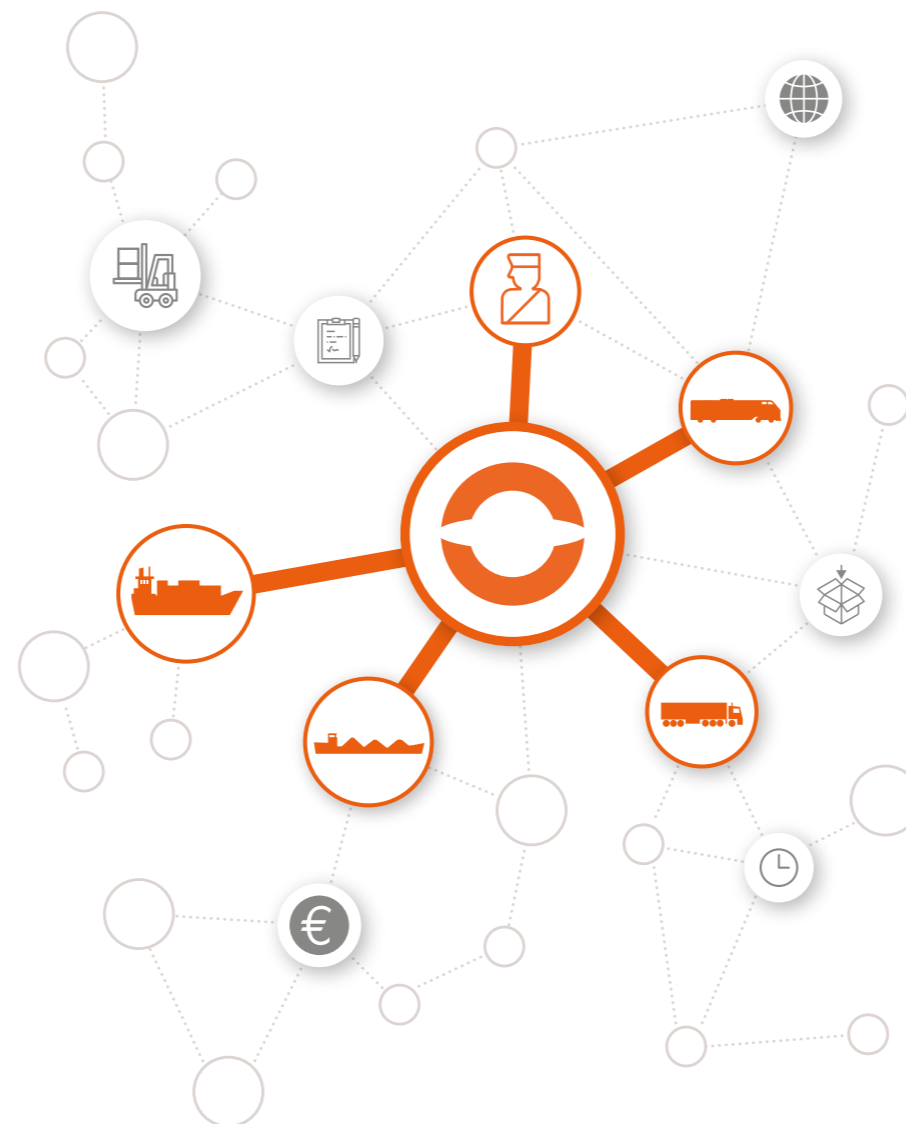# portbase®
corporate story

Portbase makes logistics chains that run through the Netherlands stronger and smarter. To this end, more than 100 employees work each day to improve the competitive position of the Netherlands. Portbase is a non-profit organisation that is active at the crossroads between IT and Logistics. We operate as an IT company and as a logistics service provider. We are both and that is what makes us strong. Portbase knows the market, the players and their interests. We connect parties, initiate chain agreements and work together on solutions that make the Dutch ports and their supply chains attractive for companies looking to transport cargo via Europe.

