



Rolling stock and value for money

An ATOC discussion paper

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ATOC

ASSOCIATION OF TRAIN OPERATING COMPANIES

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Executive Summary

The McNulty report estimated that GB rail spends c £1.9 billion pa on rolling stock and is believed to have indicated that potential savings of c £80-150 million pa could be achieved by 2018/19 (paras 3-4).

ATOC concludes that savings are possible but from a different range of approaches and to a smaller extent in the short term than McNulty proposed. We estimate that the industry's cost base could be reduced by approximately £50 million pa by 2018/19 (paras 5-10).

We believe the way forward lies in a more market-led approach than today, where TOCs have a bigger role in determining rolling stock solutions within a high-level strategic context developed and shared with other rail industry players, based on:

- Empowering TOCs to adopt a wider range of options than now when deciding on the most cost-effective way to procure and manage rolling stock
- Strengthening the ability of TOCs to negotiate better terms with ROSCOs in implementing their chosen rolling stock solutions
- Promoting a more whole-industry approach to developing and implementing rolling stock solutions which deliver better VfM (para 11).

We have identified eight specific measures for implementing our approach:

- Give TOCs more procurement responsibility within longer, more flexible franchises. This should enable them better to optimise rolling stock fleets in terms of the number and type of vehicles, maintenance arrangements, and investments to deliver improvements, as well as through more innovation in timetable planning to reduce fleet sizes. Longer franchises will also support TOCs in working more closely with manufacturers and ROSCOs

to drive best value from the supply chain (paras 12-15)

- Provide more information to help the market work better. Consideration should be given to building carefully on the recent Competition Commission order to make more information available to the market place on existing lease agreements (paras 16-18)
- Develop a high-level rolling stock strategy. This could be done through an industry-wide group, chaired independently and involving input from TOCs, NR, ROSCOs and DfT. Among other things, the strategy would help TOCs identify potential rolling stock solutions; help the DfT decide on the merits of offering Section 54 undertakings to address any residual value risk; provide greater predictability to ROSCOs, manufacturers and suppliers about future orders; and facilitate planning of other infrastructure such as depots and power upgrades (paras 19-23)
- Introduce the opportunity for a new franchisee to extend existing leases for three years at the start of a new franchise. This option would be available on essentially the same terms as the previous lease, so allowing an incoming franchisee time to explore the full range of possible solutions rather than negotiating new leases during the short period between franchise award and mobilisation (paras 24-29)
- Use Section 54s as an option, but not a requirement, for all new-build procurement. As a way of dealing with residual value risk, this mechanism is most likely to offer VfM for specialist rolling stock, such as long-distance high-speed trains, which would be difficult to cascade to other routes: they are less likely to be appropriate for more flexible rolling stock, such as Electrostars and Desiros. We recommend that option pricing – where ROSCOs quote lease rates for situations both

with and without a Section 54 undertaking - is adopted as standard practice for new-build rolling stock to enable these decisions to be made in the context of each procurement (paras 30-33)

- Develop a more commercial relationship between TOCs and Network Rail. We see the current discussion on alliancing in particular as an opportunity to incentivise operators and NR to develop more whole-industry solutions (including rolling stock) to deliver better VfM (paras 34-38)
- Explore the case for increasing the interchangeability of components beyond the levels of harmonisation created by the Technical Specifications for Interoperability (TSIs). We think the market and EU work to develop TSIs can and should drive standardisation, with the opportunities that brings to reduce industry costs. There may be a case for operators to work more closely with the supply chain to promote improved component interchangeability, for example, in areas such as couplers (paras 39-48)

- Ensure a range of approaches to train maintenance are available to TOCs. Operators should be responsible for determining the optimal maintenance strategy to fit their circumstances. Dry leases and opening up train service agreements (TSAs) to contestability after the initial contract period should be among the opportunities open to TOCs (paras 49-55).

Implementing our proposals will require the support and engagement of many players in the industry. The opportunities to make the proposed changes would arise when new build leases are entered into and also, but to a more limited extent, where existing fleets are extended by means of the agreement of new leases (para 60).

Work on implementation can begin in early 2012, alongside publication of the Government's intended Command Paper on rail. We intend to use this discussion paper as the basis for further and more detailed dialogue with our key industry partners, in order to take forward the ideas we have set out (para 61).



A handwritten signature in black ink that reads "Michael Roberts". The signature is written in a cursive, flowing style.

Michael Roberts
Chief Executive, ATOC

Introduction

1. This paper sets out how it might be possible to achieve better value for money from procuring and managing rolling stock. It has been prepared following initial discussion with a range of industry players following publication of the McNulty Rail Value for Money (RVfM) Review. It represents current ATOC thinking in this area: we hope it will help inform the rail reform agenda and it is intended to form the basis of further engagement and development with our key partners.
2. Current rolling stock policy has emerged as a response to specific requirements, such as HST replacement and financial market instability, rather than as a part of a considered overall approach. We set out in this paper to look at rolling stock afresh and explain why and where changes to current practice could deliver significant benefits across the whole industry, as part of the wider reform agenda. A central premise is that operators should have a greater role in procuring and managing rolling stock, allowing them to use their commercial expertise to drive better value from leasing companies, manufacturers and financiers.

The potential for cost savings

3. The McNulty report estimated that GB rail spends c.£1.9bn p.a. on rolling stock (15% of total industry costs), with capital leases, maintenance and operating costs account for roughly 60%, 25% and 15% respectively of whole life rolling stock costs. It did not put forward a specific estimate of savings in this area, but the study's own analysis (after allowing for double counts) is believed to have indicated that potential savings of c.£80-150m p.a. (4-8% of rolling stock costs) could be achieved by 2018/19 through implementing proposals (see Appendix A) covering:
 - Increased standardisation of GB rolling stock
 - More effective procurement of rolling stock
 - Better supply chain management
 - Improved VfM from the leasing market through adopting best practice and a partnership approach, using regulation if necessary.
4. The assumptions and analysis underpinning the savings have not been published in any detail. Our reading of the report is that the savings quoted have largely been extrapolated from the study's general recommendations on asset and supply chain management rather than from its specifically-commissioned rolling stock analysis.
5. We have worked with owner groups to identify opportunities in more detail and explored the options with DfT, manufacturers, ROSCOs, a number of financiers and Network Rail. We conclude that savings are certainly possible but from a different range of approaches and to a smaller extent in the short term than McNulty proposed, although there is scope for more savings in the long term particularly if franchise reform is implemented.
6. There are several reasons why we believe the opportunity for savings may be more modest than that assessed by the RVfM Review:
 - The operation of the franchise system, in which the market (until the Government's recently-stated intention to adopt a new approach to franchising) has been heavily shaped by government specification, creates a number of cost drivers not replicated in other privatised industries or in other countries
 - The proportion of the cost base that has in practice been "locked in" under long term contracts through DfT-led procurement. The government-led IEP and Thameslink rolling stock procurement, together with the recent Pendolino contracts and the Class 395s, place significant capital and maintenance costs outside the control of

future franchisees. We estimate that, as a result, roughly one quarter of total rolling stock spend in 2018/19 will not be addressable for this reason alone

- Current growth in passenger demand coupled with the slow pace of introducing new rolling stock over the past few years have created some shortages of fleet. As a result, bidders for new franchises face a challenge simply to contain upward pressure on leasing and maintenance costs for both new and existing stock, before looking at options to reduce them
- The RVfM Review seems to understate the outcome of the Competition Commission (CC) review in 2009 and the reality that ex-BR rolling stock has had several transfers of ownership since initial privatisation. Investors have expectations about capital rentals for both ex-BR and post-BR stock which have been 'baked in' to the sale prices of ROSCOs. Moreover, since their sale by their former bank owners over the past few years, they have generally taken on significant levels of debt which we understand are subject to banking covenants which set significant limits on lease pricing (see box on the next page).

