

Annex F – Glossary

We have tried to keep the language in this consultation simple but it is necessary to use some technical terms in places. These have been explained in context when we use them in the consultation document and the accompanying annexes/supporting documents. However, this glossary should provide a useful reference document.

Common costs

Some costs will not be linked to or directly attributable (cost attribution and cost drivers are defined in this glossary) to specific services on the network. That is, these costs will not be affected by changes in the level of activity on the network. We refer to these as ‘common costs’.

Cost allocation

While cost attribution (defined in this glossary) refers to identifying the factors that drive costs, cost allocation is how we decide to allocate these costs to different users. The appropriate way to allocate different cost categories will depend on the results of a cost attribution exercise plus some other factors. For example, if attribution exercises are unable to link a cost with a specific driver of these costs, we may have to use another method to allocate these costs to users. Even if costs can be directly attributed to a train service/operator, we may want to consider which metric to use for example to allocate the charge (e.g. a lump sum charge for each year of the control period regardless of operator behaviour or a charge based on a metric the operator can control to some extent such as per train km). The [impact assessment on the infrastructure costs package](#) provides more information on what we mean by cost allocation.

Cost attribution and cost drivers

The attribution of costs is the process of identifying the factors that are causing the costs to be incurred (i.e. the cost-drivers). Costs are attributable to a use if changes in that activity lead (immediately or over time) to changes in the overall level of cost. For example, the cost of electricity infrastructure on a line could be attributed to any electric rolling stock, but not to those that are diesel powered. And signalling infrastructure provides use for particular geographic areas, and so could be attributed to those areas. The [impact assessment on the infrastructure costs package](#) provides more information on what we mean by cost attribution.

Cost-reflectivity

In this consultation, cost-reflectivity describes a situation where the charging structure allows costs to be attributed/allocated to those who cause the cost to be incurred. Cost-reflectivity has desirable qualities. For example, if users face the costs they impose, this will provide them with the appropriate incentives to reduce those costs, as this would subsequently feed into reduced charges.

The cost-reflectivity gap identifies where the existing charging structure has limited ability to drive down costs, encourage efficient decision making and to achieve value for money.

Counterfactual

The counterfactual is the scenario which we are comparing the packages against. For the purposes of this assessment, we define the counterfactual as a 'do nothing' scenario. This means no substantial changes to the structure of charges for access to Network Rail's network, as well as no substantial changes to contractual, funding and regulatory arrangements in the wider rail industry (i.e. the current 'state of the world'). The current state of the world is discussed in more detail in [Annex C](#).

Disaggregation

The consultation includes several references to the potential for geographic disaggregation of costs and charges. Geographic disaggregation is a generic term which refers to improving cost-reflectivity (defined in this glossary) by taking into account the extent that costs can vary significantly by location. If users face the costs they impose on the network more directly, rather than an average of costs over a wider geographical region, their charges will be more cost-reflective and they will have a greater incentive to reduce the costs imposed.

Disaggregation could also be considered in terms of time of day. Costs may be higher in peak times than off-peak for example. Making charges more cost-reflective at certain times of the day could incentivise operators to reduce the costs they impose by travelling at quieter times if they can be flexible in terms of timing for their services.

Electric current for traction charge (EC4T)

The Electric current for traction charge (EC4T) allows Network Rail to recover the vast majority of its traction electricity costs from train operators who require electricity to run their electrified train services. More information can be found in [Annex A](#).

Fixed costs/charges

In this consultation, we refer to fixed costs as all those costs which are not short-run variable costs (defined in this glossary). These costs vary over longer periods of time or over larger increments rather than with every train service. Where these costs are reflected in charges, we refer to these charges as fixed charges for the purpose of this consultation. [Annex A](#) includes the current charges that fit into this category.

Gap analysis

A gap analysis was undertaken to assess how far the existing charging structure is from meeting our charging objectives. [Annex B](#) sets out the four key themes identified through the gap analysis (cost-reflectivity, capacity, complexity and competition) and summarises the evidence used.

