January 2001

# Information and incentives project:

# Incentive schemes

# Initial thoughts

## Summary

The Information and Incentives Project (IIP) aims to strengthen the financial incentives on electricity distribution businesses to maintain or improve the quality of service which they provide to customers. Ofgem recognised at the time of the last price control review, in 1999, that the existing framework of price regulation had some weaknesses and could be improved if there was:

- a clearer balance between achieving cost reductions and delivering the appropriate quality of service; and
- less emphasis on periodic price reviews and greater emphasis instead on ongoing performance.

The focus of the project over the last year has been on improving the quality of information which the companies produce for Ofgem. New reporting arrangements are expected to apply from the beginning of April 2001.

The purpose of this paper is to set out for consultation Ofgem's initial thoughts on how this information can be used to create an incentive scheme linking financial incentives to changes in quality of service. Any new incentive scheme must take account of the incentives created by the existing framework of regulation including the price controls and the Guaranteed and Overall Standards of Performance. As well as suggesting a more mechanistic framework for balancing the incentives on companies in respect of quality of service and costs, the paper raises the possibility of financial incentives based on:

- an assessment of a companies' relative performance compared to its peers; and
- on a companies' performance compared to company specific targets.

Details of the mechanics of an incentive scheme are for consideration as part of this years work. Initial thoughts are set out on some of the key issues including possible arrangements for a settlement system; normalising for inherent or inherited differences that could impact on companies' performance; and the amount of revenue to be put at risk to different components of quality of service.

Comments are invited by 2 March 2001.

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# 1. Introduction

### *Background*

1.1 Ofgem started work on the Information and Incentives Project (IIP) following the last price control review of the distribution businesses of the fourteen Public Electricity Suppliers (PESs) in 1999. From that process it was clear that the way in which the price controls of distribution monopolies were reviewed and implemented could be improved. In particular IIP looked to improve the quality of information collected from electricity distribution businesses and to strengthen the financial incentives on them to deliver the appropriate quality of supply.

1.2 The principles which underpin the IIP are generally applicable to the regulation of other network monopolies such as electricity transmission and gas transportation and distribution. Work is now well underway reviewing Transco's price control. An important part of that work will include greater clarity about the outputs of its business. In setting the most recent price control for NGC, Ofgem specified for the first time the associated levels of system capability and indicated that it would take forward the development of incentives as part of the work it is undertaking this year on transmission access. In the first instance the focus of the IIP, and in particular the development of the incentive schemes, will remain on the electricity distribution businesses.

1.3 The IIP takes place against the background of a changing industry structure. The activities of the monopoly distribution and competitive supply businesses are being separated. Separate licenses will be put in place for these "new" businesses as required by the Utilities Act 2000. In recent years several electricity distribution business have merged reducing the total number of independently owned companies. These developments increase the importance of having access to good quality information, which enables comparisons to be made across distribution businesses and reduces the possible detriment to customers associated with a smaller number of comparators. Any conclusions emerging from IIP should be robust to changes in industry structure.

### *Progress to date*

1.4 The first stage of the IIP has focused on improving the information produced by distribution businesses particularly in the areas of quality of supply and network performance. A parallel review of regulatory accounts has sought to improve the accounting information that Ofgem collects. The first stage of the IIP has also defined the outputs that will be included within an incentive scheme that will operate from April 2002.

1.5 Ofgem published final proposals on this stage of the IIP in September 2000. This followed extensive consultation on the associated issues over the course of the preceding year. This included the publication of two consultation papers (December 1999 and March 2000) and an initial proposals document (June 2000) and a public workshop held in May 2000. All these documents, including a summary of the plenary session of the public workshop (May 2000), are available on Ofgem's website (www.ofgem.gov.uk).

1.6 PB Power has supported Ofgem over the first stage of the IIP by providing technical advice in a number of areas. PB Power has produced three main reports over the course of the project, all of which are available on Ofgem's website:

- a review of the existing measurement systems of the PES distribution businesses (July 2000);
- definitions of input and output measures (September 2000); and
- a framework for monitoring the medium term performance of distribution networks (December 2000).

1.7 A major part of the first stage of the IIP has involved putting in place a new reporting framework for the distribution businesses to begin in April 2001. This covers information that will be needed for:

- operating the incentive scheme;
- supporting the incentive scheme; and
- monitoring the medium term performance of the distribution network.

1.8 To help ensure accuracy and consistency in the reporting of this information Ofgem produced draft Regulatory Instructions and Guidance (RIGs) in December 2000. This document includes detailed definitions, instructions and guidance for the collation of IIP information. It also specifies minimum accuracy levels that the distribution businesses must meet in reporting key information. This document is available on Ofgem's website. In the light of responses to the draft RIGs a final version will be published in February. Ofgem will also put in place a new audit process in order to assess whether distribution businesses have met the required levels of accuracy and that the information has been collated in accordance with the RIGs.

### *Purpose and structure of this document*

1.9 The main purpose of this document is to set out for consultation initial thoughts on:

- the framework of price regulation and a possible model for its development placing greater emphasis on quality of service; and
- the issues raised by an incentive scheme to operate from April 2002.

1.10 Electricity distribution businesses face a number of incentives in addition to those created by the price control. For example, there are incentives to meet particular standards of performance. Developing an incentive scheme for quality of service needs to be carried out against an understanding of the existing framework of regulation and any developments to that framework. Initial thoughts on this are set out in Chapter 2.

1.11 The main focus of the IIP over the course of the next year will be to develop the framework for an output based incentive scheme to operate from April 2002. There will be a number of important issues to consider which are set out in Chapter 3, including:

- the way in which companies' performance will be assessed;
- the appropriate settlement arrangements for the incentive scheme;

- the appropriate amount of revenue (of the previously announced limit of 2 per cent of regulated revenue) to expose to each of the output measures; and

- whether there are any perverse incentives created by the incentive scheme, and if so, the best way of dealing with these.

1.12 It is also necessary to consider related issues such as the most appropriate format for reporting on the performance of individual distribution businesses within the incentive scheme and the relationship of the incentive scheme with existing and proposed Guaranteed and Overall Standards of Performance that apply to the distribution businesses.

1.13 Final proposals on the incentive scheme will be published in December 2001. Further details on the timetable and process going forward are outlined in Chapter 4.

### *Responding to this document*

1.14 Ofgem would like to hear from all those with an interest in the development of the IIP incentive scheme, including the distribution businesses, customers and their representatives, employee representatives and any other interested parties. Any comments should be received by 2 March. They should be sent to:

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1.15 Unless marked as confidential all responses will be published by placing them in Ofgem's library. This document is available on Ofgem's website. Any questions on this document or the IIP more generally should, in the first instance, be directed to Cemil Altin.

# 2. Price controls and incentive schemes

### *Introduction*

2.1 This chapter describes the framework of price regulation as applied to electricity distribution businesses and puts forward a possible model for its development in order to place greater emphasis on quality of service. It covers the following main areas:

- the background, objectives and application of the price control review process including the reasons behind the inception of the IIP;
- the existing incentives facing distribution business including those areas which are not presently financially incentivised;
- the central aims of the IIP and one possible model for aligning the incentives on cost and quality in the medium term (i.e. for the next price control review); and
- longer term developments to this approach, for example, greater integration of customer choice as the driver of future investment in quality of supply.

#### Background

2.2 In May 1999, in a consultation paper on the electricity distribution price control review, Ofgem affirmed the benefits of using forward-looking price controls (based on the RPI-X formula) as the principal tool by which to:

- protect customers' interests from the possible abuse of monopoly power; and
- incentivise companies to fulfil their licence obligations efficiently.

2.3 The existing regulatory framework has demonstrated good results both in terms of price reductions and improvements in quality of service since its introduction alongside the privatisation of the Regional Electricity Companies (RECs) in 1990 and the Scottish Public Electricity Suppliers (known, together with the RECs, as the PESs) a year later. Nevertheless, more than 10 years have elapsed since privatisation and it is now timely to consider how the existing regulatory framework can be improved.

