



# SMOOTH PORTS

## Good practice in the Port of Hamburg: the slot management system for veterinary control

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Date: 19 November 2020



# The Slot management system for veterinary control as a good practice

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## (2) Organisation in charge of the good practice

Is your organisation the main institution in charge of the good practice? No.

Location of the organisation in charge:

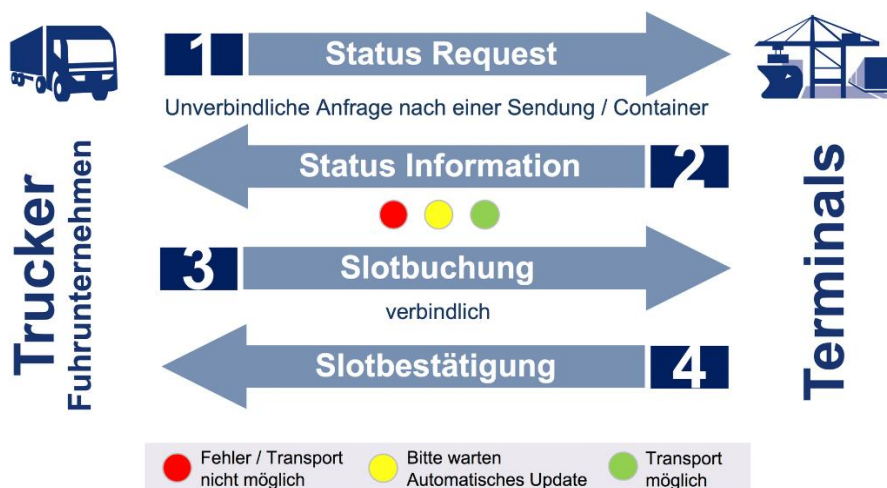
Country: Germany (Deutschland)

Region: Hamburg

City: Hamburg

Main institution in charge: Hamburg Ministry for Justice and Consumer Protection

## (3) Good practice general information



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#### **(4) Good practice detailed information**

- **Short summary of the practice**

In the Port of Hamburg, the slot system introduced by the veterinary control authority enables trucks to book inspection appointments and helps reduce traffic.

- **Short description of the local situation**

In 2019, more than nine million containers were handled in the Port of Hamburg. Despite its large size, the port is dense, bearing a constant risk of traffic jam. Containers picked up by trucks often are subject to border inspection, most notably to customs control, veterinary control and phytosanitary control. In the Port of Hamburg, inspection points are not directly located at the terminals but geographically dispersed across the whole port area. Trucks passing different inspection points therefore often have to move back and forth, hence driving long distances and extra routes and further increasing the risk of traffic jam.

Approximately 28,000 trucks pass through the veterinary inspection points every year.

- **Detailed information on the practice**

Before introducing the slot management system, the veterinary inspection points in the Port of Hamburg were called at by truck drivers at very irregular times, with volatile peaks and lows throughout the day. In certain time periods, they were overstressed by trucks, resulting in waiting times, queues and tailbacks. Partly, trucks even had to be asked to move to another inspection point, making for extra traffic and CO<sub>2</sub> emissions.

To end this, a slot management system was introduced in late spring 2019 by the veterinary control authority and DAKOSY, a software company providing the Port of Hamburg with logistical software systems. The introduced digital slot system has enabled the veterinary control authority to allocate inspection appointments according to existing staff capacities and customer needs. Fixed time slots for inspection can be booked online by truck drivers, allowing them to avoid waiting times and helping the veterinary control authority to reduce traffic.



With fixed appointments, truck drivers no longer have to enqueue, with their engines running. Traffic jams and emissions can be reduced.

Since its introduction in late spring 2019, the introduced slot management system has not been binding for truck drivers. In practice, however, priority is given to those truck drivers using the slot management system for scheduling appointments. Today, the large majority of truck drivers makes use of the system.

- **Resources needed**

Overall, EUR 38,000 were invested to implement the slot management system. Additionally, EUR 1,100 are spent every month for IT support to keep the system running.

Eight workdays were needed to prepare and implement the system.

- **Timescale**

The initial idea of a slot management system arose in January 2018. The system was implemented in late spring 2019.

- **Evidence of success (results achieved)**

No qualified data are available to estimate the CO<sub>2</sub> emissions saved by the slot management system. However, after implementing the system, long waiting times and tailbacks have not been observed any longer by the veterinary control authority. It can be assumed that less traffic jams have also made for truck emissions savings.

- **Challenges encountered (optional)**

Initially, logistics stakeholders criticised the slot system would not function properly. By now, it is widely accepted. For the future, technical alignments are needed, allowing the system to be used only by those truck drivers subject to veterinary control requirements, to avoid erroneous entries.



- **Potential for learning or transfer**

The slot system for veterinary inspection was implemented in a particular local setting, possibly hampering a transfer somewhat. Unlike other ports where control authorities are located directly at the terminals and traffic flows can be organised together with the terminal operator, inspection points in Hamburg are located outside the terminals. Here, an individual system had to be developed and refined for veterinary inspection procedures. It might differ from more collaborative systems needed in other ports. Secondly, the slot system was implemented within the framework of an existing IT infrastructure tailored to the local needs in the Port of Hamburg. Whether these factors impede a transfer to other ports is to be assessed on a case-by-case basis.

Generally, the idea of a digital slot system to reduce traffic jams shows strong potentials for saving CO<sub>2</sub> emissions and seems adaptable to other ports. Parts of the knowledge developed in Hamburg might well be used by other ports.

- **Recommendations for implementation in other ports**

From the experience made in the Port of Hamburg, a well-functioning port IT infrastructure might facilitate the implementation of a slot management system. In ports interested in introducing slot systems to improve the flow of traffic, local experts in charge of the port IT system should be contacted to develop a system that fits local needs and matches existing technical requirements.

- **Further information**

[www.hamburg.de/bgv/e-government/12056346/dakosy-slotsystem](http://www.hamburg.de/bgv/e-government/12056346/dakosy-slotsystem)

- **Keywords related to your practice**

Climate change, Digitalisation, Emissions, Environment, Green, Ports, Transport