# Master Terminal

**Solve complex
logistics and
cargo challenges
the easy way**

**master** terminal®
by **navis**

# About Master Terminal by Navis

With solutions for marine and inland terminals, and supporting full intermodal capability, Master Terminal by Navis®, solves the complex problem of managing a variety of mixed cargo.

Master Terminal by Navis provides a single integrated, real-time view of all operations and data, allowing you to make smarter decisions faster, resulting in improved productivity and operational efficiency.

Agile ports use Master Terminal by Navis to compete against the biggest and best in the world's toughest industry and come out on top.

# Managing mixed cargo

Master Terminal by Navis is a powerful, easily configurable TOS accessible via Windows thin clients, a web portal, and mobile applications running on vehicle-mounted and handheld devices.

Forming the core of your terminal operations, Master Terminal by Navis is an extremely stable solution, yet flexible enough to meet your specific challenges. Multiple sites, terminals, and sub-terminals can all be managed within a single system.

Unlike most solutions available today, Master Terminal by Navis has been designed to cater for all cargo types, making it the TOS of choice for mixed cargo terminals.

## Containers

Master Terminal by Navis allows ports of all sizes to handle any volume of containers. Our software caters for multiple container types, including flat racks, powered (reefers), and tank containers. From forklifts and top handlers to straddle carriers, roll trailers, trailers, and vehicle operations, Master Terminal by Navis has the ability to handle any style of container operation. Packed with features including integrated EDI messaging and automated reefer monitoring, Master Terminal by Navis draws information from all your systems, so you always have a complete picture of cargo and can automate repetitive tasks. Flexible, secure, and convenient, Master Terminal by Navis can be run on mobile devices, is protected by bank-level encryption, and a single instance runs multiple cargo terminals.

## Break bulk

Master Terminal by Navis has been designed with flexibility in mind. While many of our competitors' systems deal solely with containers, our software has been designed to manage multi-cargo terminal operations. Break bulk cargo that is transported in boxes, crates, drums, barrels, pallets, bundles or individual pieces can all be managed by Master Terminal by Navis through tasks such as warehousing, stuffing, and unstuffing. Operators can create an unlimited number of general cargo classes and specify which classes are available at individual terminals. They can also define cargo packaging and handling, as well as create and on-sell private warehouse space. Graphical views provide real-time monitoring and management of vessel loading and unloading operations by weight or volume, filtered by cargo attributes.

## RORO

Master Terminal by Navis allows you to manage Roll-On/Roll-Off (RORO) vessels that carry wheeled cargo such as automobiles, trucks, semi-trailer trucks, trailers, and railroad cars. RORO cargo is handled the same way as other Master Terminal by Navis cargo, using similar screens and processes. Functionality includes a full graphic display of each RORO deck at all stages of operations, and highly detailed definitions of each deck including vehicle lanes, deck layout, ramps, pillars, and container twistlock grids.

## Project cargo

Master Terminal by Navis caters for project cargo, helping facilitate the transportation of large, heavy, high-value, or critical pieces of cargo that are essential to a project. Our software assists your port to handle heavy or oversized items that are too large to fit into standard containers, and to deal with shipments made up of various components that need disassembly for shipment and reassembly after delivery. Common project cargo types include generators, turbines, reactors, boilers, towers, castings, heaters, presses, locomotives, boats, satellites, and military equipment.

### Logs

Track and manage logs as a specific cargo type, and use unique identifiers to individually track each log from arrival to load out. Scan logs with a handheld device when they enter the port, track current stock levels with Master Terminal by Navis's graphical view of terminal locations and areas, and manage storage areas visually to make best use of log stowage areas depending on log sizes and characteristics. Report log receivals, log stocks, log releases, perform historical analysis based on the forest management data collected as part of the log handling process, and meet Forestry Stewardship Certification (FSC) requirements with log dockets that record each log's full history.

### Bulk

Master Terminal by Navis allows you to handle and track any bulk cargo type by weight or volume. Bulk cargo can be allocated an ID, enabling you to track cargo moves, loads, and inventory. Master Terminal by Navis allows you to maintain a total of how much product makes up the bulk cargo, to split and merge bulk cargo, and produce bulk cargo invoices and reports. Graphical views provide real-time monitoring and management of vessel loading and unloading operations by weight or volume, filtered by cargo attributes.

