From Berth to Hinterland

How Infrastructure Drives Terminal Competitiveness

06/2025

To offer an attractive product to the market, ports and terminals must provide state of the art infrastructure – in many ways

What defines a "competitive advantage" with regards to infrastructure

Quayside Infrastructure

World Class Productivity | Quay walls that support STS cranes with 26+ rows outreach, tandem lift capacity, and double trolleys (for automation) - all at maximum draft

Nautical Infrastructure

Access channels and port basins | Unrestricted navigability that allows for access of ULCV class at any time (18m draft | 24/7)

Digital Infrastructure

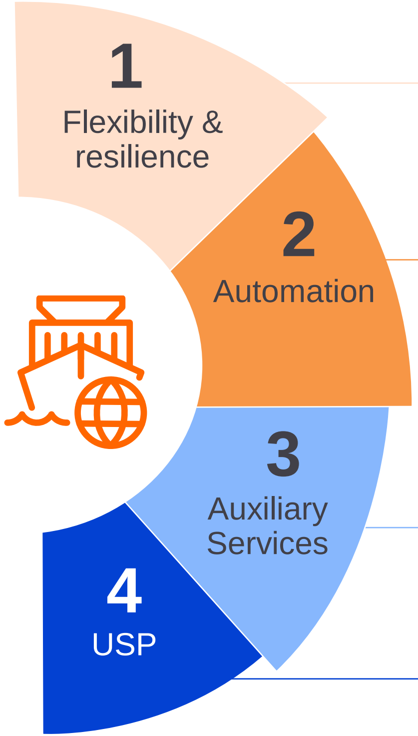
Port Community Systems | Seamless information flow between all stakeholders in the supply chain (customs, terminal, shipping line) reduces dwell time and increases predictability

Hinterland Infrastructure

Multimodal transport corridors | Allowing unrestricted access and connectivity to hinterland markets by means of truck, rail, barge for fast and predictable transit

Beyond hard infrastructure: strategic enablers that strengthen a port's position and give a competitive edge

Additional factors that come to play



Flexibility & resilience The maritime industry is under constant pressure from global and partly unpredictable events (e.g., Suez crisis, Covid, Tariffs, War conflicts). Adjustments in networks, schedules, and volume flows are part of daily operations for any shipping line – ports must adapt flexibly to this dynamic and respond quickly and efficiently. This particularly applies to peak volumes, available capacities, and demand-driven expansion at the right time.

Automation (Terminal) automation aligns many strategic goals that both, shipping lines and port authorities / terminal operators have in common, such as: transition to carbon-neutral operations, improved safety for staff, better use of data and analysis, operational efficiency and, again, resilience.

Auxiliary services Specific capabilities that ports and terminals can offer to shipping lines above and beyond the handling of cargo – such as e.g., access to green bunker (LNG / Methanol), cold-ironing facilities at the berth, reefer infrastructure, ship repair & maintenance

A Unique Selling Point Noone can tick all boxes – what niche or specialty can make a port successful despite certain downsides? Let's take a look

Tangiers can be connected in both, CoGH and Suez route networks making it a highly-attractive location for transshipment hubs

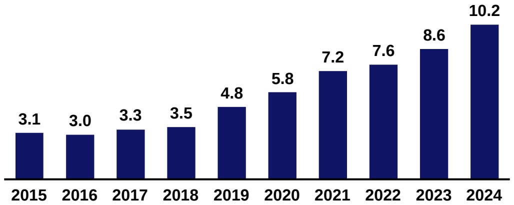
Example Port of Tangiers

- High utilization and occasional congestions
- No further expansion options in existing basins
- Limited potential for domestic (gateway) cargo

- ✓ No nautical deviation on several routes
- ✓ Unlimited draft
- ✓ Favorable framework conditions over ports in surrounding markets

Success factor: Geostrategic location

Tangier Container Throughput [TEU p.a.]



