## Periodic Review 2013:

# ATOC Response on NR's Consultation on EC4T Traction and Asset Usage Charges

15 October 2012

## Introduction

- We submit this response on behalf of the EC4T Scheme Council, to which all Owner Groups which operate electric services belong to or participate in. The Council sets the overall procurement strategy for passenger TOCs under the NR-BE/EDF supply contract and discusses matters of overall commercial concern, including the application of Feed-In Tariffs, wash-ups and changes to charging principles. We have also circulated the draft of this paper for comment to Engineering colleagues. Individual groups and TOCs are framing their own responses as well.
- The arrangements that you are consulting on are complicated, not least in their interaction with an ever-changing franchise environment. We believe that it might be sensible to arrange a multi-way discussion involving ORR, Funders, Freight Operators, NR and passenger operators, to review how these proposals might work in the round and how effective they will be in addressing the problems you have identified.

# **Charging strategy for PR13**

• Overall we seek an EC4T charging system that reflects the actual usage of trains on the system and which is as straightforward and simple to understand as possible. By contrast, the current system is already extremely complicated, sometimes poorly documented and Owner Groups report that the financial outcomes it produces are often hard to forecast. These are not attributes of well-functioning system providing clear commercial signals to train operators. The reasons for this are well known but the plan to improve things, in advance of the eventual fitment of meters to all trains that will come as new trains replace old ones, is still somewhat opaque. By introducing a round of further 'tweaks' and adjustments, many of the changes proposed in the consultation run the risk of exacerbating complexity whilst having little or no impact on behaviours, which remain overwhelmingly driven by the franchising process and its focus on achieving premium/subsidy against a tightlyspecified DfT train specifications.

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- NR makes wide variety of proposals covering technical, charging and contractual arrangements. The main features are a subsidy mechanism to encourage the fitment of on-train meters that ORR have proposed and changes to the regen. braking discounts. In our judgement, the measures proposed go too far. They tilt the balance towards rapid, fully-metered operation without justifying either the case for doing this (as distinct, for example, from partial metering) or the cross-subsidies (in particular from unmetered to metered operators) that are proposed to deliver it. As we have in the past, we would encourage NR to consider offering incentives, rather than penalties, to introduce wider-scale metering and to improve its own metering and procedures to create better estimates of actual usage.
- Although not directly mentioned, NR has had resources through the Safety and Environment fund to support on-train metering in CP4 and we believe that this should be continued, either by carrying over the CP4 spend and/or through a new fund in CP5.
- There is a clear linkage between NR's proposals and the proposed removal of Sch 9/18.1 protection for EC4T charges (a change previously trailed in ORR's earlier incentives consultations and restated here) in future franchises. It is not entirely clear from either ORR or DFT precisely which elements of the changes to EC4T charges new franchises might be exposed to (e.g. solely consumption rate uplifts) or whether the intention is for TOCs to be exposed to all changes (e.g. including changes to EAU charges etc). It would be sensible for there to be a broader multiparty dialogue involving DfT, ORR and NR so that all parties are clear both about today's economic architecture for EC4T and what improvements might be made to it before any of these proposals are taken further.

#### **Consumption rates**

 We continue to favour a system under which the actual consumption of trains is used as the basis for charging, so far as is reasonably practicable. The size of the volume wash-ups, as the NR document indicates, is considerable and is good evidence that there is some way to go today. We favour adjustment of the consumption rates for trains where a single TOC dominates the ESTA, such as c2c and Mersey, ie. Option b on page 14, with the general objective of reducing the size of the volume wash-up. However, we acknowledge the issues with doing this in 'non-isolated' ESTAs and therefore suggest that these rates are held constant. Given the electrically isolated nature of parts of the network, we are not persuaded that having different consumption rates in different areas is too complicated.