### *Price control review objectives*

2.4 The May 1999 distribution price control review consultation paper set out objectives for price control reviews and, in particular, the development of the RPI-X regime. These objectives reflected some concerns about the potential effects of the way in which RPI-X regulation was reviewed and implemented at the time of the last review. Each is considered below:

- **quality of service should be maintained at least cost**. There were concerns that companies might allow quality of service in the short or medium term to deteriorate as a means of maintaining or increasing financial returns. There were contrasting concerns that an allowed rate of return in excess of a company's actual cost of capital on new investments might lead companies to undertake inefficient (or unnecessary) capital expenditure;

- **companies should improve the quality of service on a value-for-money basis.** It was recognised that there was a trade-off between cost and quality of service and that it was necessary for customers to consider the trade-off (or value for money) in paying for any improvements in the quality of service delivered;

- **there should be equal pressure on all costs, not just operating expenditure.** There were concerns that companies had a greater incentive to reduce operating expenditure, which attracts no return, than capital expenditure, which if deemed efficient and brought into the regulatory asset base, earns a return equal to the estimated cost of capital;

- **there should be less emphasis on periodic reviews and greater emphasis on continuing performance.** There was clear evidence of companies' behaviour being affected by the timing of price control reviews, for instance by advancing operating cost savings and delaying capital expenditure within the price control period. There was insufficient evidence of companies having continuing incentives to outperform peers in terms of costs and the quality of outputs, once regulatory targets and standards had been met;

- **companies should gain or lose by reference to their relative performance, as well as in relation to their own track records and objective standards.** There should be incentives on companies to be at the efficiency frontier and greater simulation of the effects of a hypothetical competitive market, where customers would have the opportunity to move to the most efficient distributor; and

- **regulatory uncertainty should be minimised.** As well as reducing the uncertainty associated with periodic reviews, to develop and introduce methods of regulation that would be robust over time and thus reduce the risk of reinterpretation at or between price control reviews.

### *Application of the 1999 price control review*

2.5 The underlying approach to the review was based on an analysis of each distribution business's performance in terms of:

- meeting statutory duties and licence obligations (the majority of which are common to all licensed distributors);

- its own track record (both in terms of costs and quality);

- its performance relative to other distribution businesses; and

- general market data (particularly when considering the cost of capital and certain other generic costs, such as corporate costs).

2.6 Ofgem took a number of other steps to try to address the concerns set out above as part of the 1999 review. Some of these were financial and technical in nature, such as a smoothing of the allowed depreciation profiles in order to establish a more stable financial environment for distribution businesses and reduce regulatory uncertainty.

2.7 Other measures tried to capture the spirit of the objectives by emphasising the importance of quality of supply measures and relative efficiency. For example, companies were rewarded or penalised according to the extent to which they had met their quality of supply targets. These measures took the form of within-range adjustments at the time of the final proposals to determine the overall level of allowed revenue within a predetermined range of possible price control outcomes. These adjustments could have made a difference of up to 2.5 per cent of regulated revenues (1.25 per cent up or down from the mid-point of the range) to the size of the one-off cut (or $P_0$ adjustment) made to companies' revenue in the first year of the new price control in April 2000, although in practice 1.25 per cent was the largest adjustment in either direction.

### *The inception of the IIP*

2.8 In considering the 1999 distribution price control review, Ofgem encountered a number of difficulties including:

- collecting robust information on quality of supply performance (that was consistent across companies and over time);
- deriving a robust total cost regression analysis;
- resolving the capital-operating expenditure trade-off; and
- combining a measure of total cost with some measure of delivery or quality of supply to enable performance to be assessed on the basis of "value-for-money" comparisons.

2.9 The within-range adjustments made as part of the price control review affected the contract between a distribution business and its own customers (since they varied the allowed revenues of each distribution business). Although this was appropriate for the incentivisation of quality of supply targets, it could be argued that it was inappropriate to the judgements made about relative performance, which should have affected companies' returns but not their customers' prices. Arguably all customers benefit from those companies who push forward the efficiency frontier on which future price controls are set and yet the incentive to do so was in effect paid for only by the customers of the more efficient distribution businesses. In future it may be more appropriate if judgements about relative performance affect companies' returns and not just their customers' prices.

2.10 Ofgem announced at the time of the 1999 review that it intended to launch the IIP with the aim of yielding better information and better incentives. It was intended to use the IIP to put up to a further 2 per cent of regulated revenue at risk to quality of supply performance and relative performance from April 2002 onwards; and to inform the treatment of both these issues for the next price review in 2003/04. The IIP began in December 1999 and progress to date is outlined in the Introduction.

### *Distribution – the incentive framework*

2.11 The IIP has now reached the stage where proposals on incentives need to be developed. In order to facilitate this, it seems appropriate to consider the incentives on the distribution businesses as a whole; and the part that price controls and the IIP form in that overall framework.

2.12 Distribution businesses are subject to a number of different incentives arising out of different parts of the regulatory framework including:

- **the Utilities Act 2000** establishes the possibility of financial penalties for licence breach or failure to meet relevant requirements. Ofgem's broad approach to this was set out in a consultation document in August 2000;

- **the distribution price control** set to run from 2000-2005 establishes price caps designed to encourage cost efficiency and efficient investment on the basis of quality of supply targets. At present no specific financial incentive is attached to quality of supply delivery, although a related adjustment was made in 1999 and is signalled for both 2002 and 2005;

- **the Guaranteed Standards of Performance** are designed to ensure that customers who receive poor service in specific instances are individually compensated; and

- **the Overall Standards of Performance** incentivise distribution companies to perform well in areas which are of concern generally to customers.

2.13 In addition distribution businesses are subject to general competition law. The incentives and penalties created by the Competition Act 1998 are outside the scope of this paper. In December 2000, Ofgem published a consultation paper on the structure of charges levied by each distribution business. In considering the incentive framework on distribution businesses it will also be necessary to consider the incentives provided to companies by the structure of charges. That paper also includes consideration of the issues raised by the introduction of NETA.

2.14 These incentives need to be set against the background of statutory and regulatory documentation (which includes the more general provisions of the Electricity Act 1989, the Electricity Supply Regulations, the Utilities Act 2000 and the licences) which require distribution licensees for instance to:

- run a co-ordinated, efficient and economical system;
- observe statutory safety provisions, the enforcement of which fall under the remit of the Engineering Inspectorate of the Department of Trade and Industry (DTI); and
- operate within certain service standards and to design networks that meet certain engineering requirements.

2.15 To these can be added the Distribution Code, which defines the relationship between distribution companies and users of the network.

2.16 Of all the incentives identified in this section, the within range adjustments affecting the present price control and the Guaranteed Standards of Performance have historically been the only financial incentives on companies to meet their quality of supply targets and standards. While the within range adjustments contained some element of comparison between companies, there is very little formal incentivisation of relative performance on an ongoing basis. In addition, there is virtually no indication to companies in advance of how they will be assessed on the basis of the trade-off between quality of supply improvement and extra cost, i.e. on a value for money basis.

2.17 The amount paid out by companies for failure to meet Guaranteed Standards can vary significantly from year to year. In 1999/2000 the companies made payments under the Guaranteed Standards of Performance scheme of approximately £200,000. Following enactment of the Utilities Act 2000, failure to meet Guaranteed and Overall Standards of Performance could result in a financial penalty being levied on a company by the regulator. As discussed in paragraph 2.36 it may be more appropriate for performance on Overall Standards to be financially incentivised through the price control rather than by the possibility of incurring financial penalties under the Utilities Act 2000.

### *Matters presently not subject to financial incentives*

2.18 There are several areas where electricity distribution businesses are not presently subject to any form of direct financial incentive through the regulatory regime administered by Ofgem.

#### Safety

2.19 The first area includes those statutory duties which are not mirrored in any licence condition, such as safety issues (including safety of customers and safety at work). Ofgem's treatment of such issues has always been that the statutory requirement overrode any financial incentives, by placing a legal obligation on the company and its directors to meet the statutory obligation.

2.20 In the case of safety, it is the statutory duty of the Health and Safety Executive (HSE) and DTI to propose safety regulations for the distribution businesses. Ofgem does not believe that it is appropriate to second guess these regulations by placing its own additional safety requirements on companies through their licences. However, it is appropriate to make an allowance sufficient for companies to finance, amongst other things, their safety obligations.

2.21 It may be appropriate, as part of the next price control review in 2003/04, to consider whether companies have sufficient incentives to meet their safety obligations, although Ofgem has not seen any evidence to contrary under the existing arrangements. Earlier consultation papers in the IIP process indicated that Ofgem thought the IIP an inappropriate mechanism for dealing with safety, a point with which most respondents agreed.

### Medium term performance

2.22 The IIP previously considered the incentives on companies to maintain an appropriate level of network performance in the medium term in the context of incentives to reduce costs arising from the application of price controls, and the additional incentives on improving short term performance measures which the incentive scheme may provide.

2.23 A balanced approach to cost and quality incentives should provide companies with a general medium term incentive with regards to the performance of the network. Ofgem has also put in place additional reporting requirements, principally to do with monitoring of the system, to give comfort that improvements in short term performance are not achieved at the expense of medium and long term performance. Companies will be required to report in this area on an annual basis. Details of these reporting arrangements are set out in the draft RIGs.

### Environment

2.24 Ofgem is in the process of developing its Environmental Action Plan after receiving draft guidance on environmental issues from the Secretary of State. Given the Government's policy objective to ensure secure, diverse and sustainable supplies of competitively priced energy, it is likely that in future renewable and CHP (Combined Heat and Power) generators embedded in distribution networks will increase. Ofgem is considering reviewing the incentives on electricity distribution companies to enable the provision of embedded generation on fair and transparent terms while maintaining quality of supply. These issues are being considered by a joint DTI/Ofgem working group. The treatment of interruptions arising from embedded generators which impact on distribution networks will need to be considered as part of the work on developing the incentive scheme.

