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23 April 2013

Dear Emily

Network Rail conclusion letter on the ‘phasing-in’ profile of the freight-specific charge, applying the variable usage charge cap, updating our estimate of freight avoidable costs and updating / phasing in the freight-only line charge

PURPOSE OF THIS LETTER

The purpose of this letter is to:

- Conclude on our consultation¹ on the profile of the freight-specific charge (FSC) in Control Period 5 (CP5);
- Conclude on our proposed approach to updating our estimate of freight avoidable costs, including freight-only line costs;
- Conclude on our proposed approach to remedying a significant error that has recently come in to light in relation to the current Control Period 4 (CP4) freight-only line charge rate for spent nuclear fuel; and
- Set out our view on the interaction between the freight-only line (FOL) charge and the FSC in CP5.

BACKGROUND

In ORR’s January 2013 decision document² on the Variable Usage Charge (VUC) and FSC, it confirmed the following:

- The introduction of a new FSC payable by freight operators carrying Electric Supply Industry (ESI) coal, spent nuclear fuel and iron ore. ORR indicated that these charges would be phased in during the last three years of CP5; and

¹ Network Rail launched a consultation on ‘Freight specific charge and other issues consultation’ in 8th February 2013. This can be found here: <http://www.networkrail.co.uk/publications/delivery-plans/control-period-5/periodic-review-2013/pr13-closed-consultations/>

² On 15 February 2013, ORR launched its on a consultation on a freight specific charge for biomass. This can be found here: <http://www.rail-reg.gov.uk/pr13/consultations/biomass.php>



- That an early cap will be applied to the average freight VUC rate in CP5 of £1.68 per 1,000 gross tonne kilometres (kgtkm) (2011/12 prices, end CP4 efficiency)³.

As part of its decision document, ORR also confirmed that the FSC would be levied in addition to current track access charges, including FOL charges.

ORR's January 2013 decision document followed its May 2012 consultation⁴, which proposed introducing a new FSC that would recover freight avoidable costs that are not currently recovered through existing track access charges. Consistent with relevant legislation, the FSC will only be levied on freight market segments deemed by ORR as capable of bearing the additional cost.

In its May 2012 consultation, ORR proposed levying the FSC on the ESI coal, spent nuclear fuel and iron ore freight market segments. This proposal was based on market analysis carried out by MDS Transmodal (MDST) and NERA⁵.

To inform ORR's decision on the level of the FSC, following a request from ORR, Network Rail commissioned L.E.K. Consulting (L.E.K.) to estimate and allocate freight avoidable costs between freight market segments. L.E.K. estimated long-run gross freight avoidable costs (i.e. including costs currently recovered through existing freight track access charges) of £152m-£377m p.a. (in 2011/12 prices, end CP4 efficiency) and net freight avoidable costs (i.e. excluding costs currently recovered through existing freight track access charges) of £42m-£249m (in 2011/12 prices, end CP4 efficiency)⁶.

Following this work, ORR and Network Rail appointed the independent reporter, Arup, to review key aspects of L.E.K.'s initial cost estimate. Further to this review, ORR adjusted L.E.K.'s cost estimate and derived its own estimate of gross and net freight avoidable costs of £278m-400m and £200m-312m respectively (in 2011/12 prices, end CP4 efficiency). In relation to the level of the FSC, ORR proposed taking a 'conservative' approach and basing the charge on its adjusted 'low' estimate of freight avoidable costs of £278m per annum (in 2011/12 prices, end CP4 efficiency).

INTRODUCTION

In its January 2013 decision document, ORR requested that we consult the industry in relation to the phasing in profile of the FSC in CP5. We issued a consultation letter with respect to this and other issues in February 2013. We received 12 responses to our February 2013 consultation⁷, from the following stakeholders:

- ATH Resources (ATH);
- DB Schenker (DBS);

³ We have shown ORR's cap on the average freight VUC rate in 2011/12 prices and at end CP4 efficiency consistent with its decision document. However, the cost data in the CP5 VUC model will be in 2012/13 prices, consistent with our SBP, and we will estimate VUC charge rates net of our long-run maintenance and renewals efficiency assumption. Therefore, we have also calculated ORR's cap on the average freight VUC rate at end CP5 efficiency and in 2012/13 prices. Consistent with our SBP, we have assumed 15% maintenance and renewals efficiency by the end of CP5 and RPI of 3% in 2011/12. Based on these values we estimate ORR's cap on the average freight VUC rate to be £1.47 per kgtkm in 2012/13 prices and at end CP5 efficiency. This was calculated as follows: $(£1.68 * (1 - 15\%)) * (1 + 3\%) = £1.47$. Assuming a miles to kilometre conversion factor of 1.6093 this equates to £2.37 per kgtm in 2012/13 prices and at end CP5 efficiency. Please note that CP5 VUC rates will be subject to a further uplift to reflect inflation between 2012/13 and the start of CP5 (2014/15).

⁴ ORR's May 2012 consultation document can be found here: <http://www.rail-reg.gov.uk/pr13/consultations/freight-charges.php>

⁵ Available at: <http://www.rail-reg.gov.uk/pr13/publications/consultants-reports.php>

⁶ Available at: <http://www.networkrail.co.uk/publications/delivery-plans/control-period-5/periodic-review-2013/pr13-closed-consultations/>

⁷ Network Rail's February 2013 consultation letter on '[Freight specific charge and other issues](#)'



- Direct Rail Services (DRS);
- Fergusson Group;
- Freight Transport Association (FTA);
- Freightliner;
- GB Railfreight (GBRf);
- London Overground Rail Operations Ltd (LOROL);
- Rail Freight Group (RFG);
- The Association of UK Coal Importers (Coallmp);
- The Confederation of UK Coal Producers (CoalPro); and
- Transport Scotland.

