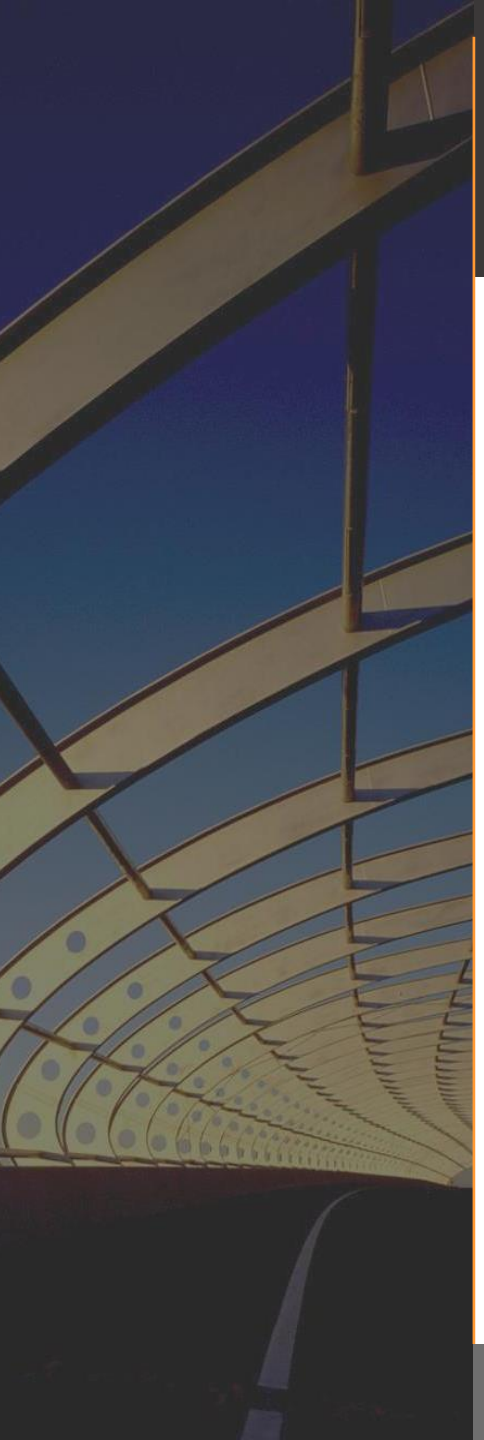
Do´s & Don't´s

1. R&D services are in principle excluded both from the scope of the European Public Procurement Directives and from the GPA. → PCP allows to restrict the participation to European companies or to companies that are willing to locate their R&D activities within the EU. → More PCPs on strategic key technologies (for which Europe cannot afford to become overly dependent on non-EU suppliers) requiring R&D to be done in Europe. → Vendors: first mover advantage + avoid non-EU dependencies

2. Announce mid-to-long term procurement needs in advance to the market to alert all actors in the supply chain

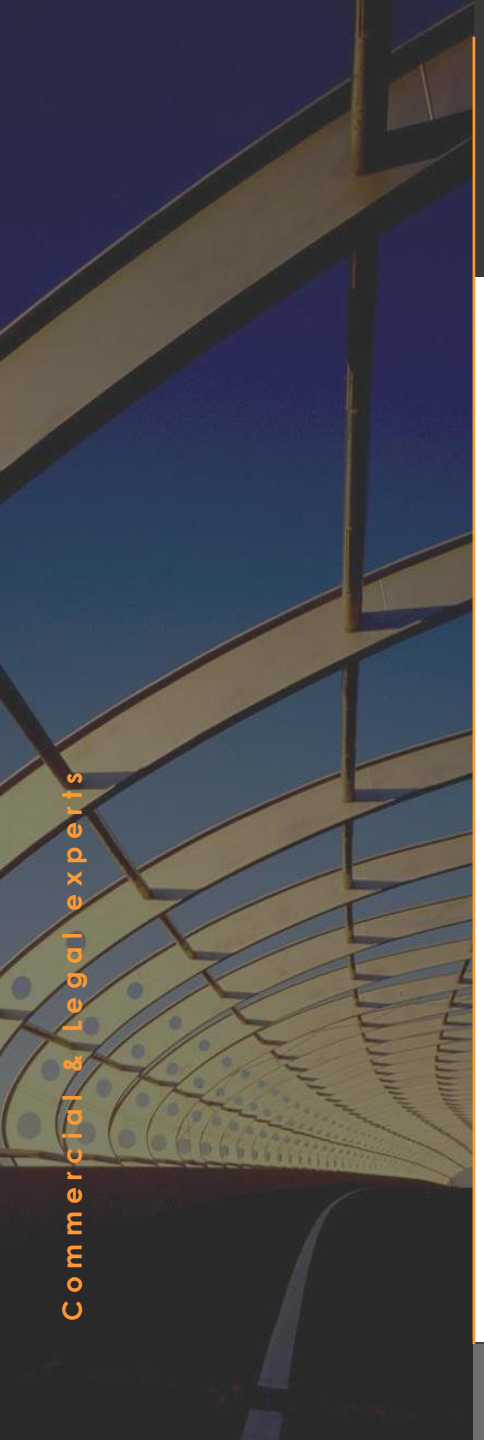
- Procurers have several possibilities to ensure that companies from non-EU countries do not benefit from unfair competitive advantages
- Technical specifications, exclusion, selection, award criteria and contract performance clauses
- Ensure the respect of high social and environmental (European) standards

- Do not go for the lowest price offer. Compliance with high European standards protects European companies that do comply with these requirements.
- Do not support uneven playing field with non-EU companies with practices that might be legal (such as considering the unique award criteria price), but that allow companies receiving large public subsidies in their home countries to participate + consider abnormally low offer.
- Do not forget to include a provision – if national transposition law doesn´t include it – allowing to exclude a candidate that violates obligations in the fields of environmental, social and labour law + subcontractors must also comply with these requirements.



Q&A


COFFEE BREAK

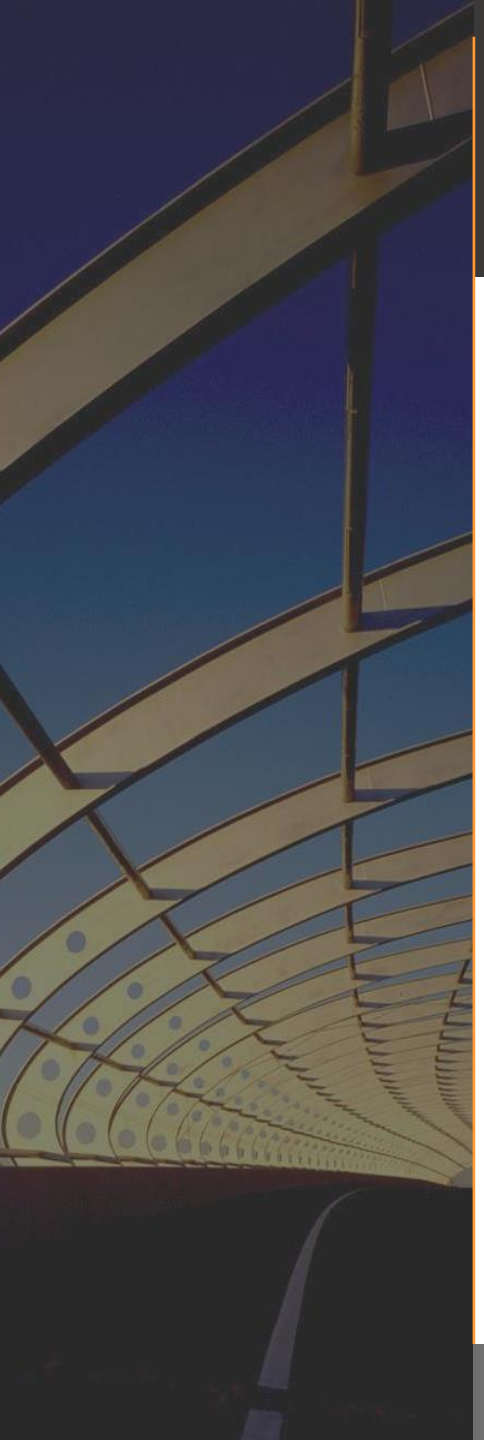


CORVERS
COMMERCIAL & LEGAL AFFAIRS

European Assistance For Innovation Procurement
eafip

Commercial & Legal experts

PART II



Broadway Pre-Commercial Procurement:
European strategic autonomy and resilience in the security and Public Safety sector

Marc Martens
& Domien Op de Beeck
Bird & Bird

Bird & Bird

& Pre-Commercial Procurement

Strengthening EU Strategic Autonomy and Resilience through Innovation Procurement
EAFIP Webinar -- 16 November 2021

Marc Martens & Domien Op de Beeck

Structure

Pre-commercial Procurement (PCP) & Strategic autonomy EU in Broadway Project

- Introduction- Broadway
- Restriction to EU entitities
- Localisation of the R&D Services
- Specific EAL (Evaluation Assurance Level)
- IPRs
- Interoperability testing.

Introduction

Case study: BroadWay is Procuring Innovation activity to enable a pan-European broadband mobile system for Public Protection and Disaster Relief (PPDR), validated by sustainable test and evaluation capabilities

→Via Pre-commercial Procurement

- 11 GOP members
- 11 MS covered – 1,4 million responders across EU
- From 4 Consortia in phase I to 2 in phase III

→Specific regulatory framework

Restriction to EU entities

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

Clause:

*The Contractor shall at all times during or after the performance of this Framework Agreement and any Specific Contract have **its registered office**(s) in a Member State and be **under the ultimate Control** of (i) entities having their registered office in a Member State and/or (ii) natural persons having the nationality of a Member State.*

Localisation of the R&D Services

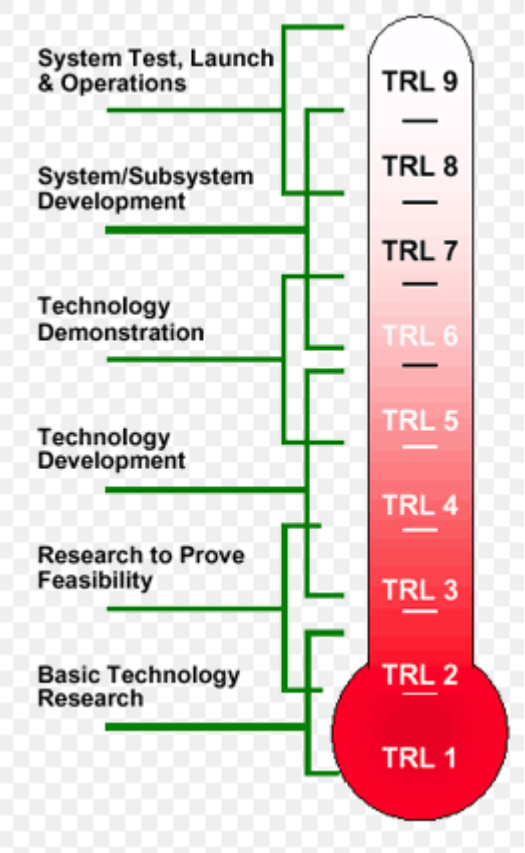
A predefined minimum percentage of the contracted R&D services in EU **Member States or Horizon 2020 Associated Countries** for a performance place requirement must be 75%

- Performance of 75% of the R&D Services
- Includes also sub-contractors
- In each phase of the PCP
- the principal R&D personnel employed by the Contractor and working on each Phase must be located within the EU MS or the H2020 Associated Countries
- The percentage shall be measured in terms of the total price of each Specific Contract allocated to the R&D Services
- As regards the development of security components in certain parts of the project, **100%** of the total value of activities covered for each PCP Phase shall be performed in the EU Member States or in H2020 associated countries

Specific EAL (Evaluation Assurance Level)

The list of all software components has to be provided indicating EAL target level. All security-related software components developed during the BroadWay PCP should reach EAL4+ for procurement of the BroadNet and for a final TRL9 system after BroadWay.

+ software (source code) audit rights for GOP members



Bird & Bird

Intellectual Property rights (IPRs)

"*in pre-commercial procurement the contracting authority does not assume all the results and benefits of the R&D services performed in the contract exclusively for itself for use in the conduct of its own affairs, but shares them with others*" (EC communication 14.12.2007)

Request for Tender + Framework Agreement

- Disclosure of IPRs at the start and during the process
  - Knowledge gathering + sharing
- Access rights / prototype
  - Freedom to operate and commercialisability
  - Avoid vendor lock
  - Background & Sideground
- Claw-back if no exploitation
- Not one size fits all
  - Sector specificities (e.g. standardization + interoperability)
- Role of the contracting authority (preemptive)

Thank you

& Bird & Bird

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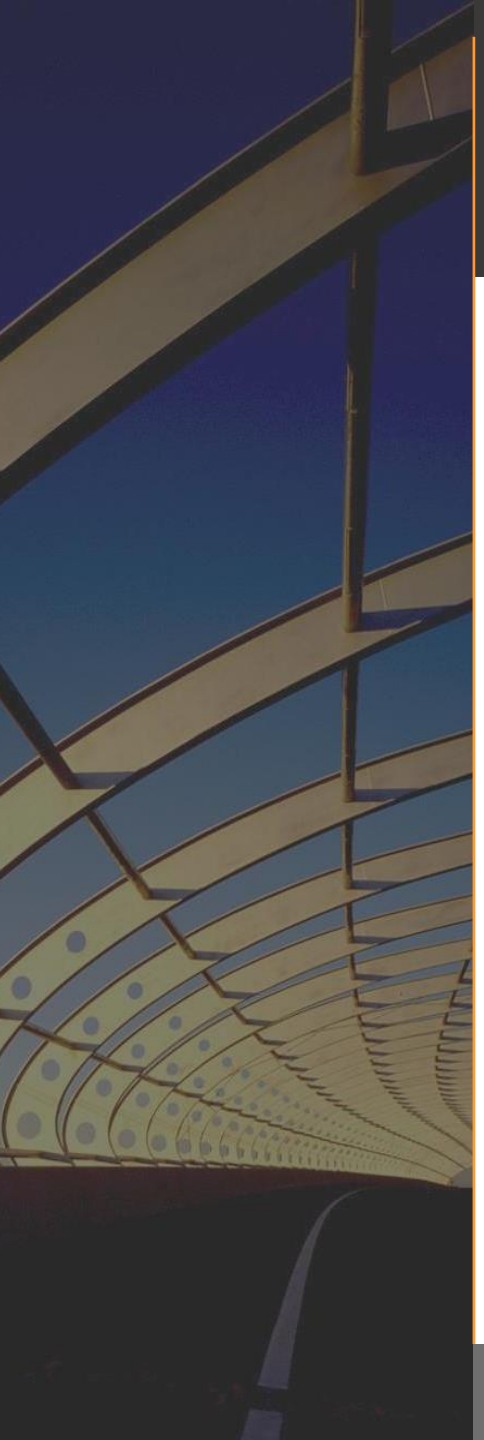


The EU Blockchain PCP:
European strategic autonomy and resilience in the software sector – Highly scalable, secure and energy efficient European blockchain

Lieve Bos
Policy Office
DG Connect, European Commission

EU Blockchain PCP - EU strategic autonomy and resilience

Lieve Bos

DG CONNECT F3 unit (“Digital Innovation and Blockchain”)

European Commission

1. What is the PCP about

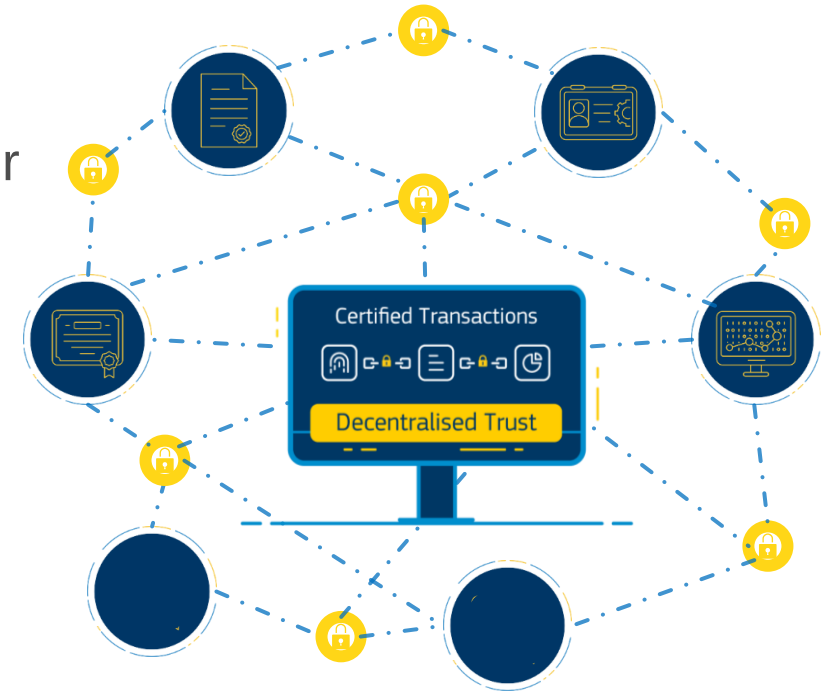
European Commission

What is the aim of the EU blockchain PCP?

