Final Determination consistent price lists: key assumptions

Published 3 December 2018

Purpose

The purpose of this note is to set out the key assumptions which underpin the following proposed final Control Period 6 (CP6) price lists that we circulated for review on 23 November 2018, consistent with ORR's Final Determination:

- Variable Usage Charge (VUC);
- Freight Specific Charge (FSC);
- Open Access Infrastructure Cost Charge (ICC);
- Electrification Asset Usage Charge (EAUC);
- Managed Station Long Term Charge (LTC);
- Franchised Station Long Term Charge (LTC); and
- Fixed Track Access Charges (FTAC).

In addition, we explain the assumptions that will underpin the Distribution System Loss Factors for CP6, which will be used to charge metered train operators for their traction electricity consumption.

We note that certain train operators have bespoke charging arrangements set out in their track access contracts, which are not directly related to the price lists set out, above. This note does not seek to cover these bespoke charging arrangements.

We also set out in Annex 2 of this document the forecast income in CP6 from the, above, charges as included in ORR's Final Determination.

We ask that stakeholders to review these proposed final CP6 price lists and respond to RegulatoryEconomics@networkrail.co.uk by COP 30 November 2018 stating either:

1. **That they have reviewed the proposed final CP6 price lists and have not identified any manifest errors or points of factual accuracy; or**

2. **That they have reviewed the proposed final CP6 price lists and consider that they include a manifest error or something that is factually incorrect.**

We are only seeking to address manifest errors or points of factual accuracy as part of this process (e.g. missing rates or incorrect operator names). Where appropriate, we will then address any issues before publishing final CP6 price lists on 20 December 2018. The methodologies for calculating charges have already been approved by ORR (approval letter available shortly on ORR's website here). ORR has now made its final decisions on policy for CP6. Therefore, as part of this process, we are not seeking views on the CP6 charging methodologies or the overall level of charges.

The models used to produce these CP6 proposed final price lists have either been quality assured by Steer Davies Gleave (report available here) or Arup (report available here) .

ORR is responsible for assessing the impact of changes to train operator charges and published impact assessment documents (available here) as part of its Final Determination.

If you would like to discuss any aspects of this note or the proposed final CP6 price lists please contact Aaren Healy (Aaren.Healy@networkrail.co.uk / 07730 359 537) or Ben Worley (Ben.Worley@networkrail.co.uk / 07801 900 424).

We set out in the following sections the key changes for each charge since we published the draft CP6 price lists in July 2018.

Background

The proposed final price lists published alongside this note are the result of lengthy engagement with stakeholders.

In December 2016, ORR published a consultation on the policy to be used to calculate charges and incentives in CP6 (available here). This was followed by ORR's conclusions, which were published in June 2017 (available here).

Following the publication of ORR's conclusions, we published a consultation on the detailed methodology for recalibrating variable and station charges for CP6 (available here). We published our conclusions in May 2018 (available here).

Separately we also consulted on the detailed methodology for allocating our fixed costs to train operators in CP6 (available here). We concluded on this consultation in May 2018 (available here). Our consultation focussed on implementing a new methodology for allocating our fixed costs to train operators, developed by Brockley Consulting (available here).

In July 2018 we published draft CP6 price lists, consistent with ORR's Draft Determination (available here). This gave operators the opportunity to review their draft charges and raise any concerns with us and ORR directly.

Following ORR's Final Determination (available here), on 9 and 16 November 2018 we wrote to ORR asking it to the approve the proposed final CP6 price lists that we are publishing alongside this note (these letters are available on our website here and here). ORR responded to our letters on 23 November 2018 confirming its approval of the methodologies used for calculating charges in CP6.

Variable Usage Charge (VUC)

We set out, below, the key assumptions which underpin the proposed final CP6 VUC price list, consistent with ORR's Final Determination. We also highlight the key changes between the draft VUC price list that we published in July 2018 and the proposed final price list published alongside this note.

Key changes since we published the draft CP6 VUC price list

We have made the following key changes since we published the draft CP6 VUC price list in July 2018, following ORR's Final Determination:

- An increase in the forecast efficiency improvement in CP6 applied to charges from 8.4% to 11.4%, reflecting the final value set out in ORR's Final Determination. This has the effect of reducing operators' VUC rates.

