



## Accessible station design - security and accessibility

Colin Lovell of Safetell looks at accessible station design and discusses its application in ticket offices.



Recent legislation shows that the U.K. Government is committed to equal access to facilities, services, and premises, and indeed Part III of the Disability Discrimination Act 1995 covers precisely this. Similarly the new European regulation EC 1371/2007, which came into force in 2009, requires those responsible for new station construction and renovation work to take into account the needs of disabled persons and persons with reduced mobility.

### But what is disability?

In 2000 Safetell began design work on a secure ticket counter, known as Eye2Eye, for the rail market; working in conjunction with Merseyrail, the purpose of this counter was, and still is, to address the needs of all customers buying tickets at ticket offices.

During research for the design our design team concluded that commonly held views of disability are somewhat distorted, probably because the wheelchair symbol for disability is so iconic there is a lot of emphasis on the needs of wheelchair users; however

our discussions with different groups highlighted that there are a great many people with a wide variety of other health problems that cause them difficulties in travelling; and by this I don't mean just people that are registered blind or deaf, but people who would not perhaps think of themselves as disabled, for example people with problems caused by old age, or other disease related medical conditions.

This research really changed our design philosophy, and when we did start to design it was with a clear emphasis on reducing difficulties for customers with much broader spectrum of health problems rather than just addressing 'disabilities'.

All of the above may sound obvious but without a thorough consideration it can be so easy to overlook the needs of users.

### Dexterity difficulties

One of the first areas we looked at was how difficult it is for elderly people or those with dexterity problems to pick up coins from the stainless steel flat fronted counters that we saw at stations. I remember one old lady blaming "these fiddly new 5ps", and consequently we sculpted our counterwork with a recess to allow customers with poor dexterity to drag-and-scoop coins for easy pickup (see photo lower left); of course making coin retrieval easier benefits all customers and saves time as people try to pick up coins and tickets.

### Mobility & Balance issues

When we investigated the difficulties of those with mobility problems purchasing tickets, we found we needed to consider people with walking sticks, crutches, and balance problems, as well as wheelchair users. The information we gained suggested that the height of the counter surface would be of considerable importance to all these



users, where perhaps bending low, twisting, turning, or overreaching might be exceptionally difficult if not impossible for them.

To reconcile the ticket counter to the needs of all of these people we eventually settled on a counter that can be easily moved or set to whatever height is required. This solution also gives the benefit to the station that everyone can be served at one counter position, which is crucial where there is no room for a second counter position, and can save cost.

### Vision impaired

Talking with people with degraded sight we found a wide range of difficulties from common sight degradation, down to very severe deterioration; one gentleman told us "I am classified as partially sighted but I can only see a light blob inside a dark blob". Working this information into our design we opted for a solution that gives high colour contrast counter edges to help all people with poor sight pick out the counter edge (see photo top right).



### Other health difficulties

Ultimately a wide variety of other health difficulties of the travelling public, such as hearing impairment, muscular issues, and cognitive problems also affected our design in many subtle ways. Without careful consideration user problems can be so easily overlooked.



- Is a designer, manufacturer, and installer of security equipment including ticket counters to prevent attacks on staff and robberies in the rail industry.
- Colin Lovell is the Safetell Rail Accounts Manager.

Web: [www.safetell.co.uk](http://www.safetell.co.uk)  
Tel: **01322 223 233**

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