We would like to take this opportunity to thank those stakeholders who took the time to respond to this consultation. We value your feedback on this, and all our PR13 charging proposals. We have published non-confidential copies of the consultation responses on our website⁸.

Please note that although this letter sets out our conclusions in relation to the phasing in profile of the FSC and other issues, ultimately, the final decision in relation to the level of track access charges in CP5, including the FSC, rests with the ORR.

STRUCTURE OF THIS LETTER

The remainder of this letter is structured as follows:

- Phasing in of the freight-specific charge (FSC): conclusion.
- Proposed approach to remedying the spent nuclear fuel charge rate error: conclusion.
- Proposed approach to updating our estimate of freight avoidable costs, including FOL costs: conclusion.
- Interaction between the FOL charge and FSC: conclusion.
- ORR's cap on the average freight VUC rate: update.
- Conclusions and next steps.
- Appendix 1 - Variance analysis.
- Appendix 2 – Draft FOL charge price list.

PHASING-IN OF THE FREIGHT-SPECIFIC CHARGE

Summary of proposal in our consultation document

In its January 2013 conclusions document, ORR proposed that the new FSC should be phased in during the last three years of CP5, to allow businesses time to adapt to it. It also proposed applying the charge to the following freight market segments:

⁸ Available at: [Closed consultations - Periodic review 2013 - Delivery plans - Network Rail](#)



- ESI coal – with a maximum FSC cap of £4.04 per kgtm (2011/12 prices, end CP4 efficiency);
- Spent nuclear fuel – with a maximum FSC cap of £11.64 per kgtm (2011/12 prices, end CP4 efficiency); and
- Iron ore – with a maximum FSC cap of £2.96 per kgtm (2011/12 prices, end CP4 efficiency).

In our February 2013 consultation letter⁹, we consulted on phasing in the FSC based on the illustrative profile that was included in ORR's January 2013 decision document. This phasing profile assumed a gradual introduction of 0% in years one and two, 20% in year three, 60% in year four and a 100% of the charge in year five of CP5.

Summary of consultation responses

Consultation question 1

What is your view on the illustrative profile of the FSC shown in Table 2, above (i.e. 0% in years one and two, 20% in year three, 60% in year four and a 100% of the charge in year five of CP5)?

The majority of consultees supported the approach of phasing in the FSC consistent with the profile set out in ORR's decision document. Some consultees, however, expressed a preference to phase in the charge more heavily weighted toward the end of CP5, or to phase in the charge over a longer period (e.g. 10 years), to reflect the long-term investment nature of the industry.

Freightliner sought confirmation that the charge will not be adjusted mid-control period if there were to be fluctuations in market volumes. It also requested that Network Rail present the data in a consistent price and efficiency base. GB Railfreight urged ORR and Ofgem to urgently discuss the timing of the introduction of the FSC (i.e. 2016, year 3 of CP5), which coincides with predicted power generation shortages.

Many consultees stated that the estimated income from ESI coal had been overestimated, whilst some consultees believed that the quantum and definition of the freight avoidable costs needed further work. Other consultees opposed the imposition of the FSC and believed that the phasing profile would be ineffective in helping businesses adapt to the new charge. One consultee considered that the level of the charges is not in keeping with the McNulty report or the Secretary of State's 7 December 2010 interim submission regarding the protection of freight's interests on the network.

Network Rail conclusion

Following careful consideration of consultation responses, we consider that there would be considerable merit in phasing in the new FSC, based on the phasing profile set out in our

⁹ Network Rail's February 2013 consultation letter on ['Freight specific charge and other issues'](#)



consultation letter (i.e. 0% in years one and two, 20% in year three, 60% in year four and 100% of the charge in year five of CP5).

Network Rail's consultation primarily focused on ORR's suggested phasing profile. As discussed, above, consultees seemed broadly content with this profile. We note, however, that other phasing profiles may also be acceptable. Ultimately, the final decision in relation to this issue rests with ORR.

Network Rail would not support the FSC being re-opened mid-control period. We consider that it is important that ORR's October 2013 Final Determinations provides certainty for stakeholders and allows them to plan their business with a reasonable degree of assurance. Ultimately, however, any decision in relation to adjusting charges would be a matter for ORR, rather than Network Rail.

As noted, above, some consultees stated that the estimated income in CP5 from the FSC for ESI coal was overestimated. Our income forecast was based on the profile of the FSC set out in ORR's January 2013 decision document and our Strategic Business Plan (SBP) traffic forecast¹⁰. As noted in our consultation letter, these forecasts were only indicative of the income that we could receive through the FSC in order to provide stakeholders with additional context. Actual income that we will receive through the FSC charge will vary in line with actual outturn traffic volumes.

The, below, table shows the proposed phasing in profile of the FSC cap for ESI coal, spent nuclear fuel and iron ore, as illustrated in ORR's decision document. We have shown these values in 2012/13 prices and end CP5 efficiency. It should be noted that while the gross and net freight avoidable cost estimates discussed, above, have been expressed in 2011/12 prices and at end CP4 efficiency, using a 2012/13 price base is consistent with our SBP and end CP5 efficiency represents the efficiency level at which these charges are likely to be levied.