- There may be a case for a more general review of consumption rates to address the significant discrepancies that NR has identified, although it should be noted that our knowledge of the size of non-passenger consumption, including NR's losses, leakage, non-traction and freight traffic is still somewhat sketchy and, as an industry, we are long way from having a good picture of what happens in practice is available. Given this, and the fact that a full recalibration of consumption rates would take some time and could not be completed in time for CP4, we accept the necessity of, in general, retaining the current system as second best alternative.
- We agree that the uplifts for EMU length and the methodology for calculating new rates should remain unchanged.
- We oppose the ORR proposal to uplift modelled consumption rates by 10% to incentivise metering for the following reasons:
  - There are other, better mechanisms for encouraging the uptake of on-train metering – primarily through the franchising process. Longer, more flexible franchise terms would enable TOCs to develop a commercial business case for metering and this development should be allowed to play out rather than tinkering further with the charging mechanism. Alternatively, specification in franchise tenders is another option and one that has, to a degree, been adopted for Essex Thameside.
  - 2. Uplifting modelled rates creates an additional problem to be solved, namely what to do with the money raised? The proposal to redistribute the additional funds to all TOCs pro rata to volume simply creates a cross-subsidy from unmetered to metered TOCs and would take us further away from the principle that billing should be related to actual usage so far as possible. We remain unconvinced that a crude cross-subsidy of this kind is a wise proposal, having regard to the already complicated system of incentives in use in the rail industry. In instances where an unmetered TOC is a majority operator in an ESTA (for example c2c) this would be particularly unfair since for these operators the benefits from full metering are negligible. All savings that the TOC achieves feed through (provided that non-traction and freight charging is accurate) into the final wash-up and the proposal simply adds to the amount of money flowing backwards and forwards between the Infrastructure Manager and the TOC. In addition, we believe the basis for the proposal having regard, in particular, to the legal framework created under the Access and Management Regulations and cost-reflective charging could be an issue.

- 3. To be fully effective, the proposal would require removal of Sch 9/18.1 protection for all franchises. In our judgement, existing franchises are both highly unlikely to give up this protection voluntarily. Given the current pause on franchising, we cannot be sure when new franchises without full Sch 9/18.1 protection might be awarded, if any, and we would suggest a full discussion with DfT on their plans in this area.
- More generally, NR should be putting more emphasis on cost-effective techniques for billing metered trains, particularly partially-metered fleets. We have been working to develop procedures to allow bills to be produced based on sampling of fleets rather than current requirement that every separate journey has to be recorded, aggregated and then charged in a global, overall bill. A sample, based on meter readings derived from perhaps 20-30% of a fleet or data taken from just 20-30%% of days in the month would provide a reliable estimate at an excellent degree of statistical uncertainty. We believe NR should, on grounds of whole system costeffectiveness, put more focus on this area.

#### Regenerative braking

- We do not support the idea of removing or reducing the regenerative braking discount. Whilst regen. savings may be lower than the discount during winter/leaf fall periods, when routes are busy and stops are frequent, they may be higher at other times than the discount. It has always been understood, going right back to CPO in 1994 that the discount should be viewed as an average, taking the rough with the smooth across the year as a whole. Picking on one aspect of the regen. discount without looking at the totality risks muddying the waters. In particular, we do not recognise the view that, as a matter of policy, in CP2 train operators were incentivised in respect of regeneration: the analysis that NR has presented in the paper indeed confirms the view that the current regen. discounts are broadly at the right level.
- In particular, having regard to whole system outcomes, NR needs to be careful to guard against a situation in which the case for fitting further regeneration becomes more complicated because of uncertainty about the discount it might attract.
- We also reiterate that another route to address the regeneration discount question for DC traction would be to improve the metering of the HV distribution and DC network on the former Southern Region system in order to provide improved data at local level on where electricity is being used, which could be used in the wash-up.

- We also oppose the use of a contractual mechanism to audit the use of regen (the implication being that TOCs are gaming the system). Once again, the principle of the regen. discount is to take the rough with the smooth.
- We are broadly comfortable with the principle of reflecting losses associated with regenerated energy, although we counsel that this is potentially an over-elaboration of what is already a very complicated scheme. We believe that the proposal should be considered on its merits but, in particular, needs to be supported by a sound evidence base; the 1% loss factor proposed is a very general estimate.
- It should also be noted that there is some evidence from the work done by Booz that regeneration on DC in fact reduces the energy sourced from NGC to power the (not inconsiderable) standing losses of the network even if there is no receptive train available in the vicinity. In other words, the net losses in returning the unused regenerated energy may be lower than the estimates put forward here.