- CP6 year one passenger VUC rates have increased by 4%, following ORR's decision to index charges by CPI instead of RPI in CP6. This adjustment has not been applied to freight and charter VUC rates, which are subject to ORR's PR18 capping policy.

- Updates to a small number of vehicles assumed characteristics following feedback from stakeholders.

Overall, the above changes result in very small changes to VUC rates, with most only moving by +/- 1%-3%.

Key assumptions

The following key assumptions have been made in calculating the CP6 VUC price list attached to this note:

- The increase in Freight, Charter, North Yorkshire Moors and West Coast Rail Jacobite VUC rates will be capped/phased-in during CP6. The VUC will be set so that in years 1 and 2 of CP6, total variable charges (including forecast VUC, EAUC, EC4T, the capacity charge and the coal spillage charge) will be held constant in real terms (i.e. equal to the final year of CP5) for these operator groups. The VUC will increase in year 1 to offset the fall in total variable charges due to the removal of the capacity charge and the coal spillage charge in CP6. In the final three years of CP6 each VUC rate will increase on a straight-line transition to full cost recovery by the end of Control Period 7 (CP7).

- No capping or phasing-in will apply to franchised operators nor to open access passenger operators. Franchised operators are 'held harmless' by their franchise agreements and the open access passenger operator group is not forecast to incur a material increase in their total variable charges in CP6 given the decision to remove the Capacity Charge.

- All VUC rates reflect the assumed maintenance and renewal (M&R) efficiency improvement of 11.4%, consistent with ORR's Final Determination. This is c.3% higher than the efficiency value (8.4%) applied to the draft VUC price list that we published in July, which reflected the assumption in our Strategic Business Plan (SBP). This change has the effect of reducing charges by c.3%, before considering any other changes and ORR's decision to cap the increase in freight and charter charges.

- All VUC rates have been published in 2017/18 prices and, therefore, will need to be uplifted 2019/20 prices prior to the start of CP6 to reflect the impact of inflation. We aim to publish price lists uplifted to 2019/20 prices using CPI in February 2019.

- VUC rates reflect the methodology set out in our May 2018 charging conclusions document available here.

- This proposed final VUC price list is based on the assumed vehicle characteristics contained in the spreadsheet ("20170728 VUC vehicle characteristics spreadsheet v7.xlsx"), which is available upon request. We have shared the vehicle characteristics which will underpin CP6 VUC rates with stakeholders several times as part of PR18.

- CP6 year one passenger VUC rates have been increased by 4%, following ORR's decision to index charges by CPI instead of RPI in CP6. This 4% upward adjustment to year one rates means that passenger train operators will pay the same in cash terms over the course in CP6, as they would have if charges were indexed by RPI. This upward adjustment to charges has not been applied to freight and charter (including North Yorkshire Moors and West Coast Rail Jacobite) VUC rates, which are subject to ORR's PR18 capping arrangements.

Freight Specific Charge (FSC)

We set out, below, the key assumptions which underpin the proposed final CP6 FSC price list, consistent with ORR's Final Determination. We also highlight the key changes between the draft FSC price list that we published in July 2018 and the proposed final price list published alongside this note. Unlike other charges, these rates have been calculated by ORR, rather than Network Rail.

Key changes since we published the draft CP6 FSC price list

We have made the following key changes to the draft CP6 FSC price list that we published in July 2018, following ORR's Final Determination:

- Reflected ORR's decision in its Final Determination to phase-in the new Biomass FSC rate over CP6 (in its Draft Determination ORR proposed levying the full charge from year one of CP6). This change results in significantly lower biomass charges in the first four charges of CP6 (the charge has been set to zero in the first two years of CP6).

- Reflected the latest freight VUC rates described, above, in the calculation of CP6 FSC rates. As explained in more detail, below, the level of freight VUC rates and ICC rates are linked. This update only results in a very small change to the ESI coal, Iron Ore and Spent Nuclear Fuel FSC rates of c. 1%.

The rates on the proposed final FSC price list are consistent with those set out in ORR's Final Determination, which were published to one decimal place.

Key assumptions

We set out, below, the key assumptions which have been made in calculating our proposed final CP6 FSC price list, consistent with ORR's Final Determination:

- In CP5 we charged freight operators a FSC and a Freight Only Line (FOL) charge. For CP6, these two charges have been merged into a single charge, the FSC.

