

# VESSELCHAIN

## BLOCKCHAIN FOR SHIPPING

Bringing transparency to the maritime sector

# IS IT WORTH BEING TRANSPARENT ?



# VESSELCHAIN TRANSPARENCY FOR THE MARITIME SECTOR

- Public blockchain registry of each ship where the relevant ship data for the different actors in the value chain are stored:
  - Safety Equipment Reviews
  - Crane test
  - Cold ironing implantation
  - Ship's machinery reviews
  - MARPOL compliance
  - Unused food donation
  - Etc...



# DOCUMENTS AS NFT's ON THE BLOCKCHAIN

- Certificates and interventions: NFT on the blockchain.
- NFT: Version of the document signed with a cryptographic hash.
- Web access to information or via existing IT systems.





# ADVANTAGES FOR STAKEHOLDERS

## PAYING CUSTOMERS

### FOR THE OWNER

- Reputational asset
- Customer acquisition
- Normative compliance
- Impact on the price of insurance
- Facilitates digitization

### FOR SUPPLIERS

- Generation of new leads
- Operations optimization

## FREE USERS

### FOR THE AUTHORITIES

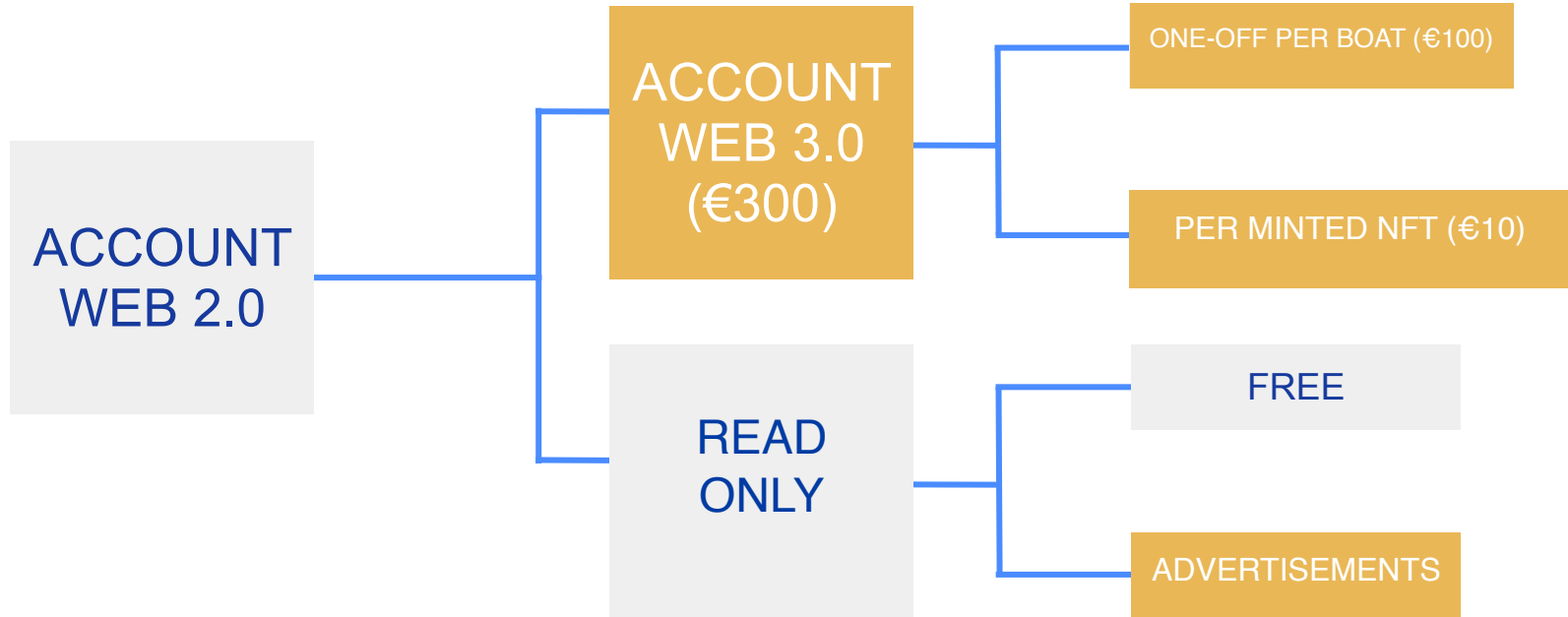
- Reduction of inspections
- Automation of procedures

