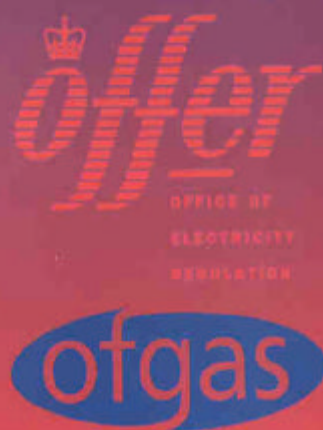


May 1999



Separation of Businesses: Proposals and Consultation

May 1999

Separation of Businesses: Proposals and Consultation

Contents

		Page
1.	Introduction	3
2.	Context of Separation and Metering Reform	10
3.	Metering and Data Retrieval	14
4.	OFFER's Observations	26
5.	Implementing Separation	35
6.	Implications for Price Controls and Separate Accounts	49
Annex 1	Views of respondents on separation and metering	52
Annex 2	Summary of consultants interim report	58
Annex 3	Proposed Licence Condition	67

1. INTRODUCTION

This paper proposes new arrangements for metering and meter reading and new obligations on Public Electricity Suppliers (PESs) to separate their distribution and supply activities, both of which are designed to promote competition and protect customer interests.

1.1 *Background to Separation*

Public Electricity Suppliers (PESs) are responsible for the supply and distribution of electricity within their authorised area. They may also have other interests some of which are licensed, such as the generation of electricity or the supply of electricity outside their authorised area, and others which are unlicensed such as the provision of electrical contracting. The distribution business maintains and operates the cables, wires and meters to pass electricity from the transmission grid to the customer's premises. The PES supply business buys electricity wholesale and sells the electricity directly to customers under tariff or contract. It bills the customer for electricity used and collects payment. The supply of electricity within a PES's authorised area is called first tier supply and carries with it certain duties and rights which are not placed on other suppliers (who are known as second tier suppliers). PESs also have a responsibility for providing metering services to other suppliers operating within their authorised area.

At present the separation of the supply and distribution functions of PESs is not straightforward because the Electricity Act does not distinguish clearly between the two functions or provide a separate licensing regime for distribution. The Government has indicated that it intends to legislate as soon as Parliamentary time permits to introduce the separate licensing of distribution and supply. This will help clarify the distinct responsibilities of the two functions and will facilitate separate ownership of supply and distribution. Legislation will not, however, deal with the operational integration of PESs. In its recent paper, "A Fair Deal for Consumers", the Government made clear that this was a matter for the regulator to pursue.

1.2 The Position in the Gas Industry

When British Gas was privatised the company operated the transportation and storage network as part of an integrated structure within British Gas' Supply Business. In July 1992 the Director General of Gas Supply asked the Monopolies and Mergers Commission (MMC) to investigate whether such an operation was against the public interest. The MMC recommended in August 1993 that the transportation and storage business and the trading business should be established as separate units. The businesses should be organised and operated as separate units.

In December 1993 British Gas announced that it was restructuring the business to comply with the MMC recommendations and it was agreed with Ofgas that this task should be substantially complete by 1 October 1994. However, in the event it took until December 1995 to complete the task.

In the gas industry, Transco is presently the monopoly provider of meters and the majority of meter work services including installation, maintenance and repositioning. Transco is also the monopoly provider of meter reading services for daily metered sites. However, shippers are able to purchase cyclic meter reading services directly from meter reading agencies or via Transco who procures this service from a number of meter reading agencies. Opening meter reading services are either provided by shippers or purchased from meter reading agencies.

In October 1998 Ofgas consulted on proposals to secure effective competition in gas metering and meter reading services. Ofgas proposed the full separation of Transco's metering and meter reading businesses from its core transportation business. Proposals were also made to develop new operational processes to support the development of competitive procurement of metering services. As an alternative means of securing effective competition in the provision of meters, Ofgas proposed the auctioning of Transco's metering assets. Views were invited on these proposals. Ofgas will issue further proposals in due course.

1.3 Observations on Present Position in Electricity

OFFER has already published two papers on the separation of PES businesses¹. These highlighted the problems that arise from PESs operating integrated distribution and first tier supply businesses and the present monopoly provision of metering and meter reading services.

In summary OFFER considers that the present integration of distribution and supply activities is likely to have the effect of protecting the position of dominant suppliers in electricity to the disadvantage of customers and competitors. Given the close interactions with competition in the gas market and the different arrangements there, the present position in electricity may also distort the development of competition in the gas market and inhibit the convergence of the electricity and gas supply markets.

These distortions arise from four principle areas of concern.

The first concern is that PESs will seek to operate the supply and distribution businesses to maximise the benefits to the company in a way which disadvantages competing suppliers. Overall this means that decisions regarding the operation of the distribution business will be made after considering the impact on the PES's own supply business. This will tend to systematically favour the PES's supply business. This might occur in a number of ways, including the PES setting a structure of distribution use of system (DUoS) charges in a way which supports or benefits their tariff structure or by having distribution business services shaped to meet their needs rather than those of all suppliers. Such discrimination may not be intentional, but is inherent in the present PES arrangements.

Second, the PES supply business may have access to information about the position of competitors and about the intentions of the distribution business which are not available to other suppliers. For example, the PES supply business is likely to have advanced warning of changes to DUoS tariffs or may have access to information about its competitors' customers through the operation of customer services shared with the distribution business.

¹ "Reviews of Public Electricity Suppliers 1998 to 2000: Separation of Businesses: Consultation Paper", OFFER, May 1998;

"Reviews of Public Electricity Suppliers 1998 to 2000: Separation of Businesses: Second Consultation Paper", OFFER, November 1998.

Third, PESs may have an opportunity to provide a cross subsidy for the supply business by allocating costs to the distribution business which more properly should be met by supply. In a market with relatively low gross margins, such as supply, transferring even a small share of costs from supply to distribution could create a significant advantage in a competitive market. Second tier suppliers are also concerned that the PES supply businesses may have lower costs because they are able to spread some costs between their supply and distribution businesses.

A fourth concern is that the perception of integration of PES supply and distribution businesses may distort competition in supply by deterring customers from switching. This may be particularly significant in the domestic sector where customers may feel that switching supplier will result in a less effective response by the PES (distribution business) to supply outages or that because they are not associated with the distribution function alternative suppliers will provide a less effective service more generally. This perception will be enhanced by the PES distribution business' close association with the supply brand and the reliance of most second tier suppliers on PES meter reading services.

The present arrangements in respect of metering and meter reading are also likely to distort competition in supply through the retention of unnecessary monopoly provision of these services by regional service providers closely integrated with the dominant supplier in the area. The monopoly is also likely to reduce incentives to efficiency and innovation in the provision of these services. Again given the close links with the gas market the retention of monopoly metering services in electricity is likely to distort the development of competition in these services in gas. All of these factors are likely to act against the interests of customers.

1.4 The Process So Far

The November 1998 consultation paper set out OFFER's initial proposals for the separation of businesses and the reform of metering.

On separation a need was identified for greater transparency in the relationship between the PES distribution and supply businesses which would allow for clearer monitoring of compliance with non-discrimination provisions and cost allocation. It was therefore

proposed that each PES should be required to establish agreements between its supply and distribution businesses in a similar form to the agreements offered to second tier suppliers. It was also proposed that these agreements should be published. In addition, it would be desirable for the distribution business to be managed independently of any energy trading interests. This would mean that all business, commercial and operational decisions are taken by the distribution business without the involvement of or reference to any energy trading interests. There was also a proposal that each PES should establish a plan for implementing separation and establish monitoring and compliance arrangements.

On metering, a number of options were set out to take forward the separation of metering. The proposals aimed to facilitate effective competition in the services of meter ownership, meter maintenance (also called meter operation), meter reading (also called data retrieval), data processing and data aggregation. The November paper noted the benefits to be obtained from greater convergence between the gas and electricity arrangements for metering services. It also identified the importance of minimising the PESs ability to distort competition by restricting the role of the distribution business in providing metering services. The paper outlined two potential approaches for the future development of metering, both of which addressed these issues. Approach A reflected the present position in the gas market and approach B took into account and further developed a proposal for an auction of metering assets.

OFFER received 42 responses to the consultation paper. A summary of the views received is set out at Annex 1.

OFFER has also appointed consultants (Pannell Kerr Forster, Horton 4 Consulting and European Economic Research Ltd - described in this report as PKF) to review the existing arrangements within the 14 PESs for the separation of the distribution and supply businesses and the treatment of metering activities. The review consisted of an examination of the scope for and implication of changes to present arrangements to meet the separated business models and the development of recommendations on a more cost effective form of separation. A summary of the consultants' report is set out at Annex 2.

1.5 Developments since the Last Consultation Paper

Since the last consultation paper was issued by OFFER in November 1998, there has been a successful bid made by National Power for the supply business of Midlands Electricity (MEB). Amongst the many issues raised by the proposed merger was the legal and regulatory background to the take-over and the separation of distribution and supply ownership. OFFER published a consultation document to consider the issues involved².

The proposals for the merger included the re-structuring of the Midlands Electricity PES licence to specify those conditions which refer to distribution and those which refer to supply. In addition it was proposed to strengthen the existing obligations to keep information confidential to the distribution business. Further conditions were proposed to require MEB to establish and maintain full managerial and operational independence of the distribution business and appoint a compliance officer to oversee and monitor the separation of businesses.

Following consideration of responses to the consultation paper and in the light of the Secretary of State's decision on the merger, OFFER has confirmed its intentions to amend the Midlands Electricity PES licence along the lines proposed in the consultation paper. Other new conditions to require the distribution business to promote competition in generation and supply and to restrict the distribution business from constructing embedded generation plant will be introduced.

1.6 Purpose of Present Paper

This paper reviews the responses to the November consultation paper and sets out conclusions on the issues raised. In addition to guiding the implementation of the next stages of work on metering and separation these conclusions will help form the basis for further work on the PES distribution price control, the transmission controls in Scotland and the supply price restraints.

² "Proposed Amendments to the Public Electricity Supply Licence for Midlands Electricity plc", Consultation Paper, OFFER, March 1999.

1.7 Comments Invited

All interested parties are invited to comment on the general issues raised in this paper. In particular, it would be helpful to have comments on the proposals made in the paper and on the various specific areas where views have been invited.

The comments should be sent to:

Mr A J Boorman
Deputy Director General
OFFER/Ofgas
Hagley House
Hagley Road
Birmingham B16 8QG

Fax No: 0121 456 6402

Electronic mail responses to the consultation paper should be sent to:

Dmoseley@offer.gov.uk

Comments are requested by 30 June 1999.

OFFER would prefer to publish all responses to this consultation by placing them in the OFFER Library. All responses will be published in this way unless they are clearly marked as confidential. Any general queries about the contents of this paper can be raised with Dave Moseley at the above address in the first instance (telephone contact 0121 456 6430).

2. CONTEXT OF SEPARATION AND METERING REFORM

2.1 *Electricity Act 1989*

The general duties of the Director General of Electricity Supply (DGES) are set out in section 3 of the Electricity Act 1989. The DGES must exercise his functions in a manner which he considers best calculated to secure that all reasonable demands for electricity are satisfied; to secure that licensees are able to finance their licensed activities and to promote competition in the generation and supply of electricity.

The Electricity Act 1989 provides for the licensing of public electricity supply and other supply activities. The Act makes no specific provision for distribution, rather the main requirements relevant to distribution are subsumed within the context of a Public Electricity Supplier. The Government addressed the issue of separating the PES supply and distribution business in the paper "A Fair Deal for Consumers" issued in November 1998. Here it confirmed that it would introduce legislation to allow for separate licensing of supply and distribution activities and to require these businesses to be held by separate legal entities, which may be under common ownership.

2.2 *Relevant Licence Conditions*

The present PES licence includes a number of provisions relevant to the separation of businesses. The controls relate to financial, informational and behavioural aspects of operating the businesses. There are four principal controls.

2.2.1 *Separate Accounts*

Condition 2 of the PES licence requires PESs to provide separate accounts for separate businesses, these include the distribution business, the first tier supply business and second tier supply business. Accounting records should be kept as if each business were a separate company and accounts prepared which show an appropriate detail of charges made between businesses. These provide financial information about the business which is available to anyone who requests them. Financial ringfences have been placed around the PES licensed activity to ensure there are sufficient funds to finance them.

2.2.2 Prohibition of Cross-Subsidy

Under Condition 4 there is a prohibition on separate businesses giving or receiving cross subsidies. This includes the distribution and PES supply business and should prevent the distribution business bearing an unfair share of the costs to enable the supply business to operate with lower overheads. Further protection for suppliers is found through the distribution price control which limits the revenue which the distribution business may receive.