7. Within the constraints described above, our assessment is that giving TOCs greater freedom to optimise rolling stock (whether through new build, cascades, life extension or renewal) within the framework of long term franchises is key to achieving VfM. TOCs would negotiate better commercial outcomes than have proved possible through the DfT-led approach of recent years, based on price signals from the supply chain (including ROSCOs, other financiers, rolling stock manufacturers, maintenance suppliers, energy markets and Network Rail).

8. Some stakeholders question whether the GB rail industry is mature enough for market mechanisms to work effectively, citing previous decisions which, with the benefit of hindsight, have been sub-optimal (for example, in procuring small orders of non-standard rolling stock which offer limited scope for future re-deployment). Others

argue in favour of a regulatory model, using a Regulatory Asset Base (RAB) mechanism to fund new rolling stock, potentially in conjunction with a central planning approach (see Appendix B). Our view is that:

- The industry has evolved considerably and is committed to improving value for money. The interaction with infrastructure is now viewed as a key part of any rolling stock project, and the improved rail industry planning process (compared with the early days of privatisation) can help address compatibility issues. More generally, competition in train procurement and finance provides strong commercial incentives to learn quickly from experience and make better decisions in future. Small build sizes, coupled with non-standard features, generally increase cost and are therefore unlikely to be chosen by future franchise bidders given the focus on value for money
 - The RAB approach would require major interventions by the ORR and DfT, losing the flexibility and responsiveness that represents our view of the best way forward. While this approach offers some theoretical advantages, it also brings significant downsides, mainly resulting from the lack of competition and the potential to lock the industry into solutions that are obsolete or do not promote innovation.
9. Our assessment is that competition can be made sufficiently effective for a market-based solution to be preferable over a regulatory or centrally-planned approach. It is difficult to be precise about the scale of opportunity, but taking into account all of the various factors that McNulty identified, we estimate the industry's cost base could be reduced by approximately £50m per annum by 2018/19 through:
- More competition during re-leasing of today's fleets: £25m pa
 - Reducing the cost of new build: £22-45m pa
 - Better VfM in maintenance (on taking over DfT contracts): £7.5m pa



The Former BR Fleets

The market segment which has provoked greatest concern in relation to capital lease prices is the ex-BR rolling stock, leased on the Master Operating Lease Arrangement (MOLA) and generally referred to as the 'MOLA' fleet. The number of these still in service is declining and by the end of CP5 we would expect (at most) half of the MOLA fleet to remain in service. There are still substantial numbers of ex-BR fleets on regional railways services and all bar one commuting route into London.

The initial lease rates for these vehicles were set through an administrative process, rather than through competitive new-build procurement, and the maximum lease length set was 10 years from 1994. The initial lease rates were based on 'indifference pricing' (ie. the price at which a TOC would be indifferent financially between a new and an old train) relative to new-build, taking account the opportunity that was then believed to exist to reduce new build costs. Bidders for the ROSCO privatisation therefore had to take a view on lease rentals beyond the initial lease periods, bearing in mind the potential that their stock could be replaced altogether by new build trains. They also had to take a view on the likely course of rail privatisation since at the stage final offers were sought for the ROSCOs in 1995, no franchise had yet been let and there remained a considerable risk that none would be let before the arrival of a new government.

Against this context, bidders for the ROSCOs during privatisation in 1995 took a cautious view about their ability to re-lease stock and the sales values were reduced. Confidence increased over time, however, and, by March 1997 (just 18 months after the initial ROSCO sales had been agreed), all 25 TOCs had been franchised. Each ROSCO has since been resold at least twice and, on each occasion, the values paid have increased reflecting increasing confidence about future re-leasing potential, including a greater awareness of the cost of changing fleets over, and of the ability of the ROSCOs to organise and arrange finance for major rolling stock procurements.

There has been an understandable wish to secure better value capital lease charges for the MOLA fleets at re-leasing points, potentially reflecting factors such as falls in interest rates and, more recently, the age of much of the MOLA fleet. The assumption that new-build stock would become cheaper over time has not been fully realised as a consequence of higher specification of vehicles, wider engineering price increases and (since 2008) unfavourable movements in sterling exchange rates. The result is that the capital rentals of the MOLA fleet are typically lower than those for new build, although a full comparison of factors such as fuel, maintenance and variable access charges, seating capacity and customer perception has to be carried out before final choices are made.

There are opportunities through competition to get better value, particularly in situations where a surplus of ex-BR EMUs builds up as a result of Thameslink and Crossrail orders, where new trains can deliver operating cost savings (for example through less onerous maintenance requirements or regeneration of electricity) or where new high density trains might be the replacement for older ex-BR EMUs from the 1980s. That said, given the ROSCO resales and refinancings since then, it is unlikely that this would lead to the savings that DfT reportedly envisaged at the time of the Competition Commission review.

10. This estimate is based on the following assumptions:

- The Competition Commission (CC) identified a statistically significant link between the number of potential alternative sources of stock and eventual capital lease prices, after adjusting for capital investment and excluding short leases. It concluded that its analysis “implies that an increase of one in the number of alternative ROSCOs considered by franchise bidders, on average, leads to a drop of almost six percentage points in the capital rental for the lease in question”. The DfT’s own analysis of the impact of competition on changes in lease rates (applied to ex- and post-BR stock) showed that in cases where existing alternative rolling stock was available, rates went down by 6.7% on average. As it is not always possible to have such a degree of competition, we have assumed only half of this saving is available. We have also excluded the IEP, Thameslink and Class 390 Pendolino fleets from this calculation, given the existing long term leasing arrangements for these put in place by DfT
- A 5-10% saving on a typical capital cost per new build vehicle of £1.5m, drawn from our earlier work on franchise reform. This would primarily arise from having simpler, more business-led specifications; some degree of standardisation (see later); and a significant reduction in professional fees (such as consultants, advisers and financiers) arising from speeding up the whole process. Further savings would arise from having less capital to finance, but for simplicity we have estimated the impact on capital costs only
- On maintenance, once existing long term contracts as part of DfT procurements come to an end we have assumed, based on experience of comparable maintenance costs for TOC-maintained fleets, that it would be possible to reduce maintenance costs by 10%.