- In its Final Determination, ORR decided that Coal ESI, Iron Ore, Spent Nuclear Fuel, and ESI Biomass are the only freight commodities that should be subject to the FSC in CP6. CP6 will be the first time that the FSC will be levied on Biomass (in CP5 the charge was restricted to Coal ESI, Iron Ore and Spent Nuclear Fuel).

- The CP6 FSC rate for Coal ESI, Iron Ore, Spent Nuclear Fuel has been calculated as a 5-year average of the following rates:
    - 2019/20 and 2020/21 rates equal to the sum of the CP5 2018/19 FOL Charge and FSC rates.
    - For 2021/22 to 2023/24 the sum of the 2018/19 FOL and FSC rate, minus the increase in the VUC for each commodity in each year of CP6. This approach means that CP6 FSC rates are lower than the sum of FOL and FSC rates in 2018/19 for Coal ESI, Iron Ore and Spent Nuclear Fuel traffic. However, on average, freight operators will pay the same in CP6 through VUC and FSC, as they did in CP5 through VUC, FSC, FOL charge and the Capacity Charge.
- For biomass, the CP6 rate has been calculated using the same methodology as described, above. However, because there was no biomass FOL or FSC rate in CP5, the uncapped 2019/20 and 2020/21 biomass rate has been set equal to 75% of the level of the average Variable Usage Charge (net of any Capacity Charge) rate levied on biomass traffic in CP5. ORR has then decided to phase-in the CP6 biomass FSC based on the, below profile.

	2019/20	2020/21	2021/22	2022/23	2023/24
Proportion of biomass rate paid	0%	0%	20%	60%	100%

- No adjustment for efficiency has been made when calculating CP6 FSC rates. The reason for this is that ORR has capped these charges based on how much the relevant freight commodities can afford to pay in CP6.
- All FSC rates have been published in 2017/18 prices and, therefore, will need to be uplifted 2019/20 prices prior to the start of CP6 to reflect the impact of inflation. We aim to publish price lists uplifted to 2019/20 prices using CPI in February 2019.

Open Access Infrastructure Cost Charge (ICC)

We set out, below, the key assumptions which underpin the proposed final CP6 open access ICC price list, consistent with ORR's Final Determination. We also highlight the key changes between the draft ICC price list that we published in July 2018 and the proposed final price list published alongside this note.

Key changes since we published the draft CP6 ICC price list

There have been no updates to the draft open access ICC price list that we published in July 2018.

Key assumptions

We set out, below, the key assumptions which have been made in calculating our proposed final ICC price list, consistent with ORR's Final Determination:

- The only rates shown on the proposed final CP6 price list are for existing Grand Central, Hull Trains and Eurostar services. A rate of £0 per annum is applicable to these services, reflecting ORR's proposal that ICCs should only apply to new entrant interurban open access services in CP6.

- We have purposely excluded the new Great North Western Railway and East Coast Trains open access services from the price list because ORR has not yet determined an ICC rate for these services. These rates will be added to the price list in due course.

- Other 'minor' open access services (e.g. North Yorkshire Moors and West Coast Rail Jacobite services) have been purposely excluded from this price on the basis that ORR has proposed that these operators should not be subject to ICCs in CP6.

- No adjustment for efficiency has been made when calculating CP6 open access ICC rates. The reason for this is that ORR has set open access ICC rates at £4/train mile based on what it considers that interurban open access operators can afford to pay in CP6.

- ORR has not yet confirmed which market segment each open access Service Code on the price list belongs to (e.g. interurban or other). Therefore, this column is shown as 'TBC' on the draft price list.

- All ICC rates have been published in 2017/18 prices and, therefore, will need to be uplifted 2019/20 prices prior to the start of CP6 to reflect the impact of inflation. We aim to publish price lists uplifted to 2019/20 prices using CPI in February 2019.

Electrification Asset Usage Charge (EAUC)

We set out, below, the key assumptions which underpin the proposed final CP6 EAUC price list, consistent with ORR's Final Determination. We also highlight the key changes between the draft EAUC price list that we published in July 2018 and the proposed final price list published alongside this note.