2.2.3 Provision of Non-Discriminatory Services

Turning to the behavioural restrictions placed on the distribution business, these are found in Conditions relating to the obligation to provide distribution services and metering and data services, Condition 8A and Condition 11D respectively. For these services the distribution business is required to offer terms and provide the service in a non discriminatory way. In the provision of metering and data services, Condition 11C of the PES licence requires the PES not to restrict, distort or prevent competition in the supply of electricity.

2.2.4 Restrictions on Use of Information

Finally, Condition 12 of the PES licence prevents the use of confidential information provided to the distribution business from being used to the commercial advantage of the supply business. It maintains that information provided to the distribution business should be treated as confidential except in certain limited circumstances. This should prevent the PES supply business obtaining information about competitors' customers. Condition 12 requires that each PES prepare a statement in a form approved by the Director setting out the practices, procedures and systems it has adopted to ensure compliance with the requirements to ensure that conditional information is not improperly passed to the supply business. At the end of each calendar year each PES must produce a report on its compliance during the year with the practices and procedures set out in the statement. **The statements must be made public. OFFER is presently reviewing the initial statements it has received from the PESs.**

2.3 Competition Legislation

The DGES has concurrent powers with the Director General of Fair Trading under the Fair Trading Act 1973 and the Competition Act 1980. In relation to these concurrent powers, OFFER works in conjunction with the Office of Fair Trading (OFT) under the terms of an agreement between the DGES and the OFT. In exercising his functions under the competition legislation, the DGES must act in accordance with his general duties under the Electricity Act. The new Competition Act 1998, which will confer additional concurrent powers on the DGES takes effect in March 2000. There are two tests which may be applied under the Competition Act, but only one needs to be satisfied to take action. The first prohibits agreements which prevent, restrict or distort competition and the second prohibits the abuse of a dominant position. If a PES is found to have breached the prohibition then it may be subject to a fine up to 10 per cent of its turnover.

2.4 EU Directive

The EU Directive Concerning Common Rules for the Internal Market In Electricity requires that there should be third party access to distribution systems. In respect of the PESs, the existing PES licence obligations may satisfy the requirements of the directive. **However, the position is less clear in Scotland because of the requirement to ensure the managerial independence of transmission.**

2.5 Industry Agreements

The provisions in the Pooling and Settlement Agreement (similar provisions exist in the Settlement Agreement for Scotland) which grant the present monopoly in metering services for settlement purposes fall away on 31 March 2000. Competition in these services will therefore be introduced from 1 April 2000.

2.6 Mergers and Take-overs

MEB has announced the sale of its supply business to National Power. OFFER is in the process of restructuring Midlands Electricity's PES licence to reflect this change and to retain regulatory effectiveness. New conditions are being introduced to:

- strengthen the existing requirements on information confidentiality;
- ensure operational separation of the businesses; and
- appoint a compliance officer to oversee the implementation of separation.

In addition to MEB, three other PES's have given undertakings to implement managerial and operational separation of the distribution business. Scottish Hydro, Southern and East Midlands have made a commitment to proceed with separation in assurances made at the time of merger or take-over.

Since the previous consultation paper was issued, PowerGen has announced its intention to sell East Midland's metering business to an independent service provider. The arrangements proposed in this paper take account of the possibility of such sales.

3. METERING AND METER READING

3.1 Background

In reaching conclusions on the overall approach to separation of distribution and supply it is appropriate to confirm the approach to be taken on metering and meter reading. These are presently both distribution business functions. The introduction of competition in these functions suggests that either in whole or in part metering activities should no longer be seen as part of the monopoly distribution business. Changes in this area will have a direct impact on the definition of the businesses, the scope and nature of price controls and on the approach to separation of businesses.

The consultation paper published in November 1998 affirmed OFFER's commitment to the extension of competition to all metering services from April 2000. It proposed two alternative approaches to metering separation.

In approach A it was proposed that the supply business be responsible for all PES metering services. The supply business could procure these services from elsewhere but, with the exception of the meter asset, not direct from the distribution business. The possible need for separate accounting requirements and prohibitions on cross subsidy where the supply business chose to provide the service in house was highlighted and views were invited. The distribution business would retain ownership of the meter assets and would provide meters to suppliers on non discriminatory terms. The distribution business would also provide a last resort service in meter maintenance and meter reading through a competitive open tendering process. Views were invited as to how such a tender process should be structured.

In approach B it was proposed that the full range of PES metering functions, including the meter assets, be auctioned. This would involve the transfer of ownership of metering activities from each PES to a number of new owners who would subsequently assume the role of meter service providers. As an alternative it provided for the selective auction of the metering assets presently owned by the distribution business, but not of the metering services. This approach would provide for an early eradication of the regional dominance of PES metering activity. There would therefore be no need for a service provider of last resort under this approach.

The November paper acknowledged that the proposed approaches might result in a need for licence modifications and requested views on what, if any, conditions should be placed on suppliers to facilitate competition and protect customers. The paper also considered the likely impact of the introduction of competition on advanced metering technology. It sought views on whether there is a need for OFFER to set new standards to promote the introduction of meters capable of remote communications. Finally, the paper proposed the establishment of a Metering Review Group to aid the implementation of the chosen approach.

3.2 Discussion of Previous Proposals

The relative merits of approaches A and B require careful consideration. Approach A was the approach preferred by most PESs. It recognises the importance of achieving competition in metering to the success of competition in supply. It supports the principle of supplier responsibility without attempting to prescribe how that responsibility should be fulfilled. It minimises the role of the distribution business in providing metering services. Approach A provides a basis for the development of competition in metering consistent with the separation of PES distribution and supply businesses. It is recognised, however, that this approach leaves the PES, at least initially, with a strong dominant position in the provision of some meter services in its authorised area.

Approach B develops approach A further by providing for an early eradication of PES regional dominance in metering activities. Independent competitors of the PES have expressed support for an auction of all PES metering services. However, they indicate that the value of a PES metering business to a potential buyer lies not only in its assets. Value also lies in the contracts a PES may have with suppliers to provide metering services. If suppliers were required to purchase the new buyer's services for a guaranteed period the effect would be to replace one monopoly with another and to prevent supplier choice. Whilst this problem would not be insurmountable, most respondents, whether or not in favour of approach B, agreed that the implications of this approach were far reaching and that it would be difficult to implement in the proposed timescales.

A further option proposed by the consultation paper was a combination of approach A with an auction of metering assets. The sale of metering assets would be instrumental in

removing the PES regional monopoly in this market whilst avoiding the need to allocate the regulatory asset value in price control reviews. However, most respondents agreed that it was unlikely that such a sale could take place in time for the introduction of competition in metering services from April 2000. Some respondents were concerned that in the meantime the uncertainty over the future of meter assets could prevent investment in advanced metering technology. Whilst these arguments are not wholly convincing, it would seem sensible to progress broadly along the lines of option A at this stage. Option B may be revisited at a later date, should it be considered necessary to further the development of competition in metering services.

3.3 New Framework

Against the background set out above, this section makes specific proposals for the reform of metering.

3.3.1 Role of Suppliers

The previous consultation paper suggested that suppliers should be the focal point for metering and meter reading. This reflects the present statutory position and the way in which existing industry agreements have been structured. This approach was supported by most respondents. Accordingly OFFER considers that suppliers should be responsible for ensuring that the following services are provided:

- A Meter - the obligation to ensure a meter is in place;
- Meter maintenance - the installation, commissioning, testing, repair and maintenance of meters;
- Meter reading - the retrieval and verification of data from electricity meters and its delivery to a data processor;
- Data processing - the processing, validation and (where necessary) estimation of meter reading data and its delivery to a data aggregator;
- Data aggregation - the collation and summation of meter reading data and its delivery to a settlement body.

These services may be provided in house or contracted out to a third party. It will be for the supplier to demonstrate that he has the necessary arrangements in place to provide these

services. In effect this is the present position for suppliers, except that in respect of services for settlement purposes for non-half hourly metered supplies they have no choice of service provider but must rely on the local PES.

Increasingly suppliers will be able to select service providers from a competitive market. Initially however, there are concerns that the markets for the provision of some of these services will be insufficiently competitive to protect suppliers' and customers' interests. This is likely to be the case where existing service providers have entrenched positions and where there are technical or other significant barriers to entry. Particular concerns relate to meter provision where the PESs have an established regional monopoly and where the barriers to entry seem particularly significant and to meter maintenance and meter reading where again PESs have established positions and barriers to entry may be important.

3.3.2 Role of Distribution

At present these meter related services are largely provided to suppliers by the distribution business. This section considers the future role of the PES distribution business in respect of meters and meter reading.

3.3.2.1 Meter Operation and Maintenance

The PES distribution business presently owns most of the metering stock in use in its authorised area. Each PES is subject to a licence condition requiring it to provide, without discrimination between suppliers, metering equipment by way of sale, hire or loan. Many of the PES metering assets were pre-vesting assets. This raises particular valuation issues which might lessen the effectiveness of any auction in introducing competition. In any event without an auction the PES will retain a dominant position in the provision of meters. Whilst competition can be expected to develop this may take time. Regulation will be required to protect customers, suppliers and competitive metering businesses from the dominant position of the PES as metering provider. Meters owned by the PESs will need to be provided to suppliers on a non discriminatory, price controlled basis. The implications for regulation are discussed further in chapter 6.

It was proposed in the November 1998 consultation document that the meter maintenance function be separated from the distribution business and the provision of meters. Views of respondents to this proposal were mixed. There are several advantages in the separation of

operational functions. These functions largely involve a field force, often closely integrated with the PES's meter reading staff. Although there are some technical and safety issues involved the provision of meter operation services could readily be undertaken by third parties. This has already been demonstrated in the half hour meter market. Moreover the ability of suppliers to fully integrate meter operation with other customer services is likely to provide a more seamless service for customers wherever changes of meter are required.

Conversely, several respondents argued that meter ownership and operation are closely linked. For some, but by no means all, PESs meter operation is separated from other metering functions and several PESs and other respondents questioned the timetable implications of introducing further industry agreements to deal with the circumstances where meter operation and provision are separated.

OFFER concludes that whilst the separation of meter operation would be desirable it is not a priority in the shorter term and many of the objectives may be achievable without restructuring. Accordingly OFFER proposes to retain the existing distribution business responsibility to provide maintained metering equipment within its area unless or until the supplier or customer introduces alternative arrangements. However, to extend customer and supplier choice it is also proposed to permit suppliers to provide maintenance services for PES provided meters.

There will be a need for a standard agreement which will define the scope of the meter asset provision and meter maintenance services to be provided by the PES. Such an agreement could be based on the existing standard PES agreement for meter operation. Following responses to the November 1998 paper a Metering Review Group was formed to further consider the implementation of the paper's proposals. The initial assessment of an Expert Group established by the Metering Review Group to consider the scope of the service to be provided by the PES is that meter asset provision would involve only the sale or leasing of the meter to suppliers or customers, with installation and safety checks forming part of meter maintenance. This raises a number of issues, one of the most important of which is where responsibility for recertification will lie. The Metering Review Group will be pursuing these issues.

3.3.2.2 Meter Reading and Data Processing

PESs are presently providing a combined data processing and meter reading service and some have argued that these should continue to be offered as a combined service. These are, however, two distinct functions. At present meter reading is a labour intensive activity requiring little technical or IT expertise. New technology in metering may change this over time but change here is likely to be associated with new metering equipment as much as with data processing issues. In any event geographical concentration of customers offers significant economies. Conversely data processing is an IT function and as such may be performed at any location without losing cost effectiveness. OFFER is not therefore convinced that these services should necessarily be combined. Allowing these functions to be provided separately will maximise the potential for competition in these functions. It will be for suppliers to decide whether they wish to arrange for a single provider or separate providers of meter reading and data processing.

Meter reading is an essential supplier function. Meter reads are used to update a dynamic database which feeds into customer billing and into the wholesale electricity market. While there may be some economies of location to be gained from density of customers, the loss of these economies is likely to be offset by the potential for economies presented by dual fuel meter reading and other potential cost savings. Competition in meter reading therefore should provide new possibilities for economies and give suppliers opportunities to differentiate their product through different meter reading services. The retention of meter reading activities within the distribution business is therefore unnecessary and may in itself prevent the development of competition in meter reading services. Accordingly the PES meter reading facility should be separate from the distribution business. The PES supply business may use independent agents to provide this facility or provide the facility itself.

Competition in non half hourly meter reading services may, however, take some time to develop. Because of this, it would be necessary to provide protection for suppliers against abuse of dominant market position inherited by some industry players. It is essential that suppliers have access to a non discriminatory basic service of last resort. It is therefore proposed that the PES distribution business be required to operate a tendering process for the provision of a non half hourly meter reading service of last resort. The tendering process will be transparent.