2.25 Another environmental aspect of electricity distribution is energy efficiency and in particular electrical losses. There is currently an incentive in the price control formula for distribution businesses to reduce losses. It was decided as part of the last price control review to strengthen the incentives on reducing losses by adjusting the proposed reduction in revenue by +/- 0.25 per cent according to the movement in losses in each business over the duration of the price control period. Following consultation last year, it was decided that losses would be outside the scope of the IIP as it did not impact on the quality of service received by customers. Ofgem's ongoing consultation on the structure of electricity distribution charges is presently inviting views on whether distribution businesses have taken appropriate steps to structure use of system charges to encourage the efficient use of energy.

### *Co-ordinating incentives*

2.26 As legislative and regulatory thinking develops, it is appropriate to signal as far as possible (without fettering the regulator's discretion) how these elements cohere and impact on companies. For example, under the existing framework certain events might affect revenues under a number of different headings.

2.27 It seems appropriate to try to ensure that:

- the hierarchy of incentives is correct (i.e. that certain behaviours are incentivised in a certain order);
- behaviour is not unhelpfully distorted either by any individual incentive or by the incentives in combination. In other words, companies should not have undue incentives to behave in certain undesirable ways, nor should the incentives cause companies to neglect other desirable forms of behaviour;
- where there is a possibility of double-counting a particular event, this is recognised when setting the quantum of any incentive. It should be noted that it is not necessarily inappropriate for a particular event to fall under two or more different headings, only that this should be recognised when setting incentives; and

- the framework is transparent so that companies are clear about how it is intended to affect their behaviour and in particular that the arrangements are not contradictory.

### *How the IIP fits into the wider picture*

2.28 The IIP aims to address the shortfalls in the incentive framework applying to distribution business by trying to weigh quality of supply against cost more mechanistically and predictably with reference to future reviews; and at the same time to inject an element of more competitive relative assessment, which might overcome some of the problems associated with the periodicity of price reviews.

2.29 These two central aims of the IIP have some features in common and some which are distinctive. In common is a need:

- to decide which outputs matter for the purposes of incentivisation;
- to measure companies' performance accurately in respect of those outputs over time;
- to evaluate 'starting-points', i.e. to judge how inherent features of an area's topography need to be taken into account when evaluating the appropriate quality or cost of service; and also any 'inherited' factors, such as the legacy of privatisation or pre-privatisation decisions (for instance, about the design of the network);
- to adopt a hierarchy of incentives as described above;
- to agree a clear timetable for periodic adjustments either to the framework or to the key outputs/targets; and
- to make the approach clear in each case, so that companies know on what basis they will be judged at the next review (without fettering the discretion of the regulator).

2.30 The distinctive purposes of each are:

- to reinforce the quality of supply targets agreed as part of the price control review; and

- to inject a more competitive relative assessment of performance which will aim to overcome some of the problems of periodicity and shift the emphasis of merely beating a single target set by the regulator at the start of a price control period.

2.31 These distinctive features are described below in more detail as a possible approach for dealing with quality as part of next price control review in 2003/04.

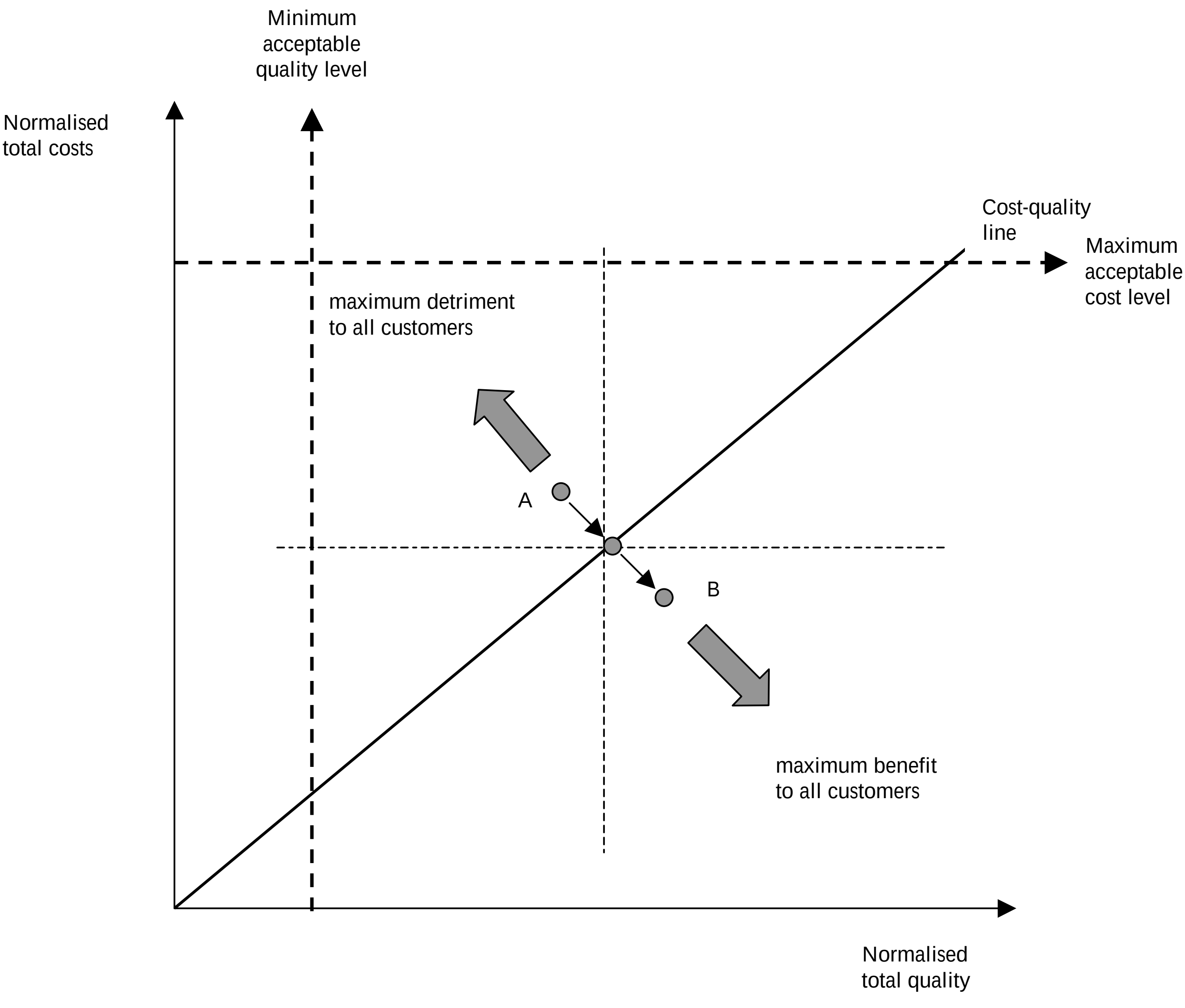
**Reinforcing quality of supply targets**

2.32 This is essentially an issue between a company and its own customers as it concerns the delivery of an agreed price control (which customers finance) and because customers are directly affected by the quality of supply delivered by the company. It therefore seems appropriate to make this a matter to be judged and incentivised through the price control. Once the measures are established and the starting-points (or targets) set, companies could expect their revenues to be adjusted periodically depending on the level of quality of service delivered.

2.33 A company would be expected to meet its quality of supply targets agreed under the price control. This would be consistent with the company earning an average rate of return over the period of the price control that is equal to the cost of capital – subject to it also meeting the cost assumptions underlying the price control. This is shown in the diagram below. A company's starting position at the beginning of the price control period is shown at point A. The agreed price control is shown by the point on the cost-quality line. The cost-quality line itself represents the price controls agreed with all companies – which is shown schematically (in reality it would not be straight).

2.34 Companies that fail to reach the cost-quality line in the north-west quadrant of the diagram (where they deliver lower quality of supply for a higher cost) act to the maximum detriment of all customers, not just to those customers that they distribute electricity to in their authorised area. This is because at the time of the next price control review – when the cost-quality line is effectively redrawn and companies' positions on that line determined – it would not be as far into the south-east quadrant of the diagram (where higher quality is delivered for a lower cost) than would have been the case if companies had outperformed the regulator's expectations.

**Figure 1**




2.35 It would be necessary to consider the most appropriate mechanism for penalising companies that failed in this respect. It may be appropriate for there to be an asymmetric approach with regard to companies who fail to meet quality of supply targets on the one hand, who could expect a penalty for failing to satisfy the agreed price control settlement and those who voluntarily exceed their quality of supply targets on the other, who should not have an incentive to spend customers' money on improvements which may not represent good value for money.