Key changes since we published the draft CP6 EAUC price list

We have made the following key changes since we published the draft CP6 EAUC rates in July 2018, following ORR's Final Determination:

- A decrease in the forecast electrification and fixed plant asset renewal efficiency improvement in CP6 applied to charges from c. 11.3% to 11.2%, reflecting the final value set out in ORR's Final Determination. This has the effect of increasing operators' EAUC rates.

- CP6 year one passenger EAUC rates have been increased by 4%, following ORR's decision to index charges by CPI instead of RPI in CP6. This adjustment has not been applied to freight and charter EAUC rates, which are subject to ORR's PR18 capping policy.

Key assumptions

We set out, below, the key assumptions which have been made in calculating our proposed final EAUC price list, consistent with ORR's Final Determination:

- All EAUC rates reflect the assumed maintenance and renewal (M&R) efficiency improvements included in ORR's Final Determination. For electrification and fixed plant asset maintenance, this was c. 7.5% and for electrification and fixed plant asset renewal this was c. 11.2%.

- All EAUC rates have been published in 2017/18 prices and, therefore, will need to be uplifted 2019/20 prices prior to the start of CP6 to reflect the impact of inflation. We aim to publish price lists uplifted to 2019/20 prices using CPI in February 2019.

- EAUC rates reflect the methodology set out in our May 2018 charging conclusions document available here and the email sent to the members of the Traction Electricity Steering Group (TESG) on 31 July 2018.

Managed Station Long Term Charge (LTC)

We set out, below, the key assumptions which underpin the proposed final CP6 Managed Station Long Term Charge price list, consistent with ORR's Final Determination. We also highlight the key changes between the draft Managed Station Long Term Charge price list price list that we published in July 2018 and the proposed final price list published alongside this note.

Key changes since we published the draft CP6 managed station LTC price list

We have made the following key changes since we published the draft CP6 managed station LTC rates in July 2018, following ORR's Final Determination:

- An increase in the forecast building renewal efficiency improvement in CP6 applied to charges from 9.4% to 12.0%, reflecting ORR's Final Determination. This has the effect of reducing managed station long term charges.
- An increase in the forecast station information and security system (SISS) renewal efficiency improvement in CP6 applied to charges from 30.9% to 35.4%, reflecting ORR's Final Determination. This has the effect of reducing managed station long term charges.

Managed station long term charge rates in year one of CP6 have been increased by 4%, following ORR's decision to index charges by CPI instead of RPI in CP6.

Key assumptions

We set out, below, the key assumptions which have been made in calculating our proposed final Managed Station Long Term Charges price list, consistent with ORR's Final Determination:

- All Managed Station Long Term Charges reflect the assumed maintenance and renewal (M&R) efficiency improvements contained in ORR's Final Determination. The efficiency assumptions are:
    - Managed station operational property maintenance and repair: c. 2.5%;
    - Managed station operational property renewals: c. 12.0%;
    - Station Information and Security System (SISS) maintenance and repair: c. 7.6%; and
    - SISS renewals: c. 35.4%.

- All Managed Station Long Term Charges have been published in 2017/18 prices and, therefore, will need to be uplifted 2019/20 prices prior to the start of CP6 to take account of inflation. We aim to publish price lists uplifted to 2019/20 prices using CPI in February 2019.

- Managed Station Long Term Charges reflect the methodology set out in our May 2018 charging conclusions document available here.

- At Paddington Station, the Managed Station Long Term Charge cannot be recovered from Heathrow Express due to their unique contractual arrangement. Instead, Heathrow Express pay a singular access charge covering both track and station access charges. The forecast income that we expect to receive through Managed Station Long Term Charges at Paddington Station has been adjusted to reflect the proportion that is not, consequently, recovered through this charge.

Franchised Station Long Term Charge (LTC)

We set out, below, the key assumptions which underpin the proposed final CP6 Franchised Station Long Term Charge price list, consistent with ORR's Final Determination. We also highlight the key changes between the draft Franchised Station Long Term Charge price list that we published in July 2018 and the proposed final price list published alongside this note.