**Our software assists your port to handle heavy or oversized items that are too large to fit into standard containers.**

> **The way ports operate is changing, and terminal operating systems now need to do much more than they used to. Our IT systems must be savvy. Smart interfaces are key, and this is a strong feature of Master Terminal by Navis.**
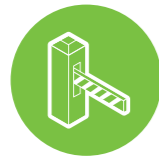>
> PORT OTAGO

# Core functionality

### Yard operations

Define terminal and yard areas for all types of cargo and operations, create user-specific terminal layout views that let each user see the areas that matter most to them, and see all cargo in real time, using current, short-term, or long-term planning modes. Fully audit all planning operations, provide support for labor working within your site, and automatically plan yard locations for any operation and all cargoes. Prioritize, categorize, and schedule your next day's work, create 'To Do' tasks on containers and cargo, and track Key Performance Indicators (KPIs) on yard operations.

### Gate operations

Manage gates in real time on touchscreen and mobile devices, controling and monitoring truck and cargo movements to increase efficiency. Keep detailed information about vehicle visits, instantly control and monitor gate flows, and integrate gate operations with both pre-advice processing and your truck visit appointment system. Get real-time updates on all truck processing within the terminal, monitor and analyze detailed KPIs, and speed up inter-terminal cargo transfers by allowing rapid access with no data entry. PIN and gate touchscreen kiosks ensure paperless rapid throughput.

### Voyage planning and operations

Make fully informed decisions, with ship and yard operations integrated in one seamless system. Define vessels, see and control operations in real time, and report and compare a full history of vessel visits. Allocate jobs between crane resources, and track progress with graphical displays. Plan break bulk, bulk, and general cargo in detail, and handle Lift-On/Lift-Off (LOLO) and RORO planning and operations. Configure and automate cargo stops, and aid management decision making by monitoring vessel operation performance.

### Mobile applications

Use handheld and vehicle-mounted mobile devices wherever your cargo goes, including in the yard, on ship, and within warehousing and general cargo operations. Running on any modern device with a supported web browser, the mobile apps feature a modern and intuitive user interface and give users great flexibility. Events are recorded in real time allowing for faster, more accurate reporting. Upgrades and maintenance are easily maintained through the Master Terminal by Navis software.

### Rail

Manage and track train schedules and wagon fleets, and easily share the right data with train companies. Control all weight and dimension rules for rail wagons, handle containers of varying sizes, and manage full train scheduling. Control operations in real time, see graphical views of trains and rail areas for planning and operations, complete planning before trains arrive, and automatically plan train load and discharge.

## Reporting

Use powerful and flexible built-in reporting to create an extensive range of reports and save them in accessible formats such as CSV, PDF, XML, or HTML. Reports can be customized to meet specific requirements, integrated into users' menus so they are easy to find, and automatically scheduled to be sent to email recipients. Data can be exported for archiving, data warehousing, or processing by other systems.

## Invoicing

Configure and track charges and invoices for every cargo event. Automatically charge for all cargo and vessel activities, including yard storage, in real time with fully configurable invoice creation. Handle flexible tariffs and rates, multiple currencies and cash payments from cash debtors before receiving and releasing cargo. Configure and generate pro forma invoices for any cargo type; define the standard transactions to include on a pro forma invoice by cargo type, and select cargo items for pro forma invoicing by any cargo attribute. Integrate with standard invoicing systems, output invoice data for auto-emailed invoices, and track and trace any invoice back to its source.

## Interfaces

Integrate Master Terminal by Navis with your general ledger system, port hardware, peripherals, and more. Mechanisms for interfacing to third-party systems include EDI, file export, web services, SQL, and real-time TCP/IP connections. Over 80 standard EDI formats are supported, plus custom EDI formats can be defined. Peripheral devices are supported, including printers, barcode scanners, radio data terminals, in-machine electronic scales, weighbridges, and external gate systems.

## Warehousing

Master Terminal by Navis's warehousing functionality allows you to easily and efficiently manage cargo storage – a key way to attract new business and revenue streams. Define any terminal area as a general cargo area for warehousing. Within this area, you can define any combination of ground and rack locations and assign them unique identifiers. Auto-planning uses the configured shelf capacity and maximum weight to fill shelves in sequence. View current capacities with a highly graphical display, use handheld applications to manage cargo, and configure billing by storage area, operator, or cargo attributes.

Master Terminal by Navis uses an intuitive, highly graphical user interface that allows you to schedule vessel visits, resources, and personnel in busy ports.

## Harbor management

Managing your harbor requirements is easy with Master Terminal by Navis's harbor management solution. The highly intuitive graphical user interface allows you to easily manage the complex problem of scheduling vessel visits, resources, and personnel in busy ports. Harbor management is multi-terminal-capable, allowing you to schedule visits across terminals with multiple harbors and berths. Dynamic tidal modeling provides intelligence to safely manage arrival and departure movements in harbors with significant tidal movement. Billing is fully configurable and automated for all harbor management activities including resources such as tugs and pilots, and consumables such as power, water, bunkerage and garbage facilities.