### FOR CLIENTS

(LOADERS AND PASSENGERS)

- Facilitates purchasing decisions: (sustainability, safety, CSR, etc...)
- Reduced cargo insurance

# SOURCES OF INCOME



# ROADMAP

2021

- Conception of the idea
- Team and advisor training
- Presentation to DigiCirc



2022

- Publication in Tecnonews.es
- Post on weixin.qq.com
- Conception of the back-end in Ignis blockchain



2023

- Completion of the backend API
- Presentation at IAT Canarias
- B-Blue accelerator program



2024

- Obtain seed capital €250 K
- Front-end development
- Validation of the MVP with pilot clients



# CURRENT STATUS OF THE SOLUTION

## IGNIS RESTFUL API (HTTP + JSON)

The screenshot displays a REST client interface for the 'Ardor http API'. The browser address bar shows the URL: `https://testardor.jelurida.com/test?requestTag=BLOCKS`. The interface includes a sidebar with navigation options: ALL, SELECTED (0), Accounts, Account Control (selected), Aliases, Asset Exchange, Blocks, Coin Exchange, Create Transaction, Digital Goods Store, Forging, and Messages. The main area shows the 'getBlock' endpoint with the following parameters:

- block:
- height:
- timestamp:
- includeTransactions:
- includeExecutedPhased:
- requireBlock:
- requireLastBlock:

A 'submit' button is located below the parameters. The 'Response' section shows the following JSON data:

```
{
  "previousBlockHash": "8b3e33e360406cd1a1a742850ae07",
  "generationSignature": "e7a0bf206a43b1028b034e56886",
  "generator": "17599793494812669214",
  "generatorPublicKey": "27c4fa81aaf58d41775287d86e5",
  "baseTarget": "746366466",
  "payloadHash": "e3b0c44298fc1c149afb4c8996fb92427a",
  "generatorRS": "ARDOR-NFAY-XYDA-S24G-H8SBA",
  "nextBlock": "17044516471096706029",
  "requestProcessingTime": 1,
  "numberOfTransactions": 0,
  "blockSignature": "4894896414e1cf875a82E5b4fd07b77c",
  "transactions": [],
  "version": 3,
  "previousBlock": "15090507236284513931",
  "cumulativeDifficulty": "1067066668697768",
  "totalFeeFQT": "0",
  "block": "11671777613177711138",
  "height": 10000,
  "timestamp": 590693
}
```

