



Example 33 **Accessible Bus Service through New Design Standards**

City (country) **Grenoble (France)**

Similar service in Merseyside (UK)

good practice for people with ...	kind of vehicle	kind of measure/approach
... motor impairment ... visual impairment	city bus	engineering/technology approach financial support measure

Project description

The aim of the project is to make the bus service in Grenoble as accessible as a comparable modern tram service. This is an even more challenging task because of the lack of track guidance for buses, as opposed to trams, which makes it difficult for bus drivers to minimize the horizontal gap between the entry area of the vehicle and the bus stop.

The municipal transportation service has undertaken research for almost 20 years in order to set design standards for making bus stops accessible to motor-impaired people that are most effective. These standards are, among others, a breadth of the boarding platform of at least 2.1m, a height of the kerb of 21cm and a gradient of the access ramps at the end of the platform of at most three percent. The 21cm measure is a compromise between reducing the gap between bus and stop surface on the one hand, and minimizing the risk of damaging anything when approaching the stop (e.g. when a bus stop is in a bus bay) on the other. If the bus driver then activates the kneeling mechanism, passengers have almost no vertical step to take.

When a new kerbside stop is built, which means a boarding area that extends into the roadway, a height of 24 cm can be used because the bus approaches parallel to the platform so that there is no risk of collision between the vehicle and kerb. Another advantage of this type of bus stop is that it is easier for the driver to minimize the horizontal gap.

But even these infrastructure arrangements fail to make the bus service fully accessible for people with motor impairments. To address this issue the transportation service has installed powered ramps, which are 65cm long with a maximum gradient of 15% in the extended situation, that allow wheelchair users to easily enter the bus. In many other towns manual ramps are installed, but the powered one has the advantage of fast deployment and the driver not having to leave his cabin, which means that he does not have to apply the handbrake, turn the engine off and close the cash box and the cabin door. All of these activities obviously take a lot of time, meaning that manual ramps have a negative effect on timekeeping.

For people with visual impairments there is a safety line in a high contrast colour (to the surroundings) 60cm back from the front edge of the boarding area.

Source:
International Association of Public Transport (UITP) / European Conference of Ministers of Transport (ECMT): Improving Access to Public Transport, Paris (2004), pp. 17-18