## Access control and data security

Control access to the system with a unique user name and password for each user, and grant permissions to control exactly what data each user can view and update. Securely store data within a high-performance database and export data to an SQL server for archiving or data warehousing. Protect your data with full disaster recovery from built-in replication technology and Master Care's expertise.

# Implementation

Our proven implementation methodology has been developed with your needs in mind. We provide an easy to follow implementation path with considerable guidance for your teams to deliver a successful Go Live.

Our customized training solutions ensure your users are rapidly up to speed and able to make the most of the Master Terminal by Navis solution. With our on-site support at key points throughout the project, and an implementation record second to none in the industry, you can be assured that Master Terminal by Navis will be implemented with minimal disruption to your operations.
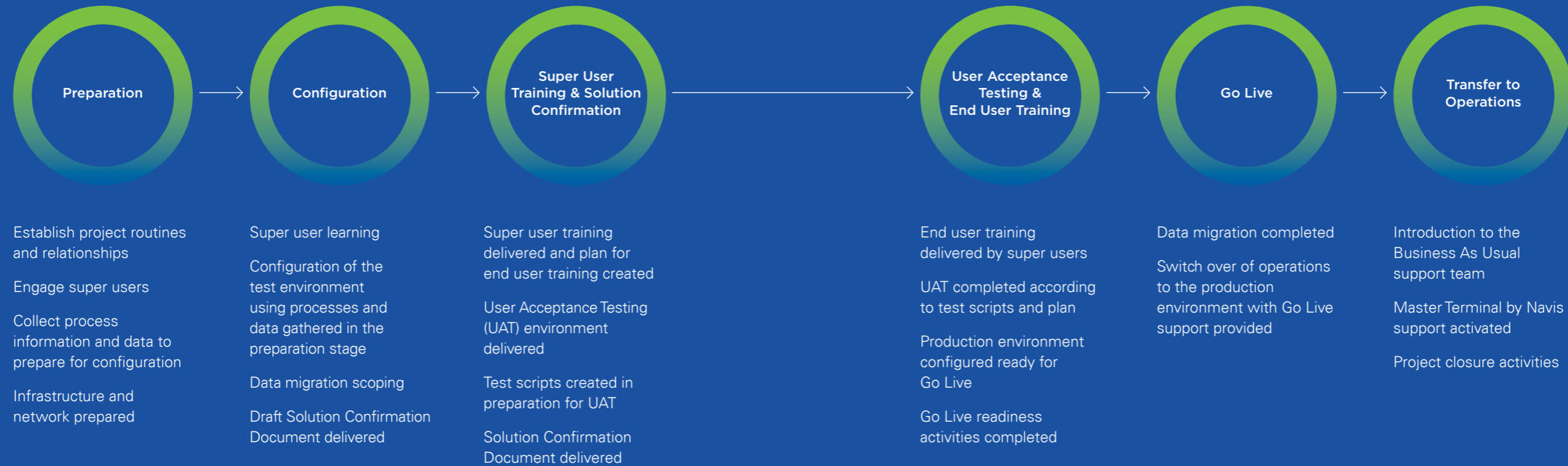
> We were impressed with Master Terminal by Navis' efficient implementation process and how quickly our staff adapted to the new system.
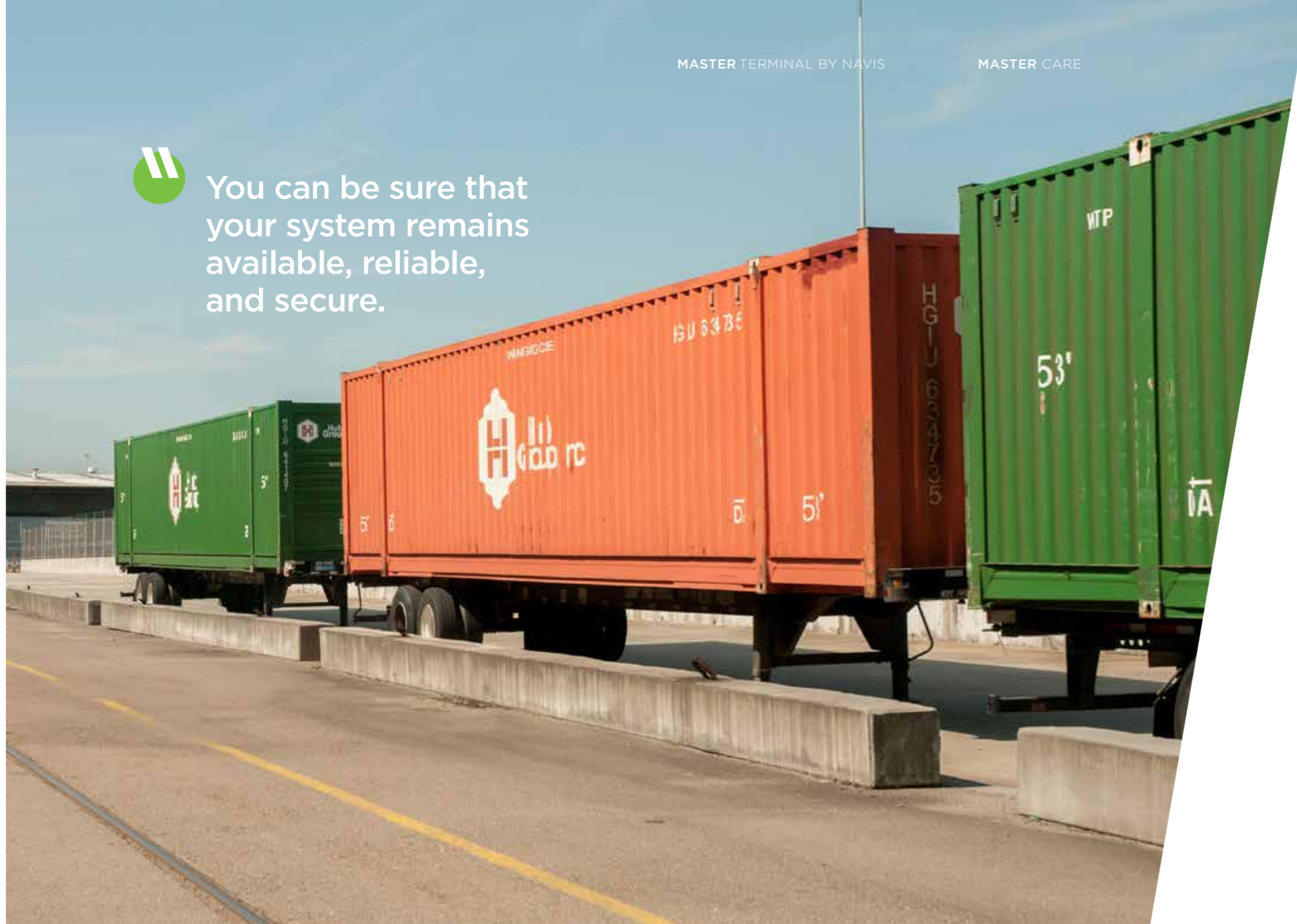>
> **DIVERSIFIED PORT HOLDINGS**