Summary of FSC rates and phasing in profile					
	2014-15	2015-16	2016-17	2017-18	2018-19
Phasing in profile	0% of full rate	0% of full rate	20% of full rate	60% of full rate	100% of full rate
ESI Coal (£/KGTM)	0.0000	0.0000	0.7074	2.1222	3.5370 ¹¹
Spent nuclear fuel (£/KGTM)	0.0000	0.0000	2.0382	6.1145	10.1908 ¹²
Iron ore (£/KGTM)	0.0000	0.0000	0.5183	1.5549	2.5915 ¹³

All data is presented in 2012/13 prices and end CP5 efficiency

¹⁰ Network Rail's SBP is available at: [Network Rail - Strategic business plan 2014-19 \(CP5\)](#)



Consultees requested that Network Rail outline how a potential FSC on the biomass freight market segment would be calculated, if ORR determined that such a charge should be levied. ORR's February 2013 consultation on a FSC for biomass was published following the publication of our February 2013 consultation. As stated in our response to ORR's February 2013 consultation on biomass¹⁴, we continue to be of the view that there would be merit in not levying any freight-specific charge on the biomass freight market segment in CP5 since the market for the haulage of biomass is in its infancy and the inherent uncertainty around future growth. However, our response noted ORR's 'minded to' position on this matter and we proposed that, if such a charge were to be levied, then it should take into account the lower density and calorific value of biomass compared with ESI coal. Our analysis shows that 1m³ of biomass has 55% of the energy value of the equivalent amount of ESI coal¹⁵. On this basis we proposed that any FSC charge for biomass is set at 55% of the respective ESI coal charge. In 2012/13 prices and at end CP5 efficiency this would equate to a charge rate of £1.9454 per kg³m¹⁶.

We understand that ORR is due to set out its minded-to conclusions in relation to whether a FSC should be levied on biomass in its Draft Determinations in June 2013.

If ORR were to determine that a FSC should be levied on the biomass freight market segment, we believe that there would be considerable merit in phasing in the charge during the last three years of CP5. (i.e. 0% of the full rate in years one and two, 20% in year three, 60% in year four and a 100% of the charge in year five of CP5), consistent with the proposed approach for other market segments, as set out in this letter.

The table, below, illustrates our proposed phasing in profile for any FSC on biomass and the respective income forecast, based on our SBP traffic forecast. Actual income that we will receive through the FSC charge will vary in line with actual outturn traffic volumes.

¹¹ ORR determined a FSC cap on ESI coal of £4.04 per kg³m (2011/12 prices, end CP4 efficiency). Consistent with the rest of this document, £4.04 per kg³m converted to CP5 efficiency (£4.04*(1-15%)) = £3.4340. Then, presented in 2012/13 prices, with an RPI uplift of 1.03% (£3.4340*1.03) = £3.5370 per kg³m in 2012/13 prices, end CP5 efficiency.

¹² ORR determined a FSC cap on spent nuclear fuel of £11.64 per kg³m (2011/12 prices, end CP4 efficiency). Consistent with the rest of this document, £11.64 per kg³m converted to CP5 efficiency (£11.64*(1-15%)) = £9.8940. Then, presented in 2012/13 prices, with an RPI uplift of 1.03% (£9.8940*1.03) = £10.1908 per kg³m in 2012/13 prices, end CP5 efficiency.

¹³ ORR determined a FSC cap on iron ore of £2.96 per kg³m (2011/12 prices, end CP4 efficiency). Consistent with the rest of this document, £2.96 per kg³m converted to CP5 efficiency (£2.96*(1-15%)) = £2.5160. Then, presented in 2012/13 prices, with an RPI uplift of 1.03% (£2.5160*1.03) = £2.5915 per kg³m in 2012/13 prices, end CP5 efficiency.

¹⁴ Our response to ORR's consultation on biomass can be found here: <http://www.networkrail.co.uk/publications/delivery-plans/control-period-5/periodic-review-2013/orr-publications-on-PR13/>

¹⁵ Based on calorific value and density data for ESI coal and biomass presented by GBRf at an industry conference in Nov 2012

¹⁶ ESI coal rate = £4.04 per kg³m (2011/12 prices end CP4 efficiency). Convert £4.04 per kg³m in to CP5 efficiency (4.04*(1-15%) = £3.4340 per kg³m (15% = CP5 efficiency). Now convert £3.4340 per kg³m in to 2012/13 prices by uplifting it by an RPI of 1.03%, which equates to an ESI coal rate of £3.5370 per kg³m (2012/13 prices end CP5 efficiency). Now we take 55% of this ESI coal rate to arrive at the respective FOL charge rate for biomass (£3.54*55%) = £1.9454. This is lower than the headline £2.22 / kg³m (2011/12 prices end CP4 efficiency) number proposed in our biomass consultation response reflecting the change in price base and efficiency level.

