



## ATTACHMENT1

### INTRODUCTION TO CORRECTIVE PERFORMANCE ASSURANCE TECHNIQUES

#### 1. INTRODUCTION

##### **Purpose**

- 1.1 This paper describes the background to the use of Corrective Performance Assurance Techniques in the BSC, identifies which such techniques might be used, and, in particular, discusses the principles of possible financial incentives.
- 1.2 The brief description below describes principles which were set out under the Pool and were subsequently included in the BSC.

##### **The Trading Arrangements and the Origins of the Performance Assurance Framework**

- 1.3 The 1998 Trading Arrangements introduced for the first time the principle that Suppliers would be responsible for submitting consumption data to settlement. Suppliers were thus made responsible for the quality of consumption data.
- 1.4 It was recognised that, through GSP Group Correction, the quality of a Supplier's data affected the quality of settlement for all other Suppliers operating in the same GSP Group. Hence there was a need to provide assurance to Suppliers collectively that each individual Supplier would meet its obligation to submit accurate data to settlement: this, in essence, was the fundamental requirement which prompted the development of the Performance Assurance Framework.
- 1.5 Another feature of the 1998 Trading Arrangements was the introduction of the principle of the Supplier Hub. This, in essence, was the idea that Suppliers would be required to fulfil their obligations for collecting and submitting consumption data through the use of separately defined agents.
- 1.6 The Supplier Hub principle was relevant both to aspirations to introduce competition in the areas of consumption data collection and processing, and to providing assurance to Suppliers collectively on data quality.
- 1.7 In the latter regard, the introduction of defined agencies made it possible to set out requirements on these agencies separately from those on Suppliers: these were the Accreditation and Certification requirements, intended to contribute to assurance that agents would act in accordance with settlement requirements, beyond any other requirements that Suppliers might agree with them contractually.
- 1.8 Nonetheless the fundamental obligation to submit accurate data to settlement remained with the Supplier, and from it arose the requirement for assurance that this was being done correctly. The method for achieving this assurance was the Performance Assurance Framework

## Components of the Performance Assurance Framework

- 1.9 It was believed that no single method would provide adequate assurance of data quality in settlement: rather, a range of complementary techniques would be necessary. It would be the overall effect of these techniques together that would deliver the required outcome, rather any individual method.
- 1.10 It was recognised that available techniques varied both in impact and in cost.
- 1.11 The available techniques could be categorised according to the development or operational stage to which they principally apply: Preventative Techniques are those that stop failures occurring; Detective Techniques enable failures to be discovered; and Corrective Techniques encourage behaviour that leads to achieving the required quality.
- 1.12 It was believed that the best way of achieving a required level of assurance would be to have a Performance Assurance Framework comprising of a portfolio of assurance techniques including Preventative, Detective, and Corrective techniques. The portfolio was designed to balance costs and effectiveness and to address identified risks to settlement.
- 1.13 A consideration, therefore, is that when considering adjustments to the components of the Performance Assurance Framework, consideration must be given to the impact on the overall level of assurance achieved, and, as part of that, the balance of techniques employed.

## 2. CORRECTIVE TECHNIQUES

- 2.1 Techniques which may be regarded as having a significant corrective element are:

### • Financial Incentives

This means techniques where Suppliers who fall below a defined quality standard suffer some financial consequence. This might be the requirement to make a payment, or it could mean not receiving a payment that others who meet the required standard do receive. These techniques rely on the financial impact being sufficient deterrent to encourage compliance.

### • Naming

This means techniques where those who do not meet required standards are individually identified, or, equivalently, those who do meet such standards are individually identified. Ultimately, these techniques rely upon the deterrent effect of possible damage to reputation to encourage compliance.

### • Sanctions on Carrying Out Actions under the BSC

This includes techniques where constraints are put on those who do not meet required standards. Examples might include Suppliers being prevented from having new Metering Systems in settlement, or agents losing their Accreditation (either in whole or in some partial way eg for new business). Clearly measures of this type have a preventative element, since they stop repetition of a non-compliance. The corrective force of these techniques arises from the deterrent effect of the likely impact. However, there are strong doubts as to whether measures of this type could or would ever be applied under the BSC, either for legal reasons, or simple practical ones: they constitute the "nuclear option". It is perhaps easier to conceive of

the Regulator using such powers, but whether this would ever be done for a “routine” failure to perform under the BSC remains debatable.

- **Use of BSC Panel Powers**

In the event that a Party is declared in default of the BSC, the Code gives wide ranging powers to the Panel. It might be that the prospect that the Panel might consider utilising these powers would act as a corrective force, although to date “default” has not been thought of as relevant to a failure to meet performance standards.

### 3. FINANCIAL INCENTIVES

- 3.1 One type of corrective technique is financial incentives. These are thought of in terms of financial sanctions which are applied in the event of a failure to meet a defined requirement: Supplier Charges in the BSC take this form.
- 3.2 Another style of financial incentive involves those achieving a required standard receiving a payment, whereas others receive no payment.
- 3.3 Where material and unambiguous financial incentives are applied, then they may well have a direct effect, because they can directly impact the financial performance of public companies. In these circumstances the behaviour of individuals may well be modified by the prospect of significant financial sanctions.
- 3.4 It has been commented that Supplier Charges in the BSC are neither sufficiently simple, nor sufficiently material to have such a clear impact.
- 3.5 A further point is that where financial incentives are large, participants may go to extreme lengths to satisfy the letter of the requirement, rather than meeting the spirit of the target. This can mean unintended and perhaps undesirable behaviour may be encouraged. As an illustration, were large financial incentives to apply only to the *amount* of actual consumption data submitted, then it is not impossible that the *accuracy* of the submitted data might suffer as Suppliers strived to achieve the required standard. The lesson is that systems of standards and incentives must be carefully designed not only to encourage the desired outcome, but also not to inadvertently produce undesirable side effects.

