Claims

1. A system for transporting containers by means of heavy-duty vehicles which comprises at least one external heavy-duty vehicle and at least one internal heavy-duty vehicle, a container store with a storage area for containers and a handling device for them and also a separate operating area, in which the heavy-duty vehicles can be operated together in a mixed mode traffic, wherein at least one first lane for the at least one external heavy-duty vehicle and at least one second lane for the at least one internal heavy-duty vehicle are reserved in the separate operating area and the first and second lanes respectively lead through a transfer area of the handling device of the storage area, and the first and second lanes are respectively arranged here laterally of the storage area and in each case only in one of two storage aisles oppositely adjoining the storage area, so that the storage aisles are reserved in an alternating sequence only for the external heavy-duty vehicle or the internal heavy-duty vehicle, wherein the first and second lanes crossing in two crossing areas of two storage aisles respectively, characterized in that the lanes are physically separated from one another, at least in certain sections, by means of road markings and/or guiding elements serving as chicane-like barriers, wherein in a first crossing area the guiding elements are arranged such that the first crossing area is designed as a pure crossover crossing, where no turning into the respectively crossing storage aisle or lane is allowed and the guiding elements are dimensioned and arranged in relation to one another such that the storage aisles in the first crossing area are deliberately made so narrow that turning of the heavy-duty vehicles is not possible, but instead, for collision-free operation, the crossing storage aisle or lanes must be crossed over, and a second crossing area is designed as a turn crossing, in order to ensure that the different traffic

modes can only travel over the routes respectively designated for them.

2. The system as claimed in claim 1, characterized in that the external heavy-duty vehicle drives around clockwise in the operating area and the internal heavy-duty vehicle drives around counterclockwise in the operating area, or vice versa.

3. The system as claimed in claim 1, characterized in that the external heavy-duty vehicle and the internal heavy-duty vehicle drive around clockwise or counterclockwise in the operating area.

4. The system as claimed in one of the claims 1 to 3, characterized in that the system comprises a fleet management system, by means of which the mixed mode traffic by the heavy-duty vehicles in the separate operating area can be coordinated, in particular by continuous processing of the positions of the heavy-duty vehicles, specification of routes for the heavy-duty vehicles, blocking of areas for the heavy-duty vehicles.

5. The system as claimed in claim 4, characterized in that, within the separate operating area, a manually guided heavy-duty vehicle is provided with a driver information system and the driver information system is connected to the fleet management system, in order to give a driver of the heavy-duty vehicle instructions for the manual guidance of the heavy-duty vehicle.

6. The system as claimed in claim 5, characterized in that the driver information system is designed as a mobile device, which is arranged at the manually guided heavy-duty vehicle before it enters the operating area, preferably is given to the driver, and is carried along by the heavy-duty vehicle within the operating area.

7. The system as claimed in claim 5, characterized in that the driver information system is permanently installed at the manually guided heavy-duty vehicle.

8. The system as claimed in one of the preceding claims, characterized in that an automatically guided heavy-duty vehicle, in particular its vehicle control system, is provided with a device for automatic navigation and/or with a device for position determination and/or with a sensor for object detection.

9. The system as claimed in one of the preceding claims, characterized in that a wireless communication connection is provided between the heavy-duty vehicles and the fleet management system.

10. The system as claimed in one of the preceding claims, characterized in that the system, in particular its separate operating area, is part of a container terminal, Ro-Ro terminal, logistics center or industrial plant.