2.36 It may therefore be appropriate to define quality of supply targets for each component of total quality; a measure of whether these have been achieved or missed; a published scale of penalties for failure to achieve the targets (which might be more severe if more than one target is missed); and a published scale of bonuses for outperformance, subject to some overall cap on outperformance beyond which no further bonuses would be payable. It would be for consideration whether Overall Standards should be included in the total quality measure, thereby incorporating these mechanisms more explicitly within the price control mechanism.

2.37 It may be appropriate to retain Guaranteed Standards of Performance as a separate mechanism within this framework, as customers could still receive compensation for individual cases of inadequate service. These form an important part of the operating environment of the distribution business and it is appropriate to consider changes to these (whether in terms of definition or quantum) in parallel with major price reviews.

2.38 It is not the purpose of the IIP to consider such a move but it is for consideration whether it may be appropriate to move in this direction during the next price control review. It would also be appropriate in that instance to consider the relationship between the Overall Standards of Performance and measures financially incentivised under the IIP.

**Relative performance**

2.39 In a competitive market, companies would strive continually for the optimum balance of cost and service delivery. Customers would tend to migrate to companies which were more successful in terms of the product they provided (including prices) and away from those who were less so. The more successful companies would tend to make higher returns at the expense of the less successful companies (but not to the detriment of the customers of the more successful).

2.40 Electricity customers are not generally free to choose their distribution business. Customers' choice of location is rarely determined by electricity distribution costs and electricity distribution companies have a geographic monopoly over the provision of existing electricity distribution services.

2.41 The purpose of incentivising relative performance is to replicate the higher returns which efficient companies could make at the expense of inefficient companies, as if customers could migrate freely between them. In this respect, it differs importantly from the reinforcement of quality of service incentives, which is aimed primarily at a company's relationship with its own customers.

2.42 In the regulatory context of a market without freedom of customer migration, the benefit to be derived by all customers from companies with leading edge performance is necessarily vicarious. It may be appropriate for the regulator to organise for leading companies to attain higher returns, because they do a service to all customers, not just their own. The converse is true for poor companies.

*Incentives and the periodicity of price controls*

2.43 The assessment of relative performance does not need to be confined to price control reviews. Indeed, the concerns raised above about the behaviour of companies at the time of reviews and during price control periods suggests that the more continual form of assessment offered by relative performance comparison could help reduce the incentive for companies to 'game the review'. Reviews could increasingly be used to regulate the broad parameters of efficient performance (for instance redefining frontiers) rather than concerning itself with discussions about companies' individual plans.

2.44 In other words, relative performance measures could be used to reduce incentives on companies to skew their behaviour in relation to the timing of a review. There is clear evidence that companies' profiles of operating cost savings and capital expenditure are affected by the timing of major price reviews. This may not be in the best interests of customers.

*Assessing relative performance*

2.45 In order to assess relative performance it is necessary to determine the criteria by which this is to be judged; a reasonable starting point for each company in respect of each of the criteria; a mechanism for measuring relative performance; and a system for adjusting revenues accordingly (including consideration of the relevant time periods involved).

2.46 When considering how the reward system for relative performance might work, some important choices need to be made about how to express relative performance. In the last distribution price control review, companies' target returns were partially determined by their distance from an efficiency frontier. In that particular case, the frontier was defined principally in terms of actual operating cost performance by actual (rather than "ideal") distribution businesses. These costs were adjusted to reflect the different cost driver factors for each distribution business, including the number of customers served and units distributed and for other company specific factors.

2.47 As discussed above, relative performance should look at costs on a wider basis than just operating costs; and should take into account quality of service. However, the principle of a frontier seems important to the calculation of relative performance because it rewards companies for absolute performance rather than changes in performance.

2.48 Use of a frontier rewards those companies which have already taken steps to become efficient and should deter companies from delaying improvements until the IIP is fully operational. It should also allow the regulator to reflect the relative ease with which companies may improve. A relatively efficient company may find it harder to improve within a particular period than a relatively inefficient company. It would be wrong to penalise the relative efficiency of the first company simply because it had not improved as fast as the second company within any period.

2.49 In order to introduce such a framework a number of issues must be resolved. These suggest that relative performance could be approached by a five stage process, viz:

- **Stage 1 Measure companies' costs and quality of service:**
  - **costs.** This is done at present as part of the price control process and monitoring companies between reviews, although the precise presentation of the costs, and their relationship to what is published in the regulatory accounts may require further thought; and
  - **quality of service.** This has been the primary discussion in the IIP to date, although a broader consideration of other components of quality may be appropriate;
- **Stage 2 Normalise companies' costs and quality of service:**
  - **costs.** This should identify and adjust for those elements of costs which are related to a company's inherent topography and, where appropriate any inherited features (e.g. at privatisation) which affect that company's costs.

    In the 1999 price control review (and at previous reviews) this exercise was done by reference to companies' historical costs but also a comparative analysis which sought to identify the companies' principal cost drivers. In 1999, these were identified as customer numbers, network characteristics and units distributed. Companies argued variously that these factors were over- or undervalued, and that other cost drivers were appropriate.

    One purpose in disaggregating the output information provided by distribution businesses (as foreshadowed by the work of the IIP to date) is to seek better information on distribution business cost drivers. This would in turn allow more accurate adjustments for inherent differences between distribution businesses.

    Inherited costs may relate to the configuration of the network on privatisation. Some PESs have argued that the layout of their networks is not ideal but that it is not optimal to undertake a wholesale restructuring of their networks on the basis of a single price control period. The issue of inherited costs is dealt with further in Chapter 3; and

- **quality of service.** Similar considerations about inherent and inherited differences apply (although more weight has traditionally been attached to inherent topography as a driver of service quality). It is to be hoped that disaggregated quality of supply measurement may make the inherent factors affecting quality of service clearer;

♦ **Stage 3 Convert into an annualised weighted index each of:**

- **costs**. This should ideally provide a measure of cost incorporating operating expenditure, capital expenditure and cost of capital (the three cost components which make up regulatory costs). It is for consideration which costs should be included at this stage.

  Depending on the cost factors involved, this might imply finding a formula to convert capital expenditure into an annualised figure (based possibly on actual spend, average spend or some measure of depreciation); to add this to an appropriate operating cost figure (based perhaps on the actual operating costs in the year); and possibly to add the sum to some measure of the cost of capital. Given that the mix of these items is, in a broad sense, determined by companies' own behaviours, as well as external factors such as the state of the financial markets, the composition of such an index might need to be reassessed at major price reviews; and

- **quality of service.** This should provide a weighted index of service quality. It is for consideration how to construct this index, including issues such as performance trends, and the relative weighting of different quality measures as discussed above;

- **Stage 4 Combine the two indices (cost and quality) into a single measure:**

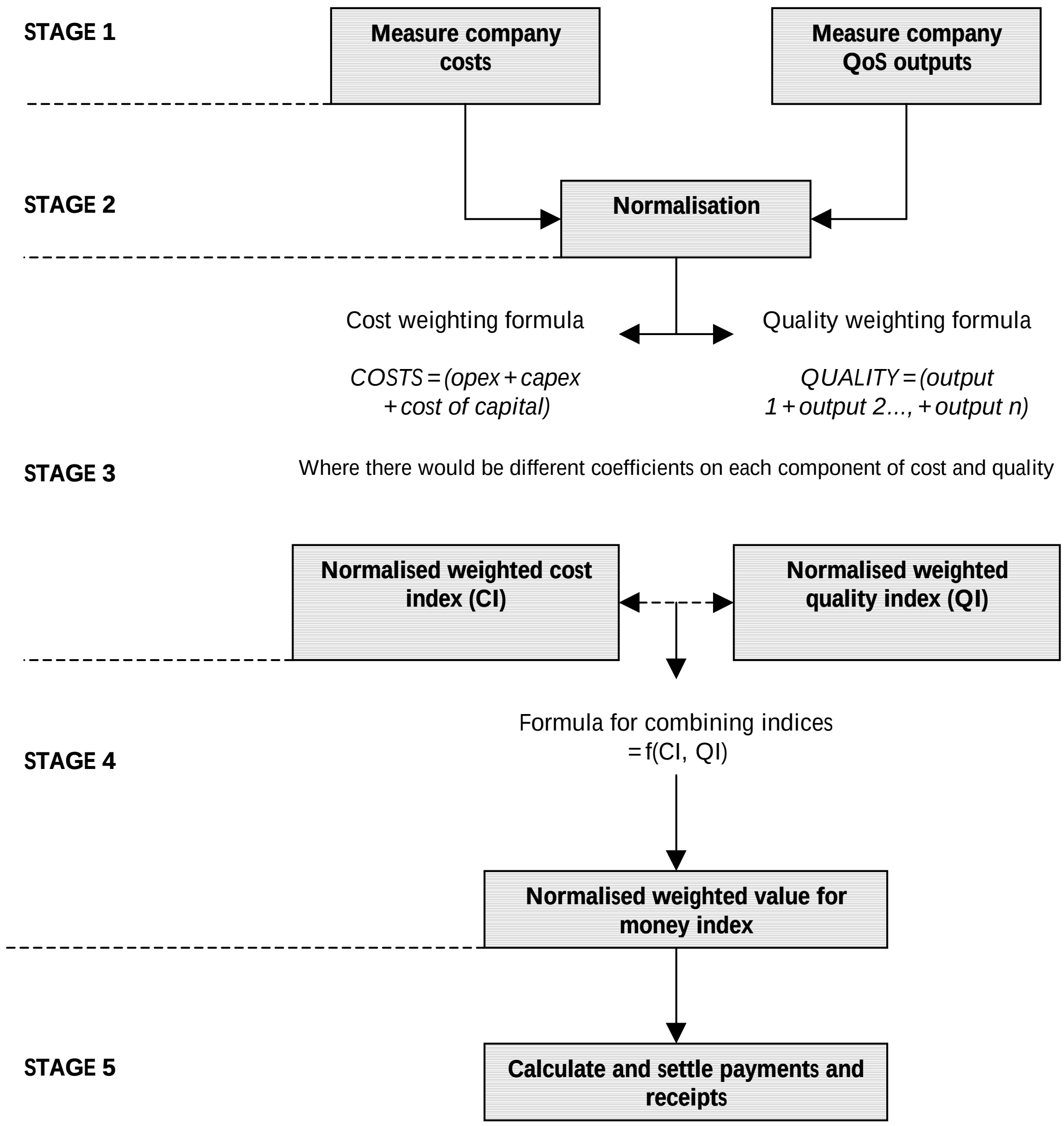
  This index would reflect companies' historical performance, after normalising for regional and other topographic factors. It would be, for the purposes of the IIP, the primary measure of companies' overall performance on a relative basis; and

