

**Network RUS: Rolling Stock - Draft for Consultation – Response**

**1 August 2011**

Railfuture is pleased to submit this brief response to the draft Network RUS – Rolling Stock.

Railfuture is a national voluntary group organised in England as twelve regional branches plus two national branches covering Scotland and Wales. Railfuture's national Passenger Committee has edited this response with input from several branches.

**General Comment**

Railfuture broadly welcomes the identification and analysis of potential cost savings; we welcome the acknowledgement of the interaction between rolling stock policy and infrastructure policy.

**Zoning**

We note the 'zoning' of rolling stock into such categories as inner-suburban, regional, etc. However, this appears to have major inconsistencies depending on location within the UK and the type of services currently supplied. Figures 3.4 to 3.9 apply.

This is compounded by the proposed simplification of rolling stock types down to three main with 9 sub-types (see our comments later). If the zoning remains unaltered or is interpreted in a too rigid manner, unsuitable rolling stock will continue to be developed and deployed.

For example it would appear that the whole of the former Southern Region is viewed as a suburban network. Basingstoke (48 miles from London) is viewed as the limit for inner suburban services. This distance is far in excess of any other route radiating from London (Reading 36, Chelmsford 30, Stevenage 27). Weymouth (142 miles from London) is viewed as the limit for outer suburban services.

However, compared to other services radiating from London (Kings Lynn 97, Peterborough 76, Bedford 50, Ipswich 69), the rolling stock for these Interurban services is of no comparison to the unsuitable Class 450 with 3+2 seating used on Basingstoke and Portsmouth Harbour services or the 'nodding donkey' Class 142 units used on the 51-mile Manchester – Southport services. Similarly services such as Lanark and Airdrie-Bathgate are apparently categorised as inner suburban. Such categorisation presumably means that toilet provision is considered non-essential.

Journey time as well as distance is important to define the boundary between Inner Suburban, Outer Suburban and Interurban journeys. Didcot (53 miles from London) has typical HST journey times of 45 minutes but to a much higher standard of comfort. Journey times will improve further following electrification and Reading remodelling. We return to Portsmouth as it fares even worse with a journey time of 97 minutes as typical for the 57-mile journey. The same journey time gets one from London to Bristol Parkway, which is 111 miles from London but in HST standard comfort

Therefore, realistic clarity of zonal boundaries, journey time characteristics and market sector is essential.

## Rolling Stock Types

The division of rolling stock into three main and nine sub-types should also be reviewed as we believe that it can be further refined to achieve better value for money but also better suited to market sectors.

The RUS suggests the following broad categorisation:

- Long Distance High Speed (125-140mph; 23m-26m long carriages):
  - 25kv electric;
  - diesel;
  - bi-mode;
- Interurban, Outer Suburban, Regional and Rural (100-125mph; 20m-23m long carriages):
  - dual voltage;
  - self powered;
- Inner suburban (up to 90mph; 20m-23m long carriages):
  - 25kv electric;
  - dual voltage;
  - diesel;
  - bi-mode

Turning first to Long Distance High Speed, we would contend that bi-mode train sets are an unnecessary expense. These units would be required to haul heavy diesel motors whilst for a large proportion of their time under the wires. This flawed and ill thought-out concept has been legitimised by the IEP programme.

We do not support this concept of b-mode when locomotive haulage remains a viable solution. This has been borne out by existing experience with AC train-set haulage in Scotland and North Wales and we cannot see any technical or financial reasons for changing this practice. This is particularly so with the advent of newer, more efficient and cost effective locomotive designs such as Traxx.

Looking next at the rather broad 'catch all' grouping of Interurban, Outer Suburban, Regional and Rural, we wonder why 'self powered' has been specified when you surely mean diesel? Also, are you advocating that all electric trains in this category should be dual voltage? Whilst this would ensure ultimate flexibility of operation we wonder if it would be better classified as 'dual voltage capable'. There seems little point in fitting additional equipment at build stage, whereas making full provision for future retrofit if required gives a better value for money profile without sacrificing future flexibility.

We also wonder if Regional and Rural should not be split off into a separate categories? It can be argued that Outer Suburban and Interurban are similar and share broad common characteristics, whilst trains serving small local Rural communities or trains aimed at connecting Regional centres, for example Norwich to Liverpool have markedly different needs. Few if any Rural trains need 100-125mph capacity whereas Regional trains most certainly do require the ability to run at 100 mph.

Finally we reach the Inner Suburban category. First of all the speed limitation of 90mph is unrealistic. There are numerous mixed traffic areas where the ability to run at 100mph is necessary in order to maximise limited line capacity. We would also suggest that all electric units are manufactured as dual voltage capable. Whilst we see the continuing necessity for some diesel units, we do not see any overwhelming argument for expensive and unnecessary bi-mode units.

Afterthought. Which category do sleepers fall into? Obviously not LDHS but arguably could be classified as Regional or Interurban. In essence these important markets to Scotland and the West Country form a category of their own with special requirements and characteristics.

## Train-Design-Infrastructure Interface

We would support the notion of intelligent design. Trains need to be designed for the market sector they serve. Equally, they need to be designed to maximise the passenger experience as much as they need to cater for passengers less able to move about freely, e.g. passengers with disabilities.

Lack of attention to detail such as seat design or positioning of seats between windows often ruins the passenger experience in the name of maximising return. The involvement of passengers in design consultations would be welcomed.

The ultimate arbiter of design must be the procurer of the rolling stock. We would not support recent quasi-arbitrary decisions taken by government in such cases as IEP and Thameslink. These appear to impose a decision on customers rather than the customer defining the best solution for 'problem'.

A much closer relationship needs to be established between service providers as the commercial procurers of rolling stock, the infrastructure providers and the funders. In other words, it is the TOCs and the ROSCOs who procure and specify rolling stock; Network Rail provides and maintains the infrastructure and the government funds the network. The last part of the equation will, by necessity, change as longer franchises are created and TOCs make more of the non-strategic investment decisions, thus making operator/infrastructure relationships even more important.

## Market and Planning

We are convinced that until the government defines what it actually wants from the network and decides the extent or otherwise of future modernisation, in particular electrification, that sensible decisions on rolling stock requirements cannot be made. Other factors also need to be decided regarding franchise form, length and commercial freedom, etc.

We would support a more stable approach to rolling stock orders. This would, quite sensibly, ensure continuity of supply on a value for money basis. However, the market is by its nature governed by when rolling stock is required. Without a 'command economy' or a massive continuing expansion of the rail network it is difficult to see continued orders being placed. This would also be problematic for other reasons, such as continuing electrification, which will, and to some degree already has, made production of diesel multiple units more expensive on a per unit basis.

There are also examples where planning or rather lack of it has left a legacy of under provision and sub optimal utilisation. Such examples include infrastructure unable to exploit the full potential of current rolling stock (such as speed restrictions or short platforms) or where changes in plans have resulted in shortages of suitable rolling stock, for example the lack of Electric Multiple Units in the Greater Manchester conurbation, necessitating the continued use of unsuitable and inadequate diesel units.

## Conclusion

Railfuture sees much merit in a stable rolling stock market that provides innovative value for money products for the UK rail market. However, this can only be achieved if TOCs/ROSCOs are allowed the commercial freedom to innovate and to react to market demand. The only way this can happen is if the government stands back and allows the market to operate in a true entrepreneurial atmosphere.

For further information contact:  
Chairman, **railfuture** Passenger Committee  
E: [passenger@railfuture.org.uk](mailto:passenger@railfuture.org.uk)