EBSI = A European blockchain infrastructure to offer cross-border services (e.g. cross-border asylum and migration handling, cross-border certified exchange of university diploma credentials etc.)

More demanding cross-border services (high volume and high velocity) **require novel solutions** that can deliver better:

- Scalability
- Energy efficiency
- Security
- Robustness

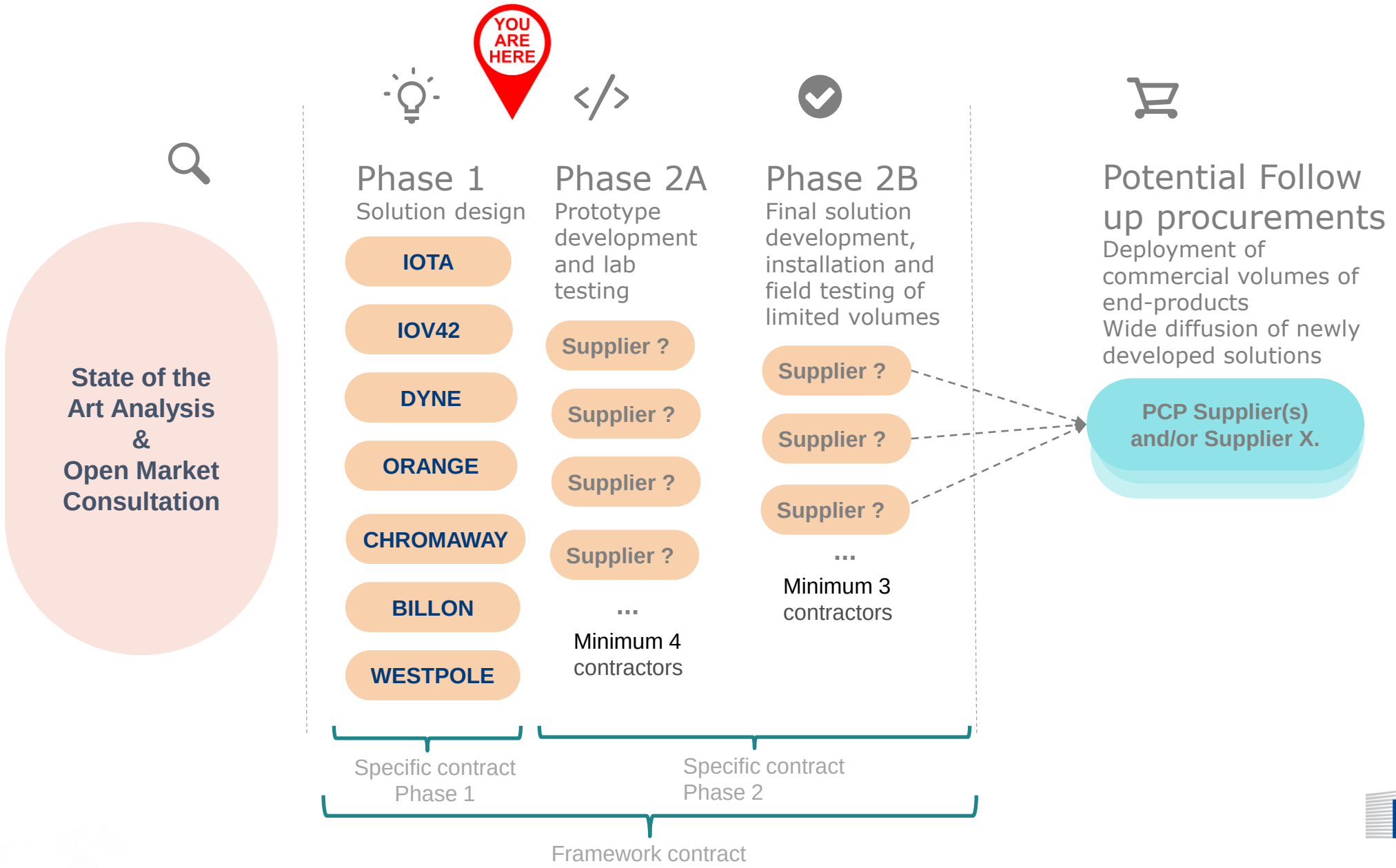


EBSI = a cooperation between the EU, EU Member States and some EEA countries

PCP objectives

1. Prepare for future versions of the European Blockchain Services Infrastructure (EBSI)
2. Contribute to the development of new solutions and standards in Blockchain
3. Reinforce European position in Blockchain

Where are we in the process



European Commission

7 contractors participating in phase 1 of the PCP

IOTA FOUNDATION

+ software AG

iov42

ChromaWay

orange™

+ kapalt. SettleMint

SKILLZ

dyne.org

Riddle & Code

InfoCert TINEXTA GROUP

WESTPOLE

flosslab

net service Information Technology

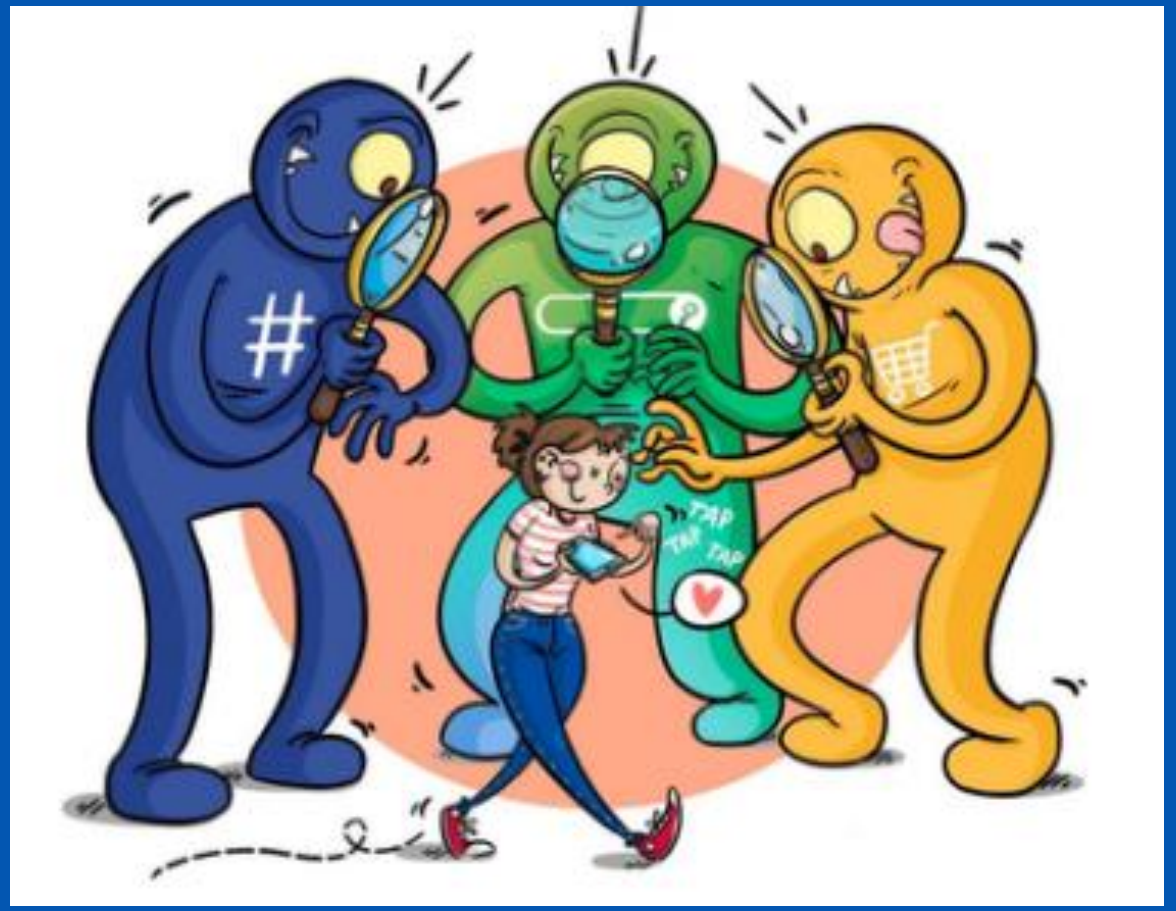
+ finoryx

FINATIC Digital Solutions

AGILE BY CHAIN Imagine, Design and Development

billon

1. What did we do about Strategic autonomy & Resilience?



European Commission

Overview of techniques

Similar like in other PCPs

- Multiple sourcing, up to the end of the procurement
- Phased approach
- Split between procuring R&D and potential follow-up deployment procurements
- Interoperability and compliance with standards
- Publication and active contribution to standardization by suppliers
- Compliance with EU regulatory frameworks / certified solutions (e.g. eIDAS, GDPR, NIS) and EU ambitions (e.g. EU green deal target to become climate neutral by 2050)

Going beyond other PCPs

- Restricted access to the procurement
- Place of performance conditions
- IPR / strategic autonomy / commercialisation conditions
- Data processing in EU / EEA

With clearly defined consequences in case of non-compliance

Restricted access to the procurement

WTO GPA and other plurilateral procurement agreements between EU and 3rd countries do not apply to this procurement (it is a PCP type R&D services procurement + it covers security R&D):

Therefore, participation in this call for tenders is subject to the following **place of establishment and control requirement**: Participation in this call for tenders is open on equal terms only to nationals (natural persons or legal entities) that are established or deemed to be established in the EEA[17] and are ultimately controlled by EEA countries and/or nationals of EEA countries. Nationals (natural persons or legal entities) that are established in EEA countries but that are controlled by third countries that are not an EEA country and/or by nationals of third countries that are not an EEA country, are not eligible for participation in the EU blockchain pre-commercial procurement.

A 'national' of a EEA country means any legal entity with registered offices in an EEA country or any natural person that has the nationality of an EEA country.

'Control' means the ability to exercise a decisive influence on an undertaking, directly, or indirectly through one or more intermediate undertakings. Control can take any of the following forms: (i) the direct or indirect holding of more than 50% of the nominal value of the issued share capital in the legal entity concerned, or of a majority of the voting rights of the shareholders or associates of that entity, (ii) the direct or indirect holding, in fact or in law, of decision-making powers in the legal entity concerned; However, the following relationships between legal entities shall not in themselves constitute controlling relationships: (i) the same public investment corporation, institutional investor or venture-capital company has a direct or indirect holding of more than 50% of the nominal value of the issued share capital or a majority of voting rights of the shareholders or associates, (ii) the legal entities concerned are owned or supervised by the same public body.

We chose EEA because EBSI is a collaboration between EU and EEA countries
-> you could restrict this also to EU Member States only

More info:
See p 40-41 of TS

Restricted access to the procurement

The contractors must moreover ensure that any cooperation with nationals of third countries that are not EEA countries or that are controlled by such a country and/or by a national if such a country does not affect the security interests and avoids potential negative effects over security of supply of inputs that are critical to the procurement and related EBSI operations.

To enable *the Contracting authority* to verify the access, each tenderer must complete **Annex 9 'Declaration of ownership and control'** to indicate its country of establishment and its country/-ies of control

Restriction that country of establishment must be in EEA -> Applies to lead contractor + all members of grouping, but not to subcontractors
Restriction that country of control must be in EEA -> Applies to lead contractor + all members of grouping + all subcontractors

Example:
Switzerland and China is not part of the EEA. Can a Swiss entity or a Chinese entity participate in the procurement?
It cannot submit a tender itself, but could still participate as subcontractor / entity on whose capacity is relied 'depending on who controls the entity'

The Swiss / Chinese entity cannot submit a tender itself, but it can possibly participate as subcontractor / entity on whose capacity is relied:

- Nationals established in Switzerland / China and controlled from Switzerland / China cannot participate in the procurement (not as sole tenderer, nor as member of a group in case of a joint tender, nor as subcontractor, nor as other entity on whose capacity is being relied).
- Nationals established in Switzerland / China but controlled from EEA countries can participate in the procurement as subcontractor or as other entity on whose capacity is being relied (but not as sole tenderer, nor as group member in case of a joint tender), "IF" the entity/group that is submitting the tender (sole tenderer or group members in case of a joint tender) is established in and controlled from EEA countries.
- Nationals established in EEA countries but controlled from Switzerland / China cannot participate in the procurement (not as sole tenderer, nor as member of a group in case of a joint tender, nor as subcontractor, nor as other entity on whose capacity is being relied).

Place of performance conditions

- At least 70% of the total value of activities covered by PCP phase 1 and at least 70% of the total value of activities covered by PCP phase 2A must be performed in the EU Member States and/or in countries associated to Horizon 2020. The principal R&D staff working on each specific contract must be located in the EU Member States and/or in countries associated to Horizon 2020.

- At least 70% of the total value of activities covered by the framework contract *(i.e. the total value of the activities covered by all the phases of the PCP, i.e. phase 1, phase 2A and phase 2B)* must be performed in the EU Member States and/or in countries associated to Horizon 2020. The principal R&D staff working on the PCP must be located in the EU Member States and/or in countries associated to Horizon 2020.
- 100% of the total value of activities on new security components developed for the contract must be performed in the EU Member States. In each specific contract, the principal R&D staff working on new security components covered by the contract must be located in the EU Member States.

The percentage is calculated as the part of the total monetary value of the contract that is allocated to activities performed in the EU Member States and/or in other countries associated to Horizon 2020, and respectively for the security components in the EU Member States. All activities covered by the contract are included in the calculation *(i.e. all R&D and operational activities that are needed to perform the R&D services, e.g. research, development, testing and certifying solutions)*. This includes all activities performed under the contract by contractors and, if applicable, their subcontractors.

The principal R&D staff are the main researchers, developers and testers responsible for leading the R&D activities covered by the contract

→ Here we used EU Member States & H2020 associated Countries because the PCP was funded by H2020. Otherwise could be limited to EU Member States.

More info:
See p 27 of TS

Place of performance conditions

Technical offer

- the offer must contain a list of staff working on the specific contract *(including for subcontractors)*, indicating clearly their role in performing the contract *(i.e. whether they are principal R&D staff or not, and whether they are working on security components of the solution or not)* and the location *(country)* where they will carry out their tasks under the contract

More info:
See p 51 of TS

Financial offer

In addition, the price breakdown in the financial section must show (see the corresponding columns in sections 4, 5 and 6 of Annex 6):

- the **location / country** in which the different categories of activities are to be carried out *(e.g. x days of senior researchers working for the contract in country L at y euro/day; a days of junior developers working for the contract in country M at b euro/day),* which personnel profile corresponds to **principle R&D personnel** and which personnel profile is **working on security components** (to demonstrate compliance with the minimum requirement 2 - Place of performance)

More info:
See p 60 of TS

Verification of compliance via end of phase report

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

Satisfactory completion will be assessed according to the following criteria:

- if the monies have been allocated and the work has been carried out according to the place of performance and the R&D definition requirements;

More info:
See p 36 of TS

Consequences in case of non-compliance

(ii) In case the 'Place of performance' obligation that applies to all contract activities is breached in one of the phases of the pre-commercial procurement, the Contracting Authority may claim liquidated damages amounting to

- 50% of the price for phase 1 referred to in the specific contract for phase 1
- 50% for the price for phase 2A referred to in the specific contract for phase 2
- 50% of the price for phase 2B referred to in the specific contract for phase 2

In case the place of performance conditions that applies to all contract activities is breached by more than 20%, meaning that less than 50% of the R&D activities are performed in the EU Member States or Horizon 2020 associated countries, the Contracting Authority may claim additional damages amounting to 50% of the price for the respective phase.

In case the 'Place of performance' obligation for the activities on new security components developed for the contract is breached in one of the phases of the pre-commercial procurement, the Contracting Authority may reduce all outstanding payments for that phase to zero and may recover all amounts already paid for that phase.

(iii) In case of breach of the 'Place of establishment and control' obligation in one of the phases of the pre-commercial procurement, the Contracting Authority, the Contracting Authority may reduce all outstanding payments for that phase to zero and may recover all amounts already paid for that phase.

The above rights are without prejudice to the Contracting Authority's right to require the transfer of the results to the contracting authority (Article II.13.5.4) in case of breach of any of the above three obligations in point (c).