Initial indications from an Expert Group set up by the Metering Review Group (MRG) suggest that this activity should as a minimum encompass walk order control, reading the meter, time switch checks, verification of reads on site, recording read failures and leaving a card at read failures. The group suggested that the scope might also include the management of the metering database so that the service provider would have full control of how reads were organised. However, this substantially increases the scope of the last resort meter reading service. Given the convergence of the two markets it would seem sensible for the service to be similar to that offered by the provider of last resort metering services in gas. In this case the meter reader is sent all the information it requires to read a meter at the time that the read is requested. OFFER will conduct further work with the MRG to define more precisely the scope of the last resort service. However, the last resort service is intended to be a transitional arrangement as its continuation is unlikely to be either necessary or desirable once the introduction of effective competition into these areas has been successfully achieved.

Data processing and data aggregation are essentially information handling activities. Some of the necessary software is produced centrally and provided on licence to service providers. The indications are that competition may develop rapidly in these services. It may therefore be appropriate, subject to satisfactory resolution of other issues raised in the metering section of this paper, to leave these activities as a supplier responsibility without requiring the PES to offer a service of last resort.

It therefore seems appropriate for the distribution businesses to be responsible for providing, on a non discriminatory basis, either in house or by sub contract, where requested by the supplier:

- provision of existing meter assets;
- meter maintenance for its own assets;

and for facilitating, via a tendering process, a last resort meter reading service for non half hourly meters.

In requiring the distribution business to operate a tender process for provision of the last resort service for meter reading it is not intended to require, by licence obligation, that the PES's own meter business tenders for this work. Evidence suggests that there will be

sufficient response from companies interested in tendering to make such an obligation unnecessary. However, there is some concern from industry groups that this may not be the case. OFFER will keep this position under review. It will be important to understand the intentions of PES businesses given their present dominant position in the market. Steps which hinder the development of effective metering services for second tier suppliers may be evidence of an abuse of dominant positions.

3.4 Prepayment Meters

Prepayment meters provide an important functionality for suppliers and many customers, including the fuel poor. OFFER is presently reviewing the costs of providing prepayment metering and will report on these issues in the summer.

Competition in the provision of prepayment metering has the potential to bring worthwhile benefits to customers and suppliers. Liberalising the ownership and maintenance of meters will assist by enabling new service providers to introduce integrated prepayment metering and infrastructure services. It is likely however that in the short term the majority of prepayment meters will continue to be provided by PESs. In as far as is possible it seems sensible to apply the above arrangements to prepayment meters. That means the provision of the meter and maintenance of that meter would be provided by the distribution business where requested by the supplier.

Support services, such as vending outlets, are presently provided by the PES supply business. Some suppliers have argued that continuing this approach would be unsatisfactory. They are concerned that a supplier who was also a prepayment meter support services provider would benefit from the advance notification of changes to other suppliers' prices necessary to update keys, cards and related infrastructure associated with the support services. However, most prepayment meters serve designated customers, that is domestic customers and some small business customers. Suppliers are required by licence to publish their prices for these customers. Other suppliers will therefore have access to these prices. Some suppliers also expressed concern about the scope for possible discrimination in the provision of prepayment meter support services. Further consideration will be given to the need for licence obligations to maintain Chinese walls between the prepayment meter support service provider and the rest of the PES supply business and to prevent discrimination in the provision of these services. It is therefore

proposed that prepayment meter support services continue to be provided by the PES supply business on a non discriminatory basis to other suppliers.

3.5 Metering Standards

It has been argued that removing the PES monopoly in metering services would adversely impact the introduction of new metering technology. It was therefore suggested that OFFER should set standards for new and replacement meters to ensure that new technology was provided to all customers within the life span of a conventional meter. A number of possible standards were suggested and included standards to require all new meters to be “communication ready” that is to have interfaces to enable remote reading.

The benefits of advanced metering have been espoused by meter manufacturers and some consumer representatives. Whilst these potential benefits are recognised, the introduction of mandatory standards would remove the right of the customer and supplier to choose for themselves whether the benefits of an advanced meter justify the costs. Indeed, potential innovation could be stifled by the introduction of such standards. OFFER is also concerned that the setting of standards might favour one technology over other equally desirable approaches and might distort competition more widely in the supply of metering equipment. Further, it is by no means certain that the introduction of competition in metering services will adversely impact on the development of advanced metering. Indeed, any innovation which delivers real benefits to consumers will be attractive to suppliers wishing to differentiate their services from others on offer. It will be the supplier who is responsible for deciding from whom they obtain their meters and metering services. Advanced metering will be introduced as suppliers and their customers conclude that the benefits conferred by the meters outweigh the costs of meter provision.

In one area however further standards are generally seen as necessary to protect customers and suppliers. The present gas licences include provisions requiring all suppliers to obtain firm readings (that is readings taken by the company and exclude customer and estimated readings) at least once every 24 months. It would be desirable to enhance customer protection in this way once the meter reading function is fully open to competition.

Accordingly OFFER concludes that additional requirements should not be placed on suppliers or distributors to promote meter technical development but that suppliers should

be required to ensure firm readings are taken from all customer meters at least once every 24 months.

3.6 Licence Modifications

It is intended that the PES supply business will have the same obligations in relation to metering as any other supply business, with the additional obligation to allow non discriminatory access to a system supporting prepayment metering. This will be reflected in the PES licence. The PES distribution business will have an obligation to provide a tendering process for the provision of a last resort non half hourly meter reading service. It may be appropriate to retain the present PES licence obligation to provide meter reading and data processing combined until such a time as the tendered service for last resort meter reading is in place.

The PES distribution business will, if all competition issues are satisfactorily resolved, be relieved of the obligation to provide data aggregation and data processing services. It will also be relieved of the obligation to provide meter reading services for half hourly meters.

Amendments will also be required to the definition of the distribution and supply businesses and a number of minor and consequential amendments required to other conditions including those relating to use of system terms.

For reasons of safety and security and to support accuracy of billing, suppliers will be required by licence to ensure that meters are read by authorised meter readers at least once every 24 months. This will have the added advantage of bringing electricity into line with gas. At this stage it would not be appropriate to rule out more frequent meter readings. This issue will also be discussed further as part of the social action plan.

OFFER will publish specific proposals on these changes at a later date. The implications for price controls, separate accounts and financial ring fence arrangements are discussed in Chapter 6.

3.7 Implementation

Implementation may involve changes to a number of industry wide agreements and will require cross industry action. The November paper invited views on the need for a Metering Review Group (MRG) to aid the implementation of proposed changes. It also invited views on the precise membership and role of this group. It was clear from the responses received that the establishment of a representative group would be widely welcomed. It was also clear that, to achieve an operational date of 1 April 2000, immediate action was necessary by the industry.

In the light of these responses it seemed appropriate to establish the Metering Review Group as soon as possible. Whilst responsibility for the necessary changes rests primarily with the Electricity Pool of England and Wales, Scottish Electricity Settlements Limited and the Master Registration Agreement Service Company, the Metering Review Group will discuss, recommend and co-ordinate changes across the industry necessary to implement the approach set out in this paper and to facilitate the introduction of effective competition in April 2000. The group has the right to invite experts to attend meetings and to appoint expert groups to advise and inform its deliberations. The MRG is chaired by OFFER and Representatives have been drawn from interested parties as follows:

- Independent meter service providers
- PES agency service providers
- PES distribution businesses
- Suppliers
- The Electricity Pool of England and Wales
- Scottish Electricity Settlements Limited
- Master Registration Agreement Service Company

The group has met on a number of occasions. It is taking forward work on the detail of these arrangements and has established three expert groups. One such group is considering the scope of the last resort meter reading activity and the PES meter provision and meter maintenance services. A second expert group is starting to consider how the tender process for the last resort meter reading service should operate. It is important that there is consistency of approach and definition of service to be provided. This will ensure that a national supplier wishing to use the last resort service will get a similar service in each

PES area. A third expert group is considering the detailed implications of this approach for prepayment meter services.

4. OFFER'S OBSERVATIONS ON THE SEPARATION OF BUSINESSES

4.1 *Reasons for separation*

In Chapter 1.3 we summarised the main areas of concern arising from the present structure of the public electricity supply businesses. In summary these were that common ownership and integration of supply and distribution functions meant that:

- PESs would operate the two businesses to maximise overall benefits to their shareholders and in particular ensure that the interests of the supply business were taken into account in all decisions about the operation of the distribution business including the way in which distribution services are provided to suppliers;
- PES supply businesses would have preferential access to information about the distribution business and about competitors;
- PESs would have incentives and opportunities to cross-subsidise the supply business; and,
- Customer perceptions of integration may discourage customers from entering the market.

In the light of these concerns OFFER concludes that the present integration of supply and distribution activities of the PESs is likely to have the effect of protecting the position of dominant suppliers in electricity to the disadvantage of customers and competitors. Given the close interactions with competition in the gas market and the different arrangements there the present position in electricity may also distort the development of competition in the gas market and inhibit the convergence of the electricity and gas supply markets.

These concerns about the present position of the PESs were supported by most independent respondents to the November consultation paper. PESs raised no new arguments in respect of these concerns that were not addressed in the November 1998 consultation paper. Any proposals for separation of supply and distribution must address these primary concerns about the present position.

4.2 Implications of Competition in Supply

In considering the issues of PES supply and distribution integration it is relevant to note the development of competition in electricity supply. Competition below 100kW is at an early stage, the market having first opened in September 1998, with all parts of the market open in May 1999. OFFER will shortly be publishing an initial assessment of the development of competition in supply. However, it is already clear that the initial level of entry is significantly lower than that experienced in the gas market. It is probable that the present integration of supply and distribution is one of the factors that has deterred entry in the electricity market. Whilst this is by no means the only factor at work, ensuring the independence of distribution and introducing competition in metering and meter reading should enhance competition to the benefit of customers.

4.3 Work of Consultants

To assist in its assessment of the present position and the appropriate approach to separation, OFFER employed a group of independent consultants, headed by Pannell Kerr Forster (PKF), to look at the PESs existing organisation structure and their plans for separation. We also asked PKF to review initial cost estimates provided by the PESs to separate the supply business from the distribution business. PKF has now produced an interim report on its findings. The main points are discussed in the text of this paper but an overall summary of PKF's report is set out at Annex 2.

4.4 Present PES Arrangements

The present PES structures vary with each adopting its own arrangement for managing and operating the supply and distribution businesses. A small number of PESs remain, in effect, wholly integrated with supply and distribution falling under the same management structure. However, many PESs have established separate businesses with their own management structure. Some PESs have also ensured that each business is operated from separate sites.

Other PESs have made arrangements reflecting the multi-utility nature of their activities. For these PESs, common customer services have been established for enquiries on both

electricity and the other utility interest. Some engineering functions are also combined between utility businesses.

Some PESs have already introduced a considerable degree of separation between supply and distribution businesses. This has been done by having separate management teams reporting to the PES Board, moving businesses to different sites and even having separate call centres for routine distribution calls. The companies that have done this argue that it improves management focus and enables new efficiencies to be identified.

4.5 PES Cost Estimates

In December 1998 a business plan was sent to the PESs so that they could provide details of the costs which they expected to incur under different scenarios of separation. There were five key restrictions put in place in defining the scenarios. These related to the full operational and managerial separation of the distribution business from other regulated electricity businesses; a prohibition on passing information to and from the distribution business unless under industry wide agreements; a ban on common services between distribution and other group regulated electricity businesses (with any common services provided by a third party separately tendered for by the different businesses); the distribution business should not use or promote brands used by other operationally separate parts of the group and the separation should be completed as early as possible and not later than 1 April 2002.

The first scenario required complete separation between the distribution and supply businesses. The second scenario required complete separation between distribution, supply and metering businesses. In the first scenario the distribution business retained responsibility for the providing the meter asset, while all other metering functions were passed to the supply business. In the second a new metering business was created for all metering functions, including ownership of the asset.

Under the defined rules of the two scenarios used, no individual below the level of the board of the UK group could be employed as part of the distribution business (or metering if a separate business) or involved in its management and be employed as part of or be involved in the management of another group business (unless the other business was not a regulated electricity business and was operational separated from all such other

businesses.) If an individual moved to or from distribution (or metering if a separate business) to another business, he or she was assumed to do so only after a period of three months, unless the business was operationally separated from all other regulated electricity businesses.

The scenarios were set to obtain a base line for work on separation. The criteria were strict, but were clear enough to enable the PESs to interpret them without individual guidance. It was expected at the time of setting the scenarios that some changes in the definition of separation may be needed. However, there was a need to obtain information about each PES's initial view of the possible costs involved in separation.