Key changes since we published the draft CP6 franchised station LTC price list

We have made the following key changes since we published the draft CP6 franchised station LTC rates in July 2018, following ORR's Final Determination:

- An increase in the forecast building renewal efficiency improvement in CP6 applied to charges from 9.4% to 12.0%, reflecting ORR's Final Determination. This has the effect of reducing franchised station long term charges.
- An increase in the forecast station information and security system (SISS) renewal efficiency improvement in CP6 applied to charges from 30.9% to 35.4%, reflecting ORR's Final Determination. This has the effect of reducing franchised station long term charges.
- CP6 year one franchised station long term charges have been increased by 4%, following ORR's decision to index charges by CPI instead of RPI in CP6.

Key assumptions

We set out, below, the key assumptions which have been made in calculating our proposed final Franchised Station Long Term Charges price list, consistent with ORR's Final Determination:

- All Franchised Station Long Term Charges reflect the assumed maintenance and renewal (M&R) efficiency improvements contained in ORR's Final Determination. The efficiency assumptions are:
    - Franchised station operational property maintenance and repair: c. 2.5%;
    - Franchised station operational property renewals: c. 12.0%;
    - SISS maintenance and repair: c. 7.6%; and
    - SISS renewals: c. 35.4%.

- All Franchised Station Long Term Charges have been published in 2017/18 prices and, therefore, will need to be uplifted 2019/20 prices prior to the start of CP6 to take account of the impact of inflation. We aim to publish price lists uplifted to 2019/20 prices using CPI in February 2019.

- Franchised Station Long Term Charges reflect the methodology described at RDG's PR18 Working Group on 18 June 2018 (slides from that meeting are available here) and described in the annex to this note.

- Stations have been categorised according to estimates of the number of daily entries into the station. The criteria are shown, below. This is the same criteria that is used to categorise stations for the purposes of the depreciated replacement cost valuation of the rail network for inclusion in DfT's group accounts. Estimates of the number of entries and exits per annum for each station are taken from ORR's estimate of station usage, available here.

Category	Daily Entries Range
A	13K+
B	5-13K
C	2.5-5K
D	1.2-2.5K
E	0.3-1.2K
F	0-0.3K

- There are twelve stations where data on entries is unavailable. Expert judgement has been used to categorise these stations.

Fixed Track Access Charge (FTAC)

We set out, below, the key assumptions which underpin the proposed final CP6 FTAC price list, consistent with ORR's Final Determination. We also highlight the key changes between the draft FTAC price list that we published in August and the proposed final price list published alongside this note.

Key changes since we published the draft CP6 FTAC price list

We have made the following key changes to rates since we published the draft CP6 FTAC price list in August 2018:

- Updated the total FTAC values to be recovered in England & Wales (£4,326m) and Scotland (£1,372m) to reflect the values set out in ORR's Final Determination. The draft CP6 FTAC price list that we published in August 2018 represented our working assumption in relation to these values (£4,298m for England & Wales and £917m for Scotland) because ORR's Draft Determination did not set out England & Wales and Scotland FTAC values.

- Updated train operators' cost allocations to reflect our latest business planning traffic forecast. The draft CP6 FTAC price list that we published in August 2018 reflected a previous iteration of our traffic forecast, as at the time of our SBP.

- Updated train operators' costs allocations to reflect the cost and income assumptions set out in ORR's Final Determination. The draft CP6 FTAC price list that we published in August 2018 reflected the cost and income assumptions set out in our SBP.

Serco Caledonian Sleeper and Abellio ScotRail see material increases in their CP6 FTACs (30%-50%), because of the changes, above. For all other train operators, the above changes have a much smaller effect, with total CP6 FTACs changing by c. +/-5%.

Key assumptions

We set out, below, the key assumptions which have been made in calculating our proposed final CP6 FTAC price list, consistent with ORR's Final Determination. For a full explanation of the methodology used to calculate the CP6 FTAC price list, please see Annex 3 of this note.

- FTAC rates reflect the cost allocation methodology set out in our May 2018 charging conclusions document available here. This methodology was developed by Brockley Consulting and discussed with industry over the course of PR18.

- Costs have been allocated to train operators based on their share of avoidable 'traffic related' fixed costs. 'Traffic related' fixed costs consist of:

    - Fixed costs that could be avoided in the absence of certain subsets of traffic. For example, the fixed costs of electrification assets could be avoided in the absence of electrified traffic; and
    - The fixed costs that could be avoided in the long-run with reductions in traffic levels, assuming the railway continues to serve the same parts of GB with a 'basic' network.