ATOC’s eight point plan

11. We have identified eight measures which could deliver a more market-led approach, where TOCs have a bigger role in determining rolling stock solutions within a high-level strategic context developed and shared with other rail industry players. The approach is based on:

- empowering TOCs to adopt a wider range of options than now when deciding on the most cost-effective way to procure and manage rolling stock needed to deliver services. This can be done through greater use of longer, more flexible franchises: these would allow more scope to look at possible solutions, including trade-offs between rolling stock and infrastructure, and the option of reducing fleet sizes through better timetable planning, as well helping to achieve better supply chain management (Measure 1). Ensuring that TOCs have a wide range of maintenance options open to them, including dry leases, where this is likely to be the best VfM route, is also important (Measure 8)
- strengthening the ability of TOCs to negotiate better commercial terms with ROSCOs in implementing their chosen rolling stock solutions. We see scope to do this by building carefully on the recent CC order to make more information available to the market on existing lease agreements (Measure 2); giving incoming franchisees the ability to use existing stock for three years, thus allowing them time to explore the full range of possible solutions rather than negotiating new leases during the short period between franchise award and mobilisation (Measure 4); and maintaining the use of Section 54 undertakings as a way of reducing residual value risk, as an option but not a requirement for all new-build orders (Measure 5)
- promoting a more whole-industry approach to developing and implementing rolling stock solutions which deliver better VfM. This could be done by publishing an industry rolling stock strategy which enables TOCs, NR,

ROSCOs, manufacturers and funders to consider the wider implications of potential rolling stock deployments and associated initiatives such as depot strategies (Measure 3); encouraging a more commercial relationship between TOCs and NR, building in particular on current discussions around alliancing (Measure 6); and, where appropriate, working with the supply chain on key initiatives including operator-led standardisation which promotes more interchangeable components to complement other drivers towards standardisation (Measure 7).

Measure 1: Give TOCs more procurement responsibility within longer, more flexible franchises

12. In her foreword to the DfT's July 2010 report on Reforming Rail Franchising, the Minister of State for Transport stated: "We also need to move away from a system which sees Whitehall specifying highly detailed and prescriptive inputs in franchises. Instead, we want to see a stronger focus on the quality of outcomes for passengers, giving more flexibility to the professionals who run our railways to apply innovation and enterprise in working out the best way to deliver those outcomes".
13. We support this change of approach, which was also part of the CC's recommendations. Implementing franchise reform in accordance with these principles would enable TOCs to take the lead in improving rolling stock VfM:
 - longer franchises with output-based specifications awarded on the basis of quality and not just price alone would give TOCs greater freedom and very clear incentives to optimise rolling stock fleets in terms of the number and type of vehicles, maintenance arrangements, and investments to deliver improvements. The franchise bidding system should encourage more innovation in timetable planning to reduce fleet sizes through better deployment and diagramming, including 'bounceback' units

that do two or more journeys in the peak, reduction in turnaround times at termini and changes to depot strategy. Depots and stabling are important parts of the value chain, but are often overlooked: it is essential that options for improving facilities and exploiting synergy between depot location and timetable development are fully explored. The bidding phase should provide a strong commercial discipline to get these areas right, and provide opportunities for market-led procurement of the majority of rolling stock requirements

- there are important choices about whether to procure new trains in a single procurement deal, with finance and manufacturer-provided maintenance and depot packages, or in separate contracts. Recent DfT policy has been to bundle these together in large part so as to encourage manufacturers to deliver high reliability and quality. This approach might be optimal in some situations, but not in all cases. TOCs should take the lead in identifying the best finance, maintenance and depot strategies that fit their own circumstances, including taking on full maintenance responsibility from the start if that is the best VfM approach
- we recognise there might be some very exceptional circumstances (e.g. major projects such as Crossrail) where the DfT or other funders wish to play a larger role, but these should not be the norm. The advantage of our approach is that TOCs can act more quickly and flexibly in making commercial decisions in response to changing market conditions and remove the pressure from what can sometimes be politically-challenging procurement choices
- a consequence of giving TOCs the flexibility to weigh up the choice between life-extension, continuation leases and new-build procurement is that it could potentially help smooth the peaks and troughs of new-build construction. Train operators would have a natural commercial incentive to seek out

gaps in production lines and negotiate attractive terms for either follow-on orders or life-extension works to help fill gaps.

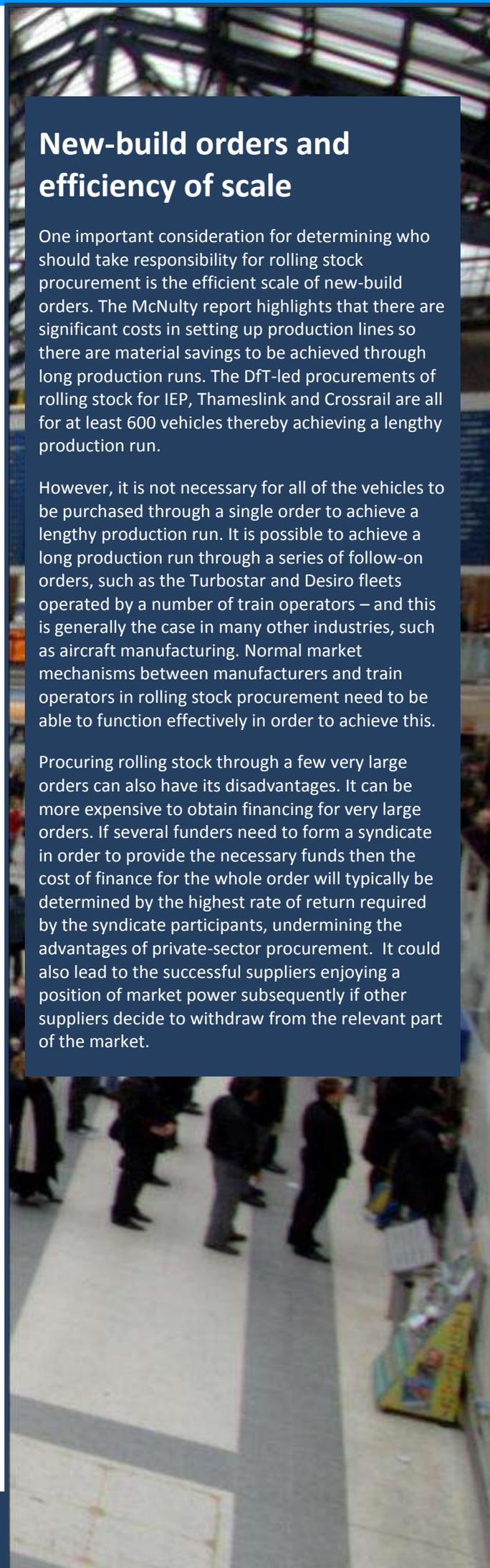
14. Allowing TOCs to leave open some of their rolling stock decisions at the time of bid submission and to change their rolling stock plans mid-franchise (providing that they continue to meet DfT's output specification) would give TOCs much greater flexibility to take advantage of commercial opportunities and strengthen their negotiating position with ROSCOs. This is an important feature of a long franchise. Under DfT's current bid evaluation process, it is widely believed that a TOC is typically marked down on deliverability assessment if it leaves flexibility in its rolling stock proposals. Under the current franchise model, the train fleet is contractualised in the franchise agreement, with restrictions as to whether and when changes to the fleet can be made. A better approach would be to make it transparently clear that bidders would not be penalised in bid evaluation if they left open options for changing some stock during a franchise.
15. The greater stability that longer franchises can provide should also help unlock improvements in supply chain management. It provides a stronger basis on which to develop the 'partnering' approach with suppliers called for by the McNulty study, where suppliers work much more closely with clients to help shape requirements for products and services, before procurement commences, building the expectation of long-term relationships rather than purely based around short-term price minimisation. To help our members with this approach, the ATOC Engineering Council has identified several workstreams to take forward, such as:
 - developing and promoting better information on whole-life costs for rolling stock to improve investment decision-making
 - improving visibility of the options and choices on energy management, particularly where this is likely to mean development or adaptation of existing products to better

New-build orders and efficiency of scale

One important consideration for determining who should take responsibility for rolling stock procurement is the efficient scale of new-build orders. The McNulty report highlights that there are significant costs in setting up production lines so there are material savings to be achieved through long production runs. The DfT-led procurements of rolling stock for IEP, Thameslink and Crossrail are all for at least 600 vehicles thereby achieving a lengthy production run.