Biomass – FSC Charge rate, phasing in profile and income forecast for CP5					
Year	2014-15	2015-16	2016-17	2017-18	2018-19
<i>Phasing in profile</i>	<i>(0% of full rate)</i>	<i>(0% charge rate)</i>	<i>(20% of full rate)</i>	<i>(60% of full rate)</i>	<i>(100% of full rate)</i>
Biomass FSC charge rate £/kgm	0.0000	0.0000	0.3891	1.1672	1.9454
Biomass FSC income forecast £m	0.00	0.00	0.75	2.25	3.75

All data is presented in 2012/13 prices end CP5 efficiency

REMEDYING THE SPENT NUCLEAR FUEL CHARGE RATE ERROR

Summary of proposal in our consultation document

In our February 2013 consultation letter, we highlighted an error that had recently come to light in relation to the current FOL charge rate for spent nuclear fuel.

As part of the recent work that we carried out to develop our SBP, it emerged that the income that we have received through the spent nuclear fuel FOL charge in CP4 is materially lower than the income forecast by Network Rail and ORR in the 2008 Periodic Review (PR08). This was due to an error in the calculation of the charge rate at that time.

We noted that in order to recover the £1.87m (nominal prices) spent nuclear fuel income that had been forecast in PR08 for the first three years of CP4, charge rates would have had to have been approximately 7-8 times higher than the determined rates.

In our February 2013 consultation, we proposed correcting this error for CP5, however, not seeking any adjustments to address the error in CP4. Moreover, in order to allow stakeholders time to prepare for the new, higher, charge rate, we proposed phasing in the charge during CP5. We proposed basing this phasing profile on that which ORR suggested in its decision document with respect to the FSC (i.e. retain the current rate for years one and two, 20% in year three, 60% in year four and a 100% of the charge in year five of CP5).

Summary of consultation responses

Consultation question 2

What is your view on the illustrative profile of the spent nuclear fuel freight-only line charge rate shown in Table 3, above (i.e. retain the current rate for years one and two, 20% in year three, 60% in year four and a 100% of the charge in year five of CP5)?

The majority of consultees that responded to question 2 were broadly content with our proposed approach.



RFG noted that there has been no assessment of the actual expenditure on relevant freight only lines over the period. It suggested that there may be merit in cross checking, during CP5, to validate the cost estimates. In addition to this, RFG noted that ORR and Network Rail may wish to consider what quality of assessment is necessary to avoid such errors occurring in the future.

DRS stated that it recognised that Network Rail is trying to cushion the nuclear fuel charge rate error by phasing it in. However, it noted that ORR and Network Rail must realise the potential damage that could have been caused to the freight industry if these charges were cumulatively levied from the start of CP5.

DRS further noted that the nuclear fuel charge rate error has caused it to vastly underestimate its pricing to its customers. It stated that any attempt to recover 3 years of error from its customers would be inappropriate given its pricing assumptions. It stated that a similar error scaled to other operators could have dire consequences to their businesses.

Network Rail conclusion

Following careful consideration of consultation responses, we propose, consistent with our consultation document, that this error is corrected in CP5 and phased in based on the profile set out in our consultation (i.e. retaining the current charge rate in years one and two, charging 20% of the new rate in year three, 60% in year four and 100% of the charge rate in year five of CP5). We believe that this should provide stakeholders sufficient time to prepare for the new, higher, spent nuclear fuel charge rate. This proposed phasing in profile and the respective charge rates are set out in the table, below. We confirm that we do not propose recovering any 'under charge' from CP4, which amounts to approximately £1.62m (nominal prices) and will instead write this off.

As noted in our consultation letter, we propose deriving the spent nuclear charge rate by dividing the FOL spent nuclear fuel cost estimate by forecast average CP5 traffic. The table, below, sets out our updated spent nuclear charge rate which equates to £30.2228 kgm¹⁷ (2012/13 prices, end CP5 efficiency). This reflects our SBP 'bottom up' view of FOL costs, in particular a reduction in the track related costs, relative to our Initial Industry Plan (IIP). The analysis also indicates that, in the last year of CP5 (2018-19), when the full spent nuclear fuel charge has been phased in; we would receive revenue from this charge of approximately £0.82m (2012/13 prices, end CP5 efficiency). However, as noted, above, actual income will vary in line with actual traffic levels. We provide a variance analysis of the spent nuclear fuel FOL charge rate based on our SBP, compared to our IIP submission in Appendix 1.

¹⁷ A spent nuclear charge rate of £30.2228kgm (2012/13 prices, end CP5 efficiency) was derived by dividing the updated spent nuclear FOL cost of £807,316.92 (2012/13 prices, end CP5 efficiency) by the average CP5 spent nuclear traffic forecast of 26,712 kgm.



Spent nuclear fuel – FOL					
Charge rate, phasing in profile and income forecast for CP5					
	2014-15	2015-16	2016-17	2017-18	2018-19
Phasing in profile (£/KGTM)	existing charge rate	existing charge rate	20% of full rate	60% of full rate	100% of full rate
Updated spent nuclear charge rate (£/KGTM)	5.3436	5.3436	6.0446	18.1337	30.2228
Updated spent nuclear fuel income forecast (£m)	0.14	0.14	0.16	0.49	0.82
All data is in 2012/13 prices and end CP5 efficiency					

We would like to apologise for the resulting inconvenience caused by this error. We are, however, not proposing to retrospectively recover any revenue in relation to this error which resulted in operators being undercharged. In addition, as noted, above, we are also proposing phasing in the new charge rate during CP5, to allow businesses time to adjust.

Some consultees suggested that we review further our PR13 FOL cost estimates. We have updated our FOL cost estimates to take account of SBP cost data. We also note that they have already been subject to industry consultation, and reviewed by the independent reporter, Arup.