More info:
See p 14 of FWC

IPR conditions: ownership, protection, rights to use

- The contractor retains ownership of all the rights to the results. The CA retains legal ownership of 1 exemplar of the foreground material, incl. source code, design specs, other documentary material. Each party retains rights to its background and gives license to other party to use background after PCP under fair and reasonable conditions (for CA / EBP for its own non-commercial purposes).
- The contractor shall be responsible for the management of all the *rights on the results* that it holds and shall bear any associated costs including for the protection, examination, grant, maintenance, defence and litigation of the *rights on the results*.

  If the contractor decides not to protect the *results* that it generated or does not seek timely or sufficient protection to enable the contracting authority to use the *results* as defined in the FWC, for example in terms of jurisdictions for registered IPRs, the contracting authority retains the right to seek itself protection of these *results* and to obtain ownership of the *rights on these results*. In the event that the contracting authority decides to exercise this right, the contracting authority will inform the contractor in writing of its decision to exercise this right.

- The contractor grants the Union and the European Blockchain Partnership (EBP) members[8], including their affiliated institutes, a royalty-free, non-exclusive, worldwide, irrevocable and non-sub-licensable (except as explicitly authorised under this FWC) license to use its *results* for their own purposes, during and after the FWC. The contractor also grants a royalty-free, non-exclusive, worldwide, irrevocable and non-sub-licensable license to contractors and subcontractors of the Union and of EBP members to practice the *results* for the Union's or for the EBP members' own purposes, during and after the FWC.

  -> For results that are design specifications, this right is unlimited in duration

  -> For results that are implementations into simulations, prototypes, products etc, this right is limited up to 4 years after the end of the FWC, for own non-commercial purposes of EC/EBP…

More info:
See p 28-38 of FWC

→ Rights to use include rights to compile and integrate results into EBSI and use for 4 years as part of EBSI + rights to modify, copy, back-up, correct errors, translate..

IPR conditions: rights to license + standard commercialisation req

In case of *commercial exploitation* of products, services or processes arising or developed from the *results* by the contractor or any entities affiliated to it or succeeding it in the ownership or development of the *results*, the contractor shall and shall procure that such affiliates or successors offer to the Union and EBP members the best price it or such affiliates or successors would offer in similar situations to any other third party for such commercial products or services, it being understood that no additional cost shall be charged in the offered price for any license of the *rights on the results*, as the Union and EBP members have already acquired license free right to use the *rights on the results* according to the first paragraph of this section II.13.3.

→ Cheaper price for commercial product in case of follow-up procurement for deployment

- The contractor shall, upon request of the contracting authority and within a reasonable time period specified in the said request, grant to third parties that are specified by the contracting authority a non-exclusive and non-sub-licensable license to use and exploit the *results*, and any *background* or *sideground* which may be necessary for the use or exploitation of the *results*, under fair and reasonable conditions.

  In case the contractor fails or refuses to grant the license to the third parties specified by the contracting authority within the reasonable time period specified in the request of the contracting authority, the contracting authority retains the right to grant itself (or to appoint an independent third party to do so) a non-exclusive and non-sub-licensable license to said third parties to use and exploit the *results*.

- If the contractor fails to commercially exploit the *results* within four (4) years after the end of the FWC, and the circumstances of the case show that the contractor has not used its best efforts to do so, the contracting authority is entitled to require that the contractor transfers the ownership of the non-exploited *results* to the contracting authority in order to ensure that the results are commercially exploited.

New: EU strategic autonomy – commercialise 'in EU' conditions

In order to safeguard the cross-border delivery of services through the EBSI infrastructure against potential physical and cyber threats and to protect the exchange of security sensitive information, the contractor shall ensure to safeguard EU security interests in the *commercial exploitation* of the *results*.

In order to safeguard security of supply of inputs critical to the functioning of the EBSI and fair competition in the supply chain compliant with EU rules and interests, the contractor shall ensure to safeguard EU strategic autonomy in the *commercial exploitation* of the *results*.

The contractor shall therefore ensure that a significant amount of the *commercial exploitation* of the *results* takes place in the EU Member States and/or countries associated to Horizon 2020. In particular, the contractor must produce minimum 50% of the products, services or processes that incorporate *results* or that are produced through the use of *results* in the EU Member States and/or countries associated to Horizon 2020[9]. For those *results* that are security components, the contractor must produce 100% in the EU Member States.

→ Here we used EU Member States & H2020 associated Countries because the PCP was funded by H2020. Otherwise could be limited to EU Member States.

The contractor must ensure that in the *commercial exploitation* of *results* any cooperation with entities established in other countries, or controlled by such countries or entities from such countries, does not affect the EU security or strategic autonomy interests and avoids potential negative effects over security of supply of inputs critical to the functioning of EBSI.

The contractor must ensure that these obligations also apply to its subcontractors, affiliated entities and other third parties it cooperates with in the commercialisation of the *results*, as well as to any entities succeeding them in their ownership or development of the *results*.

If the contractor uses the *results* to the detriment of the public interest, including EU strategic autonomy or security interests, the contracting authority is entitled to require that the contractor transfers the ownership of the *results* to the contracting authority, in order to stop use of the results against the public interest and ensure commercial exploitation of the results by another party in line with the exploitation conditions.

New: EU strategic autonomy - Mergers and Acquisitions conditions

Contractors that are in process that is preceding a possible merger with or takeover by an entity from a country (or controlled by a country) that is not an EU Member State or country associated by Horizon 2020, must notify the contracting authority at least three (3) months in advance of the decision to implement the possible merger or takeover and:

- describe in detail the identity, ownership and control structure of the potential new merged entity or the potential new owner(s)
- include a reasoned assessment of the likely impact of the possible merger/takeover on:
  - the access to the *results* and to the *background* and *sideground* that is essential for accessing the *results,* as foreseen by the FWC for the contracting authority and for third parties
  - the *commercialisation exploitation* of the *results*, including the EU security interests and EU strategic autonomy objectives above

The contracting authority may request the contractor for additional information to verify the potential impact, upon which the contractor must promptly provide the requested information. In case the impact analysis concludes that the merger or takeover negatively impacts the access to or the *commercial exploitation* of the *results*, including the EU security interests and EU strategic autonomy objectives set out in section II.13.5, the contracting authority is entitled to require that the contractor (both the contractor before or after the merger or takeover) transfers the ownership of the *results* to the contracting authority.

New: EU strategic autonomy – Transfer/excl. licensing of IPR

Due to EU strategic autonomy and security reasons, exclusive licensing and transfers of ownership of the *results* are restricted as follows:

- the contractor may not transfer ownership of its *results* or give exclusive licences if the *results* would become subject to controls or other restrictions by a country (or entity from a country) which is not an EU Member State or country associated to Horizon 2020

Contractors that intend exclusive licensing or transfers of ownership of the *results* to an entity from a country (or controlled by a country) that is not an EU Member State or country associated by Horizon 2020, must request prior authorisation from the contracting authority. The intention of such exclusively licensing or transfer must first be notified to the contracting authority at least three (3) months in advance and:

- identify the specific *results* concerned
- describe in detail the intended new owner and the planned or potential exploitation of the *results* and
- include a reasoned assessment of the likely impact of the intended transfer or exclusive license on:
  - the access rights to the *results* and on the *background* and *sideground* that is essential for accessing the *results* as foreseen by the FWC for the contracting authority and for third parties
  - the *commercialisation exploitation* of the *results*, including the EU security interests and EU strategic autonomy objectives set out in section II.13.5

Before granting the authorisation, the contracting authority will verify the potential impact of the intended transfer or exclusive licensing. The contracting authority may condition its authorisation to measures ensuring that the transfer or exclusive licensing will not have unintended or undesirable consequences. Before the contracting authority gives its written authorization, the transfer may not take place and any transfer or exclusive licensing agreement concluded before or without a written authorization will be null and void.

Data processing, storage, access in EU /EEA

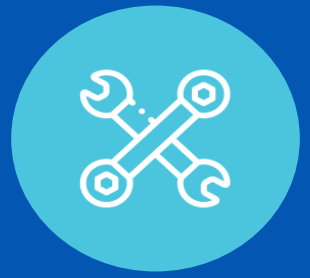
(b) The localisation of and access to the personal data processed by the contractor shall comply with the following:

i. The personal data shall only be processed within the territory of the European Union and the European Economic Area and will not leave that territory;
ii. the data shall only be held in data centres located with the territory of the European Union and the European Economic Area;
iii. No access shall be given to such data outside of the European Union and the European Economic Area
iv. The contractor may not change the location of data processing without the prior written authorisation of the contracting authority;
v. Any transfer of personal data under the FWC to third countries or international organisations shall fully comply with the requirements laid down in Chapter V of Regulation (EU)2018/1725[2].

More info:
See p 11 of FWC

→ Here only for personal data, but could be generalized also to other types of sensitive data

2. European autonomy & resilience in EU funded innovation procurements



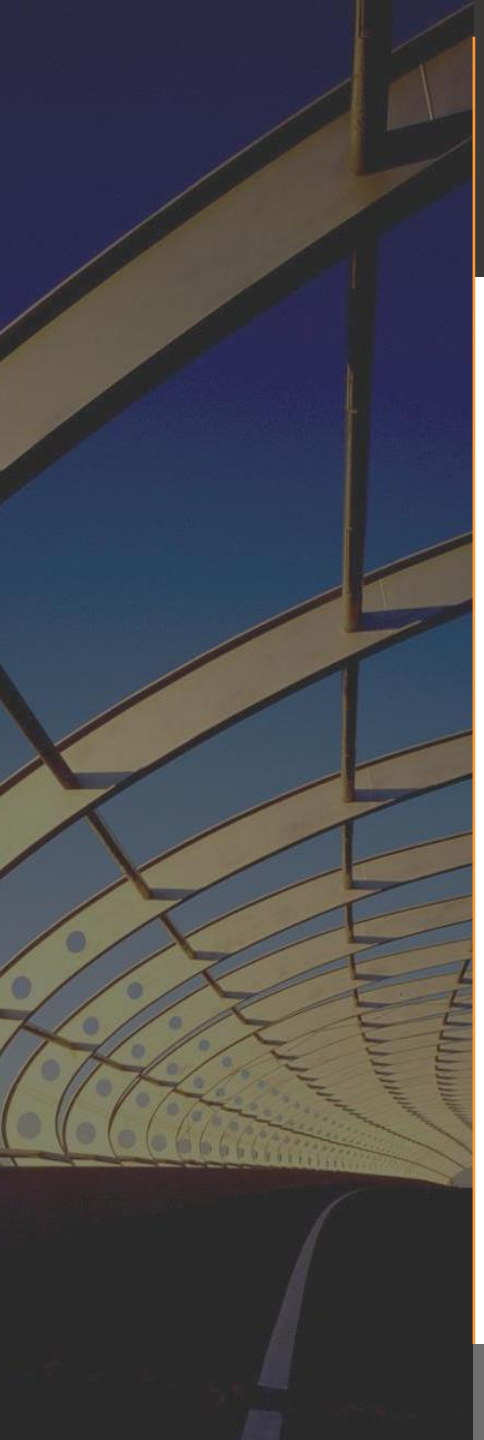
European Commission

Questions?

lieve.bos@ec.europa.eu

More info:

- Webpage EU blockchain PCP
- Tender specs and contracts of EU blockchain PCP are available online



European Payment Initiative:
European strategic autonomy & resilience in the financial sector – Banking sector

Martina Weimert

EPI Company

EPI
INTERIM COMPANY

European Payments Initiative – Building a European, resilient and autonomous infrastructure

November 2021

Agenda

1. **EPI – European Payment Initiative – a description**
2. **EPI's needs for an independent, resilient, highly available and flexible architecture**
3. **Definition of the process to identify a reliable solution**
4. **Mandatory requirements and main principles**
5. **Intermediate results and key factors**
6. **Next steps**

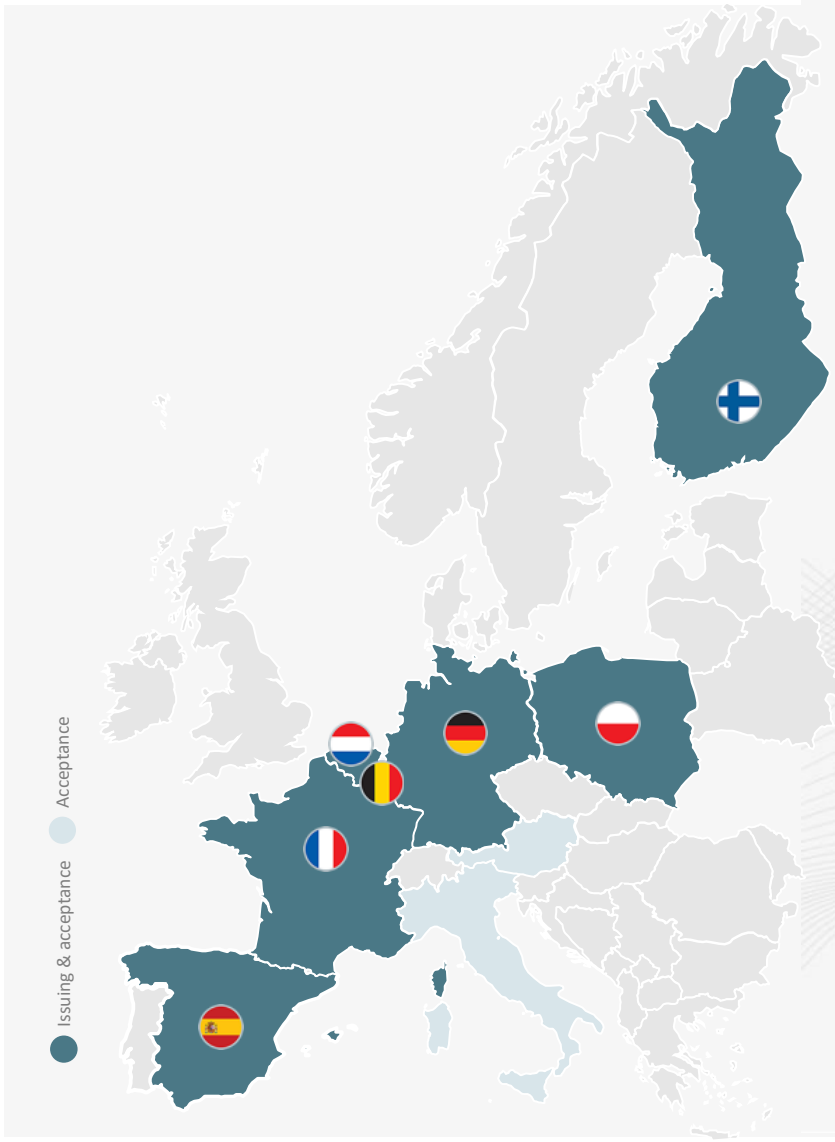
EPI's mission

"Our mission is to create a **leading-edge, unified payment solution** tailored for Europe, providing value to European consumers, merchants, banks and payment service providers."

