CLAIMS

1. An aircraft docking system (100,200,300,400) comprising:

a light based verification and positioning system (110,210,310,410) adapted to monitor an aircraft (190,290,390,490) expected to arrive at a stand, in a volume (120,220;221,320,420) in connection to the stand, wherein the monitoring includes detecting and tracking of the aircraft (190,290,390,490), said monitored volume (120,220;221,320,420) comprising at least a scanned volume (120,220,320,420) being scanned by the light based verification and positioning system (110,210,310,410),

said aircraft docking system (100,200,300,400) further comprising

a receiving unit (140) adapted to receive surveillance data including position data related to the aircraft (190,290,390,490) from an airport surveillance system (150,250,350,450),

wherein the light based verification and positioning system (110,210,310,410) is further adapted to:

control the extension of the scanned volume (120,220,320,420) based on the received position data,

reduce the size of the scanned volume (420) based on the received surveillance data, and

shift at least a portion of the scanned volume (420) sideways based on the received surveillance data.

2. Aircraft docking system (100,200,300,400) according to claim 1, wherein the light based verification and positioning system (110,210,310,410) comprises at least one laser transmitter (111,211,311,411) adapted to emit light in different directions in the scanned volume (120,220,320,420), and a detector adapted to detect light reflected from objects in the scanned volume (120,220,320,420).

3. Aircraft docking system (300) according to any preceding claim, wherein the light based verification and positioning system (310) is adapted to scan a volume (320) extending in a direction radially out from the light verification and positioning system (310), the light based verification and positioning system (310) adapted to reduce the size of the scanned volume (320) by restricting the extension of the volume (320) in the radial direction.

12. Aircraft docking system (100,200,300,400) according to claim 11, wherein the interface is adapted to provide aircraft data to the surveillance system via a database.

13. Aircraft docking system (100,200,300,400) according to any one of claims 11 or 12, wherein the aircraft data comprise at least one of: verified identification data, type, version and position of the aircraft.