It is important for both stakeholders and Network Rail that charge rates are set at an appropriate level and based on robust analysis. Therefore, in addition to our consultation and review of cost estimates carried out to date, we have reviewed again the analysis underpinning our proposed CP5 charge rates, before submitting them to ORR. We understand that ORR will also review and further audit our draft price list, before the CP5 price lists are finalised in December 2013. We believe that this process should mitigate against a similar error occurring in CP5.

UPDATING OUR FREIGHT-ONLY LINE COST ESTIMATE

Summary of proposal in our consultation document

In our February 2013 consultation letter, we noted that, when L.E.K. updates its estimate of freight avoidable costs, we will also update our FOL cost estimate to take account of the SBP cost data. This updated cost estimate could then inform ORR’s decision in relation to the level of the FOL charge in CP5.

In addition to the, above, we also stated that we would calculate FOL charge rates for iron ore and, subject to the results of ORR’s consultation, biomass freight market segment.

Consistent with ORR’s approach to introducing the FSC, we proposed phasing in iron ore, and potentially biomass, FOL charges during CP5. We proposed that the phasing profile for these charges should be consistent with that for the FSC (i.e. 0% for years one and two, 20% in year three, 60% in year four and 100% of the charge in year five of CP5).



Summary of consultation responses

Consultation question 3

What is your view on how we have calculated initial CP5 freight-only line charge rates for ESI coal and spent nuclear fuel?

The majority of consultees that responded to this consultation question were content with our proposed approach to calculating CP5 FOL charge rates. Consultees noted that Network Rail should advise the industry on the actual expected rates, when the FOL cost estimates are updated.

Some freight operating companies (FOCs) suggested that the FOL charge should be levied on a 'per tonne' basis, as opposed to a 'per tonne mile' basis. They considered that levying the FOL charge on a 'per tonne mile' basis would be in direct conflict to ORR's cost reflectivity objective and would discriminate against longer distance flows.

One consultee noted that it would have been helpful to defer this consultation until the updated L.E.K analysis had been completed. Another suggested that our initial updated spent nuclear fuel charge rate for 2018/19 of £41.52 (2012/13 prices, end CP5 efficiency) should reflect the CP4 spent nuclear fuel error.

Transport Scotland requested that Network Rail confirm whether the FOL charge is applicable to Scotland and whether it has any nuclear freight only lines.

Network Rail conclusion

With the exception of biomass, we propose that, consistent with the proposal set out in our consultation, estimating the FOL charge rates for spent nuclear fuel and ESI coal is calculated by dividing the relevant cost estimates by the average CP5 traffic forecast.

With respect to spent nuclear fuel, our proposed FOL charge rate is set out, above (see Network Rail's conclusion in response to question 2).

With respect to ESI coal the table, below, sets out our proposed updated FOL ESI coal charge rate £0.5507 kg¹⁸ and the respective forecast income (2012/13 prices and end CP5 efficiency). This is 20% lower than our initial ESI coal FOL charge rate of £0.6850 kg¹⁹ (2012/13 prices and end CP5 efficiency). This reflects our SBP 'bottom up' view of FOL costs, in particular a decrease in the track related costs, relative to our Initial Industry Plan (IIP). We provide a variance analysis of the ESI coal FOL charge rate based on our SBP, compared to our IIP submission in Appendix 1.

¹⁸ The updated ESI coal charge rate of £0.5507 kg¹⁸ (2012/13 prices, end CP5 efficiency) is derived by dividing the updated ESI coal cost estimate of £3,886,896.82 (12/13 prices and end CP5 efficiency), by the average ESI coal CP5 traffic forecast of 7,057,686 kg¹⁸.

¹⁹ Our initial ESI coal charge rate of £0.6850 kg¹⁹ (2012/13 prices, end CP5 efficiency) was derived by dividing the ESI coal cost estimate of £4,835,547 (2012/13 prices, end CP5 efficiency) by the average ESI coal CP5 traffic forecast of 7,059,195 kg¹⁹.



ESI coal – FOL					
Charge rate, phasing in profile and income forecast for CP5					
	2014-15	2015-16	2016-17	2017-18	2018-19
<i>Phasing in profile (£/KGTM)</i>	<i>100% of full rate</i>	<i>100% of full rate</i>	<i>100% of full rate</i>	<i>100% of full rate</i>	<i>100% of full rate</i>
Updated ESI coal charge rate (£/KGTM)	0.5507	0.5507	0.5507	0.5507	0.5507
Updated ESI coal income forecast (£m)	3.89	3.89	3.89	3.89	3.89
All data is in 2012/13 prices and end CP5 efficiency					

We do not agree with stakeholders' suggestions that the FOL charge should be levied on a 'per tonne' basis, as opposed to a 'per tonne mile' basis. We continue to believe that it is most appropriate to levy the FOL charge on a 'per tonne mile' basis. This approach is consistent with CP4, and consistent with the way that other freight charges are levied. In addition, levying the charge on a 'per tonne mile' basis is inexpensive to implement from a Network Rail billing perspective.

We do not consider that it would have been appropriate to defer this consultation until the L.E.K. analysis had been completed. There has already been a significant amount of work carried out in relation to estimating FOL costs. Moreover, as discussed, below, L.E.K. is due to carry out a 'light touch' update and FOL costs are not the core focus of its work.

