CLAIMS

1. A system (100) for preparing a docking procedure of an aircraft in an airport, the system comprising:

an input unit (110) being arranged to communicate with an airport surveillance system (700),

a control unit (120) being arranged to receive, from the input unit (110), identification data for the aircraft (400a-b) on ground, position data, indicating a position of the aircraft, and, to provide the identification data to a data storage (800) and receive an identifier of a designated gate for the aircraft from the data storage,

characterized in that the control unit (120) is further arranged to provide a signal to a gate control system (200a-c) at the designated gate for preparing the designated gate to receive the aircraft if the position of the aircraft is within a predetermined distance from the designated gate,

wherein the control unit (120) is further arranged to delay the signal to the gate control system a certain amount of time based on an estimated travel time of the aircraft from the position of the aircraft to the designated gate.

2. The system according to claims 1, wherein said estimated travel time is calculated based on an expected taxi time of the aircraft.

3. The system according to any one of the claims 1-2, wherein said estimated travel time is calculated based on one or more from the list of: airport size, airport design, weather conditions, performance of the aircraft, how often the aircraft needs to restart, queue on the taxiway.

4. The system according to any one of the preceding claims, wherein the control system is arranged to receive a flight plan from an airport database system (900), wherein the control unit is arranged to determine an estimated time of arrival of the aircraft at the designated gate, and wherein the control unit is arranged to update the received flight plan with the estimated time of arrival.

5. The system according to any one of claims 1-4, wherein the airport surveillance system includes at least one of ADS-B, multilateration, primary surveillance radar, and secondary surveillance radar.

6. The system according to any one of claims 1-5, wherein the preparing the designated gate comprises the gate control system being arranged to activate a visual docking guidance system (130a-c).

7. The system according to claim 6, wherein the visual docking guidance system comprises a display and the gate control system is arranged to activate the display when the position of the aircraft is within an area (310a-c) enclosing the designated gate.

8. A method for preparing a docking procedure of an aircraft in an airport, the method comprising:

receiving, from an airport surveillance system, identification data for the aircraft on ground and position data, indicating a position of the aircraft,

providing the identification data to a data storage and receiving an identifier of a designated gate for the aircraft,

characterized by providing a signal to the designated gate for preparing the designated gate to receive the aircraft if the position of the aircraft is within a predetermined distance from the designated gate,

wherein the method further comprises delaying the signal to the designated gate a certain amount of time based on an estimated travel time of the aircraft from the position of the aircraft to the designated gate.

9. The method according to claim 8, wherein said estimated travel time is calculated based on one or more from the list of: airport size, airport design, weather conditions, performance of the aircraft, how often the aircraft needs to restart, queue on the taxiway, and an expected taxi time of the aircraft.

10. The method according to claim 8 or 9, further comprising receiving a flight plan from an airport database system, determining an estimated time of arrival of the

aircraft at the designated gate, and updating the received flight plan with the estimated time of arrival.

11. The method according to any one of claims 8-10, wherein the preparing the designated gate comprises activating a visual docking guidance system.