- **Stage 5 Calculate the relative incentive payments or receipts arising from the application of the index.**

  More discussion for possible methods of calculation (or assessing companies' performance) and possible logistics of settlement of the scheme are set out in Chapter 3.

2.50 This process is shown in Figure 2 below.

**Figure 2: Five stage process for assessing relative performance**




**Application of framework in 2002 and 2005**

2.51 The framework described above is being put forward as a possible model for including quality of service in the price control from 2005. In particular it aims to put in place a more mechanistic and predictive way of weighing quality of supply and costs. Some of the stages associated with delivering this framework have already been carried out as part of the most recent price control review. In order to complete the five stage process additional work will need to be done in a number of key areas. In particular further refinements need to be made to the calculation of total costs and of total service delivered and the weighting of these against each other.

2.52 There is not sufficient time to carry out this work in advance of introducing an incentive scheme from 2002. As a result the operation of the IIP from 2002 to 2005 is likely to be rather more remote from the central price control formula than would be ideal in subsequent periods. Ofgem's aim is that the IIP should become an integral part of the price control formula from 2005 onwards. In designing an incentive scheme for 2002, the proposed framework will be used as a guide to the approach which should be adopted in future. Where possible work carried out as part of the last price control review will be used as an input into the development of the incentive scheme.

### *Possible longer term developments*

2.53 In the course of discussing the IIP with a wide variety of parties over the last year, a number of other suggestions have been made about the development of distribution price controls post 2005. These point towards more significant changes in the framework of regulation. Some of these suggestions reflect ideas published in academic journals. The model described above relies on measuring the cost-quality index which has been achieved by companies and incentivising them on the basis of their distance from the cost-quality frontier. In an ideal model the cost-quality frontier would be further informed by customer preferences. The ideas set out below place greater emphasis on customers expressing preferences and being able to choose options on the most appropriate cost-quality trade-off.

2.54 One such idea suggests the regulator offering companies a choice of contracts at the time of a review based on different cost-quality equations. An extension of this idea might involve the regulator agreeing with companies a similar contract 'menu' but allowing customers to choose the contract which best suited them, thus getting closer to a market dynamic for expressing cost-quality choices.

2.55 A different proposal would involve companies' prices being scaled at the time of a price review such that the average company (assuming this could be defined) was targeted at the average rate of return. Other companies (depending on their relative performance) would be distributed around this figure. Such a scheme has some common features with the IIP but would take the concept much further than envisaged in this paper.

2.56 It is not the purpose of this paper to analyse these schemes in any detail. Subject to respondents' views, it may be appropriate to set up work programmes to analyse these as part of the preparation for the next price review but this will be considered at the appropriate time.

### *Issues for consideration*

2.57 Views are invited on any of the issues raised in this Chapter, but in particular:

- on whether the aims of the IIP (including the analysis of the potential flaws in the existing arrangements for reviewing and implementing price controls), as set out in paragraphs 2.29 and 2.30, are appropriate;
- on the distinction drawn between reinforcing quality of supply targets (as a matter between a company and its customers) and the emphasis on relative performance (as a matter between companies);
- on the individual and initial thinking set out on each of those two approaches, including, for instance, the proposed route for establishing a method for assessing and incentivising relative performance; and
- on possible developments for the longer term.

# 3. IIP output based incentive scheme

### *Introduction*

3.1 This chapter sets out initial thoughts on the principles and framework that could be adopted in developing the incentive scheme that will operate from April 2002 to the end of the present price control period in 2005. It also sets out initial thoughts on the key issues that will need to be considered in taking this work forward.

### *Background and principles*

#### Background

3.2 The final proposals for the distribution price control review (December 1999) concluded that up to 2 per cent of the regulated revenue of each distribution business each year could be put at risk to an incentive scheme under the IIP (for the period April 2002 to April 2005).

3.3 The Introduction explained that the first stage of the IIP focused on identifying the output measures that will be included in the incentive scheme from April 2002 and putting in place a new reporting framework for the provision of IIP information. The key outputs that will be incentivised are:

- the number of interruptions to supply (measured as the number of customers interrupted per 100 connected customers per year);
- the duration of those interruptions (measured as the average customer minutes lost per connected customer per year); and
- the response that customers receive when they contact the distribution business - to be measured by the speed and quality of response that is provided.

#### Principles for developing the incentive scheme for April 2002

3.4 Ofgem has previously indicated that the introduction of the IIP incentive scheme is not intended to re-open the present distribution price control, either in terms of the costs that have been allowed to each company or the targets that have been set for quality of supply. Re-opening the price control could lead to an increased perception of regulatory uncertainty and risk. This would not be beneficial to customers, providers of finance or the companies themselves.

*The level and profile of costs*

3.5 Ofgem does not consider that the introduction of the IIP incentive scheme in 2002 will have a fundamental impact on the level or profile of costs that were assumed in setting the present price control, or the underlying cost drivers of the distribution business. This means that the process and conclusions associated with deriving the efficient allowances for operating and capital expenditure in the price control review remain valid. This implies that:

- the normalisation process used to adjust cost allowances for company specific factors should not be reviewed or adjusted until the next price control review. In deriving the efficient level of costs it was necessary to consider company specific factors that resulted in costs which were higher than the norm; and
- the assumptions on the relationship between operating and capital expenditure (the capex-opex trade-off) should not be altered until the next price control review. Ofgem implicitly made an assumption on the relationship between operating and capital expenditure, although both were analysed separately for the purpose of deriving the efficient level of costs. Adjustments were also made for the different accounting treatment of capital expenditure across the distribution businesses.

*Quality of supply*

3.6 Where previous targets have been agreed under the distribution price control review for quality of supply, these will be broadly consistent with any targets that are set under the IIP incentive scheme. There are three main reasons why targets under the distribution price control and the IIP may differ:

- changes in the definitions used to calculate the quality of supply outputs. For example, the change in the definition of a short interruption from 0 to 1 minute to 0 to 3 minutes;

- changes in the measurement systems that are used by the distribution business. For example, companies that have introduced improved measurement systems have seen a significant increase in their reported quality of supply figures. This is because they are capable of measuring with more accuracy how an incident on the network affects customers.

3.7 In addition, the June document explained that it was presently difficult to compare companies' performance on network output measures, particularly for those companies whose differ significantly in terms of the characteristics of their networks. Introducing an incentive scheme which is in part based on relative performance may require further work to be done to normalise quality of supply measures. Collecting outputs on a disaggregated basis may make this easier. The September 2000 final proposals document set out one approach for collecting disaggregated information. In collecting disaggregated information Ofgem is seeking to take account of inherent differences in networks that impact upon performance of the network. Ofgem intends to undertake further work in this area over the course of the next year. The extent to which it is possible to normalise output measures will be one consideration in deciding on how companies' performance will be assessed under the incentive scheme. These changes will be to maintain consistency between companies and help ensure that they are not penalised or rewarded on the basis of inconsistent information.