- The costs allocated to train operators reflect the funding decisions set out in ORR's Final Determination, including in relation to the final level of FTAC and Network Grant in CP6.

- The proposed final CP6 FTAC price list published alongside this note reflects the fact that Clapham Junction and Guildford have now been successfully transferred to the managed station estate.

- The price list incorporates a funding adjustment which maintains the current funding arrangements between Transport Scotland (TS) and Department for Transport (DfT). These arrangements reflect the fact that TS specifies and funds the Scottish rail network, and DfT the England and Wales network. The impact of this adjustment is that we continue to not allocate any of the fixed costs of the Scotland route to train operators with franchises specified by DfT, or allocate any of the fixed costs associated with England and Wales to franchises specified by TS.

- Train operators FTAC allocations have been updated to reflect our latest business planning traffic forecast. The draft CP6 FTAC price list that we published in August 2018 reflected a previous iteration of our traffic forecast, as at the time of our SBP.

- All FTAC rates have been published in 2017/18 prices and, therefore, will need to be uplifted 2019/20 prices prior to the start of CP6 to reflect the impact of inflation. We aim to publish price lists uplifted to 2019/20 prices using CPI in February 2019.

- We have deflated CP6 FTACs from cash prices to 2017/18 prices using forecast CPI, rather than forecast RPI, reflecting ORR's CP6 indexation policy. This approach should mean that, assuming forecast levels of traffic, we receive the same amount of funding overall in CP6 (in cash terms) as we would have if all charges continued to be indexed by RPI.

Distribution System Loss Factors (DSLFs)

We set out, below, the key assumptions which underpin the proposed final CP6 DSLF list, consistent with ORR's Final Determination. We also highlight the key changes between the draft DSLF list that we published in July 2018 and the proposed final list published alongside this note.

Key changes since we published the draft CP6 DSLF list

There have been no changes since we published the draft DSLFs.

Key assumptions

We set out, below, the key assumptions which have been made in calculating the proposed final DSLFs for CP6. Comparable figures for CP5 can be found in appendix 3 of the Traction Electricity Rules, available here.

- The Distribution System Loss Factors shown, below, have been calculated consistent with the methodology consulted on here and further described here.

Proposed DSLFs for CP6

ESTA	Description	CP6 DSLF: AC	CP6 DSLF: DC
M	Merseyside	N/A	0.1113
N	Midland Main Line	0.0279	N/A
O	London Tilbury and Southend	0.0264	N/A
P	Great Eastern	0.0272	0.1113
Q	West Anglia	0.0428	N/A
R	East Coast Main Line South	0.0230	0.1113

A	East Coast Main Line Central	0.0303	N/A
B	East Coast Main Line North	0.0548	N/A
C	East Coast Main Line Leeds	0.0409	N/A
S	Scotland Glasgow	0.0424	N/A
D	Scotland East	0.0462	N/A
E	Scotland North and West	0.0311	N/A
F	Scotland WCML	0.0356	N/A
T	West Coast Main Line South	0.0295	0.1113
G	West Coast Main Line Central	0.0362	N/A
H	West Coast Main Line Midlands	0.0299	N/A
J	West Coast Main Line North	0.0361	N/A
U	Southern	N/A	0.1113
V	Great Western (soon to be renamed 'Western East')	0.0119	N/A
I	Western (soon to be renamed 'Western West')	0.0254	N/A
K (soon to be renamed '3')	South Wales	0.0254	N/A

Please note, an entry of N/A in the AC or DC column means that the ESTA in question does not have infrastructure of that type.

Annex 1: Description of Franchised Station Long Term Charge Methodology

Purpose

The purpose of this annex is to explain the methodology that is used to calculate the proposed final Franchised Station Long Term Charges for CP6 that are published alongside this note.

Methodology

1. Take the forecast of post-efficient route-level annual average franchised station operational property maintenance, repair and renewal (MRR) expenditure for CP6.

2. Allocate (1) to individual franchised stations in a route based on long-term annual equilibrium cost (the amount that we expect we would have to spend, on average, to preserve asset condition).