However, it is not necessary for all of the vehicles to be purchased through a single order to achieve a lengthy production run. It is possible to achieve a long production run through a series of follow-on orders, such as the Turbostar and Desiro fleets operated by a number of train operators – and this is generally the case in many other industries, such as aircraft manufacturing. Normal market mechanisms between manufacturers and train operators in rolling stock procurement need to be able to function effectively in order to achieve this.

Procuring rolling stock through a few very large orders can also have its disadvantages. It can be more expensive to obtain financing for very large orders. If several funders need to form a syndicate in order to provide the necessary funds then the cost of finance for the whole order will typically be determined by the highest rate of return required by the syndicate participants, undermining the advantages of private-sector procurement. It could also lead to the successful suppliers enjoying a position of market power subsequently if other suppliers decide to withdraw from the relevant part of the market.



serve operators requirements. Examples are innovation in train management systems, regenerative braking and upgrading traction packages

- promoting good practice in condition-based maintenance, in particular remote condition monitoring to aid predictive maintenance
- increasing the extent of component interchangeability to facilitate longer production runs and reduce stock operating costs.

Measure 2: Provide more information to help the market work better

16. We think consideration should be given to building carefully on the CC's "transparency remedy" recommendations, implemented through their December 2009 transparency order. The order requires ROSCOs to provide a specified list of information to TOCs when making any lease rental offer for rolling stock, including:

- details of each item of rolling stock (e.g. class, year of manufacture, routes for which it has been accepted by NR for operation)
- heavy maintenance schedule
- maintenance reserve charges and estimated opening and closing balances
- copy of the existing lease agreement, including details of lease end date, lease extension or termination options, and current capital and non-capital lease rates.

17. Supply of this information is formally triggered by the ROSCOs making an indicative offer to a potential lessee. One option would be to make the information in the transparency order more broadly available to the market, not just at the point a lease offer is made. Publishing such information would give TOCs and bidders greater visibility of the data required to optimise their rolling stock fleets, including lease expiry dates

which might help with cascade optioneering, enabling them to evaluate a wider range of options before entering detailed discussions with individual ROSCOs.

18. However, there is a trade-off to be struck between making information about leases more generally available as an added stimulus to ROSCOs to offer competitive terms, and preserving the ability of TOCs and ROSCOs to strike innovative commercial arrangements which in turn help give a competitive edge to individual bidders for franchises. We recognise that ROSCOs have some concerns about proposals that would go beyond the CC order and we will continue to discuss with them, as well as operators, the scope for enhancing the provision of useful information to the market.

Measure 3: Develop a high-level rolling stock strategy

19. Developing and publishing a high-level, indicative strategy would further improve the quality and quantity of information available to the rolling stock market. This would show each train operator's current fleets, any planned changes and possible further developments beyond the current lease periods. In particular it would provide indications of which fleets are likely to have been modified for PRM TSI and/or ERTMS fitment, and when this would happen, which will help co-ordinate work throughout the supply chain. Such a strategy would:

- help TOCs identify rolling stock options available for a particular franchise, including options which involve a cascade or transfer of rolling stock between franchises
- increase visibility of the options available to TOCs, in turn strengthening their negotiating position with ROSCOs

- help ROSCOs price residual value risk effectively (though this would be undermined if the DfT were to make frequent, large changes to policy which have a significant knock-on impact on the future demand for existing rolling stock)
 - help the DfT to decide whether it would obtain VfM from granting new Section 54s and would help it to manage the associated risks
 - provide an opportunity to address strategic choices around the introduction of new build stock including the pros and cons of planning orders on a broader basis than on a single TOC and how any increase in cost from new build might be addressed
 - provide additional clarity to manufacturers and the supply chain about the overall quantum and type of vehicles required, providing opportunities to manage their resources and ensure that appropriate skills and capabilities are developed and retained
 - facilitate planning of other infrastructure, such as depots and power upgrades. Investment in depots and stabling was somewhat overlooked during the 2007 HLOS process and the indicative rolling stock plan would help to prevent a re-occurrence during the next Control Period.
20. The strategy could be developed and updated by an industry-wide group, chaired independently, and feed into the cross-industry Planning Oversight Group (POG). It would require input from TOCs and Network Rail (NR) as well as ROSCOs; reflect the outcome of NR's Route Utilisation Strategies (RUSs); and would be endorsed by the Rail Delivery Group (RDG). It would also need regular input from DfT to ensure that it remains consistent with the approach adopted for major projects sponsored by the Department, especially in those limited instances where funders are procuring rolling stock directly. This would include details of any key assumptions made in the project business cases, such as any cascades which have been assumed to occur following the introduction of new rolling stock.
21. The strategy would show specific rolling stock allocations to franchises for the remainder of the current leases and Section 54 undertakings. Thereafter, it would become more contingent. For example:
- the IC225 fleet of vehicles would be shown operating on the Inter-City East Coast (ICEC) franchise through to the end of their current lease. Thereafter, the strategy would indicate possible options, which could include either retaining the IC225 fleet or new-build vehicles, or a combination of both
 - if the planned response to HLOS is to increase train lengths on a particular franchise to 12-cars then the indicative rolling stock strategy might show the likely number of additional vehicles needed on the franchise after a defined date, without being specific about the class or source of the vehicles.
22. Such a strategy would not require an up-front commitment from any party in the industry to a specific course of action and the challenge would be for bidders to identify overall solutions that offered better VfM than the approaches in the strategy. Where stock was subject to Section 54 undertakings, bidders should have the ability not to retain that but if this results in the DfT incurring any financial liabilities from the Section 54 then the TOC's franchise bid would be adjusted accordingly. Such a mechanism has already been proposed by the DfT in the draft InterCity West Coast franchise ITT
23. Given the willingness of TOCs to take the lead in developing the rolling stock plan, we do not envisage it necessary to mandate this strategy through a licence condition. The recent proactive engagement of TOCs and owner

groups with NR to develop the Initial Industry Plan is evidence of owner group willingness to contribute to broader planning processes.

