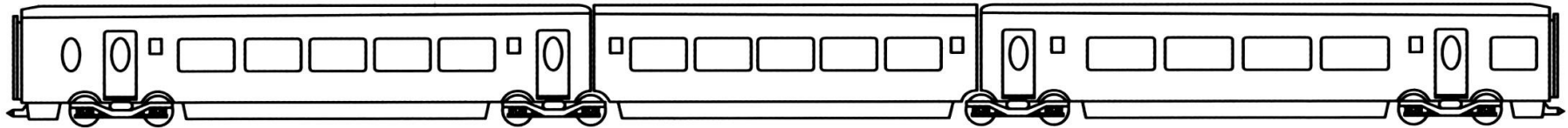


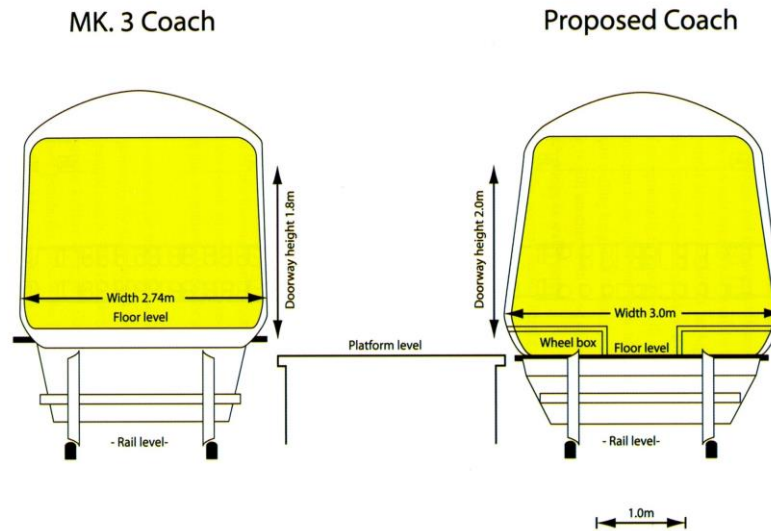
Railway Carriage Design Concept



This coach design concept is optimised for the British main line railway network, which has unusual characteristics of a restricted loading gauge and high platforms. The design has a partially articulated structure with relatively short vehicle bodies, to give a more spacious interior while preserving a 'go-anywhere' route availability. In addition, wheels are partially recessed and floors are lowered to give step-free access from platforms.

The concept covers a broad range of applications including long distance stopping, commuter and inter city services. A standard vehicle structure can be fitted out in many ways according to requirements; different seating densities, powered or unpowered, sleeping and restaurant cars, driving cabs or not, etc. Some options are described in the book '**Beyond the HST**' by **John Kinghorn** (Melrose Books, £16.99) ISBN 978-1-907040-65-8.

Looking for partners interested in developing this vehicle design or any subsystems within it. Those using novel materials or construction techniques are especially invited to consider whether this design concept might be a suitable platform to prototype their ideas.



The yellow area illustrates the additional space available in the seating area compared to a conventional 23m long coach, the level access from platforms and the increased doorway height.



The doors are of a novel design combining the best features of sliding and plug door concepts. On opening they move inwards and upwards slightly, before sliding sideways behind a large destination display. The model above shows the opening sequence.

More information can be found on the Wessex Round Table of Inventors (WRTI) website www.wrti.org.uk
Click on Membership Information tab – Members Inventions in Development – Railway Carriage Design – Train Doors.

Enquiries to the inventor John Kinghorn via johnkinghorn@waitrose.com

© John Kinghorn 2015