In response to Transport Scotland's request, we can confirm that, based on our own analysis, and following industry consultation, that there is one spent nuclear fuel line at Hunterston in Scotland. Consistent with CP4, we propose levying a FOL charge on spent nuclear fuel freight traffic on a 'per tonne mile' basis, irrespective of where that traffic travels on the network. Levying the charge on a tonne mile basis should not result in us over-recovering freight-only line costs, we aim to set the charge rate at a level (based on forecast traffic volumes) which is consistent with us recovering the appropriate level of fixed costs over the control period.

Summary of consultation responses

Consultation question 4

What is your view on the illustrative profile shown in Table 5, above, for iron ore and potentially biomass freight-only line charges during CP5 (i.e. 0% for years one and two, 20% in year three, 60% in year four and a 100% of the charge in year five of CP5)?

The majority of consultees were content with our proposed approach to phasing in the FOL charges for iron ore, and potentially biomass, on the same basis as the FSC. Some consultees noted their opposition to any charge rate being introduced for biomass, and thus any phasing profile related to it.

Consultees expressed concern over the fact that Network Rail did not illustrate how the FOL charge for biomass would be calculated. RFG noted that, if ORR intended to apply the



charge to biomass, Network Rail must clarify how such a charge will be calculated to be fair, transparent and make sure that it does not over-recover costs.

Other consultees stated that care must be taken so that Network Rail does not double count the same cost via the coal and biomass FOL charges. RFG stated that replacing coal with biomass could change elements of the FOL costs (which is based on the current mix of traffic). Fergusson Group expressed similar concerns.

Consultees also stated that any proposals on the track access charging of biomass needed to be aligned with government energy policy and suggested that ORR discuss this with the Department for Energy and Climate Change (DECC).

Network Rail conclusion

After carefully reviewing responses from consultees, we propose phasing in the FOL charges for iron ore, and potentially biomass, on the same basis as the new FSC (i.e. 0% for years one and two, 20% in year three, 60% in year four and 100% of the charge in year five of CP5).

The, below, table shows the proposed phasing profile, charge rate and income forecast for iron ore. We propose that when the FOL charge rate for iron ore has been fully phased in by 2018-19, it will equate to £0.8327²⁰ per kgm (2012/13 price, end CP5 efficiency), with associated income of £0.13m (2012/13 prices end CP5 efficiency).

Iron ore – FOL					
Charge rate, phasing in profile and income forecast for CP5					
	2014-15	2015-16	2016-17	2017-18	2018-19
Phasing in profile (£/KGTM)	0% of full rate	0% of full rate	20% of full rate	60% of full rate	100% of full rate
Iron ore charge rate (£/KGTM)	0.0000	0.0000	0.1665	0.4996	0.8327
Iron ore forecast income (£m)	0.00	0.00	0.03	0.08	0.13
All data is in 2012/13 prices and end CP5 efficiency					

With respect to a potential FOL charge for biomass, we recognise that it would have been preferable to outline both the methodology and cost estimates in our consultation letter. However, we had developed FOL charge rates on the basis that they would only be levied on ESI coal and spent nuclear fuel, consistent with CP4. At the time of developing our February 2013 consultation letter, we had not anticipated that ORR would propose to introduce a FSC and FOL charge for biomass.

Consistent with our proposed methodology to calculate the FSC for biomass, discussed, above, we propose the FOL charge rate for biomass should be charged at 55% of the ESI FOL coal charge rate, reflecting the lower density and calorific data for biomass, compared to ESI coal.

²⁰ Iron ore FOL charge rate is derived by dividing iron ore FOL cost of £133,322 (2012/13 prices, end CP5 efficiency) by the average CP5 traffic forecast for iron ore of 160,100 kgm.



The, below, table sets out our proposed phasing in profile, charge rate and income forecast for biomass. If the biomass FOL charge rate were to be fully phased in by 2018-19, we estimate that this would equate to a charge rate of £0.3029 per kg²¹ (2012/13 prices and end CP5 efficiency), and will result in income of £0.58m.

Biomass – FOL					
Charge rate, phasing in profile and income forecast for CP5					
	2014-15	2015-16	2016-17	2017-18	2018-19
Phasing in profile (£/KGTM)	0% of full rate	0% of full rate	20% of full rate	60% of full rate	100% of full rate
Biomass charge rate (£/KGTM)	0.0000	0.0000	0.061	0.1817	0.3029
Biomass income forecast (£m)	0.00	0.00	0.12	0.35	0.58

All data is in 2012/13 prices and end CP5 efficiency

UPDATING THE L.E.K WORK ON FREIGHT AVOIDABLE COSTS

Summary of proposal in our consultation document

In our consultation, we noted that ORR had requested that, in advance of its Draft Determinations we update our estimate of freight avoidable costs (developed by L.E.K.), which we provided to ORR in order to inform the level of the FSC. Specifically, ORR requested²² that we:

- Follow the recommendations of Arup in revising our estimate of variable usage costs (correcting our treatment of non-commercial freight);
- Make other refinements proportionate to their impact on the determined charge, in particular the allocation of costs associated with the possessions regime (Schedule 4) with respect to spent nuclear fuel;
- Update the unit costs consistent with our Strategic Business Plan (SBP) and other best estimates (rather than low range estimates) of freight avoidable costs; and
- Refine the allocation of variable usage costs and netting off of other variable charges (with updated charge estimates).

We noted, in our consultation letter, that we would be asking L.E.K. to take a pragmatic approach to reviewing and updating its original cost estimate, consistent with the guidance provided by ORR, above.