**Summary**

3.8 Taken together these considerations mean that the IIP should not lead to a redefinition of the agreed price control, both in terms of costs and quality; that the risk profile of the distribution business should not be fundamentally changed; and that it is therefore consistent with the relevant components of the cost of capital assumption underlying the existing price control.

## *Objectives of the incentive scheme*

3.9 Chapter 2 described one approach to introducing an incentive scheme – based on a concept of value for money, where total costs and total quality have been normalised across all companies and combined into a single index. It is clear that there is not time to put in place a fully developed scheme of that type from

April 2002, although it is important to retain as many of the principles as possible.

3.10 Ofgem's initial thoughts are that two main objectives should be met by introducing the incentive scheme that will operate from 2002 to 2005, namely:

- ♦ reinforcing the incentives towards meeting the targets set for quality of supply at the time of the last price control review (and other elements of quality of service) to achieve a better balance between achieving cost reductions and providing an appropriate level of service; and
- ♦ introducing more relative comparison so that companies have a continual incentive to focus on performance, rather meeting a single target set by the regulator at the start of a price control period.

3.11 This approach has implications for the mechanics of the incentive scheme that is introduced. This is discussed below.

### *Mechanics of the incentive scheme*

3.12 There are two possible frameworks on which the incentive scheme could be based – a system where a company's performance was assessed on the basis of its:

- ♦ own performance; or
- ♦ performance relative to its peers.

3.13 The way in which a company's performance is assessed impacts on the nature of the settlement arrangements within the incentive scheme. Regardless of how performance is assessed the settlement arrangements must be robust to ensure that financial flows paid or received under the incentive scheme are collected and allocated appropriately. It will also be important to ensure that whichever approach is used, it is consistent with the powers conferred on Ofgem in the Electricity Act 1989 and the Utilities Act 2000.

### Absolute performance

3.14 Under an incentive scheme based on absolute performance the settlement system should be based on transactions between a company and its own customers. There are a number of ways this transaction could work. The distribution business could:

- collect 100 per cent of its allowed revenue at the beginning of the year and then, depending on its performance in the incentive scheme over the period, retain the full amount or make a rebate to its customers of up to 2 per cent; or

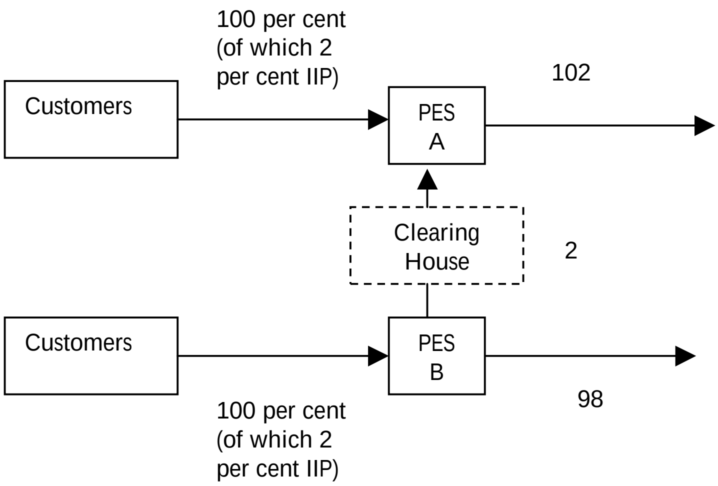
- collect 98 per cent of its allowed revenue at the beginning of the year and then, depending on its performance in the incentive scheme over the period, collect up to a further 2 per cent from its customers.

3.15 Chapter 2 explained that if a company meets its quality of supply targets it should earn an average rate of return equal to the estimated cost of capital - subject to it also meeting the cost assumptions underlying the price control. It seems appropriate that the maximum that a company could earn for meeting its targets under an incentive scheme based on absolute performance should be limited to 100 per cent of its allowed revenue. It would be necessary to consider how best to treat companies that beat their targets. This is discussed below.

### Relative performance

3.16 Chapter 2 suggested that under an incentive scheme based on relative performance it was appropriate that all customers contribute to the financing of any payments that were received or paid by their local distribution businesses. This is because all customers ultimately benefit from companies having a continual incentive to optimise performance. It would not be feasible for this transaction to take place directly between customers and all companies. It would be necessary for the regulator to put in place appropriate arrangements to replicate the transaction. Figure 3 below shows how this may operate.

**Figure 3**




3.17 Under this approach distribution businesses would receive or make payments to other distribution businesses depending on their performance in the incentive scheme. Any payments made would be sourced from the amount of revenue that each distribution business had collected from its customers. Once the size of any payments and receipts had been finalised the settlement process could be a direct transaction between distribution businesses. Alternatives could include putting in place some form of clearing house which would allocate payments and receipts to companies; or setting up an account (which would be funded by the distribution businesses out of the revenue at stake to the IIP incentive scheme) where funds were held in escrow from which payments could be made to better performing companies, while other companies forfeited the initial payment into the account.

3.18 Assessing a company's performance on a relative or absolute basis is not necessarily mutually exclusive. It may be appropriate to introduce an incentive scheme that incentivised both the absolute and relative performance of a company. This would mean making a judgement about how much of the amount of revenue exposed to the overall incentive scheme should be put at risk to a company's absolute and relative performance.

3.19 It may also be necessary to consider whether the potential maximum reward under the incentive scheme should be capped at 2 per cent of revenue. For example, if a company significantly outperformed all other companies - in a model of relative performance - it may be appropriate that it is allowed to recover a greater proportion of the revenue "pot". This would not mean that customers would pay more into the incentive scheme (via higher use of system charges) to fund the higher reward as this would be at the expense of other companies. This would provide stronger incentives on companies to improve performance, although it may mean that some companies that had improved performance may not receive any reward. If a company significantly outperformed under a model based on absolute performance any higher reward (than the 2 per cent of revenue) would have to be funded by customers. This could only be funded through higher prices (or use of system charges) than had been allowed for under the existing price control. It may be more appropriate therefore to take account of this at the time of the next price control review.

3.20 It may also be necessary to consider whether payments are made annually or whether they are held over to the end of the price control period and cleared in setting the next price control. This may lead to more stability in revenue flows to companies (or prices to customers) over the period of this price control. However, it would also mean that good (or bad) performance under the incentive scheme was not rewarded (or penalised) until the end of the price control period in 2005.

### *Assessing performance in the incentive scheme*

#### Measuring performance for the speed and duration of interruptions to supply

3.21 There are a number of ways in which companies' performance under the incentive scheme could be measured – both in a framework based on absolute and/or relative performance. For example, it may be possible to set starting positions and then measure performance based on the distance and/or speed that a company achieves in moving away from its initial starting position. An alternative would be to set final targets and then measure companies performance based on whether they achieve the target and/or the speed with which they move towards the target. It would be possible to make these comparisons either over time or on an annual basis. Assessing performance over time, for example by using moving averages, may make it easier to accommodate one-off events that impact on the volatility of data. It may also be possible to combine options in developing the incentive scheme. For example, companies could be assessed on a relative basis on the speed with which they move away from a starting position, while their ability to meet the end target could be assessed on an absolute basis.

**Measuring performance for the quality of telephone response**

3.22 Ofgem has not previously either requested information from companies on the speed of response or undertaken a survey of customers' views on the quality of response provided. On this basis, it may be difficult to set targets for April 2002 that companies would be expected to meet – such as a target average response speed or a target level of "satisfaction" with the response provided. An alternative approach would be to compare companies' performance using a league table where a company's position is determined by a combination of its performance in terms of the speed of response provided and the results from the customer survey. It will be necessary to determine the relative weights to place on the speed of response and the survey results.