Measure 4: Introduce the opportunity for a new franchisee to extend existing leases for three years at the start of a new franchise

24. Today, most fundamental decisions about rolling stock are taken in the brief few months between franchise award and its commencement. These include the terms on which stock will be leased, including rentals and durations, which are multi-million pound commitments. Such short time scales make it extremely hard for TOCs to negotiate the best value approach and finalise terms. TOCs, funders and the wider industry would benefit if train operators had the ability to retain some or all of the existing stock for at least three years at franchise change points, on similar terms to those currently operating.
 25. We intend to continue to discuss with owner groups and ROSCOs the best way in which to do this. Our current thinking is that the structure would be similar to that put in place at privatisation, which gave the then Franchising Director the option to 'call' rolling stock from the ROSCOs, with the fundamental difference that in our proposal the choice would be made by the TOC rather than the DfT.
 26. The ROSCOs have said that this approach could subject them to increased risk which might then be reflected in some degree of lease premium. On the other hand, giving new franchisees greater opportunity to consider how best to meet their rolling stock needs through this approach might generate cost-savings which could offset this effect. If the approach were adopted, it is clear that they would value the choice being made as early as possible so as to allow them maximum time for the stock to be remarketed if necessary. We recognise that some safeguards would potentially be required to avoid ROSCOs being left with very small residual fleets with limited or no redeployment opportunities. Our approach would also clearly
- not be intended to preclude bidders negotiating with ROSCOs to retain stock on a long term basis prior to franchise commencement.
27. The benefits of this approach are that it would:
 - give sufficient time to explore fully a wide range of options, including life extension and new build, against the background of a signed-up franchise agreement, rather than having to commit to retain all existing rolling stock because of the shortage of time during the bid and mobilisation periods to negotiate alternatives. This is important given the long lead time to order, finance and commission new-build rolling stock and the fact that franchise end dates (and associated rolling stock lease end dates) are very rarely aligned
 - provide TOCs with some protection against ROSCOs increasing the lease rates on existing vehicles in cases where there are no practical alternatives, particularly for short term leases.
 28. Another form of option suggested by some stakeholders is a mandatory purchase option in new build leases that would allow a TOC (or funder) to purchase rolling stock outright at defined break points in leases. This is analogous to a mechanism used in some instances in Germany whereby outgoing concessionaires sell rolling stock to their successors on defined terms (typically net book value). The potential benefit of such an option would be to give added protection to an incoming franchisee in the event that the ROSCO is in a position of market power and is seeking to obtain a return significantly in excess of its cost of capital. An example of this might be when the rolling stock approaches life expiry and has been fully written down in the ROSCO's accounts.
 29. An extension of this approach would be for rolling stock to be re-priced on an 'open book' basis once it has reached the end of either the initial lease period of at a pre-determined accounting life set when the vehicle goes into service. This might be introduced in new build

contracts but would be very difficult to apply to existing fleets for which a range of accounting values and lives are in use.

Measure 5: Make Section 54s available as an option, but not a requirement, for all new-build procurement

30. Section 54 undertakings are one way of reducing residual value risk and are intended to encourage investment in rolling stock that would not have otherwise taken place. Section 54 undertakings have been used for new-build rolling stock and for additional investment in existing vehicles and have been quite widely offered by DfT.
31. There is a range of views across the industry about how far Section 54s are necessary or have been effective in achieving their objective in different circumstances. The strongest argument for new Section 54s, or alternative mechanisms, is that they may result in better VfM because the DfT is best placed to manage several of the key drivers of residual value risk such as successive HLOSs, and other policy and regulatory changes such as Mk1 replacement and PRM TSI. The assurance that the government can give in these areas can then be translated into a lower cost of capital required by financiers. Section 54s could also help to attract new entrants – current ROSCOs might be comfortable with managing a portfolio of residual value risk, but potential new entrants might value Section 54s as they have limited experience of managing risk within the rail sector.
32. By their very nature, however, the main disadvantage of Section 54s, or similar mechanisms (such as designating rolling stock as a primary franchise asset), is that they do not result in significant risk transfer to the private sector. By putting the DfT in the driving seat for planning re-leases, they severely restrict the options at franchise ends, increase the need for DfT involvement in the detail of rail planning and potentially reduce the commercial incentive on ROSCOs to ensure that stock meets customer

requirements at franchise ends in order to reduce the risk of displacement by other fleets.

33. We understand that ROSCOs generally view Section 54s as seldom essential for new builds, given the range and depth of funding sources now available. Whether or not the DfT should offer new Section 54s depends on how the ROSCOs and other financiers price residual value risk, with and without the undertaking in place. Our discussions suggest that Section 54s have the greatest potential value for specialist rolling stock, such as long-distance high-speed trains, which would be harder to cascade to other routes: they are less likely to be appropriate for more flexible rolling stock, such as Electrostars and Desiros. We recommend that option pricing – where ROSCOs quote lease rates for both situations - is adopted as standard practice for new-build rolling stock to enable these decisions to be made in the context of each procurement.

Measure 6: Develop a more commercial relationship between TOCs and NR

34. As part of industry reform more generally, TOCs have welcomed the chance to explore with NR the opportunities for alliancing and wider co-operation to deliver improved services, affordability and better integration of planning. Rolling stock is key to the interface between TOCs and NR and owner groups want to continue to work with NR to identify better value for money solutions in the track/train interface during future train procurements. The recent Thameslink procurement process included at the start a detailed assessment of the interfaces and vehicle-train interaction issues: the provision of this information right at the start is a good model for future projects.
35. One example where further progress can be made is in reaching better whole system outcomes in terms of track damage costs. Both during bidding and operation, TOCs are incentivised to take into account the impact of rolling stock on track and power distribution systems through variable usage charges (VUCs). Rolling stock types that cause a greater

requirement for maintenance and renewals pay a higher VUC rate than more ‘track friendly’ trains. The VUC charging system has evolved over time to take account of improved industry knowledge and a broader range of track impacts (particularly lateral forces).

36. However, the incentives created by this arrangement have been blunted by DfT applying Clause 18.1 / Schedule 9 clawback provisions to changes in VUC rates for a particular class of vehicle. This removes the incentive, for example, for TOCs to invest in improving the track-friendliness of their fleets in response to better knowledge of how track damage is caused.
37. A practical example of this occurred on the SWT franchise where, from a whole-industry perspective, there was a compelling business case to modify the SWT Desiro fleet’s suspension to reduce track wear. The ORR and DfT eventually agreed to suspend the relevant Clause 18.1 / Schedule 9 clawback provisions in the track access agreement to ensure that all parties were incentivised to make the necessary fleet modifications. The DfT should consider implementing this approach more generally.
38. The SWT example highlights the case for TOCs and NR to have greater ability to agree bespoke “line of sight” deals. These deals can be facilitated by separating decision making into two stages: firstly, developing the right whole-industry solution, and secondly, identifying how this can be implemented, recognising that specific financial and incentive arrangements may be needed to deliver the best outcome. It is currently very difficult for TOCs and NR to obtain the necessary approvals from ORR and DfT to implement such deals, and this is an area already identified for improvement under industry reform.

Measure 7: Explore the case for increasing the interchangeability of components beyond TSIs

39. The McNulty report states that “multiple franchises and low procurement volumes appear

to have driven a high level of diversity in vehicle and sub-system types. This increases development, maintenance and spares costs as the industry has a large number of different equipment types to support.”