²¹ The biomass charge rate is based on 55% of the respective ESI FOL coal charge rate. Our estimated ESI coal charge rate is equal to £0.5507 kg²¹ (2012/13 prices and end CP5 efficiency). ESI FOL coal charge rate of £0.5507 per kg²¹ is derived by dividing the updated ESI coal cost estimate of £3,886,896.82 (12/13 prices and end CP5 efficiency), by the average ESI coal CP5 traffic forecast of 7,057,686 kg²¹.

²² ORR, Rail freight: conclusion on the average VUC and a FSC, page 83, January 2013.



Summary of consultation responses

Consultees appeared to be broadly content with our proposed approach to updating the L.E.K. work on freight avoidable costs. However, consultees also suggested, we:

- Update the enhancement list, to align it with the SBP, and to remove any works which are now not being progressed, or where costs have changed; and
- Re-run the Vehicle Track Interaction Strategic Model (VTISM) in relation to estimating variable usage costs, with engineering trains re-instated.

Consultees noted, generally, that further work must be undertaken to establish the cost of freight's use of the rail network, with a greater degree of certainty.

Network Rail conclusion

As requested by ORR, we have engaged L.E.K. to update its freight avoidable cost analysis, consistent with the guidance provided by ORR. In line with the proposal in our consultation letter, we have asked L.E.K. to adopt a pragmatic, 'light touch', approach to carrying out this work.

We agree with consultees that two areas that require updating are enhancements and the re-running of VTISM, with engineering trains re-instated. This is part of L.E.K.'s remit.

Following the completion of L.E.K.'s work, we are aiming to provide the updated freight avoidable cost estimates to ORR by the end of April 2013. We will, of course, share this work with stakeholders. We note, however, that because ORR has based its cap on the FSC on its adjusted 'low' estimates, the L.E.K. cost estimate would have to reduce significantly in order for there to be an impact on the FSC in CP5.

We note that some stakeholders have made detailed comments in relation to the L.E.K. analysis and ORR's subsequent assumptions. We do not consider it appropriate to respond to these points in this letter. The detail of the L.E.K. analysis has already been shared with the industry and reviewed by the independent reporter, Arup. Following this review, ORR has taken its own view on the level of the freight avoidable costs for the purpose of setting the FSC.

INTERACTION BETWEEN THE FREIGHT-ONLY LINE CHARGE AND FSC

Summary of proposal in our consultation document

In our February 2013 consultation, we set out our view in relation to the interaction between the FOL charge and the FSC in CP5.

We proposed not consolidating the FOL charge and the FSC in CP5, as they are not due to be introduced at the same time (i.e. the freight-only line charge will be levied in year one of CP5 onwards and the FSC will be levied in year three of CP5 onwards). We noted that there could be merit in reviewing, as part of PR18, whether it is appropriate to consolidate these charges in CP6.



Summary of consultation responses

The RFG stated that although it would be desirable to have the simplest charging system, there are complexities in merging the FOL and FSC due to the proposed phasing. It noted that Network Rail and FOCs should discuss how the billing of all the charges to freight for CP5 will be undertaken to ensure it is as simple and straightforward as possible.

ATH disagreed with Network Rail's proposed approach. It stated that the FOL charges should be included in any FSC for CP5.

Network Rail conclusion

We confirm our proposal not to consolidate the FSC and the FOL charge in CP5. We consider that this will increase transparency and make charges easier to understand. In addition to this, as noted, above, the charges are not due to be introduced at the same time, which would increase the complexity of any consolidation of charge rates.

However, as noted in our consultation letter, we do believe that there would be merit in reviewing, as part of PR18, whether these charges should be consolidated in CP6.

CAP ON AVERAGE FREIGHT VUC RATES

Summary of our interpretation of the cap on average freight VUC rates

In our consultation letter, we outlined our interpretation of the cap on the CP5 average freight VUC rate set by ORR. We viewed the cap applying *ex ante* and relating to the average freight VUC rate in the CP5 VUC model, rather than the average outturn freight VUC rate, for example. If, following the population of the CP5 VUC model, the average freight VUC rate exceeded the cap set by ORR, our view was that all freight VUC rates should be reduced by the same percentage (i.e. the percentage difference between the average freight VUC rate in the model and the cap set by ORR) so that the average charge does not exceed the cap.

In our consultation document, we also proposed that any difference between the average freight VUC rate and the cap set by ORR should be recovered through passenger fixed track access charges (or any network grant income received in lieu of fixed track access charges), rather than passenger VUCs. We stated that this approach would avoid unduly discriminating between different vehicle/commodity types and would retain the relative price differential between different vehicle/commodity types, reflecting their relative 'track friendliness'.

Summary of consultation responses

The majority of consultees were content with our interpretation of the cap on the average freight VUC rate.

One consultee opposed our proposed approach, and instead, suggested that, in a scenario where the cap is exceeded, Network Rail should implement an 'across the board' percentage reduction in all individual freight vehicle rates that are higher than the average freight VUC cap.



RFG stated that it might be conceivable that the application of the cap could cause the VUC rates for some wagon/commodity types to fall below current levels. It noted that Network Rail may wish to consider whether this is possible as it is not clear that the EC Directives permit a discount to variable usage costs.

