Claims:

1. A method of operating an elevator installation (1) having an elevator control system (40) and an elevator car (22) controlled by the elevator control system (40) to transport persons (4) and robots (2) from a boarding floor to a destination floor in a building, wherein the elevator control system (40) is configured to receive an elevator call from a person (4) via a call terminal (12, 32) and from a robot (2) via a radio transceiver (10) to communicate with the elevator control system (40), the method comprising:

determining by the elevator control system (40) a current transport capacity (Tcap) of the elevator installation (1), the transport capacity (Tcap) being indicative of current usage of the elevator installation (1);

recognizing by the elevator control system (40) an elevator call (2C) originating from the robot (2) via the radio transceiver (10), wherein the elevator call (2C) from the robot (2) includes a priority level (PL) set by a dispatcher of the robot (2), wherein the priority level (PL) is one of a high priority range, a medium priority range and a low priority range, the elevator call (2C) being indicative of a boarding floor; and

delaying allocation of the elevator call (2C) originating from the robot (2) to the elevator car (22)

if the priority level (PL) is set to the medium priority range and the current transport capacity (Tcap) is lower than a first threshold value (Tcap1); or

if the priority level (PL) is set to the low priority range and the current transport capacity (Tcap) is lower than a second threshold value (Tcap2).

2. The method of claim 1, wherein the elevator call originating from the robot (2) includes terms of service (ToS) information specifying a predetermined wait time, and wherein the elevator call originating from the robot (2) is allocated to the elevator car (22) upon expiry of the predetermined wait time regardless of the first threshold value (Tcap1) or the second threshold value (Tcap2).

3. The method of claim 2, further comprising queuing the elevator call originating from the robot (2) until expiry of the predetermined wait time.

4. The method of one of the preceding claims, further comprising immediately allocating the elevator call to the elevator car (22) by the elevator control system (40) if the elevator call originates from the person (4) or the robot (2) having a priority level (PL) set to the high priority range.

5. The method of one of the preceding claims, further comprising executing by the elevator control system (40) an allocated call, wherein executing the allocated call includes controlling the elevator car (22) according to the allocated call.

6. The method of claim 5, wherein executing the allocated call includes at least one of notifying the robot (2) about the elevator car (22), controlling elevator doors depending on whether the elevator call originating from the robot (2) includes a solo-travel requirement, commanding the robot (2) to board the elevator car (22) and verifying boarding of the robot (2).

7. The method of one of the preceding claims, wherein the first threshold value (Tcap1) and the second threshold value (Tcap2) are values between 0% and 100% of a maximum transport capacity, and wherein the first threshold value (Tcap1) is lower than the second threshold value (Tcap2).

8. The method of Claim 7, wherein the first threshold value (Tcap1) is set to about 25% of the maximum transport capacity, and wherein the second threshold value (Tcap2) is set to about 50% of the maximum transport capacity.

9. An elevator installation (1), comprising:

a drive (26);

an elevator car (22) configured to transport persons (4) and robots (2) from a boarding floor (L0, L1) to a destination floor (L0, L1) in a building

an elevator control system (40) coupled to the drive (26) and configured to receive an elevator call from a person (4) via a call terminal (12) and from a robot (2) via a radio transceiver (10), wherein the control system (40) is configured:

to determine a current transport capacity (Tcap) of the elevator installation (1), the transport capacity (Tcap) being indicative of current usage of the elevator installation (1);

to recognize an elevator call (2C) originating from the robot (2) via the radio transceiver (10), wherein the elevator call (2C) from the robot (2) includes a priority level (PL) set by a dispatcher of the robot (2), wherein the priority level (PL) is one of a high priority range, a medium priority range and a low priority range, the elevator call (2C) being indicative of a boarding floor; and

to delay allocation of the elevator call (2C) originating from the robot (2) to the elevator car (22)

if the priority level (PL) is set to the medium priority range and the current transport capacity (Tcap) is lower than a first threshold value (Tcap1); or

if the priority level (PL) is set to the low priority range and the current transport capacity (Tcap) is lower than a second threshold value (Tcap2).

10. The elevator installation of claim 9, wherein the elevator call received from the robot (2) includes terms of service (ToS) information specifying a predetermined wait time, and wherein the elevator call received from the robot (2) is allocated to the elevator car (22) upon expiry of the predetermined wait time regardless of the first threshold value (Tcap1) or the second threshold value (Tcap2).

11. The elevator installation of claim 10, wherein the elevator control system (40) comprises an elevator control function (28) and a queue control function (30), wherein the queue control function (28) is configured to queue the elevator call received from the robot (2) until expiry of the predetermined wait time.

12. The elevator installation of one of Claims 9-11, wherein the elevator control system (40) is configured to immediately allocate the elevator call to the elevator car (22) if the elevator call originates from the person (4) or the robot (2) having a priority level (PL) set to the high priority range.

13. The elevator installation of one of Claims 9-12, wherein the elevator control system (40) is configured to execute an allocated call, wherein executing the allocated call includes controlling the elevator car (22) according to the allocated call.

14. The elevator installation of one of Claims 9-13, wherein the first threshold value (Tcap1) and the second threshold value (Tcap2) are values between 0% and 100% of a maximum transport capacity, and wherein the first threshold value (Tcap1) is lower than the second threshold value (Tcap2).

15. The elevator installation of Claim 14, wherein the first threshold value (Tcap1) is set to about 25% of the maximum transport capacity, and wherein the second threshold value (Tcap2) is set to about 50% of the maximum transport capacity.