***Deadbands***

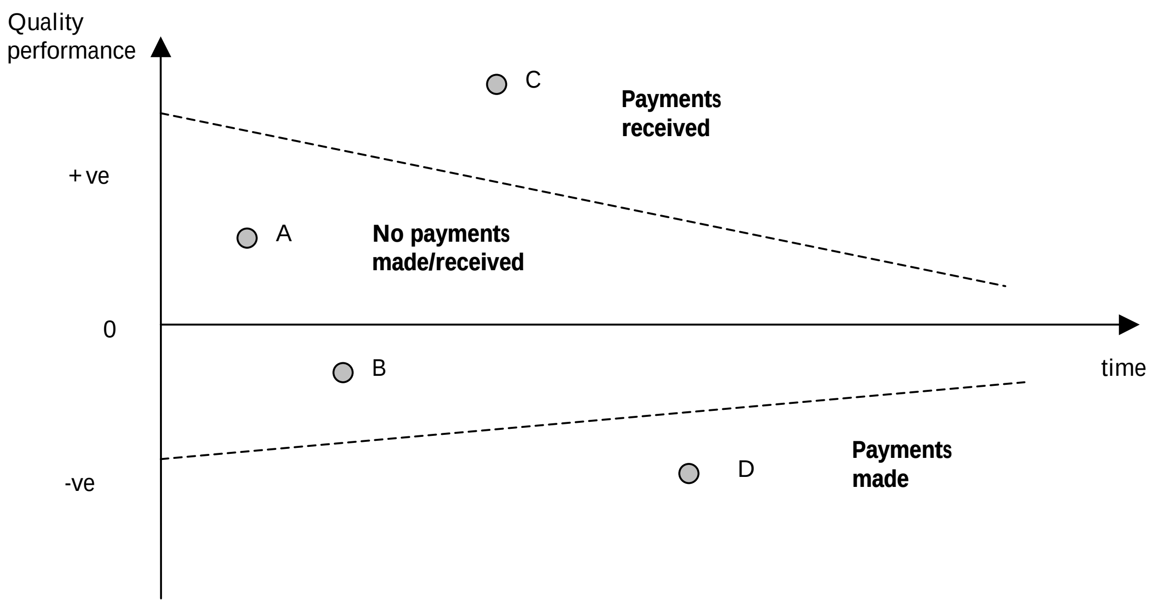
3.23 In setting up the framework of the incentive scheme it may be appropriate to consider whether it is necessary to put in place a mechanism whereby a company's performance does not necessarily lead to the payment or receipt of penalties or rewards. These so called "deadbands" may be necessary for a number of reasons, for example:

- ♦ volatility in performance – making comparisons on an annual basis may mean that it is more difficult to incorporate one-off events that impact on performance (an alternative approach may be to use rolling averages); and
- ♦ inaccuracy in the data – which mean that small differences between companies are not necessarily indicative of differences in performance.

3.24 There could be several different types of deadband that could be introduced for different circumstances, output measures or companies. For example, it may be appropriate to implement a company specific one-way deadband for companies that fail to meet the required levels of accuracy for reporting on the number and duration of interruptions to supply. This could be operated in such a way that a company had to beat a hurdle (or deadband boundary) before they received any payments. This hurdle could reflect the opinion of Ofgem's auditors as to the level of inaccuracy. In these circumstances it may not be appropriate to protect the company from making any payments under the incentive scheme. It may also be appropriate to put in place more generic deadbands to help accommodate one-off events that were beyond the control of the company that distorted performance in any particular year. These may be symmetrical although the scope of the deadbands would need to be reviewed in the light of experience.

3.25 Figure 4 shows how deadbands may operate within the incentive scheme. A company's performance in relation to an output is measured on the vertical axis – as explained above this could be assessed in a number of ways. However, broadly speaking this could be "positive", "negative" or neutral. At points inside the dashed lines (i.e. A and B) a company would not receive or make any payments under the incentive scheme. Levels of performance which fell outside the boundary or deadband would lead to the payment or receipt of funds (i.e. C and D). The figure shows that deadbands could be asymmetric and their scope reduced over time.

**Figure 4 Possible operation of a deadband**



### *Normalisation*

3.26 Chapter 2 explained the importance of being able to ensure that an incentive scheme is based on a level playing field. An important consideration in this respect is whether it is appropriate to take account of differences across companies that may impact on their ability to perform within the incentive scheme. Ofgem considers that there are three types of differences that may impact on performance:

- **inherited differences** – these are differences that the distribution businesses inherited at privatisation and may include differences in the design and configuration of the network;
- **inherent differences** – these are differences which relate to the area in which a company is licensed to distribute electricity and may include topographic factors; and
- **incurred differences** – these are differences which are the direct result of management action since privatisation and may include the strategy the a company has taken in operating and maintaining the network.

3.27 It may be expected that over time the influence of inherited differences would be reduced as companies' investment changes the nature of the network and privatisation assets reach the end of their operational lives. The influence of inherent differences may be expected to persist over a longer period of time (or indefinitely). The influence of incurred differences may be expected to increase over time as the impact of management decisions on the performance of the network become stronger.

3.28 Ofgem's initial thoughts are that it is only appropriate to make adjustments to normalise outputs for differences across companies where these fall into the first two categories outlined above. In addition these factors should be:

- outside the direct control of management; and
- capable of objective measurement across all companies and in terms of their impact on a company's performance.

3.29 There may also be other factors that will impact on companies' performance. For example, some companies have suggested that differences in weather should be taken into account in assessing performance or setting targets for output measures. Ofgem considers that it is appropriate that any adjustments that are made meet the criteria outlined above.

3.30 Ofgem's initial thoughts are that any adjustments to output measures should focus on the number and duration of interruptions to supply, as there may not be inherent or inherited differences that impact on a company's performance with regards to the quality of telephone response it provides to customers.

3.31 In the September 2000 final proposals on defining output measures and monitoring delivery between reviews, Ofgem outlined one possible way of normalising for differences in networks that could impact on a company's performance with respect to the number and duration of interruptions to supply. This was based on differences in the percentage of overhead line and network length per customer on each High Voltage circuit that made up the network. Ofgem intends to undertake further work in this area over the course of the next year.

### *Exposure of revenue to the incentive scheme*

3.32 It is important to consider the amount of revenue that should be exposed to the incentive scheme as a whole from April 2002 and how this amount should be allocated between the three output measures.

#### Exposure to the scheme as a whole

3.33 As indicated above in accepting the final proposals for the distribution price controls the companies accepted that up to 2 per cent of regulated revenue could be put at risk to an output based incentive scheme from April 2002 to April 2005. Ofgem's initial thoughts are that there are two main issues that will influence the amount of revenue that could be exposed:

- the accuracy of information on which the incentive scheme is based; and
- the need to avoid the creation of perverse incentives.

3.34 Ofgem has specified minimum levels of accuracy for the reporting of the number and duration of interruptions to supply (95 per cent at the overall level and 90 per cent at the Low Voltage level), to apply from April 2002. Until the audit of IIP information is undertaken in the summer of 2003 it will not be possible to say whether companies have met the required levels of accuracy. It may be appropriate to phase-in the exposure of revenue to the incentive scheme such that, at least for the first year, an amount smaller than 2 per should be put at risk. This could then be increased over time.

3.35 It will be important to ensure that by exposing an amount smaller than 2 per cent, companies are not provided with a perverse incentive to underperform in the early years so that when more revenue was exposed they could produce significant improvements with the possibility of earning higher returns. This would not be to the benefit of all customers as companies would not be under continual pressure to seek out the most appropriate level of service. It is necessary to consider the trade-off between ensuring that any financial flows are based on robust information and the avoidance of creating perverse incentives.

**Exposure of revenue within the incentive scheme**

3.36 It is also important to consider the relevant weightings (or amount of revenue) attached to each of the three output measures that will be included in the incentive scheme. A number of issues are relevant in making this decision.

*The robustness of the information on output measures*

3.37 It is important to ensure that the information on which the incentive scheme is based is as robust as possible. Ofgem has specified minimum levels of accuracy associated with the reporting of the number and duration of interruptions to supply. The audit framework which is being developed will provide Ofgem with a better understanding of the accuracy of each companies data and hence its comparability with its peers.

*The relationship between the output measures*

3.38 Reducing the absolute number of interruptions experienced by customers would also reduce the total amount of time that customers are off supply of – unless the reduced number of interruptions lasted on average for a longer period. This is reflected in the way in which the number and duration of interruptions to supply will be calculated for the purpose of reporting under the IIP. This suggests that placing relatively stronger incentives on the number of interruptions to supply could have a potentially greater impact on the quality of supply delivered to customers. It will also be important to consider the impact of any decision on the weighting of output measures on incentives on:

- the proposed Overall and Guaranteed Standards of Performance on the maximum number of interruptions (to be introduced from April 2002); and
- installing automated switching to reduce the duration of interruptions, particularly those derived from faults on the HV network.

*The views of customers*

3.39 As part of a wider survey undertaken by MORI, on behalf of Ofgem, customers were asked to rank in terms of importance the three output measures that will be included in the incentive scheme. The results of this research are set out in Table 1 below.

**Table 1: The views of customers on the relative importance of output measures**

| | Output measure | | |
|---|---|---|---|
| | Number of interruptions to supply | Duration of interruptions to supply | Quality of telephone response |
| Percentage of customers who consider this output measure most important | 27 | 49 | 12 |
| Percentage of customers who consider all output measures to be of equal importance | 10 | - | - |

Notes: Figures do not add up to 100 due to rounding and excluded responses

3.40 This would tend to suggest that customers place most importance on the duration of interruptions to supply, followed by the number of interruptions to supply and then the quality of telephone response. The ranking of output measures did not differ across different customer groups, although the percentage figures varied.

### *Perverse incentives*

3.41 In developing the framework for the incentive scheme it is important to consider whether the nature of the scheme leads to the creation of perverse incentives in any areas, and if so, the best way of dealing with such issues. The June 2000 document identified three possible areas of concern:

- the sharing of best practice;
- providing a co-ordinated response in storms or other similar circumstances; and
- companies focusing on short-term improvements in performance to the detriment of the medium and long term performance of the network.