## Solution Design

## Solution Delivery

**Preparation**

**Configuration**

**Super User Training & Solution Confirmation**

**User Acceptance Testing & End User Training**

**Go Live**

**Transfer to Operations**

Establish project routines and relationships

Engage super users

Collect process information and data to prepare for configuration

Infrastructure and network prepared

Super user learning

Configuration of the test environment using processes and data gathered in the preparation stage

Data migration scoping

Draft Solution Confirmation Document delivered

Super user training delivered and plan for end user training created

User Acceptance Testing (UAT) environment delivered

Test scripts created in preparation for UAT

Solution Confirmation Document delivered

End user training delivered by super users

UAT completed according to test scripts and plan

Production environment configured ready for Go Live

Go Live readiness activities completed

Data migration completed

Switch over of operations to the production environment with Go Live support provided

Introduction to the Business As Usual support team

Master Terminal by Navis support activated

Project closure activities

You can be sure that your system remains available, reliable, and secure.

# Master Care

We take care of your system with our comprehensive managed service that combines traditional 24x7 technical support with continuous live monitoring and active management of your installation, lifetime product maintenance, change implementation on demand, security monitoring, and resource usage analysis and capacity planning. With Master Terminal by Navis' experienced engineers maintaining nearly every aspect of your TOS server environment, you can be sure that your system remains available, reliable, and secure. You will gain maximum benefit from a lower total cost of ownership.

# Why Master Terminal by Navis?

Master Terminal by Navis is designed for ports and terminals that manage mixed cargo. Our stable and comprehensive software ensures you don't have to spend time and money customizing a TOS built specifically for handling containers. Use our software to gain a single view of your operations, enabling you to make smarter decisions faster, which will maximize your operational efficiency and improve your competitiveness.

Backed by a dedicated team of industry experts, our proven implementation methodology and Master Care support service are second to none in the industry, getting you up and running quickly and minimizing disruption to your business.

# Contact us

**Want to solve your complex logistics and cargo challenges?**

Visit us at navis.com

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