# TEAM



**BORJA SARRIAS**  
MANAGEMENT OF BUSINESS &  
TECHNOLOGY

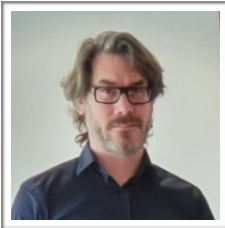


**FRANCISCO SARRIAS**  
TELECOM ENGINEER  
PDD IESE

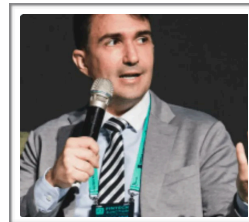


**SERGI DANCES**  
COMPUTER ENGINEER  
BLOCKCHAIN ARCHITECT

# ADVISORS



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PDD ESADE  
BMT REPAIRS

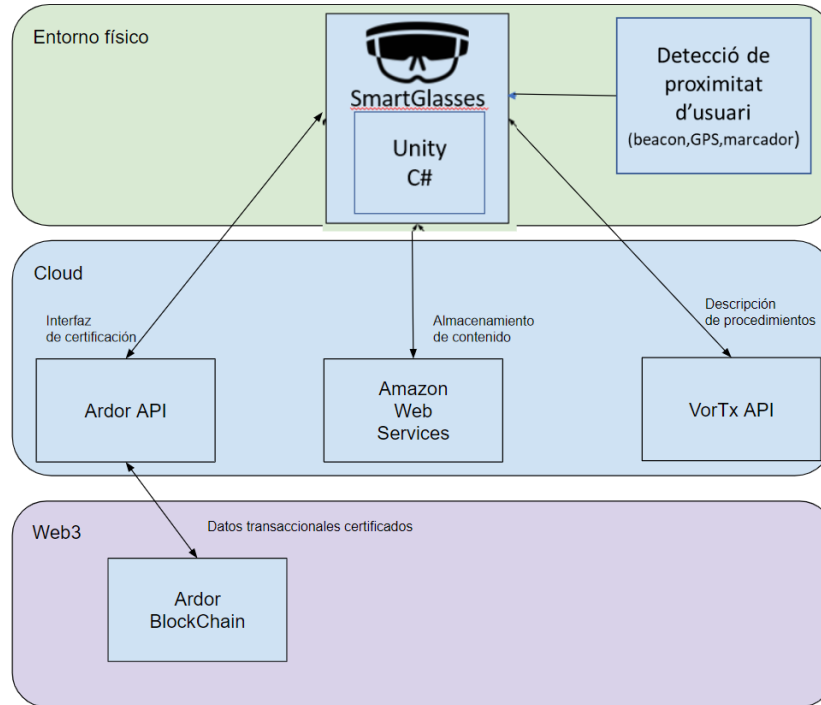


# References



# PantalAR: Port facilities maintenance

It consists of creating an application for Smart Glasses that allows, through Augmented Reality, the execution of maintenance of port facilities and their certification with smart contracts on the Ignis public blockchain.



ACCIÓ

Generalitat de Catalunya

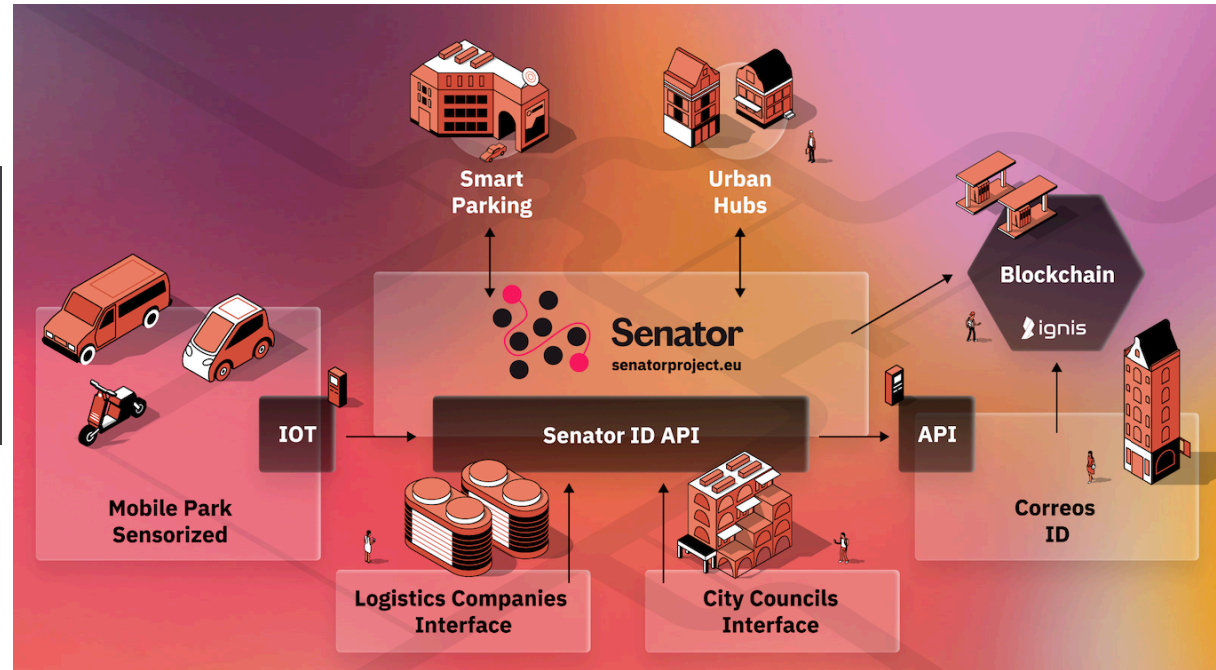
# mooring tokenization

The most appreciated asset in a marina are the moorings for boats, optimizing the occupancy of the moorings is key to the economic success of the marina, for this, flexible price management is ideal because it guarantees optimal income, but doing it transparently is not easy.



# Senatorproject.eu: Logistics and IoT for Smart-Cities

Smart grid operator platform enabling shared, integrated and more sustainable urban freight logistics



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 861540



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Sustainable and smart mobility for all



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# Thank you

Do you have any question?

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