The foundation for paperless ports

The foundation for the current success was laid 20 years ago when a start was made on the digitisation of the *core processes* and accompanying paper and communications flows in the Dutch ports. From that moment on, it became possible to supply data for various reports and notifications between companies and with government bodies in an automated fashion. Due to the different notifications and the increase in data and applications, the reuse of data quickly became part of the automated process. The smart reuse of data resulted in fewer errors and allowed the various parties to minimise their liability and administrative burden. This led to a tremendous acceleration in logistics and in the emergence of a central point where data could be exchanged (*digital infrastructure*). The term *paperless ports* was born and organisations were able to operate faster, smarter and more efficiently through the use of Portbase services.

To this day, Portbase ensures that all the core processes in all Dutch ports function properly. Tens of thousands of users are connected to the Port Community System (PCS); in seaports and inland ports, they benefit from the service provision of Portbase on a daily basis. Whether this comprises mandatory notifications to the Harbour Master and government bodies, data exchange between companies or the management of rights and access to data; Portbase allows more than 4,700 companies to conduct business in a paperless manner in the supply chains via all Dutch ports.

> **Portbase creates a connection between our community, new players and the logistics ecosystem.**

Data and connectivity; in control and secure collaboration

However, the logistics sector is rapidly changing. The data in and coverage ratio of the Port Community System is of great value to any party interested in innovating and improving logistics. Data from the core processes constitutes the starting point for new, smart solutions. Portbase stimulates this development and, with the permission of the owner, makes it possible for companies that require data and connectivity to use this information. The national coverage and the existing connections of the Port Community System ensure that these smart, innovative solutions have an optimum reach. In this way, Portbase creates a connection between existing customers (our *community*), new players and the logistics ecosystem.

Furthermore, the Port Community System also provides services itself as a digital infrastructure. Existing customers, but also new players such as platforms, software suppliers and other communities are able to easily, quickly and securely share data with each other, irrespective of their mutual relationship. Portbase makes sure that rights and access are properly arranged (Identity & Access management). Other examples of (infra) service provision that organisations can purchase via Portbase include financial settlement and data storage.

global traders

customers

portbase®

"How can we remain relevant as Dutch ports?"

Data hub for international logistics

Logistics does not stop at national borders. Ports are part of a movement in supply chains in which transparency and integrated total solutions are the standard. *Open data* and co-creation provide new innovations to existing services. And the emergence of global platforms that offer insight into the entire supply chain poses us with the question "How can we remain relevant as Dutch ports?".
One of the roles of Portbase is to ensure that the Netherlands constitutes an attractive logistics *'data hub'* for major international players who want to do business in and via the Netherlands. These platforms are seeking out locations in Europe where the physical,

but certainly also the digital infrastructure, has been properly organised. They want to connect to systems in locations where local legislation is regulated and where existing networks have good geographical coverage for fast and efficient transport to and from the hinterland. Together with its community, Portbase has accomplished this. A *'digital twin'* of the physical port emerges that ties chains to itself through trust, connectivity and the availability of data. Due to our neutral position (non-profit and operating for the benefit of all parties in the Dutch ports), we are able to fulfil this role and allow large players to enter our market in a controlled manner.

"With its PCS, Portbase is currently already functioning as the state-of-the-art digital infrastructure of the Dutch ports."

Portbase and the government

Portbase has already been exchanging data with government systems such as those of the Harbour Masters, Seaport Police, Dutch Customs, the Ministry of Infrastructure and Water Management (including Rijkswaterstaat, the Directorate-General for Public Works and Water Management), the Human Environment and Transport Inspectorate and the Dutch Food and Consumer Product Safety Authority for many years. Together, they constitute the neutral data nodes in Dutch logistics. The good cooperation between the systems is a stepping stone that allows for the development of public-private initiatives that create added value for Portbase, the business community and the Dutch government alike.