Infrastructure costs package

This is a package of options aimed at developing a better understanding of the drivers of Network Rail's fixed costs (fixed costs are defined in this glossary). This package has two sub-options. The first is to gain a better understanding about the drivers of fixed costs of the network and the second is to pass this improved information through to charges. This package could lead to new charges to recover Network Rail's fixed costs based on this improved information. We are proposing to prioritise further development of this package for PR18. A full draft impact assessment on the infrastructure costs package can be found [here](#).

Network grant

A proportion of Network Rail's income in the past has been paid directly by DfT and Transport Scotland in the form of network grants. Over CP5, more than 60% of Network Rail's income is forecast to come from the network grant.

Rail Delivery Group (RDG)

The Rail Delivery Group (RDG) is an association, established in June 2011, of Great Britain's major passenger and freight train operator groups and Network Rail to lead and enable improvements in the railway.

RDG set up its own review of charges and has been considering possible future reforms to Network Rail's current charging structure. This work has now concluded and is published [here](#).

Short-run marginal costs/charges

In this consultation, we use the term short-run variable costs (defined in this glossary) in most cases. In some instances we need to be more precise and refer to

short-run marginal costs. Short-run marginal costs are the costs directly incurred by Network Rail as a result of an extra train joining the network (after all the other trains are already running). In most cases, this would not give you the same result as if you took the costs directly incurred from all the trains on the network and divided that by the numbers of trains. In the latter case, we would get an average rather than a marginal cost estimate.

Short-run variable costs/charges

Every train service causes some costs to be directly incurred on the network. For example, every train service causes some wear and tear to the track and also contributes to some accelerated need for renewals. Any cost that is directly incurred as a result of operating the train can be considered a short-run variable cost, for the purpose of this consultation. Passing these costs in to charges, gives us short-run variable charges. [Annex A](#) includes the current charges that fit into this category. The package of improvements to short-run variable charges discusses improving these charges for PR18. This glossary also includes a definition for short-run marginal costs/charges which is a more precise term.

Value of capacity

Throughout this consultation we often refer to the ‘value of capacity’. When doing so we are using the meaning assigned in economics to the concept of value. Namely, value describes the benefits provided by a good or service.

In the case of rail capacity, value is often used to refer to the revenue an operator can secure (mostly through fares) as a result of running a particular service that uses a specific unit of capacity (however this may be defined). This is the commercial value of a service. However, when referring to the value of services and capacity in this consultation, this includes the benefits to users and society that are generated but which are not included in the price of the ticket paid by passengers or the prices paid by freight users. We call this the social value of a service. Such benefits include the reduction in CO2 emissions as a result of passengers or goods not travelling on the roads (modal shift), reduction in crowding on other rail services, as well as benefits to the economy resulting from better connections between different cities/ parts of the country (this list is not exhaustive). The value of capacity is the highest value that can be achieved by services using that capacity. Therefore, when referring to the value of capacity in this consultation, we are talking about both the commercial and the social value of rail capacity.

Value-based capacity package

This is a package of options that would improve our understanding of the value of capacity (defined in this glossary) of different parts of the network to users and

society. This package has two sub-options. The first is to understand more about the relative value of network capacity and the second is to pass this improved information through to charges. Charges would be higher where the network is of higher value, such as where the capacity available does not meet demand.

For the reasons set out in Chapter 3 of the [consultation document](#) and in this chapter, we are proposing to stop development of this package of charging options for PR18. A full draft impact assessment on the value-based capacity package can be found [here](#).

Variable usage charge (VUC)

The VUC is set to equal the operating, maintenance and renewal costs that vary with traffic. The VUC is differentiated by vehicle class. This differentiation reflects the significant variation in infrastructure wear and tear costs associated with different vehicle characteristics, for example vehicle operating speed and axle weight. In the case of freight, the charge is further disaggregated by commodity type, reflecting the different axle loads associated with different commodities. The rates are averaged across the network as a whole, resulting in a single Great Britain-wide price for each permutation of vehicle type and commodity.