

TITLE	
TICKET VENDING MACHINE – INTEROPERABILITY CONSTITUENT REQUIREMENTS	
ORIGINATOR	SUBJECT RELATED TO
ARSENAL RACE	TSI PRM, 4.1.2.9
DESCRIPTION AND BACKGROUND EXPLANATION	
<p>The TSI states:</p> <p><i>4.1.2.9.2 TSI PRM (Ticketing, Information desks and Customer Assistance points – Interoperability constituent requirements):</i></p> <p><i>“The ticket vending machines to be provided on an obstacle free route at a station according to clause 4.1.2.9.1 shall have the tactile contact area (to include the keyboard, the payment and ticket vending areas) at a height of between 700 mm and 1200 mm. A minimum of one display and the keyboard shall be visible by both someone sitting in a wheelchair and by someone standing in front of the machine. If the display is the method of entering information then it shall comply with the requirements of this paragraph.”</i></p> <p>The requirements are the following:</p> <ol style="list-style-type: none"> 1. tactile contact area at a height of between 700 mm and 1200 mm 2. one display and the keyboard shall be visible by both someone sitting in a wheelchair and by someone standing in front of the machine 3. If the display is the method of entering information, then the display has to fulfil point 1 and 2 <p>The requirement Nr.1 can be misunderstood and so the following clarification shall be used: The interpretation of the point “tactile contact area” can be ambiguous, particularly in the German translation of the TSI, where “tactile” is only used for describing raised signs or characters. The term “tactile contact area” refers only to the requirements of the height (between 700 mm and 1200 mm) and does not require a “tactile display”. The terms “tactile signs” or “tactile controls” are used for this in the TSI PRM and are explained in chapter 4.3 of the TSI PRM – but this is not required for the ticket vending machine.</p> <p>The use of the word ‘tactile’ is ambiguous in the English language also. It actually means “of or pertaining to touch”; i.e. that which can be sensed by touch. It is usually used to relate to something which can be distinguished by touch alone, comprising for example particular materials or raised characters as in Braille. My interpretation is that “tactile” as used in the TSI actually means the part of the vending machine operated manually by the user including area for entering information, money input and ticket output ports. Logically the part of the vending machine used for entering data whether this be via a mechanical or virtual keyboard needs to be located near to the machine display.</p> <p>Whereas the intended interpretation of “tactile contact area” means the area which has to be in reach for every person to be used by hands (including keyboard, payment and ticket vending area). Therefore, in case the display is the tool of entering information, it</p>	

has to meet the measurement requirements of 4.1.2.9.2 (Nr. 1 and 2, see above), but neither display nor other manual operating devices of the machine have to provide tactile signs.

According to that, if ticket vending machines provide a display as method of entering information, the display has to fulfil the requirements of the paragraph: “shall have the tactile contact area (to include the keyboard, the payment and ticket vending areas) at a height of between 700 mm and 1200 mm”.

This interpretation is supported by point 4.1.4 *Operating rules – Ticketing for Visually Impaired Passengers*, which refers to ticketing in unstaffed stations, where only vending machines are provided. In such cases, operating rules shall define an alternative means of ticketing for visually impaired passengers (e.g. purchase on the train or at the destination). Consequently, the ticket vending machines need not to be operated by blind people. Following a false interpretation of 4.1.2.9.2 and assuming a vending machine display with tactile signs, point 4.1.4 would be obsolete.

This RFU is in line with the position of ERA PRM TSI working party that states : “It is not the intention of the TSI to request a “tactile” interface for vending machines in the sense that it would be usable by visually impaired people. “Tactile contact area” shall be understood only as “area of interaction between the machine and the user’s fingers”

RFU PROPOSAL

The wording “tactile contact area” in point 4.1.2.9.2 of TSI PRM has to be interpreted as area which has to be in reach for every person to be used by hands, and does not mean area with tactile signs. The display as tool of entering information of a ticket vending machine which has to fulfil the constituent requirements has to meet the measurement requirements of 4.1.2.9.2. It does not have to provide tactile signs.

DATE OF AGREEMENT AT NB RAIL PLENARY MEETING

08/02/2012