

AIRCRAFT PARKING DOCKING REMARKS

1.	<p>Visual Docking Guidance Systems</p> <p>The optical guides in use are the following: Type 1: stands 401-404-405-406-407-408-409-410-412-413-495-499-501-502-503-504-505-506-507-508-509-510-511-512-513-601-602-604-605-606-608-609-610-611-612-613-701-702-703-704-705-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970</p> <p>In order to manage the process with a safety approach, hereafter is the list of the procedures that the Pilot and the Handler Operator on the ground must observe during the docking phases of the aircraft. In the event of critical situations during docking, these procedures must be guaranteed regardless of the type of aircraft during positioning, with particular attention to black livery aircraft.</p>																						
2.	<p>Capture phase</p> <ol style="list-style-type: none"> Once VDGS system is activated and starts intercepting the arriving plane at the stand. The aircraft must not move forward until the guidance bar on right / left indication has been displayed. The ground operator must check that the correct type of aircraft has been set up on the pilot display. In case of improperly inputs from PIC, that results in an unauthorised aircraft movement , as soon as the airplane's nose section reaches the cabin of the PBB, the ground operator must immediately press the emergency stop button <p>1.3 CAPTURE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Description</th> <th style="width: 40%;">Position</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <div style="display: flex; align-items: center;"> <p>WARNING! THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.</p> <p><i>Instructions to Operators:</i></p> <ul style="list-style-type: none"> Check that the correct aircraft type is displayed on the Pilot Display. The lead-in line is to be followed. <p><i>Note: If the Safedock system is still in Active mode when the aircraft nose reaches the Passenger Boarding Bridge cab, press the Emergency-Stop button immediately!</i></p> </div> </td> <td style="vertical-align: top;"> <p>Gate area: Empty (The aircraft is on the ground en route to gate).</p> </td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 15%;">Image Operator Panel</th> <th colspan="5" style="text-align: center;">Image Pilot Display</th> </tr> <tr> <th></th> <th style="width: 15%;">T1-42</th> <th style="width: 15%;">T2-18</th> <th style="width: 15%;">T2S-24</th> <th style="width: 15%;">T3-9</th> <th style="width: 15%;">T3-15</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> </tbody> </table>	Description	Position	<div style="display: flex; align-items: center;"> <p>WARNING! THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.</p> <p><i>Instructions to Operators:</i></p> <ul style="list-style-type: none"> Check that the correct aircraft type is displayed on the Pilot Display. The lead-in line is to be followed. <p><i>Note: If the Safedock system is still in Active mode when the aircraft nose reaches the Passenger Boarding Bridge cab, press the Emergency-Stop button immediately!</i></p> </div>	<p>Gate area: Empty (The aircraft is on the ground en route to gate).</p>	Image Operator Panel	Image Pilot Display						T1-42	T2-18	T2S-24	T3-9	T3-15						
Description	Position																						
<div style="display: flex; align-items: center;"> <p>WARNING! THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.</p> <p><i>Instructions to Operators:</i></p> <ul style="list-style-type: none"> Check that the correct aircraft type is displayed on the Pilot Display. The lead-in line is to be followed. <p><i>Note: If the Safedock system is still in Active mode when the aircraft nose reaches the Passenger Boarding Bridge cab, press the Emergency-Stop button immediately!</i></p> </div>	<p>Gate area: Empty (The aircraft is on the ground en route to gate).</p>																						
Image Operator Panel	Image Pilot Display																						
	T1-42	T2-18	T2S-24	T3-9	T3-15																		
3.	<p>Tracking phase</p> <ol style="list-style-type: none"> The aircraft has been identified and guided towards the STOP position. The aircraft checking process is ongoing. The Pilot correctly moves forward towards the STOP position. <p>The ground operator must check that:</p> <ul style="list-style-type: none"> the "Identified Message" is on the OP display shows; the OP message must remain visible for the entire operation process. 																						

4.

Error in checking aircraft identification

After the capture phase, the aircraft identification and confirmation algorithm are in progress. In case aircraft check and confirmation phase are not completed within 15 meters from the STOP position (configurable value), a STOP message and ID FAIL will appear on the display.

1. The Pilot must immediately stop the aircraft.
2. The ground staff will notice the id fail message appearing on the operator panel.

The docking process can be manually accomplished by "skipping" the procedure. In this case the Pilot shall not need to move forward until the bar and guidance indications are visible on the Pilot display.

2.5 FAILED AIRCRAFT VERIFICATION (ID FAIL)

Description	Position
<p>After capture of the aircraft, its geometry is checked against a stored profile. If, for any reason, aircraft verification is not confirmed 15m before the stop-position, the Pilot Display will show STOP followed by ID FAIL.</p> <p>Below there is a list of errors that can be displayed on the Operator Panel and a short description:</p> <ul style="list-style-type: none"> • Geometry failed - Geometry check failed within ID Fail limit • Nose height failed - Nose height check failed • Engine verification - Engine verification failed • Profile failed - Profile check failed • Lost track - Lost track close to stop <p><i>Note: (option) Dockings can be resumed without verification; however, it is important to follow the information below. Alternatively, the aircraft shall be marshalled-in or towed-in to the gate.</i></p> <div style="display: flex; align-items: center;"> <p>WARNING! THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE WITHOUT MANUAL GUIDANCE, UNLESS THE WAIT MESSAGE HAS BEEN SUPERSEDED BY THE CLOSING RATE BAR.</p> </div> <p><i>Note: This may be a system event or a fault (to analyse the possible cause of the incident, see § 2.5.2 Event or Fault Diagnosis in this Chapter).</i></p>	<p>Gate area: Empty (aircraft is on the ground en route to gate).</p>
<p>Image Operator Panel</p>	<p>Image Pilot Display</p>
	<div style="text-align: center;">T1-42</div> <div style="text-align: center;">T2-18</div> <div style="text-align: center;">T2S-24</div> <div style="text-align: center;">T3-9</div> <div style="text-align: center;">T3-15</div>

Overriding a Fail ID (Following Section 2.5.1) provides full responsibility to the ground operator.

2.5.1

Override ID FAIL

The override function is designed to resolve an aircraft verification problem during an active docking procedure.



WARNING! THE OVERRIDE FUNCTION GIVES THE OPERATOR RESPONSIBILITY FOR AIRCRAFT VERIFICATION, AS A TEMPORARY SOLUTION TO AN EVENT/FAULT RECOGNISED BY THE SYSTEM.

When using the override function, these instructions must be followed:

- Make sure the stand area is clear of any obstructions such as vehicles, apron or other objects which may obstruct the aircraft, including wings or engines.
- Check for the correct stop-position (ground markings).

5.	<p>Recommendation for managing Black Livery Aircraft and/or coated low reflectivity paints:</p> <ol style="list-style-type: none">1. Review the Safedock A-VDGS Operation Manual2. Always require a mandatory and early presence of ground handler for support. <p>WARNING: The Pilot must not enter the stand area before the image of the vertical arrows appears on the docking system; The Pilot must not move beyond bridge unless the vertical arrows have been replaced by "Closing stop" bar</p>
----	--