40. In considering this area, it is important to be clear about what is meant by standardisation:
 - ‘Train interoperability’ standardisation: this is the minimum needed to ensure that rolling stock can operate on infrastructure along several different routes, potentially in conjunction with several other rolling stock classes, providing several options for future vehicle deployment. There are different degrees of train interoperability and standardisation does not necessarily mean that all rolling stock types need to be able to operate everywhere and be coupled to every other type of vehicle
 - ‘Component interchangeability’ standardisation: i.e. what is needed for a specific component to be usable on different classes of rolling stock – and for different components to be useable on the same rolling stock class. This is analogous to the electronics industry developing open standards for components. This type of standardisation could in theory be applied at different levels, from the smallest of components up to major train systems (e.g. traction and control systems)
 - Full standardisation: this refers to standardisation based on a few train designs and standardising as much as possible between them, while recognising that different markets require different vehicle configurations and performance characteristics.
41. Full standardisation might have some benefits such as reducing manufacturing unit costs for both new trains and spare parts, through economies of scale and greater flexibility to cascade rolling stock across the network.

However, there are many reasons why full standardisation should not be pursued:

- the range of different types of train service operating in the UK which serve different markets. The needs of an inner-suburban commuter service are very different to those of an inter-city journey
 - there are important differences in the existing fixed infrastructure which need to be taken into account, including whether or not a track is electrified (and, if so, whether this is through overhead wires or third rail), electromagnetic compatibility, gauge clearances and platform heights
 - full standardisation could stifle innovation by acting as a barrier to changes which could improve the cost or performance of components or systems. The way in which standards are specified is crucial to mitigating this risk
 - it concentrates risk. If the standardised solution turns out to be flawed, then the consequences could be severe due to the widespread adoption of that solution and the absence of proven or readily-deliverable alternatives.
42. The recently published rolling stock RUS also looked at these issues and put the case for more standardisation than at present, whilst indicating that this could be achieved through the franchising process rather than by DfT prescription.
43. Many industries rely on market forces to determine the appropriate degree of standardisation and our view is that this is the best starting point for the rail industry as well. If a train operator's specification for new-build rolling stock necessitates development of a non-standard type of rolling stock, the price charged by the manufacturer would increase to reflect the additional development and manufacturing costs, and the ROSCO's pricing would take into account any consequential increase in the residual value risk. In an efficient market, a train operator would therefore only adopt this approach if it believed that the benefits of the non-standard rolling stock outweighed the additional cost.
44. In the early years after privatisation, the market did not always function precisely in line with the behaviours and drivers described above, but it has matured significantly over time. Market mechanisms have already resulted in a significant degree of standardisation in the GB rail industry with large numbers of vehicles having been procured since privatisation from a small number of rolling stock "platforms". Over 500 Turbostar DMUs have now been built serving nine different TOCs, c.2,100 Electrostar EMUs (both AC and DC) are in service, and c.1,300 Desiro EMUs (again AC and DC variants) are in service. By contrast, Alstom's Coradia DMU Classes 175 and 180 have not proved as successful in service and there have been no follow-on orders. The success of Voyager DMUs ordered for the Cross Country franchise resulted in the procurement of similar Meridian units now in service with East Midlands Trains.
45. A market-driven approach to standardisation should also be supported by the work of the European Railway Agency (ERA) in developing Technical Specifications for Interoperability (TSIs), a requirement of EU law. For example, TSIs already apply in relation to ERTMS, accessibility requirements and electrical power supply requirements. The GB rail industry should continue to engage with the ERA to ensure that all TSIs are justified in VfM terms. Implementation of TSIs should also follow a pragmatic approach, particularly for existing vehicles, in order to achieve VfM.
46. There may be some cases where these two mechanisms are not sufficient to deliver optimal 'component interchangeability' standardisation because manufacturers keep their components bespoke for commercial reasons and to protect IPR. We consider that component standardisation should be explored to determine whether it has the potential to improve the

contestability in the supply chain. This might be facilitated by creating a number of train operator-led, but inclusively developed, 'open standards' for components where there is a risk of short production runs, or multiple costly alternatives emerging. Priority areas could include couplers, braking systems and components subject to obsolescence risks (such as train management systems) or common peripherals; work in these areas could also drive operational and performance improvements.

47. The approach by which the Association of American Railroads (AAR) interchange rules and manual of standards were developed, through co-operation between the AAR, railroads and suppliers, is a possible model to follow. It would need to be adapted to work alongside European and other international suppliers to avoid the possibility of creating new barriers to entry. ATOC's engineering team is already in discussion with European counterparts to identify potential opportunities.
48. The development of GB rail infrastructure over a long period of time has resulted in many variations in loading gauges, platform heights and other features. It is important that NR proactively migrates the fixed infrastructure towards greater standardisation over time in order to facilitate greater standardisation of trains, where that offers VfM. The Rolling Stock RUS indicated that NR was considering greater standardisation of gauge. A way forward might be to develop a series of loading gauges, on the model used over many years for freight vehicles, and then progressively clear the network to those gauges.

Measure 8: Ensure a range of approaches to train maintenance are available to TOCs

49. Train maintenance is currently procured through a number of different mechanisms:
 - Dry leases: the TOC is responsible for carrying out both the day-to-day light maintenance and the less frequent heavy maintenance overhauls. TOCs can either carry out the work in-house or contract with a range of different types of maintenance supplier

Standards created by the Association of American Railroads (AAR)

The AAR was formed in 1934. It has a suite of standards, known as 'The Interchange Rules', to promote a minimum acceptable level of safety and efficiency in interchange service for the railroad operators. The standards are issued and enforced to ensure safety, compatibility, reliability, and efficiency of equipment. The standards are developed, following rigorous research, by operators and suppliers. The final decision about the use of a standard remains with the operators: the members of AAR.

Overseen by the Arbitration and Rules Committee, committees of industry experts are responsible for the development and maintenance of industry standards. The committees include railroad and non-railroad experts in the areas of quality assurance, locomotives, intermodal equipment, open top loading, freight car design, freight car truck systems, railway electronics, and freight and locomotive braking systems, and operate by consensus.

The standards ensure that wagons and locomotives can operate and be maintained anywhere in North America, with universally available approved spare parts and a strong after-market.

The standards are publically available with open architecture and open interfaces, with quality requirements and accompanied by a supplier approval regime. In so doing, they allow suppliers to compete on innovation, cost and quality, but assure the user that they are getting a quality product that can be widely used, with a reduced risk of obsolescence.

The standards themselves are FFFIS – Form, Fit, Function, Interface Specifications - and also contain test/verification requirements. Both mandatory and recommended "best practice" elements are addressed in each standard.

