

## Disabilities in Railways: Proposed Changes to the Design of Railway Compartments for the Inclusion of Differently Abled Persons

**Authors :** Bathmajaa Muralisankar

**Abstract :** As much as railway station infrastructure designs and ticket-booking norms have been changed to facilitate use by differently abled persons, the railway train compartments themselves have not been made user-friendly for differently abled persons. Owing to safety concerns, dependency on others for their travel, and fear of isolation, differently abled people do not prefer travelling by train. Rather than including a dedicated compartment open only to the differently abled, including the latter with others in the normal compartment (with the proposed modifications discussed here) will make them feel secure and make for an enhanced travel experience for them. This approach also represents the most practical way to include a particular category of people in the mainstream society. Lowering the height of the compartment doors and providing a wider entrance with a ramp will provide easy entry for those using wheelchairs. As well, removing the first two alternate rows and the first two side seats will not only widen the passage and increase seating space but also improve wheelchair turning radius. This will help them travel without having to depend on others. Seating arrangements may be done to accommodate their family members near them instead of isolating the differently abled in a separate compartment. According to present ticket-booking regulations of the Indian Railways, three to four disabled persons may travel without their family or one to two along with their family, and the numbers may be added or reduced. To help visually challenged and hearing-impaired persons, in addition to the provision of special instruments, railings, and textured footpaths and flooring, the seat numbers above the seats may be set in metal or plastic as an outward projection so the visually impaired can touch and feel the numbers. Braille boards may be included at the entrance to the compartment along with seat numbers in the aforementioned projected manner. These seat numbers may be designed as buttons, which when pressed results in an announcement of the seat number in the applicable local language as well as English. Emergency buttons, rather than emergency chains, within the easy reach of disabled passengers will also help them.

**Keywords :** dependency, differently abled, inclusion, mainstream society

**Conference Title :** ICACUEE 2017 : International Conference on Architecture, Civil, Urban and Environmental Engineering

**Conference Location :** Paris, France

**Conference Dates :** May 18-19, 2017