

GUIDING TRUCKERS TO AVAILABLE SPACES IN PORT OF HAMBURG★

The leading German Port of Hamburg has introduced an innovative solution to make free parking spaces at the container terminal Burchardkai easily findable. With information from wireless parking sensors truck drivers are guided to available bays. This has resulted into an optimized logistic process: less congestion, shorter waiting times, safer work environment, reduction of emissions and thus a more attractive container terminal.



Container terminal Burchardkai

The HHLA (Hamburger Hafen und Logistik AG) terminal Burchardkai is the largest and oldest facility for container handling in the German Port of Hamburg. Nowadays, the terminal handles one in three of all containers in the Port of Hamburg. 25 container gantry cranes work on thousands of ships that tie up annually; many hundreds of rail cars and trucks are loaded and discharged every day. The range of services at the terminal includes cargo checks, processing and storage, customs clearances and veterinary inspections.

Burchardkai is the highly efficient container terminal which ensures the Port of Hamburg's supreme importance as a logistics hub. With the program of expansion and modernization for three terminals (Burchardkai, Altenwerder and Tollerort) now in progress, the terminal capacity will be extended in the coming years step by step. Technical innovations and automated working processes ensure high productivity and short overstay times.

Efficient truck parking guidance

HHLA handles many hundreds of trucks every day which requires an innovative and effective traffic management. To the growing traffic chaos and the increasing parking pressure, HHLA was looking for a solution which reduces traffic congestion, waiting times for truckers and environmental pollution. Optimized traffic will improve the logistic processes as well as reduce yard accidents of long haul vehicles with trailers.

HHLA decided to invest in a traffic guidance system, based on the Swarco PLS, which directs truck drivers efficiently to the nearest free place at the parking zone of the terminal without unnecessary navigation.

The truck parking areas at container terminals are characterized by large open areas. The traditional ultrasonic parking sensors for roof mounting are not applicable. The Nedap wireless parking sensor system called SENSIT, based on an unique dual detection, principle of magnetic and infrared technology, is the perfect solution as the system



allows floor mounting. At every single parking space a Nedap sensor is installed which communicates occupancy data through the wireless network. The sensor data is transferred real-time to the Swarco PLS traffic management system which guides truck drivers with colored displays to the nearest available parking place. Operators monitor the PLS at Burchardkai and have detailed information about the parking status, the reservations and the guidance displays at the terminal.

Optimized logistics in port of Hamburg

With the installation of parking sensors Burchardkai has become a more attractive terminal for truck drivers. Guidance based on real-time parking information resulted in significantly less truck navigation at the container terminal. With 30% reduction of traffic movements a safer work environment with less yard accidents and collisions is realized.



Truckers appreciate the traffic management system. They quickly and accurately find a place to stop, without having stress from strict travel and rest times. Truck drivers now even only spent half the usual time waiting for loading cargo. Decreased traffic movements also have resulted in less CO2 emissions from the hundreds of trucks who pass the container terminal every day, 24/7 all the year along.

In the first half of 2013, HHLA increased its container throughput by 6,8 % to 3.8 million standard containers (TEU). The volume handled by HHLA's transport companies in the newly aligned intermodal segment also rose significantly by 21,8 % to 581 thousand TEU.

To keep up with this growth the innovative logistic process of Burchardkai terminal ensures high productivity and shorter overstay time of trucks. This will continue the leading position of the Port of Hamburg.



Smart parking with Nedap SENSIT

A clever sensor technology is available to make on-street and off-street parking spaces easily findable for motorists. This high-tech system, called SENSIT, is developed and manufactured by the Dutch company Nedap. SENSIT consists of wireless parking sensors which detect in real-time whether or not a single parking bay is occupied and how long it has been occupied. Real-time parking information results in less congestion, reduction of emissions and safer streets and thus a more attractive city for visitors.

For almost twenty years Nedap is considered an expert in advanced and effective solutions for vehicle identification and vehicle detection. SENSIT was awarded for its product innovation at Intertraffic Amsterdam in 2006. Since that day Nedap has been focusing on designing the most accurate sensor hardware and the most reliable communication network using wireless sensor nodes. Intensive field tests, held by authorities of major cities, conclude that SENSIT offers the most robust and accurate sensor hardware and the most reliable communication network for outdoor parking available in the industry.

Nedap has designed the solution to be easily integrated with third party systems for parking guidance and traffic management systems, way finding apps and enforcement equipment that are used by major cities all over the world.