



Hexagon's Port Community System

In the rapidly evolving world of maritime logistics, efficiency, transparency and seamless communication are paramount. Ports need to be able to collaborate among stakeholders and optimize the flow of goods and information.

A Port Community System (PCS) – an open electronic platform that connects multiple systems operated by organizations that make up a port community – enables the intelligent and secure exchange of information between public and private stakeholders.

By integrating and optimizing the complex network of activities and stakeholders within a port, a PCS plays a pivotal role in driving the competitiveness and growth of global maritime trade.

Hexagon's PCS

Hexagon's PCS is a robust and integrated platform. It's powered by HxGN Connect – a cloud-native, real-time incident center as a service – and designed for easy integration with other systems. **As a flexible component of a Maritime Single Window (MSW) solution, it allows small and medium ports to optimize operations.**

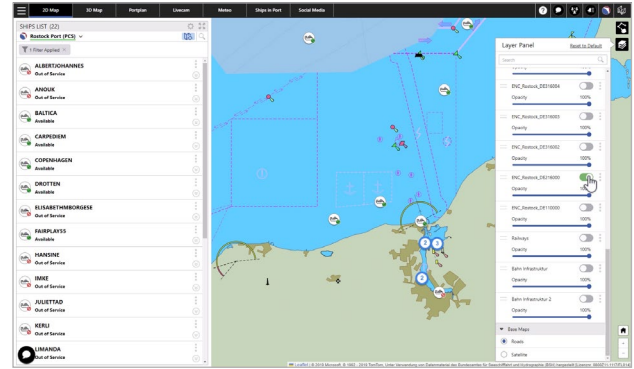
It connects various stakeholders – such as port authorities, terminal operators, shipping lines, freight forwarders, customs and other service providers – into a cohesive and collaborative ecosystem.

Benefits

- **Enhanced efficiency and productivity:** Better allocate resources, decrease turnaround times and minimize bottlenecks by automating port processes and leveraging real-time data
- **Improved communication and collaboration:** Access shared information with a centralized platform for all port stakeholders for more efficient and coordinated operations
- **Robust common operating picture:** Add high-value data sources like Automatic Identification System (AIS), nautical charts, sensors, video streams and any geographical data and share it via the centralized platform in real time as appropriate
- **Increased visibility:** Track ships, cargo and containers in real time, sharing accurate, timely data to improve decision-making and stakeholder trust
- **Boosted security and transparency:** Safeguard sensitive information with prioritized data security and robust protocols and promote transparency by facilitating the secure exchange of crucial data between authorized parties; each party has control over the data it wants to share with other parties
- **Realized cost savings:** Enjoy lower operational costs and enhanced economic growth by minimizing labor, reducing errors, speeding up processes and facilitating smoother trade; there's also no big upfront investment in IT infrastructure because Hexagon's PCS is deployed in the cloud

- **Sharpened competitive edge:** Scale and adapt easily to handle increasing cargo volumes, evolving logistical needs and future technological advancements, thereby maintaining competitiveness
- **Attainable environmental objectives:** Monitor and mitigate the impact the port has on the surrounding environment to meet sustainability goals

As a cloud-based SaaS offering, Hexagon's PCS can be deployed rapidly. Its benefits collectively empower ports to operate more efficiently, adapt to industry changes quickly and deliver superior service to stakeholders in the global supply chain.



An Electronic Navigational Chart (ENC) is visualized in Hexagon's PCS.

Hexagon's PCS powered by HxGN Connect

Because Hexagon's PCS is built on HxGN Connect, data from different stakeholders can be shared via a central platform in real time. The resulting common operating picture gets even richer with the additions of other high-value data sources. Those include AIS data with important vessel-related information, nautical charts, sensor information (water level, weather, etc.), video streams and any geographical data.

The idea behind this platform is that none of the actors must be the center of attention or take sole responsibility. Rather, the system can be adapted to the circumstances and specific processes in a port. Hexagon's PCS not only offers an easy-to-use interface that combines any number of data sources in one display, but also offers channel functionality – separate collaboration channels can be automatically opened for each ship, allowing only relevant stakeholders to exchange information and documents in a targeted and secure manner.

Features

- **Central information and data hub:** Serves as a centralized platform for sharing real-time information and data among stakeholders, enhancing collaboration and decision-making
- **Common operating picture:** Integrates various high-value data sources such as AIS, nautical charts, sensor information, video streams and geographical data, creating a comprehensive view of port operations
- **Communication channels for all stakeholders:** Establishes dedicated channels for each ship, facilitating information exchange and document sharing among all involved parties

As global trade continues to grow and demand for sustainable shipping solutions increases, the role of Port Community Systems in the shipping industry will only become more important. By providing a unified platform for all stakeholders and enabling data-driven decision-making, Hexagon's PCS helps create a more efficient, sustainable and resilient port call environment.

[Find out more](#)

Hexagon is the global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications. Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Safety, Infrastructure & Geospatial division improves the resilience and sustainability of the world's critical services and infrastructure. Our solutions turn complex data about people, places and assets into meaningful information and capabilities for better, faster decision-making in public safety, utilities, defense, transportation, government and physical security. Learn more at hexagon.com and follow us [@HexagonAB](https://twitter.com/HexagonAB).

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