#### **Electrical losses**

- We reject the proposal for a nationwide AC losses mark-up for metered trains. As NR's document points out, there is good evidence that losses in fact vary materially by region and as such we should seek a solution that ensures TOCs pay, as far as possible, for the true level of losses they incur in their areas rather than a national 'jam spread'. Use of a national average might result, for example, in TOCs in southern AC ESTAs effectively subsidising TOCs operating further north or vice versa.
- ESTA boundaries may well change during CP5 (e.g. as a result of Crossrail). NR needs to come up with a clear and workable proposal about how boundaries and associated losses might be treated through a simple management process from year to year. We would not support hardwiring ESTA descriptions into Sch 7 as now, given the experience that making amendments to Sch 7 has proved difficult.
- Although NR is not directly consulting on it this time, we should point out that we have supported the proposal put forward by ORR that NR should be subject to a level of losses that it bears itself, to give a sufficient, shared incentive to explore both operational and technical loss-reduction options. In our view, the current system in which all losses are paid for by TOCs with them having no control over their level is, in the long term, both inefficient and unsustainable. For example, the practice of taking DC transformer stations out for maintenance during the daytime in order to reduce NR's opex with consequential increases in losses borne by TOCs as a result of having to feed over longer distances needs to be reviewed.

## **Electricity prices**

- We oppose the proposal to allocate transmission costs to metered operators according to their actual consumption in the triad half hours. Although we support the principle of cost-reflectivity, this particular change would introduce a disproportionate amount of complexity and variability into the bills that TOCs pay. Under this system, the benefit of any action that a TOC takes to reduce peak demand would be ameliorated by other factors such as the peak demand of other TOCs and on factors such as local weather conditions affecting demand at that ESTA in the triad half-hours. For example, taking the case of the winter snowfall in 2010, if one TOC (eg FCC) had elected not to operate trains across the Wimbledon Loop during a possible triad half hour as a result of snowfall whereas others TOCs were (eg. Southern), they would experience a significant windfall gain compared to the current system and Southern would be disproportionately adversely affected. In future, the situation could be reversed.
- We are reasonably comfortable with the proposal to recover transmission costs across the whole year as opposed to Nov-Mar subject to discussion about what the possible impact might be on TOC bills.
- In principle, just as with passenger operators, freight operators should, as far as possible, be billed based on actual volumes used. The 2008 work leading up to the CP4 pricing system indicated that the origins of freight consumption rates were not always clear and that they may not necessarily reflect today's trailing loads, speeds or usage patterns. There could be a case for looking at these again but information on the point is limited and, as with the earlier discussion on consumption rates, there is unlikely to be time to do this between now and the start of CP5.
- As passenger operators, we of course offer no view on the proposal that FOCs drop MLUI and move to actual prices other than to note that differences between them arise from time to time so this is, fundamentally, a commercial, not a technical, matter. In addition, to the extent that differences have arisen in the past or may do so again, we seek an assurance from NR that the effect of these (whether positive or negative) has been borne by NR and are not being and have not been charged back to passenger operators under the cost wash-up arrangements.
- If FOCs do eventually move to an 'actual price' scheme, we note that freight operators may wish to join the ATOC EC4T Scheme to set prices for their volumes although we also note that the contract that NR proposes to enter into for traction

electricity supplies for October 2014 and beyond is more flexible than the current one. We have made provision for the possibility of FOCs joining the ATOC scheme in the Scheme's rules; another option is for them to set prices directly via NR.

#### **Contractual framework**

- We are broadly supportive of the proposal to create a set of Traction Electricity Rules to cover various issues including operation of the wash ups, ESTA definitions etc. This will allow much greater flexibility and avoid the need to go through lengthy contractual processes to make what should be relatively straightforward changes. However, it is important to reiterate that any 'rules' document must not dilute existing contractual protections for TOCs or any of the obligations placed on NR, for example to ensure the integrity of the billing and wash up processes.
- Through the EC4T Scheme Council, TOCs have already supported in principle the proposals to modify the cost wash up to reflect T&D costs and direct price setting although it should be noted we are planning to address these issues (or at least the direct price setting aspect) for the 2012/13 wash up via a simple Schedule 7 amendment rather than wait for CP5.

#### **Electrification Asset Usage Charge**

• We are concerned that there is limited detail as to why Electricity Asset Usage costs are proposed to increase so much. It appears that NR has elected to move this element of cost to a long run average approach rather than through an estimate of the short term prospective cost within each a control period separately. This is a familiar story from earlier control periods but we were under the impression that NR's assets were already being renewed and financed on a long-term basis. The particular computational approach that NR propose should be subject to detailed ORR scrutiny, since as train operators we feel unable to comment on it ourselves. In particular, ORR may want to look at this charging approach against the overall revenue requirement calculation to be sure that there are no 'double counts' involved. We believe that this change should be justified more fully by NR and it needs to be ready to explain what it will do with any surplus funds that it will collect, but not spend, within CP5.

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