The PESs were invited to put forward an alternative lower cost scenario which would meet the objectives of separation, but used a different method of achieving them. These could for example reduce the costs by extending the timetable of the work, or provide alternative but equivalent restrictions to obtain separation. Seven PESs provided such a return.

In the comments that follow scenario one is discussed in preference to scenario two (as the decisions taken on metering mean that this is less closely related to the intended approach). The PESs own scenarios are discussed where relevant but these are not sufficiently common in form for structured conclusions to be reached.

The total cost of the work under scenario one was estimated at £1,628 million across all PESs over six years. This comprised around £600m in one off costs and about a further £210m a year in additional operating costs over and above the estimates previously provided for distribution price control purposes. All costs are expressed in 1997/98 prices.

The costs estimates are high. PKF said that it "it is right to be sceptical about many aspects of them". However, PKF's interim conclusion is that given the scope of the defined scenarios the costs would not be reduced by an order of magnitude in the context of the extreme scenarios. They concluded that a different level of separation could achieve a desirable outcome at a much more modest cost. PKF also argued that "costs could substantially be reduced with a longer timescale". They also noted that in examining the costs they noticed that companies had interpreted the guidance in different ways.

One of the reasons that the PESs' forecast costs of separation are high is that the scenarios used in the business plans were extreme in terms of work to be carried out and the timescales within which to do it. By allowing common services to operate under certain conditions and extending the timetable for separation the costs are expected to fall.

Table 1. PES Estimates of Costs of Separation (1999/00 - 2004/05) under Scenario 1.

Costs of Separation £m 1997/98	Scenario 1		
	Average	Highest	Lowest
Relocation	15	35	4
Corporate	12	27	1
IT	44	87	20
Customer services	13	35	3
Branding	8	27	1
Metering	5	14	0
Other	20	88	0
Total (sum of above)	117	313	29
Total	116	191	69

However, there were wide variations in the levels of costs expected to be incurred which cannot be easily explained. Some examples of these are shown in Table 1 which sets out a summary of cost estimate provided by the PESs. The range in estimates is shown by the average, highest and lowest PES estimate. The final total gives the range of PES total costs and is distinct from the sum of the highest, lowest and average costs of the main cost components reflecting, in part, differences of cost allocation and interpretation by the PESs.

Table 2 shows the average costs estimates broken down between one-off and on-going costs. On-going costs are the costs estimated as being incurred by the PES on an on-going basis which would not be incurred but for the separation and which were not reflected in the PES submissions of business plans for the distribution price controls. Table 3 shows total

forecast costs per company annualised by spreading one off costs over the period to 2004/05.

PKF reported that there was a strong fixed cost element in PES estimates, and noted that smaller companies often argued that they had special factors applied to them which increased their costs beyond average. The more integrated companies tended to have higher costs, but again there were exceptions to this. Some companies who showed clear separation in many areas had estimates which were considerably higher than average. PKF commented on the fact that since many of the costs were seen by the PESs to relate to IT, those PESs with older systems often had higher costs. One concern was that the costs of renewal and upgrading may have been included in the forecasts.

Table 2: On-off and On-going costs of separation under Scenario 1

Costs of Separation £m 1997/98	Scenario 1		
	One off	On-going	Average Costs
Relocation	7.1	7.8	14.9
Corporate	1.8	10.2	12.0
IT	20.3	24.2	44.5
Customer services	1.4	11.4	12.8
Branding	3.8	3.7	7.5
Metering	1.1	3.6	4.7
Other	6.8	13.4	20.2
Total (sum of above)	42.3	74.3	116.6

Table 3: PES Estimates of Average Annual Costs of Separation under Scenario 1

£m 1997/98	Annual Costs
Eastern Electricity	29.2
East Midlands Electricity	18.4
London Electricity	21.6
Manweb	19.9
Midlands Electricity	28.4
Northern Electric	13.8
Norweb	15.2
Seaboard	14.9
Southern Electric	35.1
SWALEC	34.3
SWEB	16.7
Yorkshire	16.9
Hydro	38.3
ScottishPower	23.1
Total	325.7

Looking at the individual categories the PES estimates of costs varied significantly - generally there was a ten fold spread between the lowest and highest cost estimates. The narrowest spread was around the costs for work on IT systems, with the most expensive PES estimating costs which were about five times the cost of the cheapest. It was also found that PESs were allocating different proportions of costs between the one off and ongoing expenditure. This may reflect their varying present arrangements, but some PESs did have very high levels of on-going expenditure in areas which might be expected to be concentrated in the early years, such as branding.

Costs associated with IT systems accounted for around 40 per cent of the total costs of separation. PKF noted that the estimates varied in detail. Most PESs had taken the scenarios to require a full separation of all IT applications including all hardware and IT support services. PKF noted that this was an extreme scenario and concluded that PESs should be allowed to operate common services in this area, but with a view to new developments being provided separately for the relevant business. In the meantime

Chinese walls should be strengthened to prevent information crossing from the distribution business to the supply business.

Customer services are a further area where PESs forecast considerable costs were likely to be incurred, with over 10 per cent of the forecast costs being allocated here mostly of an on-going nature. PKF did not consider that setting up separate call centres for no supply calls should incur significant extra costs as some PESs already operate a separate call centre for such calls.

For relocation, the assumptions made by companies varied considerably. Some PESs were proposing to move staff between towns, while others tended to use existing buildings. PKF urged that those PESs which had suggested moving staff between towns should be questioned about the logic behind this proposal. They also said that some specific PES costs should be queried as it appeared that a number of PESs had signed leases and were proposing to use separation as a way of vacating the premises. This may lead to the costs being inflated as the leases were uneconomic. PKF pointed out that if IT could remain a common service then many of the costs of refurbishment would be avoided. Keeping meter operations as part of the distribution business would also reduce the need to set up separate depots for engineering staff.

The estimates for corporate restructuring costs showed the PESs believed that there were substantial loss of economies of scale and that running separate finance, human resources, legal advice etc. would require significant additions to staff. However, it is not clear why such increases are justified.

Most PESs suggested rebranding distribution businesses would cost between £3 million and £6 million, although there were some who said it would cost over £25 million. Branding showed a significant diversity of cost estimates and some PESs observed that given sufficient notice costs could be reduced considerably eg by changing uniforms at time they were planned to be replaced, although this may possibly confuse the public. PKF suggested that the public education costs were likely to be low, since customers seldom needed to contact the business.

PESs were invited to prepare an alternative scenario to achieve the objectives of separation, but at lower cost. Seven produced alternatives with the majority maintaining shared

services for IT and customer services. The PESs concluded that if the compliance role was rigorously enforced then they would not need to make so many changes, although most agreed to increasing physical separation and most accepted that separate branding was helpful. The costs of this work was estimated at between £3 million and £66 million. However caution should be exercised in interpreting data from the alternative scenarios as these were not produced on a common basis and in some cases introduced separation which falls short of the minimum requirements.

4.6 Existing Requirements on Separation

As is noted in Chapter 2 PESs presently have a number of licence and other requirements which point to the need for effective separation of the supply and distribution businesses. Existing conditions include requirements that the PES: ensures that it does not discriminate between suppliers; does not distort or deter competition in supply through setting charges for use of system; and avoids cross-subsidies between businesses. In addition there are existing requirements on the confidentiality of information. OFFER concludes that existing PES arrangements are unlikely to ensure satisfactory compliance with these obligations and that the present structure of arrangements within PESs may be tantamount to an agreement designed to distort or deter competitors.

Given existing licence provisions and the powers granted under Competition legislation OFFER concludes that a number of steps are now appropriate to address the concerns about supply and distribution integration and to ensure compliance with existing obligations. These steps are set out in the next section.

5. IMPLEMENTING THE SEPARATION OF THE DISTRIBUTION AND SUPPLY BUSINESSES

5.1 Overview

The preceding Chapters have outlined the need for greater separation, described the views of respondents to previous consultations and described the assessments made by OFFER's consultants. We have also made proposals for the reform of metering arrangements. In the light of these factors OFFER considers that PESs should be required to implement the separation of their distribution and supply businesses.

The proposed changes are intended to benefit customers by:

- addressing the concerns about the present position set out in Chapter 1
- enhancing competition in supply and metering;
- providing new opportunities for change in the industry and for management to identify new sources of efficiency;
- facilitating the more effective regulation of monopoly distribution services and in particular the setting of price controls.

In addition we have considered existing best practice in the industry with a view to building upon existing arrangements where possible and minimising the costs and difficulties of implementation of any necessary changes. The changes are also intended to assist in the preparation for new licensing arrangements following the planned change in legislation.

In general the proposals set out below are based on the proposals made in the previous consultation paper. As a general principle we consider that the maximum possible separation of businesses is necessary and appropriate to address the concerns raised by the present position. Areas where integration is to be maintained need to be reviewed critically to ensure that they do not involve cross subsidy or otherwise distort the development of competition. The assumption should be that services should be separated

unless they can be demonstrated to comply with strict conditions designed to protect customers and competitors.

Greater separation is necessary in three main areas:

- management;
- information; and,
- operation.

These are discussed in turn below prior to a discussion of the treatment of common services and consideration of the issues of branding, establishing compliance arrangements, the implications for the PESs in Scotland and the implementation of the proposals. The chapter concludes by summarising the proposals and considering the need for licence amendments.

5.2 Managerial Separation

Many PESs have already separated the management of their supply and distribution businesses to some extent. This allows each business to concentrate on their core responsibilities i.e. engineering for distribution and energy purchasing and customer services for supply. Those PESs who have moved away from an integrated structure say they have done so to allow them to operate more efficiently. By giving the distribution business the authority to run its day to day business independently a culture of separation is created.

It is important that decisions which have commercial implications are made within the distribution business without reference to the supply business. All day to day decisions should be carried out by the distribution business together with key financial decisions. In particular, any area which may have an impact on competition in the supply of electricity should be dealt with entirely within the distribution business. This would include the setting of distribution use of system charges and finance, strategy and regulatory functions.

5.2.1 Management of Distribution and the Availability of Resources

The distribution business should be provided by the PES with such premises, systems, equipment, facilities, property, personnel, data and management resources as are

necessary for the efficient and effective management and operation of the distribution business. Restrictions should be placed on the transfer of staff from the distribution business, where legally possible.

In the gas industry it was necessary to create the post of Managing Director for the transportation business - that is, the equivalent of the distribution business of the PESs. This was necessary given the way the gas industry had been set up. However in the electricity industry there is a defined role for the distribution business together with existing obligations on it, such as financial ringfencing. Therefore it would not be appropriate for the regulator to decide the managerial structure of PESs by having a licence condition to require the PES to appoint a managing director of distribution. However, given an obligation to have separate management of distribution it is highly probable that all PESs will create a post of this nature as many have already done. Indeed to demonstrate compliance with this approach OFFER believes it would be necessary for each PES to demonstrate that it had distinct and complete management structures for distribution and other businesses. Although in the context of the Scottish PESs it may be necessary to clarify the position for the transmission business.

5.2.2 Relationship with the PES Board

The PES Board, and any other part of the PES group which shares information with the distribution business, should only undertake the minimum legally required to fulfil their responsibilities in relation to the distribution business. This will ensure that supply and distribution only have the minimum contact which is legally necessary to run the businesses. The Board would need, for example, to agree the group accounts and other general provisions. It should not have detailed oversight of the distribution function. A model for this type of separation of Board functions existed with the restrictions placed on the then PES owned holding company of the National Grid Company. The precise nature of the relationships between the Board and the supply and distribution businesses will need to be assessed against individual company and group structures.

OFFER concludes that the distribution business should have full managerial independence from all other businesses in the PES group which have energy trading interests (that is electricity supply and generation and gas supply). All the commercial and operational decisions of the distribution business should be made within the business and without reference to or involvement with any energy trading interests of the PES, unless through

public consultation or to the extent that the PES Board (or a holding company Board) is legally required to be involved.

It is important that the way in which a PES distribution business deals with its supply business is formally defined. PESs' have contracts with all other suppliers which operate within their authorised area and should be required to have similar arrangements with their own supply business to place the relationship on a formal basis. This will reduce the possibility of staff making special arrangements for the PES supply business.

They should as far as legally possible mirror those that the distribution business has with other suppliers. Agreements should be published and kept in place for as long as the distribution and supply businesses are held in common ownership. Since suppliers and customers may have similar concerns about metering services provided by the distribution business to the PES supply business, the same arrangements should be in place for metering services provided by the PES.

5.3 Information Separation

The present restrictions concerning information restrict the use to which information is put. They do not directly restrict access to information by both businesses. This enables the PESs to argue that the largely integrated form of their information systems is acceptable. OFFER does not accept this proposition. Where information is available it must be assumed to be used. The present position gives no incentive on the businesses to identify clearly where data is owned, who is responsible for maintaining it or, indeed whether it is necessary for the business. This results in large amounts of data being described as shared between the businesses.