EPI – European Payment Initiative – overview

- EPI was launched by some European banks reaching out to other European banks after many exchanges with the regulator (European Commission and ECB) and given the dominance of international
- EPI aims to be the European answer to GAFAs, BATX and international card schemes
- Private initiative in close cooperation with public authorities (supervision and fulfilling political agenda)
- The future of EPI is either to fail or to become a European champion and then international player
- EPI targets to provide a strong contribution for European independence and sovereignty
- EPI is an ecosystem play associating consumers, merchants, banks, third party service providers for merchants, and public authorities

Current footprint



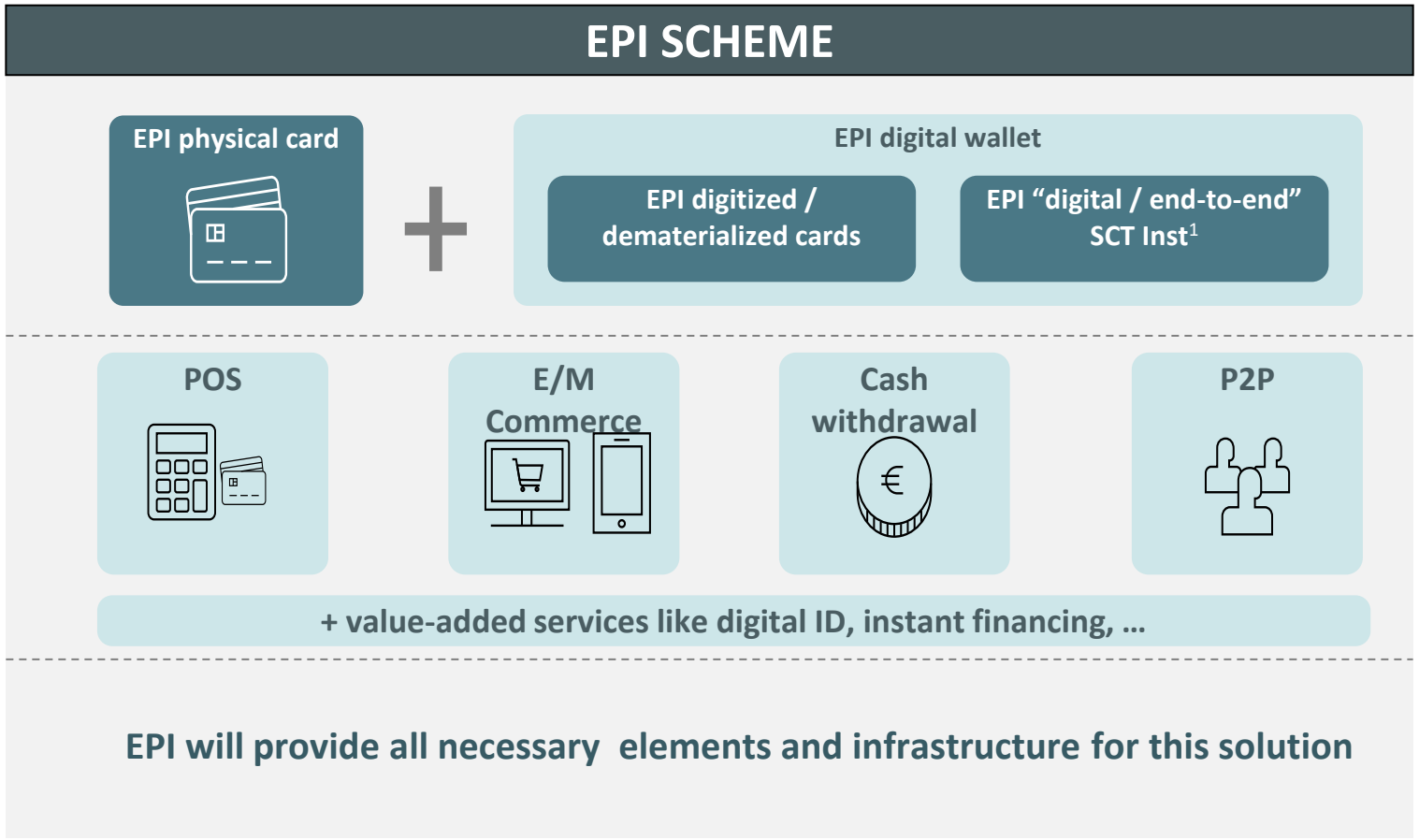
22 shareholders in EPI Interim Company (31 credit institutions of which 12 smaller Spanish banks a grouped in a SPV and 2 non-bank acquirers), spanning across 7 European markets and representing 65% of all European transactions

- In addition, Italy and Austria will accept EPI transactions – but no issuing foreseen so far
- Additional expansion foreseen

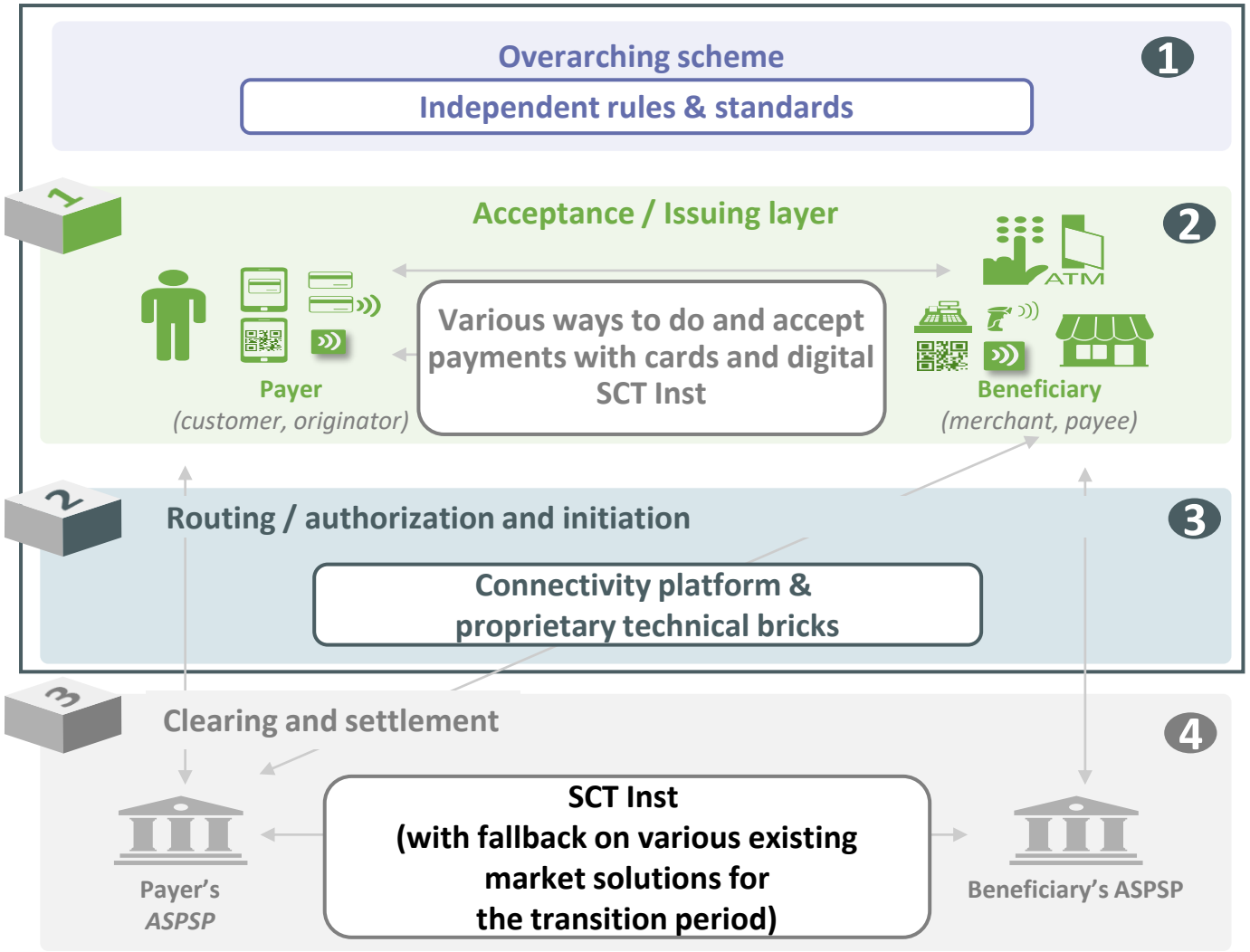
Overview of what is EPI

One scheme and one brand with 2 products

Covering all retail use cases



Overview on how works EPI and its scope



EPI’s needs for a European, independent, resilient, highly available and flexible architecture

For EPI as an independent, European based payment scheme these are the corporate goals concerning IT-infrastructure – besides any binding European regulations

- Adherence to European regulations and usage of available, proven European standards
- Independence and control of EPI’s own infrastructure with a clear view on short- to midterm insourcing which is considered a must. Insourcing comprises control on infrastructure as well as on source code incl. the corresponding intellectual rights
- Building a resilient infrastructure that guarantees high availability and high transaction rates on 24 hours x 7 days a week on all days of the year (99,999%)
- Reliance on infrastructure that allows a flexible evolvement of products, new functions, features and business models

Definition of the process to identify a reliable solution - Request for Information (RFI) 1/2

The identification of an infrastructure which fulfills EPI's requirements was achieved in a multilevel approach

- Business transactions / Use cases build the foundation and the starting point
- Their description resulted in the definition of 23 necessary technical components which were described in so-called technical requirements
- Based on these technical components overarching design principles and a technical architecture were defined
- A RFI published in national, European, and international channels of the payment sector invited technical providers to share their own solutions and their view on EPI's foreseen architecture
- All feedbacks from 150 companies were evaluated in detail and scored reducing the list of possible vendors

Definition of the process to identify a reliable solution – Request for Proposal (RFP) 2/2

This first phase (RFI) gave EPI's technical experts valuable input for the second phase – the Request for Proposal

- Based on the RFI Input, its evaluation and additional research the architecture was further refined and described in more detail
- For the RFP the identified 23 technical components were clustered into 10 technical lots plus an integration lot
- Each of the four negotiation rounds in the RFP was based on pre-defined evaluation criteria and weights, including technical, functional, commercial and contractual criteria
- The evaluations in rounds 1-3 were performed to identify best of breed solutions. Each round resulted in a further reduction of possible vendors
- Round 4 introduced new rules and criteria to find the best suitable combination of the remaining contenders

Mandatory requirements and main principles

- Adherence to European legislation, e.g. GDPR and NIS directive
- Adherence to existing European market standards (e.g. EPC – SEPA Instant Payment, ECPC – CPACE card standard)
- No acceptance of companies with headquarters outside Europe, exceptions only
  - for explicitly defined, non-business critical components (lots)
  - if the corresponding solutions have an outstanding market reputation
- Multi-vendor approach to avoid vendor lock-in
- Strong reliance on joint interfaces to provide interoperability between different vendors and their solutions
- A quick market start demands to begin with an outsourced solution; near-100%-insourcing is the goal. To become independent, stages from 100%-outsourcing to near-100%-insourcing are part of the contractual negotiations

Key factors for success

- Expertise is essential – expertise in the payment sphere concerning the business perspective as well as functional and technical basics
- Pre-definition of overarching design principles, e.g. on interoperability, security
  - Concentration on Interoperability using market-proven interfaces
  - Usage of existing European standards
  - Thorough understanding SOTA (state-of-the-art) of the payment landscape
- Concentration on European key technologies
- Avoidance of vendor-lock-in thus reducing implementation risks, e.g. fallback scenarios
- Usage of market-driven standards esp. concerning availability and performance
- Inbuilt innovation by using value engineering methodologies, e.g. constant control of used technologies by providers together with EPI (as part of the contract)
- Strategic European approach and high-level understanding with European authorities including European Central Bank
- The process was built on transparency; the fairness principle was respected throughout the process

➔ The RFP approach is scalable for other B2B-sectors

Next steps

- Shareholder decision on EPI as a permanent venture (from EPI IC to EPI HoldCo)
  - Staffing
  - Building the organizational foundation
  - Launch implementation work and developing of sub-use cases

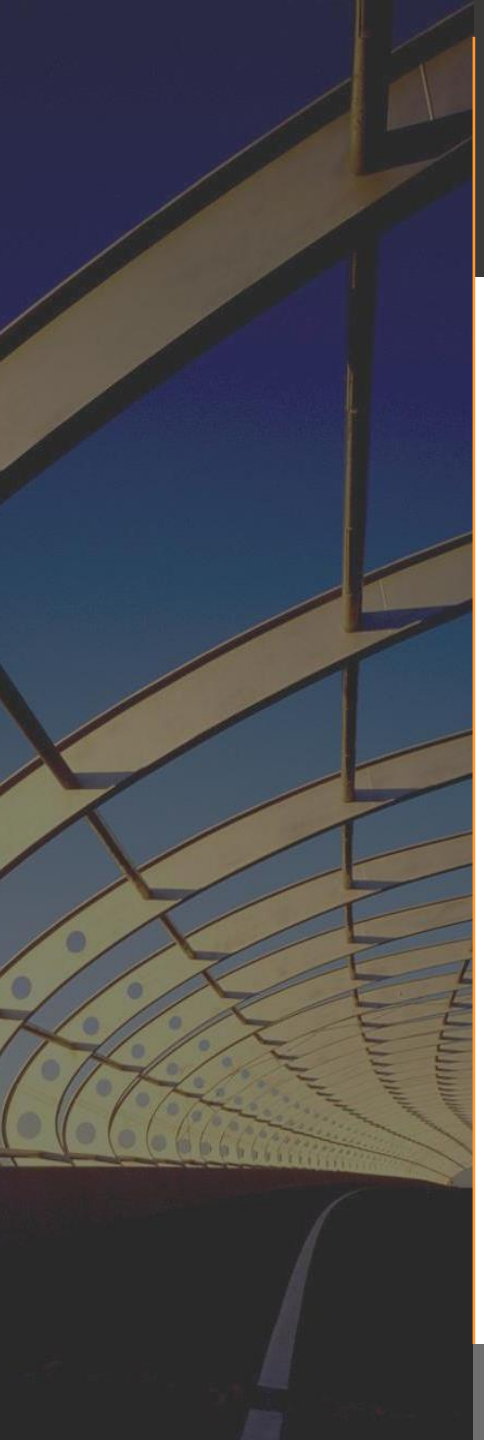
- Implementation project to build the IT-infrastructure as basis for
  - Certification and connection of banking institutions and payment service providers
  - Work with local communities on getting ready for EPI
  - Launch of EPI-products with first product, P2P, in 2022

- Onboard additional shareholders and members

Contact Details

In case of questions concerning the RFP-process please feel free to contact our RFP-team under rfp.response@epicompany.eu

As an alternative you can contact the RFP-responsible Co-leader of the technical entity Susanne Klusmann under susanne.klusmann@epicompany.eu



UVD Robots:

From innovation procurement to successful worldwide leadership in disinfection robots to tackle the Covid-19 sanitary crisis

Jacob Mortensen

UVD Robots

WELCOME TO THE REVOLUTION IN UV-C DISINFECTION TECHNOLOGY

Jacob Mortensen
Sales Director - Corporate Accounts
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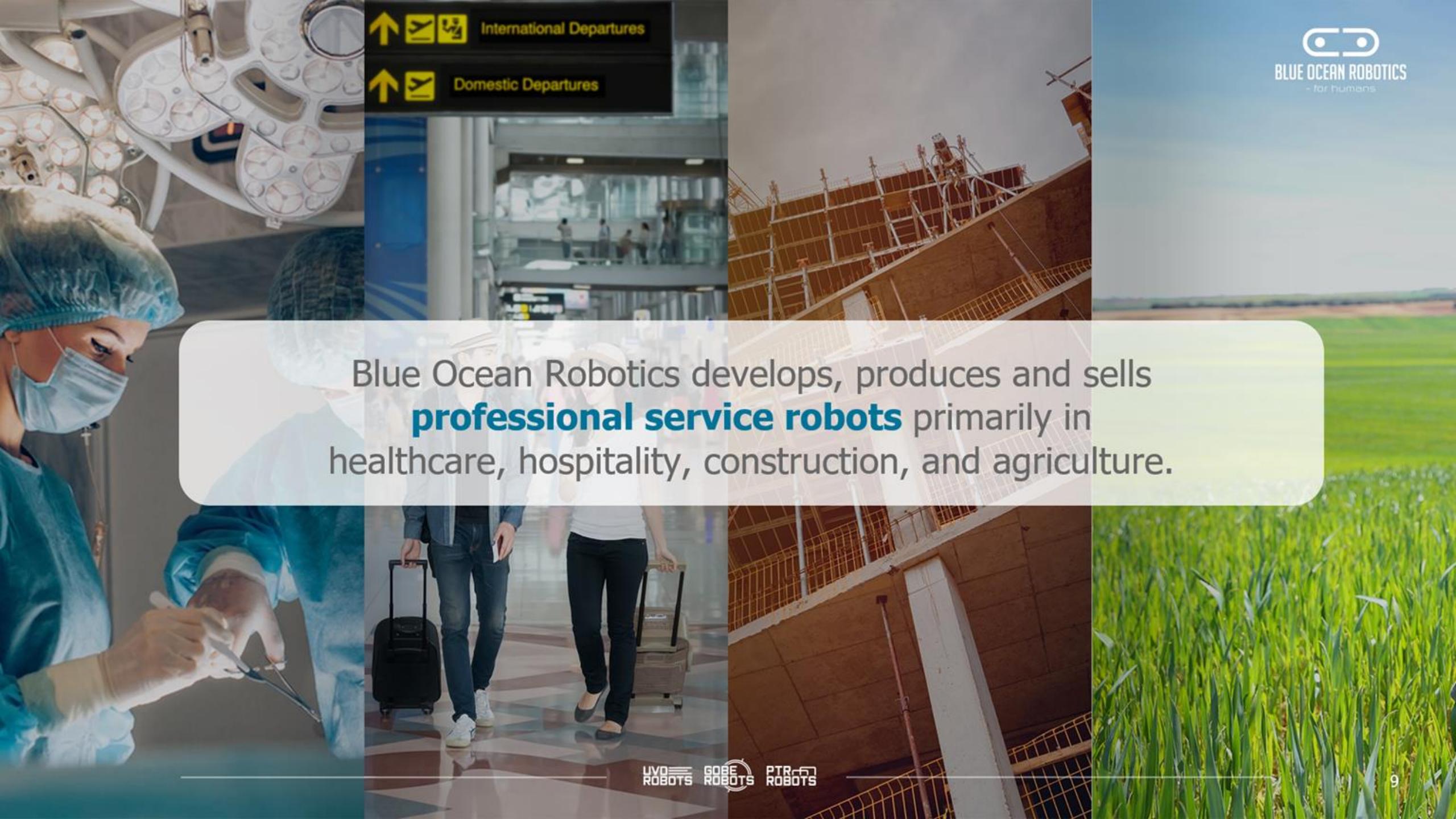
At a Glance



BLUE OCEAN ROBOTICS
- for humans

Blue Ocean Robotics develops, produces and sells **professional service robots** primarily in healthcare, hospitality, construction, and agriculture.

