

# Ports 4.0

Guide to participate in the port-logistics  
innovation fund's call for proposals



Port de Barcelona

Puertos del Estado







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## What is Ports 4.0?

The Ports 4.0 capital fund is the corporate open innovation model adopted by the **Spanish Port System** and the **Spanish Port Authorities** to attract, support and facilitate the application of talent and entrepreneurship to the Spanish public and private port-logistics sector in the context of the 4th industrial revolution.

Its main objective is to actively **promote and incorporate disruptive or incremental innovation** as an element of competitiveness, efficiency, sustainability, safety and security in the Spanish port-logistics sector, both public and private, in order to facilitate its transition towards the 4.0 economy.

**Ports 4.0 encourages the creation** or consolidation of a network of emerging companies, **start-ups, spin-offs** or new business lines in the field of technology in existing companies that develop innovative products, services or processes for the port logistics sector with a market orientation.





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## What is it and who is it for?

**The Tradetech Ports 4.0 Fund is aimed at national and international entrepreneurs and companies** with innovative ideas or projects capable of improving the efficiency, competitiveness and sustainability of the logistics-port sector and, in general, of trade, and with the capacity for market development and growth through business projects, including intra-entrepreneurship in the working environment of the Port Authorities and the Spanish Port System.

**The Fund is aimed at financing any phase of the innovation process** (ideation, validation, acceleration, prototyping and growth). It is not only associated with clearly disruptive new technologies, but also with the development of new, more efficient processes and business models based on the verticals of the 4.0 economy, such as:

- . **Big Data, IoT**
- . **Blockchain**
- . **Artificial Intelligence**
- . **Virtual and Augmented Reality**
- . **Machine Learning**
- . **Additive Printing**
- . **Robotics**
- . **Automation**
- . **Analytics**





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# What is Ports 4.0 looking for?

## **INNOVATIVE COMPANIES IN THE SECTOR**

Innovative or disruptive technological solutions for the Spanish Port System and the logistics and port business ecosystem

## **CONSOLIDATED STARTUPS**

Active startups whose technological solutions are applicable to the logistics-port sector or the maritime industry

## **INITIATIVE PROJECTS**

Entrepreneurs, emerging or recently created startups, and spinoffs with solutions applicable to the sector that need to be prototyped or piloted

## **VERTICALS OF INTEREST**

The areas of innovation proposed by the Spanish Port Systems and Port Authorities, as well as the application of the 4.0 technological verticals to the port-logistics sector

## **INNOVATIVE IDEAS**

Organisations with a tangible innovative component

## **DISRUPTIVE PROJECTS**

An innovative product applicable in one or several Spanish ports or port-logistics facilities







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## What does Ports 4.0 offer?

**Grants, a specialised team and the necessary infrastructure to accelerate ideas and projects:**

### **INCUBATOR - ACCELERATOR**

The temporary joint venture KPMG/Innsomnia is an incubator/accelerator associated with Ports 4.0 and has 14 offices throughout Spain. Its objective is to mentor, incubate, accelerate and monitor ideas and projects in the design and implementation phase within the framework of the Ports 4.0 Fund and thus maximise the success rate of the activities financed. It is possible to request advice before the deadline established for Commercial Projects and Ideas and offers assistance to successfully complete the technical and administrative documentation under the terms set out in the public call for proposals.

### **ADVICE AND INCUBATION/ACCELERATION**

What is each one and how do they differ?

- 1. Advice prior to the submission of applications** aims to provide applicants with sufficient knowledge to complete the technical documentation in a satisfactory manner within the terms established in the public call for proposals.
- 2. The post-selection acceleration** and incubation of ideas and projects aims to providing sufficient practical knowledge for successful applicants to maximise their chances of success.



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programme types



Ideas



Projects





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IDEAS

An idea is the **set of actions necessary to achieve an innovative product, service or process** that is in an incipient phase of technological development, associated with a technological maturity level 1 or 2, and whose result must be a proof of concept applicable to one or more agents of the port-logistic community. The expected result will be the realisation of a proof of concept or to reach level 3 of the technological maturity level.

The ideas will be given an amount of **FIFTEEN THOUSAND EUROS (EUR 15,000)** and the possibility to access the incubation services of the idea established in the territorial headquarters of the incubator-accelerator associated with the Fund.

Nomenclature plan to boost entrepreneurship for innovation in the port sector "Ports 4.0"

Level	Description of maturity level	
Level TRL1	Idea bàsica	<b>Idea</b>
Level TRL2	Concepte o tecnologia formulats	
Level TRL3	Prova de concepte experimental	<b>Project in pre-commercial phase</b>
Level TRL4	Validació a nivell de components en laboratori	
Level TRL5	Validació a nivell de components en un entorn rellevant	
Level TRL6	Validació a nivell de components en un entorn rellevant	
Level TRL7	Demostració de prototip en un entorn real	<b>Project in pre-commercial</b>
Level TRL8	Validació i certificació completa en un entorn real	
Level TRL9	Proves amb èxit en entorn real operacional	



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PRECOMMERCIAL

PROJECTS



The projects will have sufficient maturity to be classified in the pre-commercial phase **when the proof of concept has been positively tested** and the product, service or process is at level 3, 4, 5 and 6, so that it can be validated in a logistic-port environment.

The expected result is the positive validation in a real environment or the arrival at level 7 of technological maturity.

Projects involving the allocation of grants of less than **FIFTY THOUSAND EUROS (EUR 50,000)** will not be considered.

