International Port Community Systems Association

IPCSA Foresight Group

PCSs: From Current Practice to Future Possibilities

November 5th, 2026

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Publication of IPCSA's Final Foresight Report



IPCSA
International Port Community Systems Association

Why a Foresight exercise ?

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Chairman's Foreword

When IPCSA decided to embark on its own Foresight exercise, some may have wondered why an association of system operators would spend time imagining the world of 2040, when the pressures of today already keep all of us more than busy. I would like to use these few lines to explain why I believe it was not only worthwhile, but necessary.



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Our members sit at a unique point in global trade. Port, Airport and Cargo Community Systems and Trade Single Windows are where public authorities and private operators meet and where information is shared that would otherwise never be shared. This position rests on something that cannot be bought or quickly built- trust and neutrality. Yet the environment around us is changing faster than ever. Geopolitical tensions are redrawing trade routes and alliances. Artificial intelligence and new data platforms are changing what is technically possible. Cyber threats grow every day, and regulation is shifting in directions that are far from certain. In such a world, reacting well is no longer enough. We need to see change coming and, wherever possible, help shape it.

Others have studied the future of ports and logistics, and their work is valuable. But no one else will look at that future through the eyes of our community, with our concerns, our responsibilities and our knowledge of how data really flows across borders. That is why we chose to build our own Foresight, with our own members and partners, rather than borrow someone else's.

I had the privilege of taking part in the workshops myself, and what struck me most was not any single scenario but the quality of the conversation. Colleagues from very different regions, ownership models and levels of maturity debated fragmentation, data ownership, new financial orders and the future of trade routes with great openness. Their perspectives were different, but they kept arriving at the same conclusions. Trust and neutrality remain our greatest strengths in every plausible future. And our greatest risk is simple: not being at the table when the decisions that shape our sector are taken.

This report does not claim to predict the future. It offers a set of plausible futures, a shared vocabulary for discussing them and a number of concrete recommendations. These include influencing decision-making at every level, taking a global lead on the responsible use of data and future-proofing our platforms. Just as importantly, it gives our members the tools to carry out their own Foresight work, so that this becomes a continuing habit rather than a one-off exercise.

I would like to warmly thank all the participants, the facilitators and the IPCSA Secretariat for their time, their candour and their commitment. I invite every reader to use this report not as a conclusion, but as the start of a conversation within your own organisations and communities, and with us.

Javier Gallardo
Chairman, International Port Community Systems Association (IPCSA)

Why Foresight rather than any other strategic tool:

Foresight is a process of looking beyond the immediate issues that businesses can see or predict with some certainty. It is about looking at possible future worlds and scenarios and then reflecting how these affect the industry and businesses represented within the study, in this case PCS operators.

The purpose of the Foresight initiative

IPCSA decided to carry out the Foresight study for 2 reasons:

01. To provide its members with strategic information that can help with future thinking.

02. To provide members with the tools to carry out their own Foresight initiatives in the future.

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The IPCSA Foresight exercise

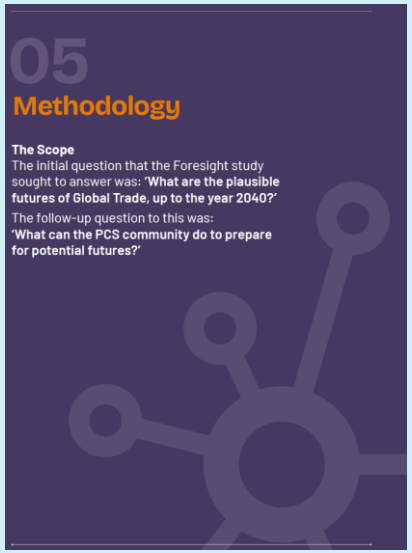
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Methodology