OFFER concludes that security of information for customers and competitors can only be achieved through the separation of data and the implementation of strict controls about the ability of businesses to access data.

5.4 Operational Separation

In addition to having separate management and information for distribution, there should also be operational separation of the businesses. This will help ensure that the distribution business is run as a separate entity, rather than as a part of a larger business.

The premises, systems, equipment and staff of the distribution business should not be shared with or used for any other business. In addition the distribution business should have staff whose work relates solely to the distribution business. The staff should not be accommodated in the same buildings as supply staff, or with the staff of any other energy trading business.

The application of these general principles is considered in the next section on common services.

5.5 Common Services

At present all PESs operate with significant levels of services shared between distribution, supply and perhaps other businesses. These services typically included many corporate activities such as personnel and finance, IT services, accommodation, transport and customer services, including the provision of call centres. Where services are shared between supply and distribution (whether managed within supply or distribution or elsewhere in the PES Group) these services are described as common services.

PESs argue that operating such common services is the cheapest way of providing the services for the two businesses and enforced separation would increase costs and these costs would then have to be passed onto customers. OFFER does not accept that this is generally the case. PESs have not demonstrated adequately that they have sought alternative approaches to the provision of these services. More generally the operation of many of the common services are the focus of competitors' concerns about the present integration of supply and distribution. They also provide significant opportunities for providing cross-subsidies to or from distribution.

Nevertheless OFFER accepts that in limited circumstances the provision of shared common services may not be counter to the development of competition and may provide for the

distribution business the service in the most economical and efficient manner possible. Subject to the general presumption against the provision of common services it would be appropriate to provide for continuing common services in strictly defined circumstances. We consulted on the criteria to be adopted in the previous consultation paper.

In the light of responses and the further analysis in this paper OFFER concludes that common services should only be provided if the distribution business can demonstrate that the arrangements satisfy the following criteria; namely that they:-

- do not involve a cross subsidy being either given to, or received by the Distribution Business;
- obtain for the Distribution Business, in the most efficient and economical manner possible, the use of the relevant premises, systems, equipment, facilities, property or personnel; and
- do not restrict, distort or prevent competition in the generation or supply of electricity.

Where common services are retained it would be appropriate for the distribution business to tender out major requirements with alternative service providers as a means of demonstrating that it had explored alternative options for the efficient and economical provision of the service to distribution.

We asked the consultants to look at the existing arrangements for common services when they were reviewing the present extent of separation within the PESs. It could be concluded from the consultants interim report that none of the PESs presently had arrangements which would comply with these proposals.

5.5.1 Who can provide common services?

At present common services may be provided by a variety of people. They could be outsourced to a third party with no connection at all to the PES; to a subsidiary company within the group or by one or other of the supply or distribution businesses.

Where the common services lie and on what basis they were procured affects the degree of concern that OFFER or suppliers may have about the treatment of the service. As a general principle if the service is provided by a third party with no connection to the PES and has been procured competitively then the main concern is whether each business is bearing a fair share of the charges and whether the service itself discriminates in favour of the PES supply business. However, if the service is provided by a subsidiary of the PES or by an affiliate then this raises no issues for the purposes of this analysis that are not raised by provision from within the PES itself.

More generally, to reduce competition concerns it would be appropriate for common services to be operated and managed outside the distribution business, unless the distribution business is the predominant user of the service. Two of the biggest present common services, those of IT and call centres, would both be run outside the distribution business, probably by the supply business. If the distribution business wanted to continue to use this service it would need to demonstrate that it could meet the requirements of providing no cross subsidy, obtaining the service economically and not distorting competition.

5.5.2 Sharing IT and Call Centre services

It has already been established that setting up duplicate IT and call centre systems for the distribution business could be expensive, although much is likely to depend on the specific position of the PES. Several PESs may wish to continue joint provision of the IT services for some time into the future, and await the introduction of new systems before completing separation of services. This would require consideration of the extent to which such a common service complied with the conditions set out above.

In respect of IT PESs already have an obligation to maintain confidentiality of distribution information. Accordingly there should be Chinese walls in place to fulfil most information confidentiality requirements. It will be for the PESs to demonstrate that these are sufficient to avoid the distortion of competition and that the costs of the systems are properly shared between users. PESs will also need to show that they are exploring alternative means of providing such services.

Most PESs operate integrated supply and distribution call centres. However the majority of calls received by the supply business will relate to enquiries such as meter readings or payment queries. If the core distribution business deals mainly with no-supply and connection issues, the distribution calls account for less than around 1 in 5 calls made to a PES call centre. Some PESs have recognised the benefits of having a team dedicated to dealing with distribution calls and have set up a separate telephone number for these calls. This enables the calls to be answered by staff who specialise in distribution issues, for instance queries about no supply problems, meter faults and connections. As part of the operational separation of the distribution business separate call centres should be established for normal day to day enquiries with separate customer enquiry numbers established for supply emergencies.

Distribution businesses can be subject to substantial extra demands on call centres at certain times. If there is a major supply fault then they need to have access to extra resources to answer the telephones of people who are off supply. This typically happens at times of bad weather such as heavy snow storms, high wind or thunderstorms where overhead lines are often severely damaged. At the moment PESs are able to divert staff from dealing with supply enquiries to help with large scale distribution faults. If no common services were allowed the distribution business would have to make alternative arrangements. PESs argue that it would be expensive to have, say, 100 staff available in the distribution business on standby at all times just in case there was severe distribution system failure.

Although the licences provide for the distribution businesses to provide an emergency service for all customers it is not clear in practice whether customers in the competitive market will contact initially their supplier or the local distributor. Experience in this area may suggest that effort by the distribution business should also focus on ensuring good communications with suppliers.

Again it will be for PESs who wish to continue with such shared services to demonstrate that they have met the criteria for common services. One approach may be for the distribution businesses to set up and operate their own system for day to day enquiries, but to seek additional emergency cover. If a third party supplier can provide adequate cover more cheaply then the distribution business should obtain the emergency cover from them. However, if the PES supply business can provide the cover more cheaply and it can be

shown that there is no cross subsidy to or from the distribution business and that the arrangements would not restrict, distort or prevent competition, this would be an acceptable arrangement.

5.5.3 Sharing common services with Multi-Utilities and Merged PESs

When looking at whether the PES may share functions with non-energy utility businesses it is critical to look at whether such arrangements could adversely affect competition. For instance, there may be substantial overlaps between running a distribution business and the some of the engineering services associated with the water industry. Here, it may be cost effective to operate a common pool of engineers for some tasks with no adverse effect on competition so long as the normal prohibition on cross subsidy is observed. In such cases it is likely to be straightforward to demonstrate compliance with the terms for common services. In other cases relationships with other parts of a multi-utility group may mask common services which involve cross-subsidy or otherwise distort competition in electricity supply. Each case would need to be considered on its merits.

Similar considerations apply where two PESs have merged. In general OFFER would not wish to restrict the PESs from integrating the two distribution business services where this was efficient. Where mergers have been approved the integration of distribution services are not considered to distort competition. However, it should be noted that the integration of distribution functions is distinct from the integration of common services shared between the supply and distribution businesses. Accordingly each case needs to be considered on its merits.

OFFER does not consider that general provisions in respect of multi-utilities or merged PESs would be appropriate.

5.6 Branding

In addition to the arrangements to introduce operational, informational and managerial separation of the distribution business from other businesses a further simple step should be taken which would further separate the business from the existing PES supply business in the minds of customers and suppliers. This would be to undertake the rebranding of the distribution business in the same way that British Gas formed Transco to operate the

transportation side of the gas business. With separate brands the link between the supply and distribution may be weakened. This, together with the other arrangements, will loosen the ties between the distribution and supply and help reinforce the culture of separation in the minds of staff.

It should be possible to re-brand the distribution business at relatively low cost since the business mainly deals with other suppliers. There are relatively few occasions, such as no supply faults, when ordinary customers need to contact the distribution business. It would be expected that most metering problems would be dealt with by the supplier on behalf of the customer and most connection queries would come from builders.

5.7 Compliance Officers

The work on separation will take time and effort to achieve. Every single aspect of the work presently carried out by the distribution business will need to be examined to ensure that the work is being carried out by the proper staff with the correct resources. While separation of the businesses is being carried out the distribution and supply businesses will need to undertake normal day to day activities. Experience of the separation of the gas industry, and increasingly from MEB, shows that undertaking a complete review of the way a business operates is difficult. It is important to understand that it will be the PES's responsibility to undertake the work, although with guidance from OFFER.

There is a clear role for someone who can take an objective view of the way that the work is structured and the implications behind any proposed new arrangements. In the same way that a compliance officer was appointed for British Gas when gas transportation was split from the trading business, compliance officers will be needed for the PESs.

It would be appropriate for each PES to appoint a compliance officer, following consultation with the Director. The compliance officer will be expected to undertake a variety of tasks related to the separation of the distribution business from the other PES businesses. The PES will need to provide the compliance officer with the staff and resources needed for the officer to perform their duties.

The principle responsibilities relate compliance with the requirements to achieve full operational and managerial separation. They should include:-

- providing advice and information to the Licensee for the purpose of ensuring compliance with the licence;
- monitoring effectiveness of the procedures, practices and systems set up to comply with the licence requirements on confidentiality and separation;
- investigating any complaint or representation made about compliance;
- recommending and advising upon remedial action which is necessary to correct any problems including providing any relevant advice to ensure compliance; and
- reporting annually to the directors of the licensee as to the activities carried out in the year.

It is envisaged that the Compliance Officer would report to the PES Board (or Group Board if appropriate) and would be directly involved in the management decisions surrounding the implementation of separation requirements.

The relevant details of the activities carried out in the year by the Compliance Officer, together with areas which cause concern and the solutions found to address these problems should be included in an annual report which is made available to OFFER and to the public. However, there may be times when this is not appropriate. An example of this may be where an in depth investigation is made into the security of the IT systems. In these circumstances it may be appropriate to provide an abridged report of the activities for publication and a full report for the Director. However, confidentiality would not be regarded as sufficient cause to fail to publish details of any failings in the practices, procedures and systems.

5.8 Separation of transmission business in Scotland

In Scotland the PESs presently integrate many services between distribution and transmission. OFFER considers that requirements for separation apply equally, if not with greater force, to the management, information and operation of the transmission businesses as they do to the distribution businesses. In general a broadly similar approach should be

adopted in respect of the transmission businesses. A separate consultation paper will be published on the transmission business in Scotland. This will include consideration of separating out a regulated interconnector business and the creation of an independent system operator. The paper will address these issues in more detail.

5.9 Implications for PES Generation Businesses

In the last paper OFFER asked for views on whether all PESs should be prohibited from constructing and operating embedded plant in the same way that East Midlands Electricity was at the time of the PowerGen take-over. It does not seem necessary at this stage to impose a prohibition on all PESs from building further generation plant within its authorised area. However, this should be reviewed on a PES by PES basis as part of the work on separation. A different view may be appropriate for the more vertically integrated companies. Where the link between the distribution and generation businesses are close enough for the generation business to influence the activities of the distribution business, then a prohibition may be appropriate. At present however it should be noted that the general restriction on common services applies to services shared between PES distribution and generation businesses.

It is proposed that embedded generation owned by the PES should undertake to enter into formal arrangements with the distribution business in the same way as any other embedded generator. The same requirement to publish the agreements should help to minimise the risk of the PES owned generation being treated in a more favourable way than others.

5.10 Implementation

Implementing the changes described in this section may take time. PESs will commence work from different starting points in respect of the degree of separation already achieved. Some PES's arrangements may meet the proposed requirements in some areas. However, no PES is thought to be fully compliant. Now that the proposals for the separation of the distribution businesses from the supply business have been confirmed the PESs should commence preparation of their plans to comply with the proposed licence conditions. The compliance plan should cover all aspects of operational and managerial separation of the distribution business from other businesses. This would include a full plan showing the structure of the existing organisation and the changes which are proposed to meet the

requirements of separation, together with a proposed timescale. These will form the basis of discussions with OFFER about what action is necessary to provide sufficient separation.

Critically, where a PES proposes to continue operating common services it should demonstrate that such arrangements meet the specific criteria for derogations, or detail how it plans to demonstrate compliance.

PESs should also prepare distribution use of system, metering services and embedded generation agreements for their supply businesses. Where it is decided that shared services are appropriate, agreements will be needed to formalise the arrangements.

As it takes time to introduce new arrangements, premises and systems it is unlikely that PESs will be able to comply with all requirements immediately. Therefore, OFFER proposes to permit derogations from the requirements where a PES is unable to comply with the obligations on confidentiality of information or the managerial and operational separation of the distribution business.

