

TB-GEN006

## TECHNICAL BULLETIN

INFORMATION ONLY

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**For the Attention of :** Graham Mears, Paul Ayers, Peter Amura, Larry Power,  
Sales Team, Estimators, Testers, Field Mangers

**From:** Angelos Strantzalis – Senior Product Engineer (Passenger Lifts)

**Date :** 14 Jan 2015

**Subject :** Lift Operation in BS9999 mode (fire evacuation)

**Product:** All

**Pages :** 2

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### **Background**

Recent issues with MP product **on fire evacuation lifts (according to BS9999)** and the software update needed for a range of lifts which are either delivered to site or not, has forced us to produce this product bulletin.

Taking into account that it is common knowledge that this type of lift demands a back up supply and a standalone range of communication intercoms, this document will describe the functionality of a lift with fire **evacuation mode (BS9999)**. In other words, what we need from controller software in accordance with British Standards for all OEMs and products.

### **Operation Description & Related British Standards**

Despite the fact that BS9999 sets the fire evacuation mode to lifts, it does not describe in detail how this lift should behave when in evacuation mode. The operation of the lift is described in detail in BS EN81.76 'Evacuation of Disabled Persons Using Lifts'.

- *In case of a fire the lift should first go into the EN81.73 mode by cancelling all calls and returning back (non-stop) and park to main exit floor with doors open and removed from service.*
- *The building's trained person for evacuation purpose it is the only responsible to turn the lift into BS9999 mode using the key-switch on the main intercom at the main exit floor (which will activate the stand alone intercom system) and evacuate people according to the plan and notices received through the intercoms.*
- *The electrical/electronic landing control devices and indicators required for rescue purposes shall continue to function, so that a person can detect where the car is located. The above make common sense that the lift should be able to overrule the EN81.73 mode and initiate EN81.76 mode and also when the*

*EN81.76 mode is turned off the lift should be able to return to EN81.73 mode if the BMS or alarm system is still active.*

**As soon as the building's trained person switches the lift into BS9999 mode using the key-switch on the main intercom the lift should operate as follows:**

- Turn off any illuminated signs barring access to the lift and turn on illuminated signs for evacuation (car and landings)
- Activate communication system
- Immobilise landing calls (lift will accept only car calls)
- Keep the doors open waiting for next instruction from the building's trained person
- The lift should not be possible to register more than one car call simultaneously
- Whilst the car is in motion it shall be possible to register a new call from within the car, however the previous call shall be cancelled driving directly to the new registered floor
- Registration of a car call shall cause the car to travel to the selected floor, stop and open its doors.
- When the doors are open, they shall remain open until a new call is registered on the car control panel. Door close button shall be made inoperative. If the doors are closing and the door open button is operated this will cancel any registered call
- Door reversal devices that may be affected by smoke or heat shall be rendered inoperative, the car door reversal devices and the door open button shall remain operative
- The registered car call shall be visually displayed on the car control panel
- The position of the car shall be shown when either normal or emergency power is available, both in the car and at the main exit floor
- The lift shall remain at its destination landing until a further car call is registered
- The communication system shall remain operative for at least 1 hour during any evacuation or any loss of power

## **Summary**

In future projects we have to be sure that evacuation lifts comply with the above description and specifically to the following standards: EN81.1 or EN81.2 (where applicable), EN81.70, EN81.73, BS9999 and EN81.76. Is the EN81.76.

Furthermore, our OEMs have advised that they will from now provide any Fire Evacuation lift we order with the appropriate software so we have a fully complaint product.

If you have any questions please call me on 01264 343646

**End**