Network Rail conclusion

We have now developed the CP5 VUC model, which indicates an average freight VUC rate of £1.1210 per 1,000 gross tonne kilometre (kgtkm), which is 24% lower than the ORR cap of 1.47 per kgtkm²³. Therefore, it has not been necessary to apply the cap to freight VUC rates. For further information in relation to our conclusions with respect to CP5 VUC rates, please see our VUC conclusions document²⁴.

For the avoidance of doubt, in the event that it was necessary to apply a cap on freight VUC rates we would have proposed retaining our interpretation of the VUC cap set out in our consultation. It is important to note, however, that, ultimately, the final decision in relation to the level VUC rates in CP5, and any cap on these rates, rests with ORR.

We do not support the suggestion that the VUC charge rate should only be reduced for those individual freight vehicles that exceed the average freight VUC cap. We consider that, such an approach would unduly discriminate against those vehicle types that did not exceed the cap and would distort incentives (i.e. reduce the price differential between 'track friendly' and 'track nasty' vehicles).

As stated previously, we support placing an early cap on freight VUC rates in a way that is consistent with the principles of the current legislation. Ultimately, any decision in relation to the level of any cap rests with ORR.

NEXT STEPS

The conclusions set out in this letter form our proposals to ORR in relation to various aspects of freight charges for CP5. ORR is due to publish its Draft Determinations in June 2013, which will include decisions on access charges, including the FSC and the other issues discussed in this letter. ORR will then publish its Final Determinations in October 2013, before auditing and approving the track access charge price lists in December 2013. We are aiming to provide ORR with an updated L.E.K cost estimate of freight avoidable cost, by the end of April 2013.

Following this process, the new CP5 charge rates, determined by ORR, are due to be implemented on 1 April 2014.

²³ In its decision document ORR's cap on the average freight VUC rate was £1.68 per kgtkm in 2011/12 prices and at end CP4 efficiency. However, the cost data in the CP5 VUC model will be in 2012/13 prices, consistent with our SBP, and we will estimate VUC charge rates net our long-run maintenance and renewals efficiency assumption. Therefore, we have also calculated ORR's cap on the average freight VUC rate at end CP5 efficiency and in 2012/13 prices. Consistent with our SBP, we have assumed 15% maintenance and renewals efficiency by the end of CP5 and RPI of 3% in 2011/12. Based on these values we estimate ORR's cap on the average freight VUC rate to be £1.47 per kgtkm in 2012/13 prices and at end CP5 efficiency. This was calculated as follows: $(£1.68 * (1 - 15\%)) * (1 + 3\%) = £1.47$. Please note that CP5 VUC rates will be subject to a further uplift to reflect inflation between 2012/13 and the start of CP5 (2014/15).

²⁴ Available at: [Closed consultations - Periodic review 2013 - Delivery plans - Network Rail](#)





Yours sincerely

Jashim Uddin

Planning and Regulation Assistant



APPENDIX 1 – VARIANCE ANALYSIS

The, below, table compares our updated charge rate estimate for spent nuclear fuel (based on SBP data) to the estimate in our consultation (based on IIP data).

Spent nuclear fuel – FOL					
Variance analysis of Charge rate based on latest SBP compared to IIP Submission					
	2014-15	2015-16	2016-17	2017-18	2018-19
Phasing in profile (£/KGTM)	existing charge rate	existing charge rate	20% of full rate	60% of full rate	100% of full rate
Updated spent nuclear fuel charge rate (£/KGTM) (based on updated SBP data)	5.3436	5.3436	6.0446	18.1337	30.2228
Initial spent nuclear fuel charge rate (£/KGTM) (based on IIP cost data)	5.3436	5.3436	8.3043	24.9130	41.5217
Variance – spent nuclear fuel charge rate (£/kgtm)	0 (0%)	0 (0%)	-2.2597 (-27%)	-6.7793 (-27%)	-11.2989 (-27%)
All data is in 2012/13 prices and end CP5 efficiency					

The, below, table compares our updated estimate of ESI coal FOL charges rates (based on SBP data) to our initial estimate (based on IIP data).

ESI coal – FOL					
Variance analysis of Charge rate based on latest SBP compared to IIP Submission					
	2014-15	2015-16	2016-17	2017-18	2018-19
Phasing in profile (£/KGTM)	100% of full rate	100% of full rate	100% of full rate	100% of full rate	100% of full rate
Updated ESI coal charge rate (£/KGTM) (based on updated SBP data)	0.5507	0.5507	0.5507	0.5507	0.5507
Initial ESI coal charge rate (£/KGTM) (based on IIP cost data)	0.6850	0.6850	0.6850	0.6850	0.6850
Variance – ESI coal charge rate (£/kgtm)	-0.1343 (-20%)	-0.1343 (-20%)	-0.1343 (-20%)	-0.1343 (-20%)	-0.1343 (-20%)
All data is in 2012/13 prices and end CP5 efficiency					



APPENDIX 2 – DRAFT CP5 FOL CHARGE PRICES LIST

FOL CHARGE RATE

£ Per KGTM

2012/13 prices end CP5 efficiency

FOL CP5 CHARGE RATES					
	2014-15	2015-16	2016-17	2017-18	2018-19
ESI coal	0.5507	0.5507	0.5507	0.5507	0.5507
Iron ore	0.0000	0.0000	0.1665	0.4996	0.8327
Spent nuclear fuel	5.3436	5.3436	6.0446	18.1337	30.2228
Biomass	0.0000	0.0000	0.0606	0.1817	0.3029