Prince Rupert has managed to become a competitor to Vancouver despite unfavorable location due to a powerful hinterland network

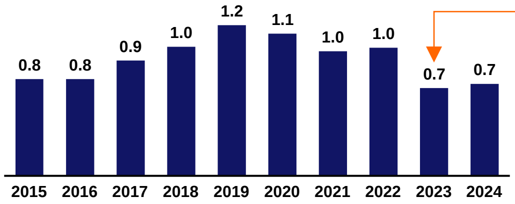
Example Port of Prince Rupert

- ✓ Highly capable railway network towards US markets
- ✓ Beneficial transit times over competitor Vancouver
- ✓ Limited capacity on CA west-coast

Success factor: Hinterland Network

- × Low domestic demand in surrounding catchment areas
- × Exposure to snow and ice (port downtime risks)

Prince Rupert Container Throughput [TEU p.a.]



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Antwerp managed to overcome shortcomings through resilience and skill in the operations field

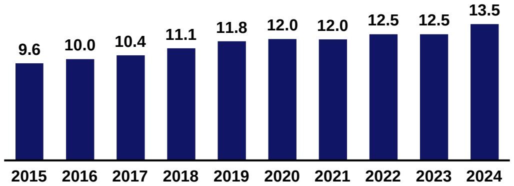
Example Port of Antwerp

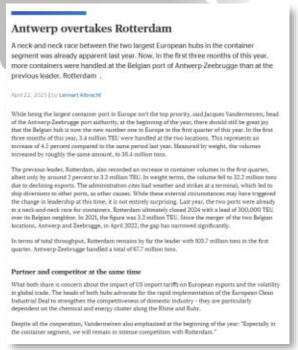
- ✓ Skilled terminal operators with high productivity
- ✓ Stable environment with rdgs. to labor (impact from strikes)
- ✓ Superior port development strategy

- × Draft limitations & longer river passage compared to RTM
- × Lack of automation on most terminals in Antwerp
- × Terminals scattered along river, partly behind locks

Success factor: Resilience & Reliability

Antwerp Container Throughput [TEU p.a.]





Antwerp overtakes Rotterdam

A neck-and-neck race between the two largest European hubs in the container segment was already apparent last year. Now, in the first three months of this year, more containers were handled at the Belgian port of Antwerp-Zeebrugge than at the previous leader, Rotterdam .

While being the largest container port in Europe isn't the top priority, said Jacques Vandermeiren, head of the Antwerp-Zeebrugge port authority, at the beginning of the year, there should still be great joy that the Belgian hub is now the new number one in Europe in the first quarter of this year. In the first three months of this year, 3.4 million TEU were handled at the two locations. This represents an increase of 4.5 percent compared to the same period last year. Measured by weight, the volumes increased by roughly the same amount, to 38.4 million tons.

The previous leader, Rotterdam, also recorded an increase in container volumes in the first quarter, albeit only by around 2 percent to 3.3 million TEU. In weight terms, the volume fell to 32.2 million tons due to declining exports. The administration cites bad weather and strikes at a terminal, which led to ship diversions to other ports, as other causes. While these external circumstances may have triggered the change in leadership at this time, it is not entirely surprising. Last year, the two ports were already in a neck-and-neck race for containers. Rotterdam ultimately closed 2024 with a lead of 300,000 TEU over its Belgian neighbor. In 2021, the figure was 3.3 million TEU. Since the merger of the two Belgian locations, Antwerp and Zeebrugge, in April 2022, the gap has narrowed significantly.

In terms of total throughput, Rotterdam remains by far the leader with 103.7 million tons in the first quarter. Antwerp-Zeebrugge handled a total of 67.7 million tons.

Partner and competitor at the same time

What both share is concern about the impact of US import tariffs on European exports and the volatility in global trade. The heads of both hubs advocate for the rapid implementation of the European Clean Industrial Deal to strengthen the competitiveness of domestic industry - they are particularly dependent on the chemical and energy cluster along the Rhine and Ruhr.

Despite all the cooperation, Vandermeiren also emphasized at the beginning of the year: "Especially in the container segment, we will remain in intense competition with Rotterdam."

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Thank You

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