The Licensee may request that the Director issues a direction relieving it of the obligations where it is not reasonably practicable for the Licensee to comply with any aspect of those obligations. This could for instance cover the case where a compliance plan is in place but it is not reasonably practical to complete separation arrangements immediately.

5.11 Conclusion

OFFER believes that the requirements set out in this paper on the separation of businesses could be placed on PESs in the context of present licence and statutory obligations on the PESs. They are designed to ensure that the arrangements made by the PESs do not involve cross-subsidies between businesses or distort, prevent or deter competition. Subject to this they are also designed to enable PESs to obtain services for the distribution business in the most efficient and economical manner possible. Given the present licence and statutory regime such changes seem necessary to ensure compliance with existing provisions.

However, other aspects of this paper require licence amendments. Whilst amendments are not essential it would be desirable to take the opportunity to rationalise the position and

provide a clearer licence framework for future discussions on the separation of businesses. Accordingly OFFER proposes to amend the existing Condition 12 in the PES licence (Condition 9 in the PES licences in Scotland). The form of the amendment closely mirrors that recently proposed in the case of the merger of National Power and Midlands Electricity. The text of the proposed amendment, which is intended to reflect the main policy objectives set out above, is reproduced at Annex 3.

OFFER believes that an amendment of this form should be made at an early stage in respect of those PESs which have given assurances concerning separation. For other PESs it may be appropriate to make amendments later in the year around the same time as price control decisions are reached.

6. IMPLICATIONS FOR PRICE CONTROLS AND SEPARATE ACCOUNTS

This chapter considers the implications of the proposals set out above on metering and separation for price controls and separate accounts.

6.1 *Changes Arising From Metering Reforms*

The changes in metering arrangements set out above will have significant implications for price controls. For metering, the distribution business will only be obliged to continue to provide existing meter assets and maintain those assets. A new requirement will be placed on it to tender for a last resort meter reading service. These obligations are substantially reduced from those which were previously placed on it. The supply business will become responsible for obtaining meter readings and the data processing and data aggregation functions.

First, the assessment of distribution business operating costs needs to take account of the transfer of meter reading activities from distribution to the supply business from 2000/01. A first step in developing projections of operating costs on this basis is included in the OFFER May 1999 paper on the Distribution Price Control Review. The costs of meter reading will be taken into account as part of the supply price control review.

Second, the form of the new control will need to take account of the obligation on the distribution business to procure a meter reading service of last resort and the introduction of competition. It is likely that the revenue for the last resort meter reading service will be outside the scope of the main control. However, some constraints are likely to be placed on the amount which the distribution business can charge suppliers under these arrangements, particularly in the early stages.

Third, similar considerations apply to meter provision and maintenance. Here the revenue is likely to be treated as part of the controlled revenue but it will be appropriate to consider means of adjusting that revenue downwards where competition develops and parties other than the PES distribution business provide meter equipment.

Fourth, consideration needs to be given to the structure of distribution charges. PESs have submitted revised use of system charging statements showing separate charges for

metering functions and use of system charges. The separation of charges for use of system and metering will need to be considered further in the light of conclusions on the price control. More generally it will be important to ensure that the PESs' charging structures are appropriate given the development of competition in supply and metering functions.

6.2 Changes Arising from Separation

The proposals set out in this paper raise two main issues for price controls. First, the separation proposals and the need to minimise opportunities for cross-subsidy imply the need for a new assessment of the allocation and attribution of the costs of certain common and corporate services, including advertising, customer services and billing.

Second, the separation of businesses may have an impact on the costs of operating the businesses. PESs were asked to provide initial estimates of the costs of separation under different scenarios. As is shown in Chapter 4 the information provided to date is not directly relevant to the present proposals. The proposed terms of the requirements for retaining common services allow economic services to be retained where they do not distort competition or involve cross-subsidies. The scenario against which the PESs prepared cost forecasts assumed no shared services would be permitted. Inevitably this strict assumption would give rise to significant costs that need not be incurred. More generally however the PES estimates do not appear to represent a sound basis for further work. Cost forecasts varied widely between companies in a way which did not appear to reflect any fundamental differences in circumstances between the companies. Further work may be required here to obtain more robust data from the PESs.

In considering the implications for price control no assumption should be made that any additional costs should be met by distribution system users arising from separation. It is not clear that separation gives rise to additional costs. More focused management and fresh opportunities to identify economies provide opportunities for cost savings. Even if some costs are identified it is not clear whether these are appropriately allocated to distribution as opposed to supply.

As noted in this paper the requirements for separation are already largely in place through existing licence conditions. Some companies have already taken steps to separate businesses along the lines proposed. Others have not and it would seem inappropriate to

reward such companies. Several companies already have given assurances on separation in the context of addressing detriments arising from mergers. Further merger activity may have an impact on the position of companies over the next year or so.

6.3 *Other Implications*

The changes set out in this paper will also have implications for work on separate accounts and on licence conditions defining the distribution business and its obligations.

Separation and reform of metering arrangements may also have implications for the revision of the supply price restraints.

6.4 *Next Steps*

OFFER will be discussing the implementation of these proposals with individual PESs. In particular, the plans OFFER will wish to review drawn up by PESs have to comply with the licence proposals and the circumstances in which derogations may be given to operate common services. The objective will be to develop a better understanding of the issues surrounding the implementation of these proposals with individual PESs. It will be necessary for this work to be undertaken in parallel with the next steps on price controls.

Views are invited on the issues raised in this paper. Chapter 1 provides details of how to contact us.

ANNEX 1: VIEWS OF RESPONDENTS ON SEPARATION AND METERING

There were several suggestions made in the November paper about the way the work on separation of businesses could proceed. The paper also considered which business should take responsibility for the different types of metering functions. In all 42 responses were received to the consultation paper. This Chapter summarises the views expressed.

A1.1 Views on Separation

A1.1.1 Public Electricity Suppliers

PESs remained opposed to compulsory separation of ownership of the supply and distribution businesses. They argued that separate ownership would not enhance competition and was likely to lead to inefficiency in the provision of services to customers. Most PESs also argued that compulsory separate ownership would result in significant additional operating costs through unnecessary duplication and complexity. Separate legal subsidiaries under common ownership, rather than separate ownership, was, said the PESs, the option favoured by the Government.

PESs argued that once legislation was in place providing for separate licences for supply and distribution, there was likely to be a major rationalisation of the electricity industry. This should provide sufficient comfort that the market would determine a satisfactory separation model over time. Some PESs also argued that existing powers, such as tougher licence conditions and the possibility of a reference to the Competition Commission, provided for the Director to take appropriate action in the event that a PES was considered to have abused its market position. The PES licence changes and the new agreements put in place for 1998 were also considered by the PESs to be an effective mechanism for facilitating competition.

The proposal to establish use of system agreements between the distribution and supply businesses in a similar form to those offered to second tier suppliers was agreed by PESs. Most PESs also said that they had established or saw no difficulties in establishing meter related agreements between the two businesses. However, there was some resistance to the proposal that these agreements should be published. Whilst a number of PESs stated that they would be willing to make their agreements available for wider scrutiny, some PESs argued that it would not be appropriate to publish commercially sensitive information.

PESs did not object to the principle that an agreement should also be put in place in circumstances where the distribution business had an interest in generation embedded in its authorised area. However, there was strong resistance to any proposal that PESs should be restricted or precluded from having an interest in embedded generation. PESs argued that such prohibition may restrict the development of economic schemes which may also limit reinforcement costs. Some commented that prohibition on East Midlands Electricity was specifically related to its take over by PowerGen, which had a significant interest in generation.

A number of PESs said that they had already appointed a separate managing director for the distribution business. While it was agreed that this would facilitate a culture of separateness, some PESs argued that the board would still be required to exercise control over key decisions and would require access to information on both businesses to discharge its statutory responsibilities. Restrictions on sharing operational and management functions between distribution and non-energy utility interests should only be put in place if it was clear that there would be significant detriment to the public interest.

Most PESs argued that the preparation of a plan for implementation of measures to ensure greater separation could not be undertaken in the absence of agreement on the form of such a plan and on the overall objectives. Concern was also raised about any proposal to publish compliance plans which may contain commercially sensitive information. A number of PESs said that the manner in which the required model of separation was achieved was a matter between each PES and OFFER. The need for a focal point for monitoring and reporting on compliance was accepted by most PESs, with some stating that they had already appointed a director with responsibility for ensuring compliance with requirements such as those imposed by Condition 12. However, some PESs argued that insisting on a Compliance Director was too prescriptive. While others said that they would not object to the publication of any public reports on compliance, confidentiality concerns were raised.

On the issue of common services, PESs argued that separating out shared services would add significant cost without delivering any additional benefits to customers or assisting the achievement of regulatory objectives. Some PESs said that it would be possible to benchmark the services they provided against similar services provided by external organisations. In addition, PESs said that it should be acceptable for some services, such as payroll,

property and pensions, which they argue do not have an impact on the competitive environment, to be provided on a Group basis. They said that the cost benefits and efficiency gains provided by the sharing of such services should be permitted to continue.

PESs argued that the justification for continuing to use a common call centre was the ability to call on significant additional staff resources quickly at any time to deal with customer enquiries on system emergencies. They added that it would be difficult to provide the same level of support in dedicated network service centres at reasonable cost. An integrated IT function, most PESs argued, was the most effective means of providing an efficient support service to both businesses. They added that the cost implications of replicating functions and systems were such that this service should remain integrated. Some PESs suggested that ensuring that the IT service is provided at an appropriate rate for the quality of service required could be achieved by benchmarking against external services. PESs argued that it would be important to identify the costs of operating under the new arrangements and to ensure that price controls fully reflect these. In addition, they said that the present cost allocation guidelines needed to be revised to reflect an environment where greater separation was required.

Most PESs said that the same business separation principles should be developed in Scotland as in England and Wales. Some PESs advocated some form of separation of the transmission, Interconnector and distribution businesses of the Scottish PESs. However, the Scottish PESs argued that there were unique characteristics in Scotland which would need to be taken into consideration.

A1.1.2 Second Tier Suppliers

There was strong support from second tier suppliers for separate operational and management arrangements for each business. However, they said that, so long as cross-subsidy and discrimination concerns were eradicated, it was unnecessary to prescribe separate ownership. Second tier suppliers also supported the proposal for PESs to establish and publish use of system and meter related agreements between the supply and distribution businesses. Second tier suppliers did not suggest that there was a need to place restrictions on PESs operating embedded generation. However, one second tier supplier said that there should be effective management and operational separation.

One second tier supplier said that all operational and management functions up to board level should be separate as between distribution and supply. The proposal that each PES should be required to prepare and publish a compliance plan was supported by most second tier suppliers. Second tier suppliers also agreed that a compliance director should be appointed to oversee and report on the effectiveness of separation. One second tier supplier stated that compliance reports should be made available to interested parties.

On common services, one second tier supplier argued that shared systems and functions were undesirable. This supplier added that integrated services should not be permitted without stringent separation of activities and adequate security measures. It said that any derogations granted to a PES should be subject to public consultation and limited to a period of 12 months until alternative arrangements could be put in place. However, another second tier supplier commented that requiring duplication of common services may lead to increased costs which would not be in the interests of consumers.

One second tier supplier said that transmission and distribution in Scotland should be separate from generation. Another second tier supplier advocated the creation of a single independent transmission system operator to help facilitate competition in Scotland. However, this supplier said that this issue was best considered as part of the review of the Scottish Trading Arrangements.

A1.1.3 Consumers' Representatives

Electricity Consumers' Committees supported the separation of supply and distribution, but saw no need for compulsory separation of ownership. However, some Committees said that separate ownership was desirable and was likely to occur naturally in any case with the appropriate legislative environment. The Committees continued to be concerned, however, by the possibility that the costs associated with greater separation will be passed through to customers. There was support for the proposal that PESs should be required to establish use of system and meter related agreements between the businesses.

Many Committees supported the proposal for the establishment of discrete management for supply and distribution, although one said that the scope and nature of the managing director for distribution need not be too prescriptive provided that a person on the board had responsibility for compliance. The proposal that PESs prepare and publish compliance plans

was supported by most Committees, as was the proposal for the appointment of a Compliance Director. A number of Committees also agreed that public reports on compliance should be published.

On common services, some Committees said that a derogation for integrated services should only be granted where this does not give rise to cross-subsidy issues and results in the most economical provision with no distortion of competition. Some Committees suggested that the management of integrated services should be provided by third parties after competitive tender. They considered that outsourcing was preferable to duplication of databases and call centres. The Committees expressed reservation about the effectiveness of a national call centre, although there was some support for separate enquiry points for supply and distribution.

