Claims

1. Transportation system (1) for a building with multiple floors (14; 15) comprising:
   - a shaft (2),
   - a traction sheave drive type elevator (3) for vertically conveying persons having an elevator car (5) which is movable in the shaft (2) and at least one counterweight (6,16) which is movable together with the car (5) in the shaft (2) in a direction of movement opposite to the direction of movement of the elevator car (5), elevator car (5) and the counterweight (6) being driven by at least one drive engine (8) with a traction sheave (9), characterized in that the transportation system (1) further comprises
   - a lift (4) for vertically conveying objects based on a different drive type than the elevator (3), the lift (4) having a lift platform (11) which is movable in the shaft (2), whereby the lift platform (11) overlaps at least partly a vertical projection of the elevator car (5), whereby the vertical projection of the lift platform (4) is smaller than the vertical projection of the elevator car (5) in that a base area occupied by the vertical projection of the lift platform (11) is less than 60% of a base area occupied by the vertical projection of the elevator car (5).

2. Transportation system (1) according to claim 1, characterized in that the shaft (2) comprising a plurality of elevator shaft doors (17) for providing access for passengers into the elevator car (5), the plurality of elevator shaft doors () being arranged at a front side (12) of the shaft (2), whereby at least one of the elevator shaft doors (17) being arranged at each of multiple floors (14), and
   a plurality of lift shaft doors (18) for providing access for the lift platform (11) or for objects onto the lift platform (11), the plurality of lift shaft doors (18) being arranged at a rear side (13) opposite to the front side of the shaft (12) and at least one of the lift shaft doors (18) being arranged at each of multiple floors (15), each of the latter floors (15) preferably being arranged on the same level as a neighbouring floor of the floors (14) at the front side (12) of the shaft (2).

3. Transportation system (1) according to claim 2, characterized in that the multiple floors (14) associated with the elevator shaft doors (17) at a front side (12) of the shaft (2) comprising a lowermost floor (14') and that the multiple floors (15) associated with the lift shaft doors (18) at a rear side (13) of the shaft (2) comprising at least one floor (15^N) which is arranged below said lowermost floor (14').

4. Transportation system (1) according to one of the preceding claims, characterized in that the elevator car (5) of the elevator (3) is a front side supported car which is guided along a pair of opposing car guide means (20), whereby each of the two car guide means (20) being arranged at one of the lateral sides (19) of the shaft (2) and in a region close to the front side (12) of the shaft (2).

5. Transportation system (1) according to one of the preceding claims, characterized in that the elevator (3) comprising two opposing counterweights (6, 16), whereby the counterweights (6, 16) being located at the opposing laterals sides (19) of the shaft (2).

6. Transportation system (1) according to claim 4 and 5, characterized in that the counterweights (6, 16) are guided along counterweight guide means (21), the counterweight guide means (21) and the car guide means (20) on each lateral side (19) of the shaft (2) are formed by a common guide rail profile.

7. Transportation system (1) according to one of the proceeding claims, characterized in that the lift (4) is a self-propelled lift, the lift platform (11) of the self-propelled lift comprising at least one climbing drive unit (23) for climbing up and down in the shaft (2).

8. Transportation system (1) according to claim 7, characterized in that, for guiding the lift platform (11), at least two and preferably four lift guiding units (22) are arranged in the shaft (2).

9. Transportation system (1) according to claim 8, characterized in that the lift platform (11) of the self-propelled lift (4) comprising at least two and preferably four motorized gearwheels (24) capable of being interacting with the associated at least two and preferably four lift guiding units (22).

10. Transportation system (1) according to claim 9, characterized in that, when four lift guiding units (22) are provided, the lift guiding units (22) comprise two pairs of vertical posts (25) and roller chains (26), one of the roller chains (26) being attached to each of the posts (25) and extending parallel to the posts (25), whereby the roller chains (26) being intended to receive the associated gearwheel (24).

11. Transportation system (1) according to claim 10, characterized in that the posts (25) are formed as hollow rail profiles.

12. Transportation system (1) according to one of the claims 1 to 12, characterized in that the lift platform (11) of the lift (4) is a mobile lift platform being designed as a vehicle which can be brought in and out of the shaft (2) and which can be moved on the floors (15), whereby the lift platform (11) comprising rolling wheels (27) for being capable being moved on a floor (15).

13. Transportation system (1) according to claim 2 or 3, characterized in that each of the lift shaft doors (18) comprising controllable lift shaft door drives (34) for reciprocally opening and closing the lift shaft doors (18), whereby the lift shaft door drives (34) can be controlled by a mobile lift platform (11) or, when the lift platform (11) being permanently installed in the shaft (2), by autonomous robots (28) as objects to be conveyed on the lift platform (11).