We make robots for humans

BLUE OCEAN ROBOTICS
- for humans

People use our robots to change the way they work to be more meaningful, rewarding and healthier. We improve quality-of-life and productivity.

Claus Risager, CEO @ Blue Ocean Robotics

UVD ROBOTS GO BE ROBOTS PTR ROBOTS

UVD ROBOTS

UVD ROBOTS | Committed to Disinfection. Dedicated to Your Safety.

GOBE ROBOTS | Go & Be Present. Anywhere. Anytime.

PTR ROBOTS | Bring Patient Transfer to the Next Level

UVD Robots History

2014-2020

2014-05: Innovation tender on infection control from Danish Healthcare authorities

2014-08: Phase 1 application submitted

2014-11: Phase 1 project started

2015-03: Phase 1 concept completed

2015-06: Phase 2 prototype project started

2016-12: UVD Robots company was founded

2017-12: Phase 2 prototype project completed

2017-12: Transfer of all IP rights for the UV Robot from Blue Ocean Robotics to UVD Robots

2017-12: Per Juul Nielsen appointed as CEO

2018-03: 1. Investment round (9 investors)

UVD Robots History

2014-2020

2018-03: Commercial launch of the UVD Robot

2018-03: First UVD Robot sold to hospital

2018-10: Accelerated growth strategy and Nordic Eye as co-investor in Blue Ocean Robotics

2019-04: UVD Robots Ltd in England is founded

2019-05: Winner of the IERA Award

2019-07: UVD Robots now sold in Europe, Asia, Middle East, United States and Australia

2019-Q3: Establishment of UVD Robots Americas Ltd in United States

2019-Q4: Establishment of sales office in Asia Pacific

2020-Q1: Establishment of sales office in MENA

UVD Robots History

2014-2020

2020-Q1: Winner of European award, euRobotics Technology Transfer Award

2020-Q2: UVD Robots now sold in Europe, Asia, Middle East, United States, Australia, and Africa

2020-Q3: UVD Robots moves to new HQ in Odense, Denmark

2020-Q3: Launch of 3rd generation, UVD Robot Model C

2020-Q3: Winner of Designing Safety, IDEA Awards

2020-Q3: Winner of SDG Tech Award

2020-Q3: Winner of Best Practices Award, Frost & Sullivan

2020-Q4: Winner of Emerging Technology Award, American Society for Mechanical Engineers (ASME)

2020-Q4: Wins EU Contract to deploy 200 robots in European Hospitals

The Problem

HAI (Hospital Acquired Infections)
A Global Increasing Healthcare Problem

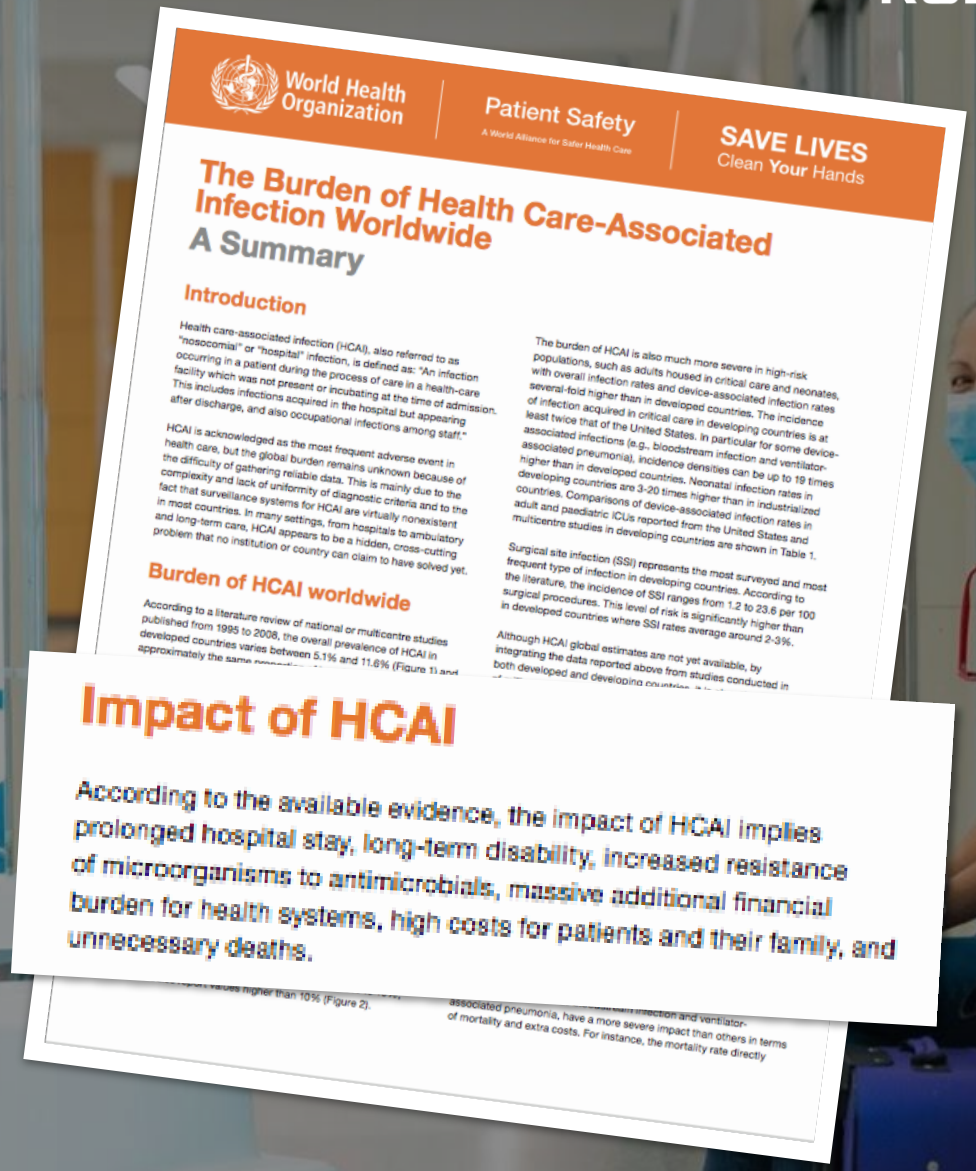
The European statistics:

- **4 million** HAI cases per year
- **37,000** direct deaths, **110,000** indirect deaths linked to HAI
- **7 billion** Euros in costs attributed to HAI

HAI (Hospital Acquired Infections)
The Impact

WHO
A global problem of epic proportion:

- **Prolonged** hospital stays
- **Increased** antimicrobial resistance
- **Massive** financial burden
- **Unnecessary** deaths


World Health Organization | Patient Safety | SAVE LIVES Clean Your Hands

The Burden of Health Care-Associated Infection Worldwide
A Summary

Introduction

Health care-associated infection (HCAI), also referred to as "nosocomial" or "hospital" infection, is defined as: "An infection occurring in a patient during the process of care in a health-care facility which was not present or incubating at the time of admission. This includes infections acquired in the hospital but appearing after discharge, and also occupational infections among staff."

HCAI is acknowledged as the most frequent adverse event in health care, but the global burden remains unknown because of the difficulty of gathering reliable data. This is mainly due to the complexity and lack of uniformity of diagnostic criteria and to the fact that surveillance systems for HCAI are virtually nonexistent in most countries. In many settings, from hospitals to ambulatory and long-term care, HCAI appears to be a hidden, cross-cutting problem that no institution or country can claim to have solved yet.

Burden of HCAI worldwide

According to a literature review of national or multicentre studies published from 1995 to 2008, the overall prevalence of HCAI in developed countries varies between 5.1% and 11.6% (Figure 1) and approximately the same proportion

The burden of HCAI is also much more severe in high-risk populations, such as adults housed in critical care and neonates, with overall infection rates and device-associated infection rates several-fold higher than in developed countries. The incidence of infection acquired in critical care in developing countries is at least twice that of the United States. In particular for some device-associated infections (e.g., bloodstream infection and ventilator-associated pneumonia), incidence densities can be up to 19 times higher than in developed countries. Neonatal infection rates in developing countries are 3-20 times higher than in industrialized countries. Comparisons of device-associated infection rates in adult and paediatric ICUs reported from the United States and multicentre studies in developing countries are shown in Table 1.

Surgical site infection (SSI) represents the most surveyed and most frequent type of infection in developing countries. According to the literature, the incidence of SSI ranges from 1.2 to 23.6 per 100 surgical procedures. This level of risk is significantly higher than in developed countries where SSI rates average around 2-3%.

Although HCAI global estimates are not yet available, by integrating the data reported above from studies conducted in both developed and developing countries

Impact of HCAI

According to the available evidence, the impact of HCAI implies prolonged hospital stay, long-term disability, increased resistance of microorganisms to antimicrobials, massive additional financial burden for health systems, high costs for patients and their family, and unnecessary deaths.

values higher than 10% (Figure 2).

associated pneumonia, have a more severe impact than others in terms of mortality and extra costs. For instance, the mortality rate directly

Danish Innovation

How It Started

Odense is a global cluster for robotic technology

2015: Public Private Partnership

Vision:

To reduce Hospital Acquired Infections, increase patient safety and reduce healthcare costs

Objective:

To develop a fully autonomous Robotic based UVC-Disinfection solution

Project partners:

Five Healthcare Regions, Danish Healthcare Authorities, Odense University Hospital & Blue Ocean Robotics. Funded by Markedsmodningsfonden.

REMEDI

Robotic Exposure Map for Enhanced Disinfection

Funded by DIH HERO under Grant Agreement No 825003

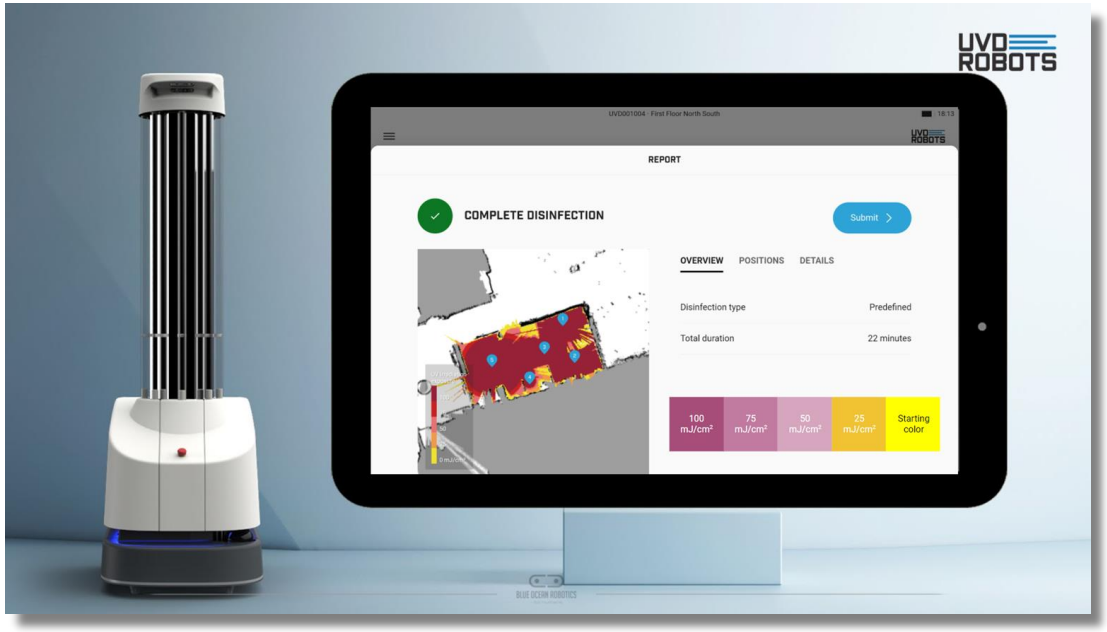
About REMEDI

Aim: Explore possibilities to extend the robotic product features of the UV-Disinfection Robot.

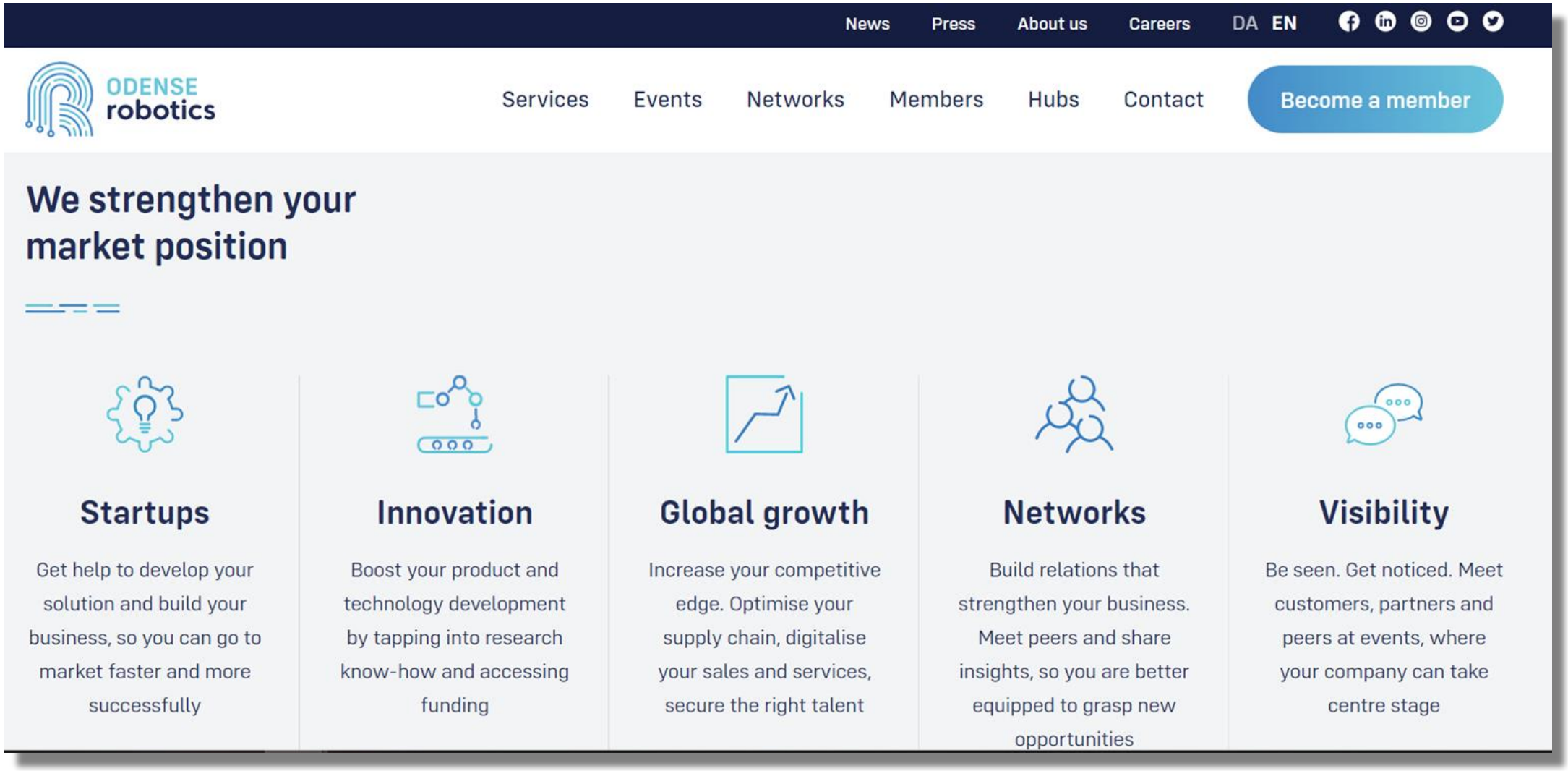
Goal: Will allow healthcare professionals to evaluate exactly how well a patient room has been disinfected.