#### Principles

- 3.6 The following have been suggested as desirable characteristics of a system of financial incentives:
  - **Simplicity** would make for reduced implementation and operational costs, and would contribute to transparency. However, a consequence of simplicity may well be a lack of refinement that might, for example, lead to extreme outcomes in certain circumstances. (In an analogous way, it has been said that tax systems can either be simple or fair, but not both.)
  - **Transparency and Clarity** would make for better effectiveness, since they allow participants to understand unambiguously the consequences of their actions.

- **Significant in magnitude** otherwise little impact on behaviour is achieved: payments may too easily be seen as an acceptable business cost rather than a stimulus to change behaviour.
- **Predictable** That is, those who will be subject to charges can simply make a reasonable advance estimate of their magnitude. It is clearly reasonable for participants to expect this to be the case. Further, where material charges are involved this increases the likelihood that a participant's behaviour will change promptly to achieve the required standard.
- **Securely Based** If significant sums are involved the standards and measurement data from which incentives are calculated must be, so far as possible, beyond challenge.
- **Automated and Consistent** The method for measuring performance, determining and applying incentives must proceed so far as possible without human intervention and in accord with pre-defined rules. This is desirable from a costs and efficiency point of view, but also so as to achieve uniformity and impartiality. It would not be desirable for it to be routine necessary for individual decisions to be made regarding the levying of incentives.
- **Explicitly linked to a clearly desired outcome** Such as, for example, the amount of actual data submitted to settlement.
- **Progressive and Reflective of Performance**
- **Immediate** It is believed that best results are obtained where any financial incentives are levied as soon as possible after any non- performance.

### Components

3.7 A system of financial incentives may include the following components. Ideally, each of these components should be tested against the principles set out above. Components:

- **A defined performance requirement** (and a method to review and adjust it as necessary)
- **A method for determining actual performance**
- **A method for determining the difference between required and actual performance**
- **A method for determining individual financial incentives**

For example, the determination might most obviously be derived from the divergence of performance from the requirement; it could also be derived by comparison of individual performance against best, or average performance.

Further, this component could include:

- A method for determining the total financial incentive to be levied (or paid) (see below for a further discussion)
- A method for determining how the total financial incentive should be apportioned between non-performing Parties

- **A method for redistributing collected Financial Incentives**

### Further Discussion: Determining the Total Financial Incentive to be Levied

This basis must be legally secure, and hence simple arbitrary penalties are ruled out. Some approaches suggested have been:

**Liquidated Damages** The principle here is that a genuine pre-estimate of the loss caused by a failure to perform is made. In the event that non-performance occurs, the LD's are applied, and the breach of contract is "liquidated".

So far as application under the BSC is concerned, there are difficulties in using LD's:

- It is not desirable that payment of a charge "clears the slate" so far as non-performance is concerned.
- A significant component of the loss due to non-performance is the inaccuracy of data in settlement, or, more precisely the increase in uncertainty regarding the accuracy of data. To date this has not been estimated in a convincing way, but, clearly it would appear to be related to the value of energy passing through settlement. It is considerably easier to estimate the administrative costs relating to non-performance, but these reflect only one aspect of the costs.

It is possible that an argument could be made that the cost of Performance Assurance under the BSC reflects a genuine pre-estimate of loss, since it might be said to represent the amount BSC parties are prepared to pay to achieve assurance. Logically, perhaps, Parties would not invest more in Performance Assurance than the loss it sets out to prevent. However, it may be better to consider the costs of performance assurance under the next approach, below.

**Charges for Services** It would be possible to define a set of services in the BSC for which Parties would pay charges: for example, Performance Assurance could be defined as a service to Parties; the total costs of this service would be charged to Parties. The level of charges for each Party would be determined from the "use" made of the service, determined to be the degree of non-performance of the Party.

**Charges Arising from the Execution of the BSC** Imbalance charges appear to be a financial incentive of this type. They arise as a natural consequence of settling imbalances, but because of their possible magnitude, constitute a financial incentive on Parties to balance. It might be possible to conceive of an analogous charge in SVA. As an example, perhaps the way in which GSP Group Correction energy is distributed amongst Suppliers might be considered: some part of this correction must in reality be due to inaccuracies resulting from the use of estimated data, and hence to the degree of non-performance of Suppliers. If non-performing Suppliers received a greater proportion of GSP Group Correction, then they would have a significant incentive to reach the required performance levels.

- 3.8 It must be noted that any move to incentives related to the value of energy would be likely to have implications for the total size of incentives involved, and hence for the commercial arrangements between Suppliers and their agents. It may well be that incentives derived from the value of energy would more fully reflect the value of the information that agents collect and process. However, current contracts are more likely to relate to the cost of the services involved, rather than the value of the information processed.