For projects in the pre-commercial phase, 60% of the costs associated in the project budget may be allocated to the innovation component with a maximum limit of **ONE MILLION EUROS (EUR 1,000,000)**, and the possibility of accessing the incubation-acceleration services established in the territorial headquarters of the incubator-accelerator associated with the Fund.

It is essential that for the implementation of the prototype or pilot in an operational environment required as a result of the fund, the commitment of a **facilitating agent** is required. A facilitating agent is the Port Authority, concessionaire or public or private agent of the port-logistic community in whose facilities the project is carried out.





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COMMERCIALS

PROJECTS

Projects will have sufficient maturity to be classified in the commercial phase when they are at a development level equal or higher than 7. **The resulting product, service or process must be in a position to be commercialised on a large scale, including at international level.**

Projects in the commercial phase may be financed up to 80% of the costs associated in the project budget with the innovation component up to a maximum of **TWO MILLION EUROS (EUR 2,000,000)**.

In addition, commercial projects will have the possibility to access the **acceleration services** established in the territorial headquarters of the incubator-accelerator associated with the Fund.

Projects involving the allocation of funds of less than **ONE HUNDRED THOUSAND EUROS (EUR 100,000)** will not be considered.

It is essential that for the implementation of the prototype or pilot in an operational environment required as a result of the fund, the **commitment of a facilitating agent** is required. A facilitating agent is the Port Authority, concessionaire or public or private agent of the port-logistic community in whose facilities the project will be developed.



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## Amounts of aid

### Ports 4.0

The amounts of the latest calls for proposals have been:



#### Pre-commercial projects

**€11.25 million.**

**Up to 60% of the costs** associated in the project budget with the innovation component may be financed up to a maximum limit of €1,000,000

#### Commercial projects

**€6 million.**

**Up to 80% of the costs** associated in the project budget with the innovation component of the project may be financed with a maximum limit of €2,000,000



#### Ideas

**750,000 euros**, of which 105,000 euros will go to intra-entrepreneurship. **15,000 per idea**





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## Requeriments

### Ports 4.0

- **Development of a new product, service or process or improvement of an existing technology** with an innovative component and development of its application to the port-logistics sector.
- Promote the **achievement of measurable breakthrough solutions** in one or more of the following areas of port-logistic activity:
  1. LOGISTIC EFFICIENCY IN THE INFRASTRUCTURAL, OPERATIONAL OR SERVICE PROVISION FIELD
  2. ENVIRONMENTAL AND ENERGY SUSTAINABILITY
  3. ANY OTHER INNOVATIVE PROCESS OR PRODUCT WITH IMPACT ON THE PORT SECTOR
  4. DIGITISATION OF PROCESSES AND SMART PLATFORMS
  5. ANY OTHER INNOVATIVE PROCESS OR PRODUCT WITH AN IMPACT ON THE SECTOR
- Have a certain, **demonstrable and clearly defined innovative component**, at least in terms of scope, contents and costs. And that it does not exist on the market both nationally and internationally as an application for the port-logistics sector.
- That the project, solution or service can be made available and tested, implemented or deployed in one or more agents of the logistics-port community.
- **Demonstrate the results of the previous phases** achieved in the case of products or services with a consolidated degree of maturity.
- Reach or exceed the total value of the **costs associated with the innovation component** of the project of 50% of its budget, even if the percentage exceeds the funding limits established for each type of project in these rules.



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Open  
calls

Ports 4.0

# 3rd call for pre-commercial projects

**Check here** the announcement of the call (spanish):

[See the announcement →](#)

## **Application dates**

from 03/10/2022 to 06/13/2022





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# Phases of the open call Ports 4.0

- 1 Preparation of the **documentation** to be submitted based on the requirements of the call.
- 2 **Registration of the application** on the platform provided by the General State Administration.
- 3 Resubmission of administrative documentation (only if required).
- 4 Making a **video presentation** and uploading it to [www.ports40.es](http://www.ports40.es).
- 5 **Evaluation** of the technical documentation and the video presented by the Technical Office and the Instructing Body.
- 6 **Defence of the proposal** by means of a pitch in front of the Instructing Body.
- 7 Waiting for the **resolution**.



An aerial photograph of the Port of Barcelona, showing the city skyline, the harbor, and several large buildings. A large blue text overlay is positioned in the center-left of the image.

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# How to apply for grants from the Port of Barcelona?

Projects applying for Ports 4.0 grants must submit at least **one letter of support as a facilitating agent**. A facilitating agent is the Port Authority, concessionaire or public or private agent of the port-logistic community in whose facilities the project is implemented.

If you would like to request support from the Barcelona Port Authority, please send an email to **ports40@portdebarcelona.cat** with the following information:

- Company name
- Project or idea name
- Contact person
- Description of the project (2 pages)
- Modality (idea, pre-commercial or commercial project)
- Requested amount
- Type of support requested from BPA (facilitating agent, data, networking, etc.)





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## Regulatory basis

**To resolve any doubts you may have, consult the regulatory bases:**

[BOE \(spanish\) →](#)

[Spanish Port System \(spanish\) →](#)



Contact Port de Barcelona **[ports40@portdebarcelona.cat](mailto:ports40@portdebarcelona.cat)**

Contact Ports 4.0. **[info@ports40.es](mailto:info@ports40.es)**

**[www.ports40.es](http://www.ports40.es)**



**Port de Barcelona**