Project Partners
Blue Ocean Robotics (SME), Denmark
UVD Robots (SME), Denmark
Bucharest Promo Robots (SME), Romania
Hospital in Vienna as End-User

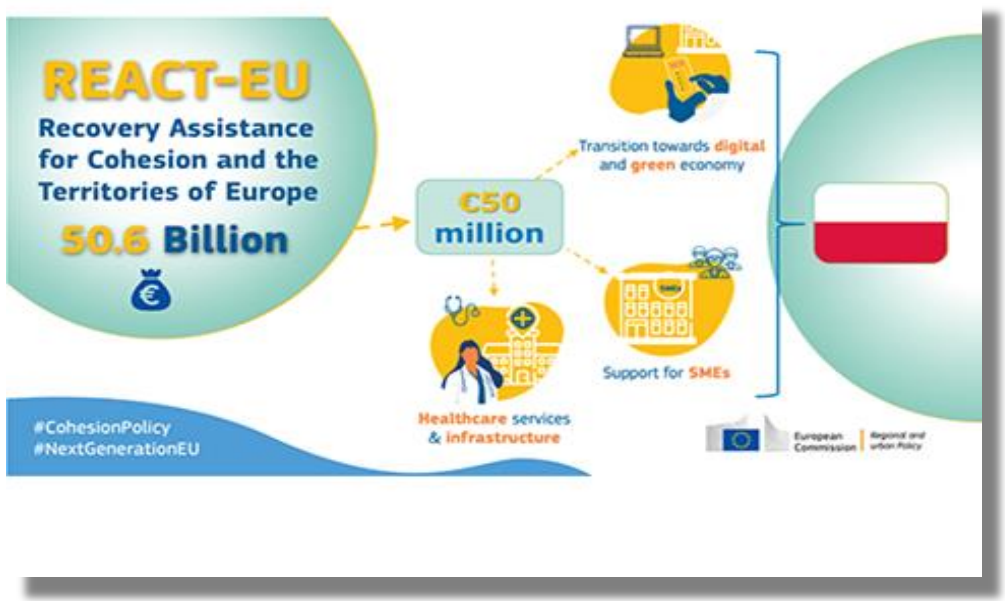
Project Dates: 01.10.2020 – 30.06.2021

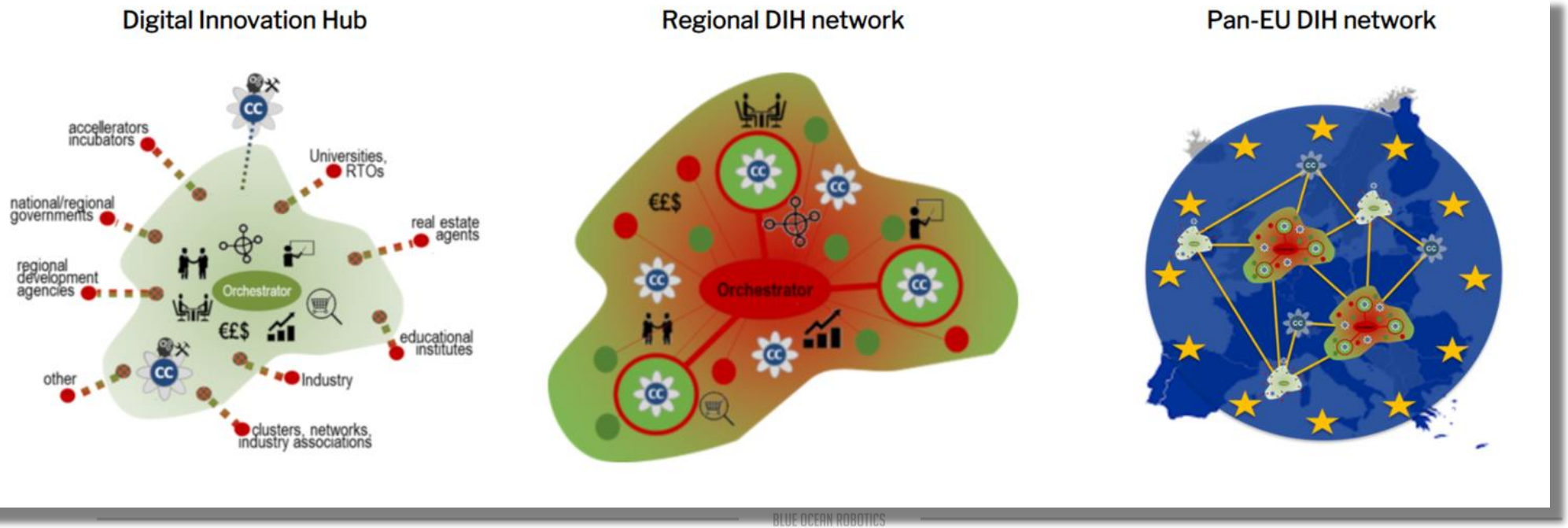


Digital Innovation Hub

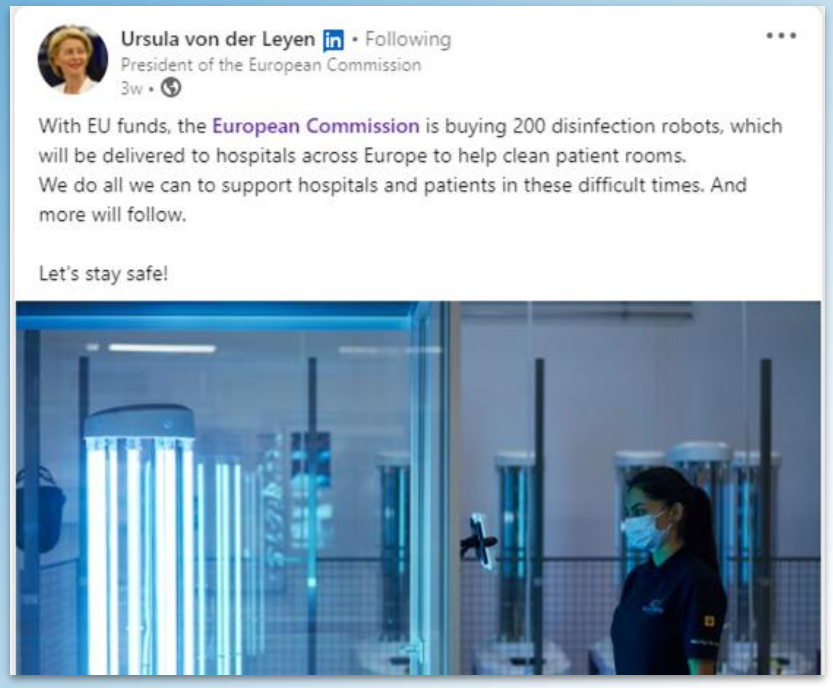


2018-2021


REACT-EU
Recovery Assistance for Cohesion and the Territories of Europe
50.6 Billion
€50 million
Transition towards digital and green economy
Support for SMEs
Healthcare services & infrastructure
#CohesionPolicy
#NextGenerationEU
European Commission

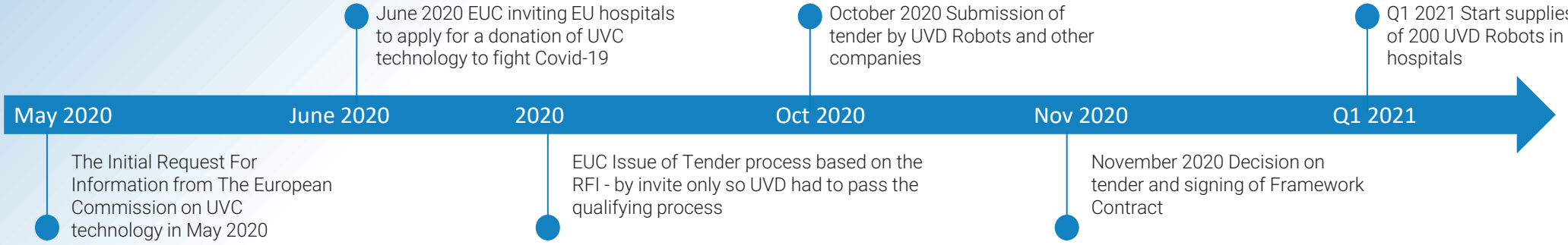

Digital Innovation Hub
accelerators incubators
Universities, RTOs
national/regional governments
real estate agents
regional development agencies
Orchestrator
€£$
educational institutes
other
Industry
clusters, networks, industry associations
Regional DIH network
€£$
Orchestrator
Pan-EU DIH network

European Commission Tender



UVD Robots was evaluated on the following criteria:

- **Innovative solution**
- **Functionality**
- **Versatility**
- **Price**

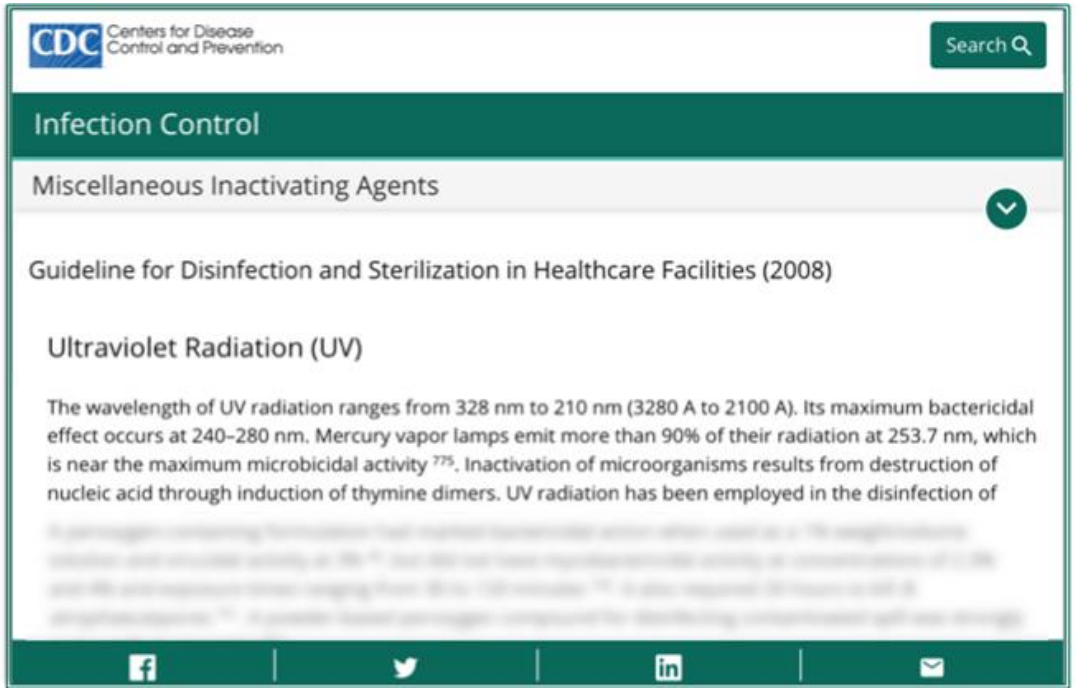


Our answer to the problem


UVD ROBOTS
>99.99%
OF PATHOGENS KILLED
100%
AUTONOMY
<10 min
AUTONOMOUS DISINFECTION TIME
2-3 min labour
IRREGARDLESS ROOM/AREA SIZE

Proven UV-C germicidal technology

Germicide, definition: any substance or process that kills germs (bacteria, viruses, and other microorganisms that can cause infection and disease).



CDC Centers for Disease Control and Prevention

Search

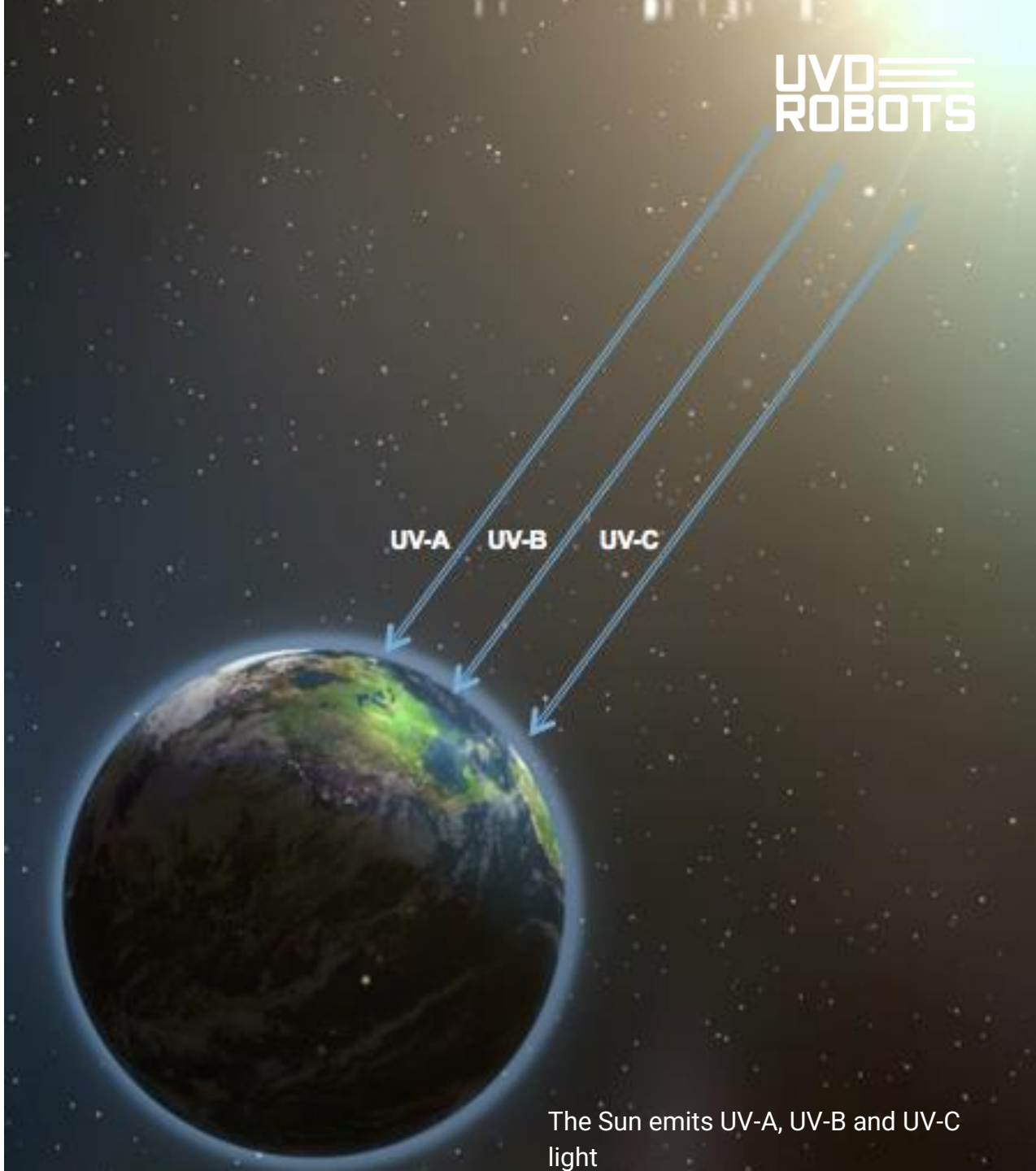
Infection Control

Miscellaneous Inactivating Agents

Guideline for Disinfection and Sterilization in Healthcare Facilities (2008)

Ultraviolet Radiation (UV)

The wavelength of UV radiation ranges from 328 nm to 210 nm (3280 A to 2100 A). Its maximum bactericidal effect occurs at 240–280 nm. Mercury vapor lamps emit more than 90% of their radiation at 253.7 nm, which is near the maximum microbicidal activity [775]. Inactivation of microorganisms results from destruction of nucleic acid through induction of thymine dimers. UV radiation has been employed in the disinfection of



The Sun emits UV-A, UV-B and UV-C light


UVD ROBOTS
UVD ROBOTS

2015 – Project to develop & build world's first fully autonomous UV-C robotic system approved

Critical requirements

Reduction of shadowed areas

Closer proximity to surfaces

Quicker turnaround of rooms & operating theatres

Lower workload for staff

Creation of room disinfection validation reports.