- Wet leases: the ROSCO is responsible for providing all of the maintenance, contracting it out to suppliers. In some cases they actually contract the service delivery back to the TOC
 - Soggy leases: these are part-way between dry and wet leases with the TOC responsible for light maintenance and the ROSCO responsible for heavy maintenance. The original MOLA leases were of this form
 - TSAs: it has become increasingly common for the maintenance of new-build rolling stock to be carried out by the rolling stock manufacturer (OEM) through a Train Service Agreement (TSA). These contracts often cover a long time period (normally longer than the duration of an individual franchise) and include development of new depot facilities.
50. The best approach to procuring rolling stock maintenance will vary, depending on the specific circumstances facing the train operator. Even with the same basic type of rolling stock, two TOCs may prefer different maintenance solutions given different approaches to management, operating geography, resources and capabilities.
 51. The companies that operate rolling stock should be responsible for determining the optimal maintenance strategy given their specific circumstances. With good information on the costs and benefits of each strategy, a market-based approach should deliver the best outcome in terms of affordability and fleet reliability.
 52. ROSCOs and financiers should continue to give TOCs the option of a dry lease. In cases where TOCs have taken responsibility for maintenance in-house, they have often managed to achieve significant savings by finding more efficient ways of carrying out the work. For example, taking maintenance of the HST fleet in-house was an important element of the Great Western franchise.
 53. It is sometimes argued that dry leases create problems because train operators have insufficient incentive to look after the long term condition of the fleet. However, TOCs already have strong

incentives to keep rolling stock in optimal condition during both short- and long-term franchises to drive passenger satisfaction, improve performance and ensure safety. The ultimate owner of the vehicle will frame the lease to ensure that the whole-life costs of the fleet are optimised and incentivised. A TOC that does not manage this properly opens up the possibility of the loss of its safety case and, with it, its franchise.

54. TSAs are another area where further improvements are needed to help improve value. Future contracts should be designed to open up the market to contestability after the initial contract periods. In particular, these terms should include provisions for TOCs (or their successors) to take over maintenance reserves, spare parts stocks and, where appropriate, the depot facilities themselves. Better arrangements are also needed to address intellectual property rights (IPR) issues to allow alternative maintenance providers to carry out the work. IPR is currently a significant barrier to switching maintenance suppliers and this is an important area that we will work on further.
55. Where TOCs have dry leases and there is no TSA, TOCs can influence changes in other parts of the supply chain. For example, some TOCs have worked to broaden the supply base for traction motor refurbishment for its Class 319 fleet recognising that the industry's dependence on a single supplier potentially created risks. An alternative approach would be to work with that supplier and find ways of providing longer term assurances on workload in exchange for sharing efficiency gains.

Opportunities to secure best value

56. With a number of major franchise competitions and the committed enhancements to the network, including electrification, Thameslink, Crossrail already in progress, and in the context of the industry's plans for further growth set out in the Initial Industry Plan, a more market-based

approach to procurement could deliver best value in a number of areas. Some examples are:

- the new Thameslink order, once the vehicles are delivered, will release a large number of vehicles into the market, opening up potential options for redeployment (eg one option suggested has been to use Class 319 EMUs to support Great Western suburban electrification and North-West regional services). A TOC-led procurement would provide opportunities to determine whether new-build vehicles provide better value and performance than cascades in these applications, as well as incentivising ROSCOs to offer appropriate terms for mid-life rolling stock, and to determine appropriate deployment of vehicles to meet demand around the network
- the displacement of Class 315 EMUs by Crossrail may provide vehicles suitable for deployment on extensions of regional electrification – which again could be tested against specifications for new vehicles to drive out an affordable solution
- North TransPennine electrification would release some Class 185 DMUs that could allow a cascade of vehicles, potentially displacing some of the oldest MOLA DMUs to be retired or used for low-mileage diagrams. The market should identify commercial and operational opportunities made possible as a result, working within an overall rolling stock strategy to optimise fleet deployment
- building on the current market-testing on East Coast to determine whether the best value for long-term rolling stock can be secured by life extension or early replacement of the existing Mark 4 + Class 91 fleet, either by new locomotives and coaches or by a high-specification EMU vehicle
- the long Greater Anglia franchise will provide an opportunity to develop an option for replacing legacy EMUs (such as the remaining Class 315s and Class 317s) and loco-hauled

trains with a vehicle or vehicles optimised for current passenger needs (in particular, internal configuration, air conditioning and operational performance), to determine whether new build or extension of existing fleets might offer best value to TOCs and DfT.

57. The industry is fortunate to be planning for sustained growth. The current opportunity around fleet deployment is to ensure that the high-level strategic decisions taken by funders, TOCs and Network Rail are translated into the best-value outcomes that unlock savings, while providing a stable framework for manufacturers, ROSCOs and suppliers.

Conclusions and implementation

- 58 Giving TOCs greater scope to optimise their rolling stock solutions based on passenger requirements, their own operational requirements and price signals from the supply chain (including ROSCOs, rolling stock manufacturers, maintenance suppliers, energy markets and NR) is key to achieving VfM.
- 59 Our approach differs in several respects from that adopted in the RVfM study, which seems to rely essentially on the threat of regulation to achieve savings. The thrust of our proposed eight measures, shaped by experience since privatisation in 1995, is closer to that adopted by the CC following their rolling stock leasing market investigation, which focussed on improving the operation of the market through franchise reform and greater transparency.
- 60 Implementing our proposals will require the support and engagement of many players in the industry – TOCs (with the support of ATOC), DfT, ROSCOs, NR and suppliers. Rolling stock is also an area that RDG may choose examine in due course. The opportunities to make the proposed changes would arise when new build leases are entered into and also, but to a more limited extent, where existing fleets are extended by means of the agreement of new leases.
- 61 We intend to continue to work with ROSCOs and NR to develop and refine the ideas set out in this paper. The table below is our current view of what a high level plan for implementation might look like. We intend to use this discussion paper as the basis for further and more detailed dialogue with our key industry partners, in order to develop the ideas we have set out.

Summary of implementation proposals

Measure	Implementation mechanism	Responsibility	Target completion
1: Franchise reform	ITTs for nine franchises are due to be issued during the next two years. New franchises should be let in accordance with ATOC's October 2009 franchise reform proposals and the Minister of State's July 2010 statement. They should create maximum flexibility on rolling stock, allowing new builds as well as life extensions and cascades.	DfT	2012 onwards
	DfT to adopt a more flexible approach to franchise management on existing franchises	DfT	2012
2: Rolling stock transparency	ROSCOs and TOCs to consider areas in which greater information could usefully be made available.	ROSCOs	Q2 2012
3: Indicative rolling stock plan	Create industry-wide group responsible for indicative rolling stock strategy	RDG	Q1 2012
	Develop and publish first version of indicative rolling stock strategy, based on work done for the recent Initial Industry Plan	Industry-wide group	Q2 2012
4: Three year lease extension options	Develop detailed proposition for three year lease extension options and agree with ROSCOs; and ensure that DfT is ready for leases that have this as a feature when they are submitted.	ATOC / ROSCOs	Q1 2012
5: Section 54 options	TOCs, guided by DfT, start to ask for new-build procurement options with and without Section 54s as a matter of course	TOCs	Q2 2012
6: Commercial arrangements between TOCs and NR	DfT reviews clawback provisions (Schedule 9) from changes in VUC rates and other aspects of access agreements which potentially inhibit sensible whole industry changes. The timing of when this would take effect would vary between franchises <ul style="list-style-type: none"> New franchises: At start of franchise Existing franchises: If and when the incumbent TOC agrees to the change 	DfT	2012 onwards
	ORR and DfT refine their approvals processes to facilitate "bespoke line of sight" deals	ORR / DfT	Q1 2012
	Continue to refine VUC rates to incorporate the latest knowledge of how different trains impact NR. Periodic Review 2013 provides a mechanism for implementing these changes	NR / ORR	Q2 2014
7: Standardisation	Develop European Technical Standards for Interoperability	ERA	Ongoing
	Consider list of 'interoperability' areas for UK rolling stock, over and above TSIs and NNTRs eg. on coupling, train management systems	ATOC/TOCs/ROSCOs/Suppliers	Q2 2012
	Develop Europe-wide component interchangeability standards	ATOC/European counterparts	2013
8: Maintenance options	ATOC to continue to work to develop better contractual choices for train maintenance	ATOC/ROSCOs/Suppliers	Q2 2012