In order to tackle the challenges in domestic logistics, it is important that logistics data be shared intensively and securely. Not only between parties that already have a relationship with each other, but also between parties that do not yet know one another. After all, the

logistics chain comprises many links that are dependent on each other but that do not always have a direct relationship. The Dutch government recognises this; by means of the Digital Transport Strategy Freight Transport of the Ministry of Infrastructure and Water Management (I&W), it is working towards a *'Basic Data Infrastructure'* (BDI). shared by the logistics sector and the government. The primary aim in this respect is to safeguard the competitive position of the Netherlands and to stimulate trade.

The position of Portbase is quite interesting regarding the establishment of a BDI. With its PCS, Portbase is currently already functioning as the state-of-the-art digital infrastructure of the Dutch ports. Our neutral role and non-profit motive make the PCS an ideal landing place within the BDI which the government aims to implement in the coming years. By bringing together data from government bodies and logistics companies, more and more insight based on real-time data is created. This increases the overall insight into the logistics chain (*supply chain visibility*). The more insight is created through up-to-date and improved data, the more adequately the government is able to make risk analyses and the smoother government bodies and businesses are able to operate. In addition, operating in a less fragmented manner and setting up a well-secured system for data exchange better safeguards us against cybercrime.

"A Supply Chain Cockpit position ultimately ensures that the Netherlands is 'at the wheel of logistics'."

Vision on logistics of the future

Portbase has identified another development for the future as well. As a logistics 'data hub', good supply chain visibility will eventually make it possible for the Netherlands to better manage cargo flows that pass through our country. This kind of control for example makes it possible for modes of transport to be loaded more optimally and for logistics players to strike the right balance between modes of transport and routes to the final destination. It also means that the Dutch logistics sector can start to selectively manage goods flows, with Portbase facilitating control for all parties involved.

The overview position from which such control over goods flows is exercised is called the *Supply Chain Cockpit*. A Supply Chain Cockpit position ultimately ensures that the Netherlands is 'at the wheel of logistics', has a steering role in logistics movements throughout Europe and maintains a central position in global trade. Furthermore, it strengthens our position as an attractive location for logistics and supply chain management and shows that the Netherlands is an expert in logistics and digitisation. As a supply chain cockpit, we can tackle challenges such as retaining our competitiveness, sustainable growth, a level playing field, efficient control, data security and cyber security. In this way, we ensure that our transport and logistics sector continues to be among the best in the world in the future as well.

Glossary

Community
All parties that are affiliated with Portbase are part of the community (often also referred to as the port community).

Basic Data Infrastructure
Federated network of platforms that enables companies involved to share data with one another in a secure and controlled manner through their own systems.

Data hub
Central point with lots of data that is interesting for companies, institutions and other organisations to do (digital) business with.

Digital infrastructure
Counterpart to the physical infrastructure such as roads, rail and canals. The digital infrastructure creates a secure environment that allows for fast and efficient operations using data.

Digital twin
A digital replica of a physical entity and/or port. By bridging the physical and the virtual world, data is seamlessly transferred, allowing the virtual entity to exist simultaneously with the physical entity.

Core processes
Processes in the port, defined in consultation with (port) companies and government bodies, that ensure that the port functions properly and that are essential to the position of the ports and the use of infrastructure and assets. From arrival to departure, all aspects of the call are linked to processes that ensure a favourable competitive position in relation to other ports.

Open data
Term used to refer to data that is freely available. The conditions under which this data is available are described in licenses and terms of use.

Paperless port
A port in which all processes have been digitised and in which data is no longer transferred using paper documents. Paperless ports offer a faster and more efficient handling process.

Platform play
Companies that are developing into digital platforms and are looking for an active place in logistics to achieve full transparency in their chains. These platforms bring together supply and demand, have a global orientation and are looking for landing spots all over the world. Examples of platforms are Amazon and Alibaba.

Supply Chain Cockpit
The overview position from which digital control over goods flows is made possible.

Supply chain visibility
The insight into the entire (logistics) chain, from start to finish.

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