The Scope

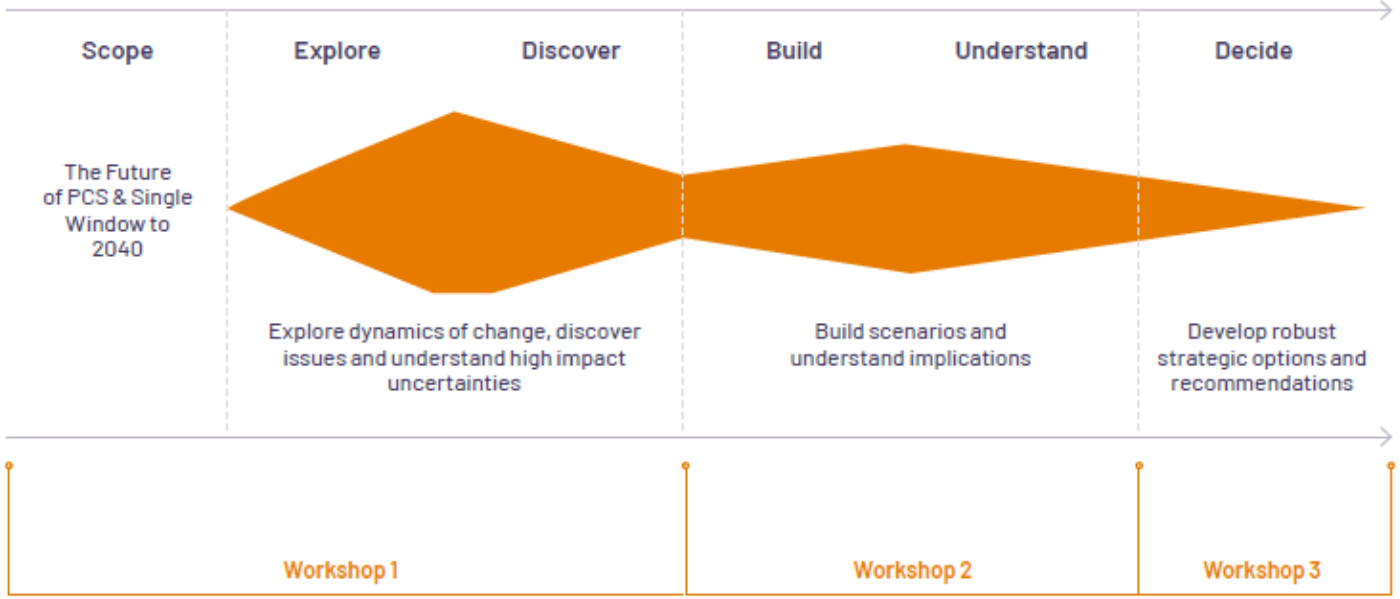
The initial question that the Foresight study sought to answer was: **'What are the plausible futures of Global Trade, up to the year 2040?'**

The follow-up question to this was: **'What can the PCS community do to prepare for potential futures?'**



The Copenhagen Method™

Progression through the strategic foresight process



Workshop 1

Explore dynamics of change to discover critical issues.

Dubai (Kalé Logistics)

Workshop 2

Use these issues to build plausible futures and understand implications.

Casablanca (PortNet)

Workshop 3

Develop strategic options and recommendations.

Rotterdam (Portbase & Port of Rotterdam)



...
all in our well-known open atmosphere !



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Report Recommendations

"You shouldn't try to predict the future, but make it possible."

Antoine de Saint-Exupéry, French Writer

Recommendation 1

Influence Decision Making at National Regional & Global levels

PCSs need to create a map of the stakeholders that influence decisions on data exchange and trade. They can then approach them with some of the futures that emerged through the Foresight process and show how they could work with the stakeholders to create solutions.

Recommendation 2

Take a GLOBAL lead on data use and data exchange

Lead a collaboration of stakeholders to develop a shared framework on data that could include, among other things, establishing the right technological architecture and data governance in the best interests of both public and private entities. This would help define a vision for what "good" data sharing looks like and build collective momentum to continually improve in line with the values already held by IPCSA and its members.

Recommendation 3

Create new service lines through collaborating with other holders of data

Work with other providers or sources of data (large warehousing organizations or ERP developers for example) to provide collective solutions to new and existing customers. This could help PCS operators be seen as more than just a port service provider. Where the port authority and operator are either government-backed or an essential part of government optimisation, foster B2G and G2G cooperation with departments like Customs, Police, and Municipalities.

With new players entering the data services field all the time, it will also be necessary for PCS operators to increase their resilience. To do this they can utilise the knowledge they hold to provide new services and collaborations. Specific recommendations are therefore as follows:

01.
Influence decision making at national, regional and global levels

PCSs need to create a map of the stakeholders that have the greatest reach and impact on the way trade data is exchanged and present PCS operators as necessary partners to work with when shaping if ideas and making decisions. PCS operators, and IPCSA, could even approach decision makers with some of the 'potential futures' that emerged through the Foresight process and demonstrate their value in developing solutions.

02.
Take a global lead on data use

Lead a collaboration of stakeholders in the creation of a manifesto on Data (much like the Agile Manifesto). This could include, but not be limited to, creating the right technological architecture and data governance that is in the best interests of public and private entities.

This would help create a vision of what 'good' data sharing looks like and help generate a collective intent to continually improve in line with the values currently held by IPCSA and its members.

03.
Create new service lines through collaborating with other holders of data

Work with other providers or sources of data (large warehousing organizations for example) to provide collective solutions to new and existing and customers.

This could help PCS operators be seen as more than just a port service provider. Where the port authority and operator are either government-backed or an essential part of government optimisation, foster P2P cooperation with departments like Customs, Police, and Municipalities. PCS can serve as a trusted, neutral party to consolidate data and offer data exchange services sought by government agencies.

04.
Develop professional consultancy & advisory services

PCSs could utilise their ever-growing knowledge and expertise in cyber and data security to offer this as a servi to maritime, logistics and supply chain operators. They co also extend their consultancy services beyond the local maritime port community to include processes, data flows and automation for logistics in hinterland connections and dry ports.