A1.2 Views on Metering

The November paper requested views on two proposed approaches to metering separation, both of which placed responsibility for all metering services with the supplier. Under Approach A the distribution business retained its meter assets and was obliged to provide a last resort service in data retrieval and meter maintenance through an open competitive tendering process. Approach B proposed that the full range of PES metering services, including the meter assets, be auctioned. The paper also asked for views on the likely impact of the introduction of competition into metering services on advanced metering technology.

A1.2.1 Public Electricity Suppliers

The PESs expressed general support for the introduction of competition in all metering services by 1 April 2000. The majority of PESs preferred approach A but were concerned that this might prevent them from establishing an associate or subsidiary metering business which might compete in the market. Most PESs were opposed to an auction of either metering services or metering assets.

Some PESs expressed the view that a last resort service in meter reading and meter operation, as proposed in approach A, would be unnecessary and expensive.

A1.2.2 Meter Reading Agencies and Meter Manufacturers

Metering service providers welcomed the introduction of competition in metering and were keen to see a greater convergence between the arrangements applying in electricity and those applying in gas. The majority preferred approach B to approach A.

Meter manufacturers expressed divided opinions about the ownership of PES assets. Some said that the PES distribution business should be responsible for providing a basic meter which may or may not be communications ready. Others advocated that the assets be sold at auction whether or not the other PES metering services were subject to auction.

Most manufacturers and service providers said that the introduction of advanced metering should be left to market forces and that there was no need for OFFER to set standards for meters capable of remote communication.

A1.2.3 Second Tier Suppliers

Second Tier Suppliers were supportive of the liberalisation of metering services and stressed the importance of consistency between the gas and electricity regimes. They also expressed the view that the costs of moving towards a competitive metering services market should be borne by the PESs which had benefited from the extended monopoly.

A1.2.4 Consumers' Representatives

Most Consumers' Committees who mentioned metering supported approach A, at least as a short term measure.

Several committees saw advanced metering as bringing many customer benefits especially to those customers using pre payment meters. They were therefore in favour of setting national standards for communications ready meters. Others were concerned about the cost implications for customers of setting a national standard.

ANNEX 2: SUMMARY OF CONSULTANTS INTERIM REPORT

1. Terms of Reference and Methodology

In September 1998, OFFER commissioned PKF, Horton 4 Consulting and European Economic Research Ltd to assist the Director General in reviewing the existing arrangements within the 14 Public Electricity Suppliers (PESs) for the separation of the distribution and supply businesses and the treatment of metering activities.

The review consisted of the following elements:

- To examine the scope for and implication of changes to present arrangements to meet the separated business model compared with the present arrangements; and
- To bring forward recommendations, including guidelines on the future definition of the businesses; the nature of the physical and managerial separation of the businesses; and the requirements in the handling of information by businesses; in the context of the costs of so doing.
- To develop recommendations concerning a more cost effective form of separation.

The approach adopted by the consultants was to define fully the models of separation developed by OFFER and to draft a questionnaire in order to ask the PESs for systematic estimates of the cost of achieving the required level of separation.

When preparing their report, the consultants considered a number of documents prepared by the PESs, including responses to Consultation Papers, Statements of Compliance with Condition 12 and replies to the distribution price review investigations.

Preliminary visits to the PESs were undertaken in December and January prior to the receipt of responses to the questionnaire at the end of January 1999. These were analysed during February and March. The PESs were then visited again to review their individual responses. The questionnaires issued to the PESs required that they forecast the cost of achieving the level of separation required by OFFER. PESs were also invited to provide an alternative scenario which they believed would achieve OFFER's objectives, but mitigate the costs in some way. Seven PESs proposed alternative scenarios. The questionnaire asked PESs for

an overview of the main impacts of separation and for the more detailed impact on the regulated businesses. Seven major aspects of separation were drawn from the responses of the PESs to OFFER's Consultation Papers and from the pilot visits to the PESs. These were:

- Physical separation (location of business and staff movements);
- Corporate overheads and other common or shared costs;
- IT;
- Customer service activities such as call centres and correspondence handling;
- Metering;
- Branding; and
- Any other major items identified by PESs.

As part of their study, it was important for the consultants to determine the extent of separation presently in place in each of the PESs. This provided an understanding of the present position that helped in the assessment of the validity of cost claims associated with introducing further separation. Second, it provided an understanding of how activities were carried out in each of the PESs. In addition, the appreciation of the existing models of separation offered some suggestions on how OFFER's preferred options may be modified (The outcome of their review of the present position is summarised in Chapter 5).

The consultants analysis of the costs submitted took into account:

- The principle of **cost causation**. Whether the cost was a result of the decision to separate the businesses, or whether the PES would have instituted the change - and incurred the cost - regardless of OFFER's decision to separate;
- The principle of **efficiency**. That is, whether the costs are associated with the least cost way of achieving OFFER's objectives;

- The possibilities of **cost mitigation**. That is whether by relaxing the definition of separation or for example the timescales within which separation must be achieved, significant costs could be avoided; and
- **Equitable** treatment of PESs in different situations.

2. Overview of Benefits and Costs of Separation

The consultants identified four key potential benefits of separation.

Firstly, they considered that the full separation of the distribution business from other parts of the PES would prevent any risk of discrimination by the distribution business against any competing electricity business (supply, metering or generation). Secondly, it would remove the risk that there were undetected cross-subsidies between different parts of the business, which could cause various sorts of inefficiencies or unfairness. Thirdly, full separation would ensure that there was no leak of confidential information between different parts of the company. Fourthly, it would open the way to mergers, acquisitions or joint ventures of various kinds between supply businesses in different parts of the country which, assuming approval by OFFER and the competition authorities, could open the way to greater operating efficiencies. Similar restructuring might also benefit distribution or metering businesses.

Against the potential benefits of separation, the consultants also weighed up certain cost implications. They said that, depending on the way in which separation is implemented, there could be some loss of economics of scale in common services; some loss of economics of scope between the businesses; and possibly a reduction in the effectiveness of management if the integrated management structure would have proved most efficient in the long term. In the shorter term, the consultants said that bringing separation about would involve significant transitional costs, such as the cost in management and other staff time.

In conclusion, however, the consultants said that the costs of separation were mostly short-term impact costs. They said that few of the PESs raised arguments against separation in terms of a reduced ability to reduce costs in the future. The consultants considered that the likely benefits of separation, on the other hand, were mainly to be expected as a consequence of more effective competition and less intensive regulation. They also pointed to potential new economies of scale and scope that could be introduced through

restructuring. More focused management might also uncover efficiencies not presently observed by existing management arrangements.

3. Costs of Separation: Assumptions And Key Findings

The PESs were invited to assess the cost of the two scenarios under which regulated businesses were required to implement full operational separation. The two separation scenarios agreed with OFFER and against which the PESs were asked to assess the costs were:

Scenario 1: all customer metering activities (including re-certification and maintenance of the meter) to be carried out or procured by the supply business. However, meter assets (including prepayment meters) would continue to be owned by the distribution business, which would make them available on equivalent terms to all supply businesses and would also make available a fixed price menu of new meters.

Scenario 2: a separate metering business would be created, consisting of all customer metering including ownership of existing meters (but not prepayment meter services, data processing or aggregation which would remain supply business functions), and full operational separation would be introduced between it and all other businesses (unless the other business is not a regulated electricity business and is operationally separated from all such businesses).

In both scenarios, full operational separation was assumed to be introduced between the distribution business and all other businesses (unless the other business is not a regulated electricity business and is operationally separated from all such businesses) as soon as possible and, in any event, no later than 1 April 2002.

Full operational separation was defined to mean complete managerial and informational separation, with the further implication that the separated businesses should not share premises or any common services provided by the company. No individual below the level of the board of the UK group could both be employed as part of distribution (or metering if a separate business) or involved in its management and be employed as part of or be involved in the management of another group business. If services were purchased from third parties outside the group and those third parties provide the same or similar services to other regulated electricity businesses within the group, this must be as a result of full

competitive tendering of each service provision. Separate invitations to tender should be issued to a range of third parties and the results assessed separately by each business. It was not assumed that distribution (or metering if a separate business) would be under different ownership, unless that would provide the least cost separation. However, it was assumed that they would be separate legal entities, subsidiaries of a holding company, and that other businesses would be part of one or more other subsidiaries.

The consultants advised that PES responses to the questionnaire indicated that significant costs would be incurred if either scenario prevailed. Costs ranged from the lowest estimate associated with scenario 1 at £7 per customer per year, to £61 per customer per year as the highest estimate associated with scenario 2. Scenario 2 was regarded as more costly by every PES. The consultants reported that, even if the lowest costs were taken for each cost category, the total for one notional company for scenario 1 (scenario 2) would be £29m (£43m). Aggregated for 14 PESs, this would amount to £406m (£606m). Average figures show an industry-wide cost of £1.6bn (£2.1bn). IT was regarded as the key cost driver, accounting for between 30 percent and 80 percent of the total estimated costs of separation.

The consultants said that requiring separation within a relatively short period would inevitably incur significant costs, both in establishing separated businesses and through losses in economies of scale. It considered that these costs could be substantially reduced with a longer timescale and if PESs embark on separation as a positive business strategy, for example, through the development of supply businesses. Therefore it is important, they said, that steps are taken now to encourage structural change within the industry and to ensure that the momentum of separation generated by the review process was maintained.

The consultants considered whether there were measures which could adequately address competition concerns at lower cost than scenarios 1 and 2, but which achieved real progress and promoted a culture of separation. Based upon the costs of separation reported by the PESs, the consultants' analysis and consultations as part of this study, their advice was that an alternative "scenario 4" could be developed. Scenario 4 was recommended in preference to scenarios 1 or 2, as it was believed that it could be achieved at a much more modest cost than scenarios 1 and 2. The PESs were not asked for their estimates for the costs of implementing scenario 4.

4. Summary of Scenario 4 Recommendations

The consultants considered that scenario 4 would provide rapid separation of businesses sufficient to ensure that entrants in competitive markets, particularly supply, could be reasonably confident that services were provided to them on a non-discriminatory basis and that the incumbent does not receive an unfair advantage or cross-subsidy from ownership of monopoly businesses. This should be achievable at a modest cost without reducing customer service standards, and would pave the way for full separation of the ownership of distribution businesses through the normal workings of competitive capital markets.

On metering, the consultants considered that it would be helpful to the development of competition, and to minimising the scope for distribution businesses to discriminate between supply businesses, to move meter reading out of distribution. They proposed therefore that data retrieval, processing and aggregation should not be allowed to be part of the distribution business, but that ownership of the existing meters, and also responsibility for their maintenance, should remain with it. The consultants also proposed that distribution businesses should have an obligation to arrange by tender for the provision of meter reading of last resort for an entrant (or any) supply business. However, they said that distribution businesses should not be expected to provide meter services below cost.

The consultants said that the first requirement for physical and managerial separation of the businesses was that there should be separate licences. On the legal implications of separate licences, and of the general objective of increasing the managerial independence of the distribution businesses, the consultants considered that each distribution business should be required to be a separate Companies Act company. They said that the distribution subsidiary established in this way should be required to contract formally for any services it receives from or provides to other businesses owned by the parent company. These contracts should be similar in form and detail to those which were offered to third party suppliers. The consultants comments that replacing informal intra-company agreements, or SLAs, by formal contracts in this way would involve some increase in transaction costs, but it could also have some benefits in adding clarity, which should be taken into account in assessing any net cost.

The consultants said that for many of the PESs, the implementation costs of full physical separation would be considerable, while the benefits depended on the nature of the work of the staff who would have to be moved. They said that where the nature of the work was

such that there were minimal risks of confidential information passing improperly from one business to the other, or of preferential treatment being given, and the costs of relocation would be large, then the balance of advantage probably lies with accepting that such work could continue to be shared. Even so, the consultants said that there should be as much physical separation (through access keys etc.) as can be effected without excessive cost in the interest of promoting separate business cultures and clarifying dividing lines. The consultants concluded that physical separation in separate buildings of the senior management teams of the different businesses, and of other staff dealing with sensitive information or strategic issues (such as tariffs, regulatory policy, or business strategy) should be required. Other administrative personnel should also be separated by secure, physical division within buildings. The consultants also said that strategic decisions of the distribution business should be decided at operating company level and not by the holding company.

The consultants assumed the supply businesses would continue to use the present names if the PESs wish them to do so. Where this was the case, the consultants proposed that the distribution business should adopt a new brand name. They said, however, that none of the arguments put forward by the PESs seemed sufficiently strong to justify more than minimal costs for promoting the new brand.