   An estimate of long-term annual equilibrium cost for operational property assets exists for all individual franchised stations (with a small number of exceptions where a station has just recently opened). These estimates are used to calculate averages for each combination of route and station category, which are then used to allocate route-level operational property MRR expenditure to individual franchised stations.

3. Take the forecast of route-level annual average franchised station Information and Security System (SISS) MRR over CP6 and allocate to relevant individual franchised stations in a route based on their share of the relevant route's annual average SISS renewal cost over 35 years.

4. There are some third party SISS contracts that only apply to certain stations. Where a third party SISS contract covers multiple stations, these costs are allocated to individual stations based on each station's share of those stations' annual average SISS renewal cost over 35 years.

5. Add (2), (3) and (4) to calculate the total long-term charge for each franchised station.

Annex 2: Forecast income from charges in ORR's Final Determination

The table below sets out ORR's forecast, in its Final Determination, of the GB-wide income that we will receive through charges in CP6. ORR's forecast does not separately identify all the charges set out in this note. For example, the variable charges line includes income that we will receive through VUC, EAUC and station charges.

	CP5		CP6					
£m, 2017-18 prices	**2018-19**	**Total**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**Total**
Variable charges	(426)	**(2,128)**	(579)	(595)	(612)	(621)	(634)	**(3,042)**
EC4T	(380)	**(1,619)**	(485)	(531)	(599)	(613)	(629)	**(2,856)**
Schedule 4 ACS	(207)	**(1,083)**	(338)	(284)	(302)	(281)	(248)	**(1,453)**
FTAC	(1,412)	**(4,926)**	(1,119)	(1,131)	(1,140)	(1,150)	(1,159)	**(5,699)**
Network Grant	(4,036)	**(21,861)**	(4,226)	(5,040)	(5,212)	(5,146)	(4,665)	**(24,290)**
RPI/CPI differential adjustment	(63)	**299**	(10)	(16)	(24)	(31)	(38)	**(117)**
Total SoFA related income	**(6,523)**	**(31,316)**	**(6,757)**	**(7,597)**	**(7,887)**	**(7,842)**	**(7,374)**	**(37,457)**

Annex 3: Detailed description of FTAC methodology

The purpose of this annex is to provide a detailed description of the methodology used to calculate draft CP6 FTACs.

1. The total amount of FTAC to be recovered in each year of CP6 for England and Wales and Scotland, respectively, is an output of Network Rail's financial model. The FTAC for England and Wales and Scotland for each year of CP6 is an input into the calculation of draft FTACs for CP6.
2. As part of the work that we commissioned Brockley Consulting to undertake, Brockley Consulting allocated the fixed costs of each operating route to operators for each year of CP6. We take the outputs of the Brockley Consulting work and make two adjustments:
    a. We made a 'Funding Adjustment'. The purpose of this adjustment is to maintain the current funding arrangements between Transport Scotland (TS) and Department for Transport (DfT). These arrangements reflect the fact that TS specifies and funds the Scottish rail network, and DfT the England and Wales network. The impact of this adjustment is that we continue to not allocate any of the fixed costs of the Scotland route to train operators with franchises specified by DfT, or allocate any of the fixed costs associated with England and Wales to franchises specified by TS.
        i. For routes in England and Wales, the avoidable fixed costs of TS specified franchised operators are allocated to each DfT-specified franchised operator in proportion to their share of the total avoidable fixed costs for DfT-specified franchised operators.
        ii. For the Scotland route, the avoidable fixed costs of DfT-specified franchised operators are allocated to each TS-specified franchised operator in proportion to their share of the total avoidable fixed costs for TS-specified franchised operators.
    b. We allocate the costs of De Minimis passenger services to other passenger services in proportion to their share of the remaining passenger avoidable fixed costs.
3. The England and Wales FTAC for each year is allocated to individual routes in England and Wales based on each route's share of England and Wales' franchised passenger avoidable fixed costs in the relevant year (after the adjustments described in (2)). The Scotland FTAC is allocated to the Scotland route.
4. The route-level FTAC value for each year is allocated to individual franchised passenger operators according to their share of avoidable fixed costs (after the adjustments described in (2)).
5. To calculate each operator's annual FTAC in each year, their FTAC for each individual route is summed.