3.42 The document explained that the incentive scheme should not lead to the creation of perverse incentives in the area of sharing best practice for various reasons, including that:

- increased emphasis on outperforming peers would provide strong incentives on companies to seek out best practice and that any requirement to share best practice may inhibit innovation; and
- suppliers to the industry would have vested interests in ensuring that all distribution businesses are aware of any technical innovations.

3.43 The September 2000 final proposals document indicated that further work needed to be done on looking at whether there needed to be additional arrangements for encouraging a co-ordinated response by the distribution businesses in storms or other emergencies. At present the distribution businesses are members of one of two groups (or “consortiums”) that enable the sharing of resources in emergency situations. These are known as the Western Eastern Scottish Area Consortium (WESAC) and the Northern and Southern Area Consortium (NOSAC). The companies have put these arrangements in place themselves and it may be necessary for the industry to consider whether they are appropriate and allow for robust agreements for the sharing of resources.

3.44 Previous IIP documents have outlined concern at whether the RPI-X system and the introduction of an incentive scheme based mainly on shorter term performance measures could lead to perverse incentives in the medium term on maintaining the integrity of the network. As a result Ofgem has proposed introducing a framework for monitoring the medium term performance (MTP) of the distribution networks, as detailed in the draft RIGs document. This is to help ensure that the plans submitted by the distribution businesses (including actions taken between price reviews including under the IIP incentive scheme) and the final price control settlement are consistent with maintaining overall network integrity for the medium term and beyond.

### *Other Issues*

#### Reporting framework

3.45 The September 2000 final proposals document indicated that it would be necessary to consider the appropriate format for reporting on the performance of individual distribution businesses within the incentive scheme. In considering the best way of achieving this it will be necessary to consider a number of issues, including:

- the relationship to other existing or proposed reporting requirements on distribution businesses, such as for regulatory accounts and on network performance; and
- the way in which the incentive scheme is operated – for example, any reporting role played by a clearing house in the possible schemes outlined above.

3.46 The arrangements that are put in place will need to be transparent so that interested parties are able to understand how a company has performed under the incentive scheme. It will also be necessary to explain, where appropriate, the linkages between the various reporting requirements.

### Relationship between the incentive scheme and Guaranteed and Overall Standards of Performance (GOSPs)

3.47 Ofgem intends to put in place a separate, but closely related, workstream to consider the issues associated with the implementation of the new GOSPs that were part of the final proposals for the last distribution price control review. It will be necessary to consider the relationship between the IIP and the new standards. This relationship will need to be considered both at an overall incentive level and at a more detailed definitional level. For example, it may be appropriate to take into account the work that has been done on defining output measures for the IIP in developing the new standards. It will also be appropriate to consider the definition of the existing Overall Standards, including OS1a, which some companies have argued leads to the creation of perverse incentives. Putting in place a separate workstream will help ensure that due consideration is given to the important issues associated with introducing the new GOSPs. Ofgem would expect to consult closely with energywatch and the companies themselves in drawing up the new standards and reviewing the relationship between GOSPs and the IIP.

3.48 Ofgem will publish a further paper on its review of the existing GOSPs scheme this month. This document follows on from the one published in October 2000. It will set out the proposed standards that will apply to various businesses from April 2001, including electricity distribution and metering. It will also consider whether standards are appropriate for supply businesses in the competitive market.

### *Issues for consideration*

3.49 Views are invited on any issues raised by this Chapter and in particular on:

- the different approaches for operating an incentive scheme including the treatment of revenue put at risk to the scheme;
- the assessment of companies' performance and the best way of taking account of differences in performance arising from inherent or inherited differences in networks; and

- arrangements for reporting under IIP including linkages with other information provided to the regulator.

# 4. Timetable and process

### *Introduction*

4.1 This chapter sets out the timetable and process for the work that Ofgem intends to undertake on the IIP – including the ongoing work on putting in place reporting arrangements to apply from April 2001 and on developing the incentive schemes to apply from April 2002. It also identifies the work that will need to be undertaken on the IIP between April 2002 and the next price control review in 2003/04.

### *Ongoing work on implementing reporting arrangements*

4.2 Following the publication of final proposals in September on the information required as part of IIP, Ofgem has prepared a revised licence condition and published for consultation draft RIGs. The consultation on the RIGs closes on 31 January 2001. It is expected that the RIGs will be finalised in February 2001. Subject to the distribution businesses indicating that they are minded to accept the licence modification, Ofgem will then carry out a further statutory consultation on the licence modification. The aim is to have the new licence modification in place by 1 April 2001, which is the start of the reporting year for companies to provide the information required under IIP.

4.3 It is Ofgem's intention that the IIP modification will be included in Part C of the standard distribution licence due to be determined on by the Secretary of State following the enactment of the Utilities Act 2000. In the event that the standard licences do not take effect until after 1 April, Ofgem will modify the existing PES licences to incorporate the IIP modification.

### *Draft work programme up to April 2002*

4.4 The table below sets out Ofgem's initial thoughts on the timing of the main consultation documents between now and April 2002 for developing the incentive scheme to be applied from April 2002.

**Table 2: Draft timetable for the IIP**

| Timing | Consultation document |
|---|---|
| April 2001 | **<u>Update</u>**<br>This will include a summary of responses to this document, a more detailed description of the work programme and key tasks and confirmation of Ofgem's overall approach to incentive scheme. |
| June 2001 | **<u>Initial proposals</u>**<br>This will set out Ofgem's initial proposals on the mechanics of the incentive scheme. |
| December 2001 | **<u>Final proposals</u>**<br>This will set out Ofgem's final proposals including a draft licence modification. |

4.5 In addition to the consultation papers, it may be appropriate to hold a public workshop along the lines of the workshop held last year to discuss the definition of output measures and monitoring delivery between reviews. A public workshop provides an opportunity for all interested parties including customers, suppliers, employee representatives, other utilities and regulators to express their views and take part in the debate which follows. On the basis of the timetable above, the most appropriate time for holding a workshop is likely to be May 2001.

4.6 A critical issue for the incentive schemes is the provision of accurate and comparable information. The work carried out over the course of the last year has focussed on improving the quality of the information provided by the companies in this respect. The distribution businesses have been asked to provide information on the number and duration of interruptions six months into the reporting year beginning in April 2001. Ofgem expects to use this information, together with previous years' data and an assessment of the impact of new measurement systems and definitions, as a basis for populating the incentive scheme for the year 2002/03. This information will be used as an input into the December 2001 proposals.

4.7 A number of companies are introducing changes to their systems for measuring the number and duration of interruptions which will only come into effect from the beginning of 2002/03. This raises questions about data continuity and its impact on setting and normalising targets as inputs into the incentive schemes. Ofgem places considerable importance on introducing an incentive scheme in April 2002, which it considers will be in the best interests of customers.

Delaying the introduction of the incentive scheme until 2003 would mean that there would only be one year of experience on which to base the review of the incentive scheme before reaching conclusions on the next distribution price control review.

4.8 One way of dealing with the impact of the new measurement systems in the first year is to reduce the amount of revenue which would otherwise be put at risk to the incentive scheme. During the second half of 2002/03 the first six months of the data collected with the new systems could be reviewed and compared with the assumptions made in setting the schemes for 2002/03. Differences which have arisen as a result of changes to measurement systems and which were not adequately reflected in the 2002/03 scheme could be taken into account in revised targets for the two years the incentive scheme will operate from 2003/04 through to 2004/05.

4.9 The most appropriate means of dealing with changes to data will also depend on the nature of the incentive scheme which is introduced. These issues will be taken forward as part of the work identified in Chapter 3.

### *Outline timetable to 2005*

4.10 Chapter 2 outlined areas of further work which will need to be carried out as part of the preparation for the next periodic review. In addition there is related work associated with new GOSPs and which formed part of the final proposals of the previous distribution price control review. During the course of 2001 to 2003, Ofgem would expect to carry out further work on:

- developing a total cost and total quality function and evaluating the appropriate form of the value for money index;
- introducing the relevant GOSPs for worst served customers etc, and other appropriate changes to the GOSPs; and
- reviewing the information provided by the distribution businesses as part of Condition 6/9 and eliminating overlap between that and the IIP licence condition.

4.11 Ofgem expects to start work on the next distribution price control review during the course of 2003/04. Part of that work will include a review of the incentive schemes which it is expected will be carried out over the summer of 2004, in time for inclusion in the final conclusions of the price control review at the end of 2004.

***Issues for consideration***

4.12 Views of consultees are invited on this chapter and in particular on:

- the draft timetable and process for developing an incentive scheme including the merits of holding a workshop; and
- the scope of the work to be carried out in advance of the next periodic review.