SIMULATED WITH VISIBLE LIGHT

UV-C LIGHT EXPOSURE

from a patient room at OUH (Odense University Hospital)

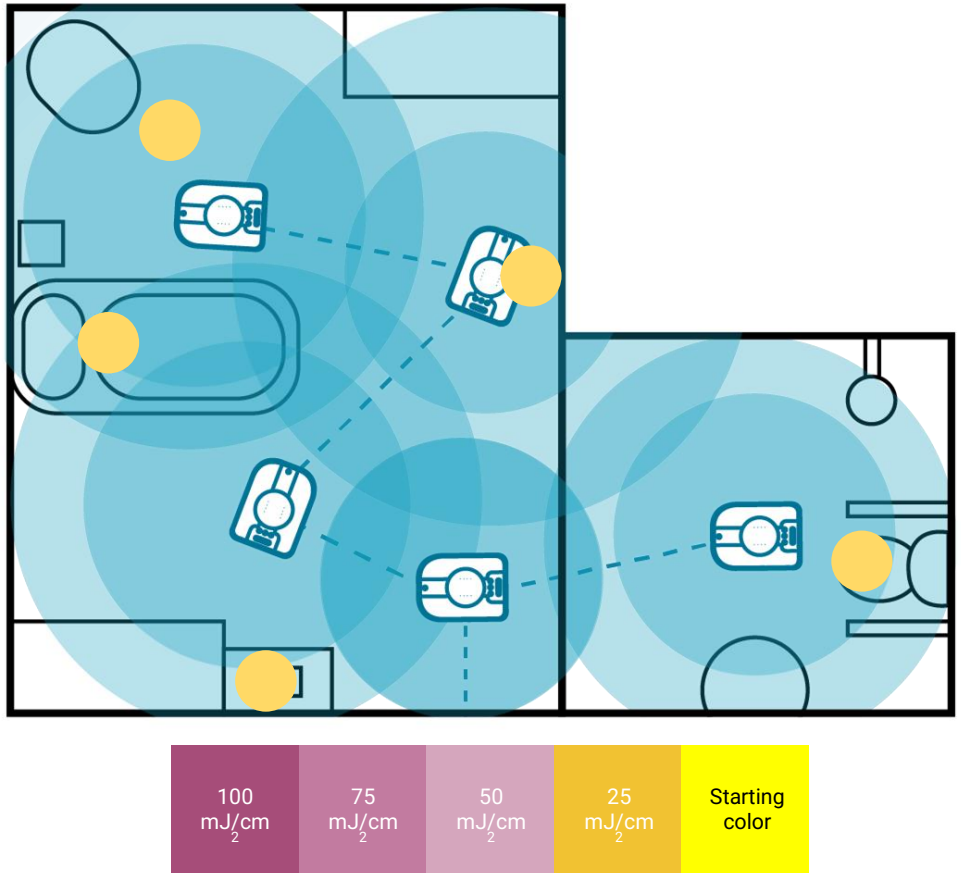
UVD Robots autonomous room disinfection - validated!

in conjunction with cleaning and hygiene protocols already in place

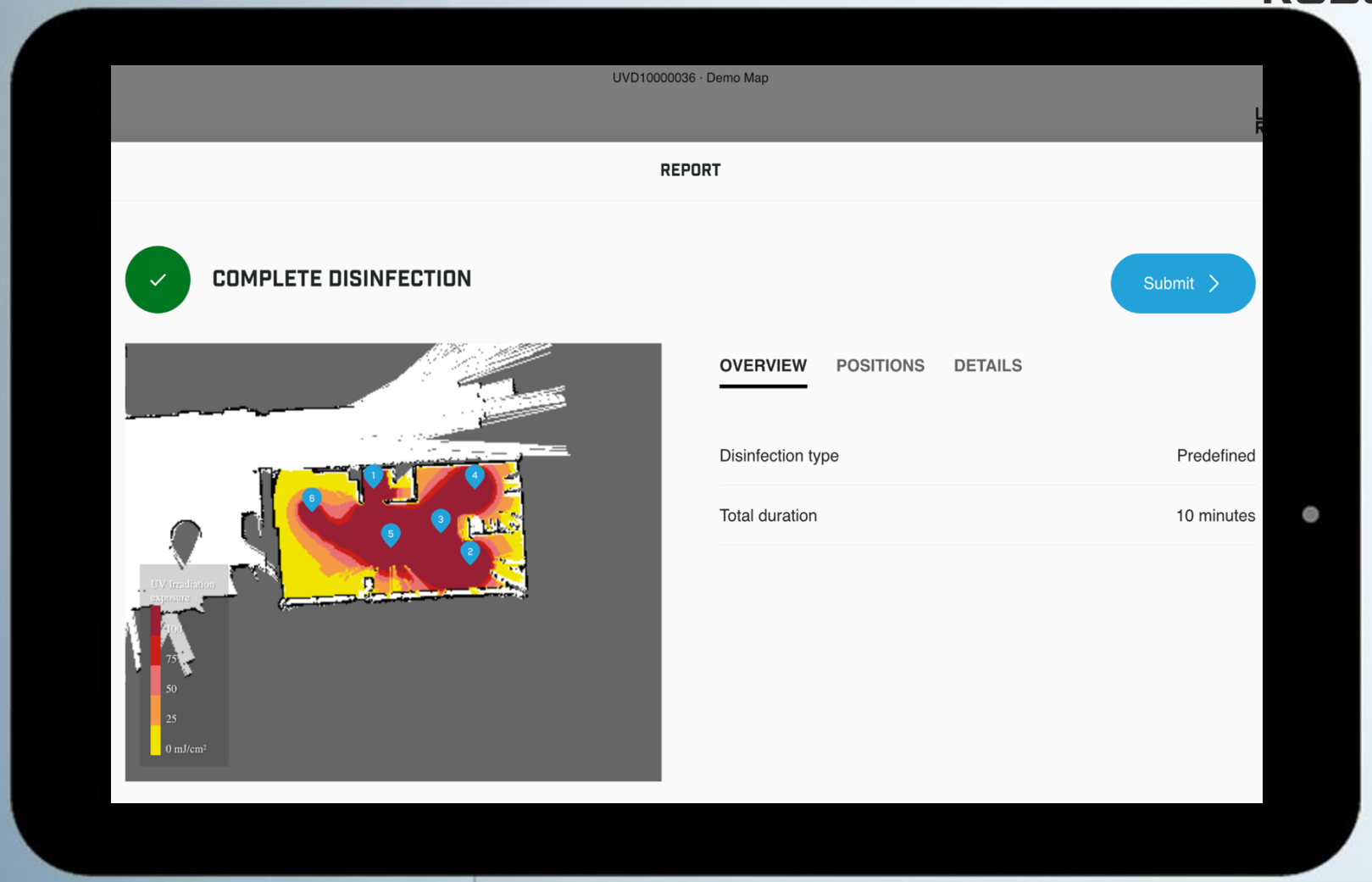
Room disinfection

Elevating the hygiene protocols with disinfection of high and low touch surfaces. UVD Robots autonomous disinfection

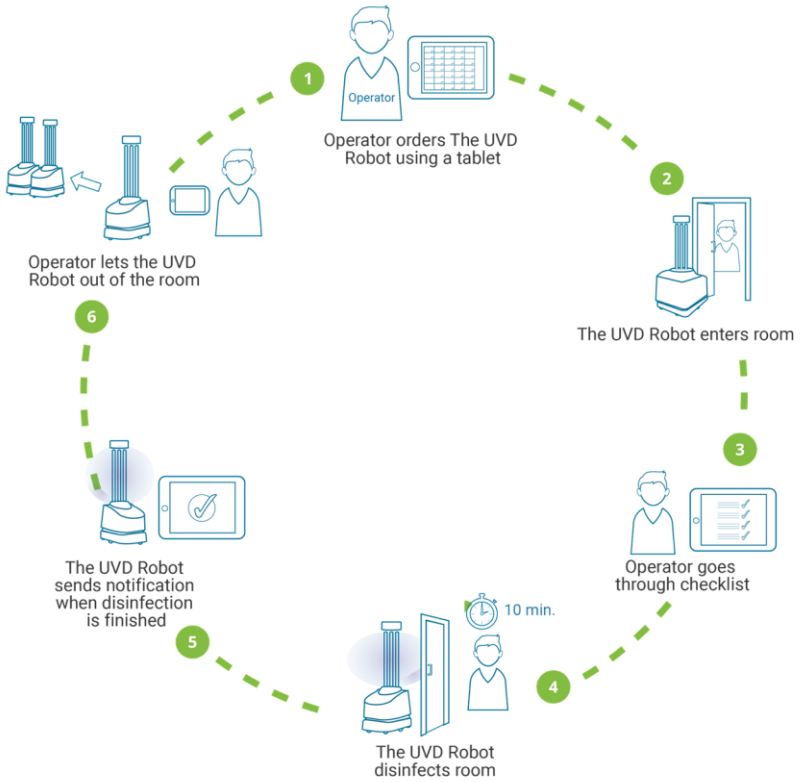
Disinfection time
10-20 min. depending on room size in square meters



UVD ROBOTS



Workflow



	Staff involvement (avg.)
Cleaning of the room, established standard process	-
Order UVD Robot via App or Tablet, autonomous arrival	30 sec
Staff opens door, security check, press start	60 sec
Autonomous disinfection	0 sec
UVD Robot notifies when done	0 sec
Staff allocates new task for UVD Robot	30 - 60 sec

Total: 120 - 180 sec

Applications for the UVD Robot

Healthcare:

Hospitals:

- Operating theatres
- Intensive care units
- Emergency departments
- Oncology wards
- Isolation rooms
- Infection disease unit
- Nursing wards
- Day clinic
- Outpatient departments

Medical Clinics

Nursing Homes

Canteen, floors, toilets, waiting rooms, offices


ON
IS
BY
ERS





11

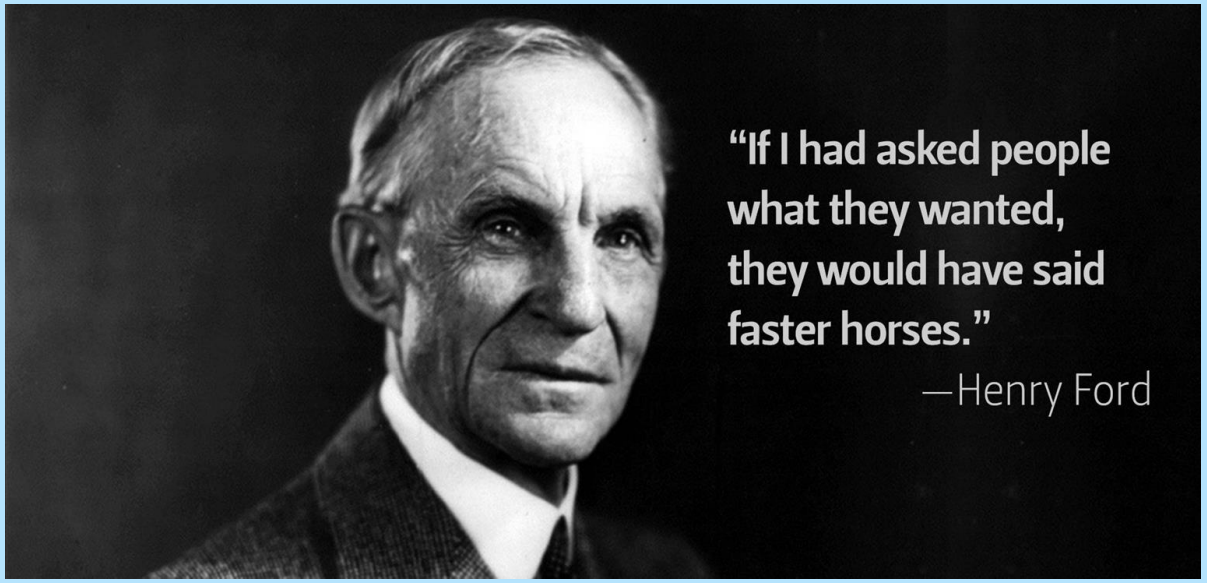

Rakta

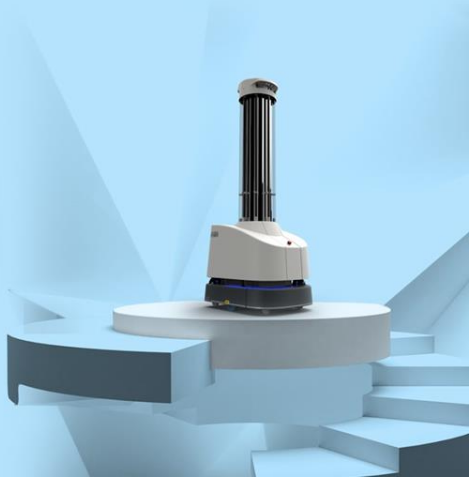
The Future

The Future

- More usage of innovative procurement - not only nationwide, but European wide
- Bring together experts & technology
- Integrate forward looking technologies for a better tomorrow (Covid pandemic…)
- Make public authorities connect with innovative solutions

- **Wishlist**
  - Update the standards of applying UV-C - autonomous UV-C!
    - Why did the EU-C select?
    - Someone needs to be 1st movers





WELCOME TO THE REVOLUTION IN UV-C DISINFECTION TECHNOLOGY

Thank you kindly

for the opportunity to present

Jacob Mortensen
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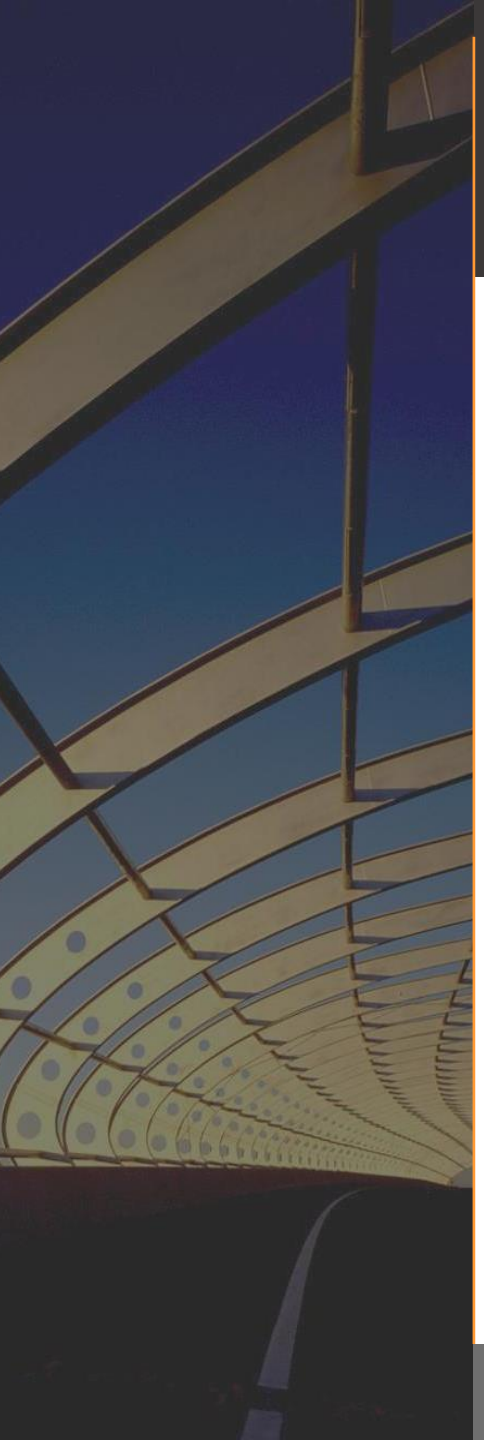
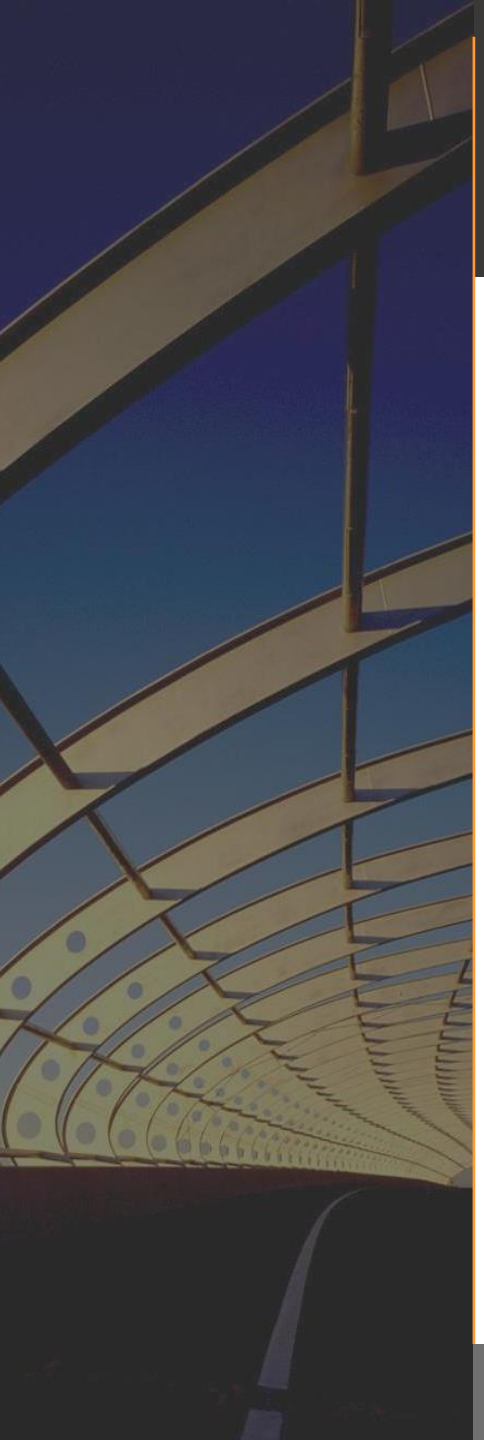
+ 45 20 45 00 18

www.uvd-robots.com



Q&A



Closure

Conclusions, recommendations & future events

Stephan Corvers
Corvers Procurement Services BV

Strengthening EU Strategic Autonomy and Resilience through Innovation Procurement
16 November 2021

Conclusions and Recommendations

- **Perform more R&D procurement on strategic key technologies:**
  - avoid becoming overly dependent on non-EU suppliers
  - require R&D to be done in Europe: it gives vendors first mover advantage and ensures that there will be vendors in Europe who can deliver solutions.