The consultants said that full achievement of the benefits of separation would imply that there were no common services. However, they commented that this would involve excessive costs at least in the short term. They therefore recommended that some common service provision should be allowed, subject to it being clear that there would be no distortion to competition or cross subsidy, and subject to the following specific conditions:

- Chinese walls should prevent information passing improperly between regulated businesses;
- Fully transparent pricing should be evident, reflecting contractual relationships between the regulated businesses;
- Where distribution is the purchaser of a common service, the price should be demonstrably at competitive market prices;
- Distribution should not itself provide common services to the other businesses;

- Where possible, common services should be made available to third parties on a comparable basis as a further demonstration that no cross-subsidy is involved; and
- Where independent third parties are asked to provide common services to different regulated businesses, this must be through completely independent procurement processes.

On IT, the consultants commented that if PESs were allowed sufficient time before implementing business separation, so that the requirement to have separate systems can be designed in to the next generation of IT, these costs should be dramatically reduced. They recommended that this time be allowed, so that no IT separation costs need be incurred in the short term, other than those needed to fully enforce the present licence conditions. However, they added that OFFER should make it clear that only expenditure which is fully consistent with the eventual separation of the businesses would be considered in the context of distribution or supply price reviews. Existing systems and other assets could complete their normal useful lives provided that they allow the PESs to meet the licence conditions about non-discrimination.

To encourage a separate business culture, the consultants said that personnel functions should be managed by the separate distribution business for its own staff. This is an area in which the benefits of separation are likely to outweigh the costs. They considered however that personnel might continue to use common services such as the payroll system, as part of IT services. The consultants added that no staff should move between distribution and other parts of the business without a reasonable period of “quarantine”.

The consultants approached call centres on the assumption that PESs would be required to maintain or improve on the present standard of service provided to customers, including in times of emergency. However, they considered that the incumbent suppliers’s call centre should not be the medium of contact with the distribution business for other suppliers’ customers. Distribution should be responsible for its own call centre, with a separate telephone number, and take responsibility for “no-supply” and other calls.

The consultants concluded that there were a number of options for distribution call centres, including a national call centre. However, they said that there were a number of disadvantages with a national facility. The consultants also outlined various options for the provision of emergency back up. One of these options was that the distribution businesses

could contract with the supply business, as a means of formalising the normal current practice. However, the consultants said if this option was adopted, the supply business should be required to introduce themselves as 'on behalf of the distribution business', rather than give the supply company name. This arrangement would have the advantage of reducing arguments that the changes would imply any lowering of service standards in emergencies or that it would prevent improvements as the technology becomes better and more familiar.

The consultants said that the compliance officer should be required to report to the directors of the distribution business and to the audit committee of the holding company. This officer should also send quarterly reports to OFFER. They said that these reports should cover how complaints were handled; the nature and apparent effectiveness of Chinese walls within the IT/IS systems designed to prevent unauthorised access to information; and the steps being taken to increase the degree of cultural separation between the distribution and other businesses.

5. Next Steps

The Consultants recommended various steps to ensure that the impetus created by the present work on separation is not lost and that implementation of the measures is undertaken. They considered that further consultation with the PES was necessary, In particular, the consultants said that it would be important to agree an implementation timetable and to review individual PES plans for compliance, practicality and reporting purposes. They also considered that OFFER should outline the level of compliance monitoring required and the type of reports it required under that regime.

The consultants recommended that OFFER consider the options for distribution call centre capability and to decide which to pursue and how best to implement it. On IT, they said that further analysis may be desirable to develop principles by which enhancement of present systems is acceptable and distinguishable from the development of new systems. In the meantime, the consultants suggested that Chinese walls between systems should be enhanced and that, for this purpose, relevant industry standards on information management could be considered.

ANNEX 3: PROPOSED LICENCE CONDITIONS

Condition A: Restriction on use of certain information and independence of the Distribution Business

1. Any information relating to or deriving from the management or operation of the Distribution Business shall, for the purposes of this Condition, be treated as confidential information.
2. The Licensee shall not (and shall procure that its affiliates and related undertakings shall not) disclose or authorise access to confidential information:
 - (a) save to the extent provided by sub-paragraphs 3(b) to (d), to such of its (or its affiliates' or related undertakings') employees, agents, advisers, consultants or contractors as are engaged in the management or operation of the Supply Business; or
 - (b) save to the extent permitted by paragraph 3, to any other person.
3. The Licensee shall (and shall procure that its affiliates and related undertakings shall) disclose or authorise access to confidential information only:
 - (a) to such of its (or its affiliates' or related undertakings') employees, agents, advisers, consultants or contractors as are engaged in the management or operation of the Distribution Business and require access to the information for that purpose;
 - (b) where the Licensee (or any affiliate or related undertaking of the Licensee) is required or permitted to disclose such information in compliance with:
 - (i) any requirement of a Competent Authority;

- (ii) the conditions of any licence granted under the Act or any document referred to in such a licence with which it is required by virtue of the Act or that licence to comply;
 - (iii) any other requirement of law; or
 - (iv) the rules of the Electricity Arbitration Association or of any judicial or other arbitral process or tribunal of competent jurisdiction;
- (c) where such information was provided by and relates to any person who has notified (or otherwise agreed with) the Licensee that it need not be treated as confidential; or
- (d) where such information is in the public domain otherwise than as a consequence of unauthorised disclosure by the Licensee (or any affiliate or related undertaking of the Licensee) or by any person to whom the same is disclosed or suffered to be disclosed by the Licensee (or such affiliate or related undertaking)

and in each case the Licensee shall disclose or authorise access to the confidential information only insofar as is necessary in all the circumstances.

4. The Licensee shall use all reasonable endeavours to ensure that any person who is in possession of or has access to confidential information in accordance with subparagraph 3(a) shall use such information only for the purposes of the Distribution Business.
5. For the purpose of facilitating its compliance with paragraphs 1 to 4, the Licensee shall establish and shall thereafter maintain the full managerial and operational independence of the Distribution Business from each other business (whether or not a Separate Business) of the Licensee and of its affiliates and related undertakings.
6. In order to facilitate its compliance with paragraphs 1 to 5, the Licensee shall ensure that:

- (a) the Distribution Business is provided with such premises, systems, equipment, facilities, property, personnel, data and management resources as are necessary for the efficient and effective management and operation of the Business;
- (b) no business of the Licensee (or of any affiliate or related undertaking of the Licensee), other than the Distribution Business, may use or have access to:
 - (i) premises or parts of premises occupied by persons engaged in the management or operation of the Distribution Business;
 - (ii) systems for the recording, processing or storage of data to which persons engaged in the management or operation of the Distribution Business also have access;
 - (iii) equipment, facilities or property employed for the management or operation of the Distribution Business; or
 - (iv) the services of persons who are (whether or not as their principal occupation) engaged in the management or operation of the Distribution Business; and
- (c) it can and does, insofar as is legally possible, prevent any person who has ceased to be engaged in the management or operation of the Distribution Business from being engaged in the activities of any other business of the Licensee (or of any affiliate or related undertaking of the Licensee) until the expiry of an appropriate time from the date on which he ceased to be engaged by the Distribution Business.

7. The Director may, upon the written request of the Licensee, issue a direction relieving the Licensee of its obligations under paragraphs 1 to 6 - to such extent and subject to such terms and conditions as he may specify in that direction - where:

- (a) it is not reasonably practicable for the Licensee to comply with any aspect of those obligations; or

- (b) in the case of paragraph 5 and sub-paragraph 6(b), any arrangements for the use of or access to premises, systems, equipment, facilities, property or personnel by both the Distribution Business and any other business of the Licensee (or of any affiliate or related undertaking of the Licensee):
- (i) do not involve a cross-subsidy being either given to the Distribution Business by such other business or received from the Distribution Business by such other business;
 - (ii) obtain for the Distribution Business, in the most efficient and economical manner possible, the use of the relevant premises, systems, equipment, facilities, property or personnel; and
 - (iii) do not restrict, distort or prevent competition in the generation or supply of electricity.
8. Where, subsequent to the issue of a direction pursuant to paragraph 7, the criteria set out at sub-paragraph 7(a) or (b) cease to be satisfied, the Director may withdraw the direction or modify any terms and conditions which may be specified in it.
9. For the purposes of paragraphs 7 and 8 the Director shall, following consultation with the Licensee, determine any question as to whether the criteria set out at sub-paragraph 7(a) or (b) are or continue to be satisfied.
10. In this Condition:

“appropriate time” means 3 months, or such shorter period as the Director may approve in respect of any person or class of persons.

“Competent Authority” means the Secretary of State, the Director, the Compliance Officer, the Stock Exchange, the Panel on Take-overs and Mergers, or any

local or national agency, regulatory body, authority, department, inspectorate, minister, ministry, official or public or statutory person (whether autonomous or not) of, or of the government of, the United Kingdom or the European Community.

“confidential information”

bears the meaning given at paragraph 1.

“Electricity Arbitration Association”

means the unincorporated members’ club of that name formed inter alia to promote the efficient and economic operation of the procedure for the resolution of disputes within the electricity supply industry by means of arbitration or otherwise in accordance with its arbitration rules.

ANNEX 3: PROPOSED LICENCE CONDITIONS

Condition B: Appointment of Compliance Officer

1. The Licensee shall no later than [date] prepare a statement in a form approved by the Director setting out the practices, procedures and systems which the Licensee has adopted (or intends to adopt) to ensure its compliance with the Relevant Obligations.
2. The Licensee may periodically revise the information set out in and, with the approval of the Director, alter the form of the statement prepared in accordance with paragraph 1 and shall, at least once every year during which this Licence is in force, review such statement in order that the information set out therein shall continue to be accurate in all material respects.
3. The Licensee shall send a copy of the statement prepared in accordance with paragraph 1, and of each revision of such statement in accordance with paragraph 2, to the Director.
4. The Licensee shall, following consultation with the Director, appoint a competent person (who shall be known as the “Compliance Officer”) for the purpose of facilitating compliance by the Licensee with the Relevant Obligations.
5. The Licensee shall at all times engage the services of the Compliance Officer for the performance of such duties and tasks as the Licensee considers it appropriate to assign to him for the purposes specified at paragraph 4, which duties and tasks shall include those set out at paragraph 8.
6. The Licensee shall procure that the Compliance Officer:
 - (a) is provided with such staff, premises, equipment, facilities and other resources; and
 - (b) has such access to its premises, systems, information and documentation

as, in each case, he might reasonably expect to require for the fulfilment of the duties and tasks assigned to him.

7. The Licensee shall make available to the Compliance Officer a copy of any complaint or representation received by it from any person in respect of a matter arising under or by virtue of Condition A or in relation to any of the practices, procedures and systems adopted by the Licensee in accordance with the statement referred to at paragraph 1.

8. The duties and tasks assigned to the Compliance Officer shall include:

- (a) providing relevant advice and information to the Licensee for the purpose of ensuring its compliance with the Relevant Obligations;
- (b) monitoring the effectiveness of the practices, procedures and systems adopted by the Licensee in accordance with the statement referred to at paragraph 1;
- (c) investigating any complaint or representation made available to him in accordance with paragraph 7;
- (d) recommending and advising upon the remedial action which any such investigation has demonstrated to be necessary or desirable;
- (e) providing relevant advice and information to the Licensee for the purpose of ensuring its effective implementation of:
 - (i) the practices, procedures and systems adopted in accordance with the statement referred to at paragraph 1; and
 - (ii) any remedial action recommended in accordance with sub-paragraph (d); and

- (f) reporting annually to the directors of the Licensee - in respect of the year ending 31 December 1999 and of each subsequent year - as to his activities during the period covered by the report, including the fulfilment of the other duties and tasks assigned to him by the Licensee.
9. As soon as is reasonably practicable following each annual report of the Compliance Officer, the Licensee shall produce a report:
- (a) as to its compliance during the relevant year with the Relevant Obligations; and
 - (b) as to its implementation of the practices, procedures and systems adopted in accordance with the statement referred to at paragraph 1.
10. The report produced in accordance with paragraph 9 shall in particular:
- (a) detail the activities of the Compliance Officer during the relevant year;
 - (b) refer to such other matters as are or may be appropriate in relation to the implementation of the practices, procedures and systems adopted in accordance with the statement referred to at paragraph 1; and
 - (c) set out the details of any investigations conducted by the Compliance Officer, including:
 - (i) the number, type and source of the complaints or representations on which such investigations were based;
 - (ii) the outcome of such investigations; and
 - (iii) any remedial action taken by the Licensee following such investigations.

11. The Licensee shall submit to the Director a copy of the report produced in accordance with paragraph 9, and shall give or send a copy of the report to any person who requests such a copy.

12. In this Condition:

“Relevant Obligations” means the obligations set out in Condition A and the terms and conditions of any direction issues pursuant to paragraph 7 of Condition A