05.
Future-Proof PCS Platforms against Technological Stagnation

PCS platforms designed for EDI-era batch exchange risk slowly losing relevance to real-time, API-first platforms from cloud-native, big tech and blockchain providers.

To stay ahead, PCSs should modernise their services, invest in skills and innovation, and use foresight to monitor new technologies and competitors, while building on their core strengths of trust and neutrality.

Recommendation 4

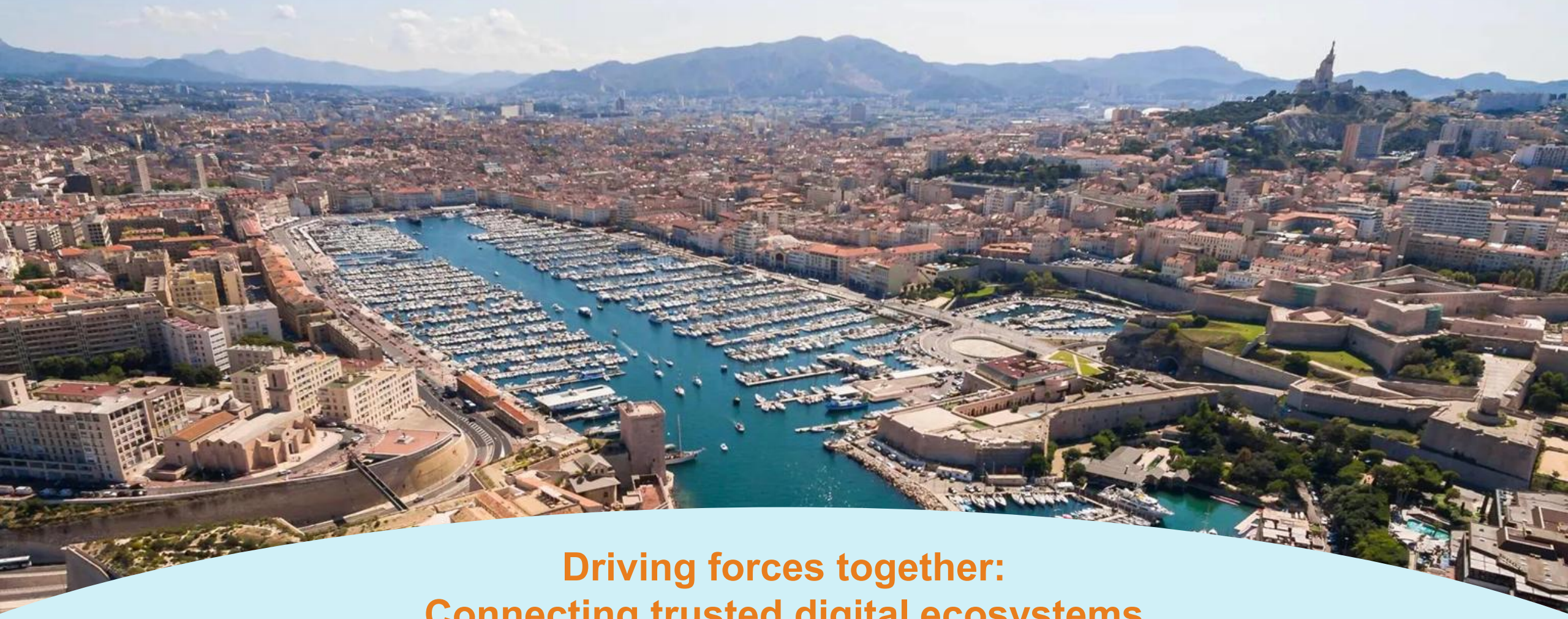
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Recommendation 5

Future-Proofing: What actions are needed to prevent technology stagnation from making traditional port community hubs outdated?

The core risk is that PCS platforms, built for EDI-era batch data exchange, become legacy infrastructure as newer entrants (cloud-native supply chain platforms, big tech logistics offerings, blockchain-based trade platforms) offer more flexible, real-time, API-first alternatives — the danger isn't sudden disruption but slow irrelevance.



Driving forces together:
Connecting trusted digital ecosystems

IPCSA's Annual Members meeting 2026

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Panel session

Insights & reflections on IPCSA Foresight's Final Report

moderator:

- **Nico De Cauwer**, *Secretary General* • IPCSA

panel members:

- **Stephanie van den Berg**, *Portfolio Manager Strategy & Innovation* • Portbase, *Chair of IPCSA Sustainability Working Group*
- **Youssef Ahouzi**, *CEO* • Portnet - IPCSA Regional Representative Africa
- **Rommel Edwards**, *Manager Digital Innovation & Development* • Barbados Port Inc.

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Thanks for your attention

Nico De Cauwer
Secretary General IPCSA

E: nico.decauwer@ipcsa.international
M: +32 475 48 40 03
LinkedIn:

ipcsa.international