- **Use multiple sourcing:** it increase a group of suppliers that can deliver solutions, reduces supplier lock-in, and thus increase resilience in case of supply chain shocks.

Conclusions and Recommendations

- **Leave IPR ownership with suppliers in procurement:** making this the standard approach in Europe would enable more vendors to commercialise/offer solutions to procurers, on condition that vendors will keep a significant part of product commercialisation in Europe (e.g. minimum 50% of the production).
  - Allow vendors only to do 'exclusive' licensing or transfer of IPR/results to non-EU players after approval of the procurer.
  - Keep the right to call back IPR in case of mergers/acquisition of contractors by non-EU players.
  - Keep the right to call back the ownership of IPR/results, in case of non-compliance with any of the place of performance, control from Europe, commercialisation, IPR, security etc. obligations (e.g. EU blockchain PCP)

Conclusions and Recommendations

- **Announce your mid-to-long term procurement needs more in advance to the market** to alert all actors in the supply chain to get ready to provide solutions (e.g. climate neutral mobile phone procurement example)
- **Introduce blockchain in your supply chain** to make it traceable where supply chain issues start emerging
    - use AI to do early detection / prediction of supply chain issues. As soon as potential issues emerge, look for adding alternative vendors to your supply chain.

Conclusions and Recommendations

- **Use WTO GPA exemptions** when allowed (e.g. security, public health etc.):
  - use possibilities to limit access to the procurement to vendors that are controlled from Europe and require contractors to source strategic components from Europe
- **Require compliance with:**
  - standards / certification requirements that are used in Europe
  - environmental / social requirements that are typical for Europe
- **Make (critical parts of) the procurement subject to confidentiality obligations**
- **Require that all (personal) data is processed, stored and handled in Europe**
- **Punish vendors that use illegal subsidies** to underbid the price to win the procurement

Future events

Topic	Date
The Management Perspective on Innovation Procurement of data driven solutions	15-12-2021
Security: dual use approach & NIS Directive	13-01-2022
Lessons learned from successful innovation procurement projects	08-02-2022

More information on: www.eafip.eu/events/webinars/upcoming-webinars/

3rd CALL OF 2021-2022 IS OPEN NOW!

Apply for free assistance

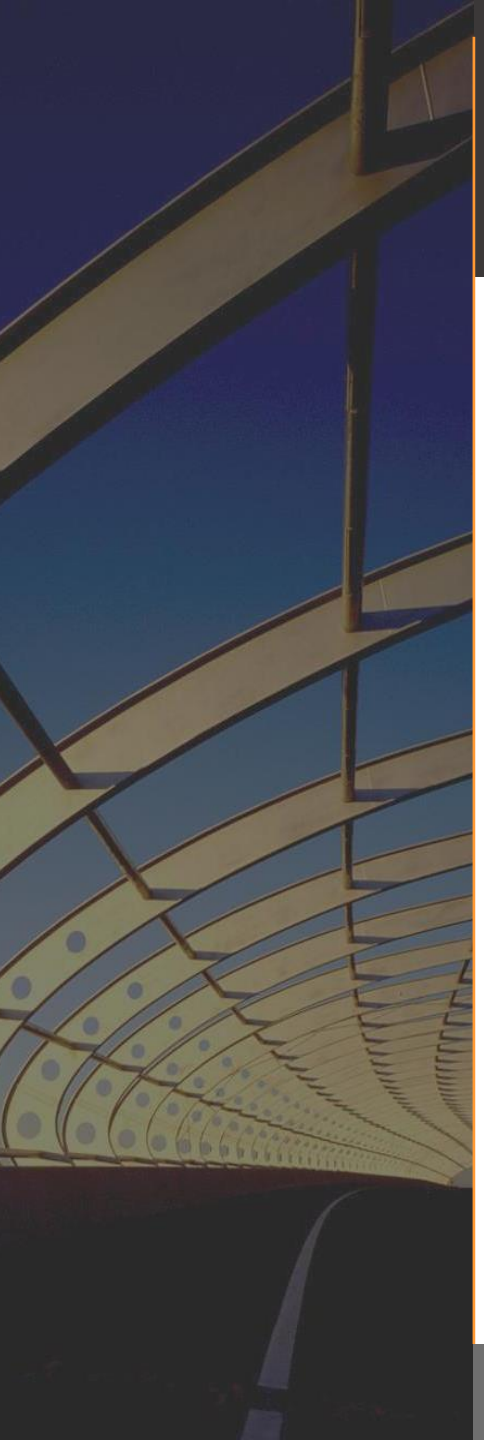
Deadline 3rd call - 11 January 2022

https://ec.europa.eu/eusurvey/runner/EAFIP2021

EAFIP call to apply for free assistance

opens every 3 months

Call	Launch date	Deadline
1st Call	25th March 2021	25th June 2021
2nd Call	25th June 2021	25th September 2021
3rd Call	**27th September 2021**	**11th January 2022**
4th Call	12th January 2022	15th April 2022



Poll

Thank you for your attention

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For any questions regarding EAFIP-Assistance and/or applying for free assistance, please contact:

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WEBINAR WORKSHOP

Strengthening EU Strategic Autonomy and Resilience through Innovation Procurement

16 November 2021

Q&A

1. **Is the current strategic autonomy and resilience through innovation procurement failing if our EU27 education system does not deliver the "engineering" talent need to lead, create, design and engineering innovations? Etc. USA and China have software engineering education but Europe does NOT.**

   Indeed, one of the challenges of European autonomy and resilience is to attract expertise and relevant skills to the European Union. This is also applicable to innovation and the development of ICT-related solutions, where may be a talent gap that needs to be addressed. The pool of workers is not enough to cover the demand, and thus a clear policy should be designed to provide the needed skills and foster the development of new companies in Europe. Nevertheless, Europe is leading the R&I for Green transition according to the Science, Research and Innovation Performance Report of the EU 2020 (SRIP). Science, Research and Innovation Performance of the EU 2020 (SRIP) - Publications Office of the EU (europa.eu)

2. **What is the risk of "cognitive & talent gap" on future of strategic autonomy and resilience through innovation procurement?**

   Human (cognitive) talent is essential to adapt and advance towards more autonomy and resilience. The risk of lacking capabilities is to increase the dependencies and lessen the ability to thrive.

3. **How can we help European companies? We aren't allowed as public government to discriminate.**

   R&D services (under certain conditions) are in principle excluded both from the scope of the European Public Procurement Directives and from the Government Procurement Agreement (GPA), but must observe the principle of non-discrimination as stated in the TFEU. Having said this, Member States have different possibilities in order to promote European autonomy:

   a) They can decide whether or not their public buyers may allow economic operators from third countries to participate on defence and security grounds. This should be clearly indicated in the tendering documents.

   b) Public procurers can set clear requirements to comply with, for example, environmental and social standards.

c) In the field of Defence, public buyers can also require economic operators to provide a certification to demonstrate their capability to comply with obligations regarding the export, transfer and transit of goods associated with the contract; ensure the security of the supply chain during the execution of the contract; or their commitment to provide with all specific means necessary for the production, in the event that the tenderer is no longer able to provide these supplies. They can also open up the supply chain by including subcontracting requirements.

d) Public buyers operating in the water, energy, transport and postal services sectors can reject tenders for supply contracts, if the proportion of the products originating in a third country exceed 50 % of the total value of the products constituting the tender. Alternatively, they can allow the participation of these bids, but have to give preference to bids in which the proportion of the products originating in a third country is below the 50 % threshold. Nevertheless, this possibility is limited to third countries that are not covered by the GPA or another trade Agreement.

4. Is the current innovation procurement too much "played" around "legal views" lacking engineering management and leadership?

The technical and engineering aspects, along with a solid and flexible legal framework, are essential to carry out an innovation procurement procedure successfully. They are complementary and the effort should focus on creating an ecosystem of legal certainty and professionalisation that encourages both contracting authorities and economic operators to engage in developing innovative solutions. Professionalization and interdisciplinary teams are key for successful Innovation procurement projects.

Although the European Commission has stressed in numerous occasions the importance of ensuring a proper level of professionalisation in the public sector, and particularly on the public procurement domain, the real implementation of this strategy in practice lies in national innovation strategies and the actions carried out by contracting authorities. To support the public buyers´ staff during the preparation and implementation of Innovation Procurement projects and in order to understand and assess the technical aspects of the innovation procurement and the solutions available on the market, contracting authorities are encouraged to carry out a state-of-the-art analysis and build a business case considering the expected costs and benefits of starting a PCP/PPI.

5. How the "ball park" architecting strategies should be used strategically in PCP "tender design phase" to gain maximum strategic sovereignty and long-term IPR impact?

The preparation phase of an innovation procurement is fundamental. The needs analysis and assessment should be clearly defined at the initial step. This can be done by formulating the needs as functional requirements.

6. How important it is that the DIH activities drive innovation with PCP activities and mission rather than "science" without commercial outcomes?

First of all, it is important to bear in mind that public procurement aims to purchase the goods and services needed to carry out public tasks and satisfy public needs. Thus, the acquisition of an innovative solution has the purpose of improving the quality and/or efficiency of the public services.

When starting a Pre-Commercial Procurement (PCP), contracting authorities purchase R&D services to speed up the development of best possible solutions from the market, and

compare alternative solution approaches from different technology vendors in parallel. It allows the public sector to obtain high-quality products that really meets the public needs at a reasonable price by providing early customer feedback, as well as reducing the risk of failure in large scale follow-up PPI procurements.

From the suppliers' perspective, innovation procurement provides public investment and mitigates risks of innovation, facilitating the access of SMEs to the public procurement market and attracting financial investors for firms. It also tackles the gap between public buyers and economic operators, so they can better understand each other's needs.

7. What is the biggest "obstacle" that PCP is not used in Europe by European EU27 member states?

There are several barriers that need to be overcome to achieve a wider implementation of innovation procurement in Member States, such as:

- Risk-averse public sector culture and budget constraints.
- Lack of incentives for engaging in innovation procurement.
- Learning and switching costs for potential end-users when adopting new solutions.
- High costs of the first batch of innovations (benefits come with time after the investment).
- Lack of experience to articulate advanced technological requirements.

These barriers can be addressed by defining an innovation procurement policy, which works as a crucial incentive for public procurers to engage in innovation procurement. It provides a policy and support framework that creates the incentives for procurers to put modernization of their public services as strategic priority, provides support in creating the buyers' groups that are needed to create enough demand pull, and trains and assists them in market and cost-benefit analysis to identify those innovation procurement opportunities that will bring clear return on investment for the procurer.

Furthermore, it is crucial to have a clear political commitment to implement innovation procurement and mechanisms to monitor and assess the working of the innovation procurement policy.

8. Can you provide an example of how the subject matter of the contract can refer to environmental standards?

Formulate requirement of, for example, Nearly Zero Energy Building Standard 'Nearly Zero Energy Buildings' means a building that has a very high energy performance. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby.

9. How to deal with market constraints, such as the need of components manufactured in, for instance, China?

Looking for alternative materials based on functional requirements. It is important to take into account the dependencies and try to use Value engineering methodologies - whose origin goes back to the times of World War II and the scarcity of materials.

10. **To what extent do you see the agriculture and fisheries sector as a sector that could contribute to increasing Europe's autonomy and resilience trough PPI? (For Lieve Bos – EC, DG Connect)**

The agriculture and fisheries sector are crucial to ensure food security for all EU citizens and avoid dependencies on third countries. Moreover, the crisis of COVID-19 and climate disruptions have demonstrated the need to improve the resilience and sustainability of food systems.

To achieve this objective, it is essential to invest on research and innovation to ensure the long-term production of sufficient food in a sustainable and fair manner. Innovation procurement is an excellent mechanism to help contracting authorities to decide which is the better solution to satisfy the public needs and contribute to Europe's autonomy and resilience, by involving the private sector and acting as a first customer of a solution that might be implemented through Europe.

11. **Did you take European autonomy into consideration when drafting your technical specifications? Did you allow to participate companies from any country in all the components of the procedure? (For Martina Weimert – EPI Company)**

European autonomy was considered from the start in the Request for Information (RFI). The initial RFI minimum requirements comprised the demand for datacentres in Europe and the adherence to European legislation (e.g., GDPR, NIS directive). These requirements evolved and got more emphasis with every step of the following Request for Proposal (RFP).

12. **How did you ensure European participation? What kind of dissemination channels do you recommend? (For Martina Weimert – EPI Company)**

An important aspect is knowledge of the payment market and about key players with state-of-the-art products. Knowledge was ensured by staffing EPI with payment experts from the participating shareholders (banks and payment service providers), market research and consultation of external experts. EPI used various technical dissemination channels, and the first step was to announce the RFI on EPI's Website plus a press release.

13. **Do you feel that political commitment was necessary for the EPI initiative to be launched? (For Martina Weimert – EPI Company)**

Political commitment is one factor that encouraged the initiative to be launched, but which was not the only reason for its start. In the course of the initiative the importance of political commitment grew and became an important factor.

14. **Did anything go wrong in the process and what can we learn from it? (For Martina Weimert – EPI Company)**

The whole process had to be driven in a very tight timeframe with a limited group of experts. These limitations (time and resources) implied risks and produced problems that had to be addressed but were finally managed. This management was based on early detection and timely procurement of necessary support. What can be learnt – not only from problems we encountered:

- All internal stakeholders need to be actively involved from the start.
- The overall strategy must be clear when starting the process, strategy must be aligned with internal and external stakeholders, esp. within management.

- The process must be based on an open approach, which includes the ability to adjust and respond to a potentially rapidly changing environment, with changes coming from – for example – national/European regulation, an evolving competition and evolving market standards.

15. Do you feel that EU PCP structure and funds were key to further develop your solution and to avoid the valley of death? (For Jacob Mortensen – UVD Robots)

Yes, the PCP structure was an important element in developing the solution and preparing it for commercialization. Especially for a start-up it enabled us to get the funding for developing the solution, but also work with an end-user to develop it in the right way. Working with end-users is a key element in our way of developing robots, but getting their resources and commitment is not always easy. So, the PCP combined financial support and resources from the end-user. Of course, there are probably also things that can be improved, like easier administrative procedures.

16. Can we expect for germs/bacteria to evolve and become UV-C resistant? (For Jacob Mortensen – UVD Robots)

Each year in the European Union, over 4,000,000 patients acquire a healthcare-associated infection (HAI). These infections are estimated to contribute to roughly 110,000 deaths across Europe, along with substantial morbidity and cost for health systems. At least 20% of the HAIs are considered to be avoidable through better infection prevention and control.
The dramatic increase of antimicrobial resistance makes it necessary to act urgently to remedy this situation. UVD robots have the technology and expertise to kill germs (bacteria, viruses, and other microorganisms that can cause infection and disease) by using UV-C light, the technology was developed directly by a request from the Danish Healthcare Authorities looking for innovative solutions to bring down HAIs. Unlike the ever-increasing antimicrobial resistance - bacteria becoming resistant to antibiotic/drug treatment - there is no evidence whatsoever, until this point of time, that implies that pathogens may evolve and become resistant to ultraviolet germicidal irradiation (UVGI).

17. Why did you decide to have multiple spin offs for your 3 different robots? (For Jacob Mortensen – UVD Robots)

The commercialisation model for the 3 different robotics are different, and so are the target markets. Therefore, each robot requires a specific knowledge about these markets. So, Blue Ocean Robotics works as a mother company, ensuring all the back-office functions like marketing, HR, finance, R&D and manufacturing, while each spin off consists of commercial and technically skilled people, with deep knowledge about the products and core markets.

Should you have any questions relating to the subject of this webinar and/or innovation procurement, please contact us through info@eafip.eu