Appendix A: Summary of McNulty study recommendations for rolling stock management

The McNulty study made three main recommendations in relation to rolling stock management:

- Increased standardisation of rolling stock within the GB rail system. These standards should be developed by the industry (via the RDG) and the DfT
- More effective procurement of rolling stock
- Improved value for money from the leasing market

With regard to the third of these items, the McNulty study found it difficult to understand how the remedies put forward by the Competition Commission following its review of the rolling stock leasing market could give the DfT sufficient information to satisfy itself that rolling stock lease rates on re-lease are value for money. Accordingly, the study recommended that the DfT should explore the possibility of establishing strategic partnerships with the ROSCOs to ensure that re-lease rates are demonstrably value for money. If that cannot be achieved then the study recommended that the DfT should consider introducing regulation of fair rates of return to the ROSCOs or, in the longer term, establishing new vehicles to procure and hold rolling stock in the public interest.

The McNulty study did not specify a figure for the value of potential savings from improved rolling stock management because the “benefits are almost all double-counted with asset management, programme management and supply chain management savings”. However, the study’s supporting analysis indicates a saving of c.£80-150m p.a. (4-8%) by 2018/19.

The study’s rolling stock consultants estimated that there could be steady state annual savings as high as £316m to £532m p.a. (or 17-28% of the current rolling stock costs).

The savings arise from:

- Stable policy and improved governance: £100m p.a.
- Industry efficiency gains: £191m-£382m p.a.
- Avoiding small orders and specifying requirements to industry at a higher level of detail: £25m-£50m p.a.

The “industry efficiency gains” item refers to the potential to create an industry structure which eliminates inefficiencies associated with the present level of influence government exercises over the rail industry. To estimate the potential scale of these benefits, the consultants drew on data from the regulated infrastructure sector which showed that appropriately-incentivised private sector entities can reduce unit costs by up to 20% over time.

The consultants stated that the cost saving estimates should be “treated with a significant caution” but placed “a strong emphasis on the need for government to remove itself from the detail of industry planning and investment decisions. Without that step, it is highly unlikely that even the degree of benefits estimated to represent the low end of the range can be delivered.”

Appendix B: RAB funding of new rolling stock

An alternative approach suggested by some of the stakeholders consulted by ATOC would be to use a Regulatory Asset Base (RAB) type mechanism to fund rolling stock. Some consultees expressed the view that this could help to reduce the financing costs for new-build vehicles.

RAB mechanisms are used in regulated businesses, including NR. The regulator calculates the revenue requirement based around current expenditure, an allowance for depreciation of capital assets and an allowed return on capital, which takes into account the company's cost of capital and risk profile.

GB policy on economic regulation is that it is typically used as a proxy for competition in situations where market mechanisms are not sufficiently effective to generate the necessary level of competitive pressure to protect consumers' interests. However, the CC's 2009 rolling stock leasing market investigation concluded that "there was effective rivalry between the ROSCOs in seeking to finance and lease new rolling stock." ATOC agrees with this view. This suggests that the basis for economic regulation (and therefore a RAB funding mechanism) of new-build rolling stock is unclear.

However, at the point of re-leasing the CC did find that there were features of the market that "prevent, restrict or distort competition in connection with the leasing of rolling stock for franchised passenger services." In principle, a RAB-based approach might be applied here by agreement with ROSCOs. However, the CC considered a number of different types of remedy but decided against controlling lease rentals (a form of economic regulation). Instead, it recommended a number of measures designed to make the market function more effectively. The proposals outlined by ATOC in this paper build on these.

The CC and ATOC both recognise that, given the nature of the rolling stock leasing market, there are always likely to be some situations where the ROSCOs enjoy a degree of market power. The question is whether economic regulation would be a practical and proportionate remedy for addressing these residual situations and, more fundamentally, how it could be introduced.

The CC's view was that economic regulation would not be appropriate. These residual situations are most likely to occur for ex-BR rolling stock where the initial lease rates were set through an administrative process rather than through a competitive new-build procurement. However, applying a RAB-type mechanism to the ex-BR rolling stock is difficult from a practical perspective because a range of different values could be used as the asset value – separate asset values were not defined for each vehicle when the ROSCOs were initially created and privatised, and the ROSCOs have been sold several times since privatisation at values that are based on future expectations of lease rates rather than historical book values. In this context, this is primarily an issue of asymmetry in the market, rather than classic market failure.

One of the arguments put forward in favour of adopting a RAB-type mechanism for rolling stock appears to relate to a lower cost of capital being possible as a result of a reduction in residual value risk. However, regulation and residual value risk are two separate issues. It is entirely possible to reduce residual value risk without introducing economic regulation. Section 54s are one mechanism for doing this, as discussed earlier in this paper. Longer franchises is another.

Appendix C: Summary of Competition Commission recommendations (2009)

The Competition Commission found that there was effective competition between the ROSCOs for the financing and leasing of new rolling stock. However, there was “a restricted choice of rolling stock available to TOCs, arising partly from operational and technical restrictions on substitutability, but also because of direct or indirect specification of rolling stock in franchise ITTs, the costs and risks involved in switching to alternative used or new stock, and the operation of the franchise system which reduces opportunities for competition.”

It also found that there were reduced incentives on TOCs to seek to negotiate better deals, in part because of the non-discrimination requirements in the Codes of Practice. It found that, “given all of these constraints on the potential for rivalry between substitute fleets, the incentives on ROSCOs to compete with each other are lower than in a well-functioning market.”

To address the adverse effect on competition, the CC proposed a number of remedies:

- The franchising authorities should make a number of changes to the franchise system including – introducing longer franchises of 12-15 years or longer; assess the benefits of alternative rolling stock beyond the franchise term; ensure that franchise ITTs allow bidders a choice of rolling stock (collectively the “franchise reform remedy”)
- ROSCOs should amend their Codes of Practice to remove non-discrimination requirements
- ROSCOS should provide TOCs with a set list of information when making an offer to lease incumbent or alternative used rolling stock (the “transparency remedy”)

All elements of the CC’s package of remedies have the common objective of encouraging and enabling TOCs to exercise choice, thereby stimulating greater rivalry between ROSCOs in leasing rolling stock.

The CC considered and rejected a range of remedies that involved controlling lease rentals. It stated that these remedies would suffer from severe practical difficulties and costs in implementation and have significant distorting effects on the market. These distorting effects would have long-term adverse consequences in terms of limiting investment in existing rolling stock and new rolling stock, and discourage new market entries.





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