IRG PUBLIC CONSULTATION DOCUMENT

Principles of Implementation and Best Practice regarding the implementation and use of Retail Minus pricing as applied to electronic communication activities

National Regulatory Authorities (NRAs) implement the regulatory framework laid down in EU and national law. These principles of implementation and best practice (PIBs) have been devised by IRG to assist in the process of harmonizing the implementation of remedies in IRG member states. The NRAs are committed to implement these principles wherever they consider appropriate to do so.

January 2006 as adopted by the IRG Plenary on 8 February 2006

Contents

Section 1

Executive Summary

National Regulatory Authorities (NRAs) implement the regulatory framework laid down in European Union (EU) and national legislation. This document has the objective of providing guidance to NRAs in the implementation and establishment of wholesale prices based on a retail minus methodology. This document does this through identifying principles of implementation and best practice (PIBs). These PIBs have been devised by the Independent Regulator Group (IRG) to assist NRAs in the process of harmonising the implementation of remedies in IRG member states.

This document explains the concept of retail minus pricing, identifies issues around implementing retail minus in electronic communications markets and discusses how NRAs can seek to take account of these issues when implementing retail minus pricing. NRAs, in deciding what regulatory options to use to address specific competition problems and to achieve specific regulatory objectives should refer to the ERG remedies paper.

IRG has adopted the following PIBs with regard to the use of Retail Minus pricing as applied to electronic communication activities

PIB 1:
An NRA should consider the competition problems that it faces in a particular market and its assessment of the various remedies available to achieve its regulatory objectives before concluding that retail minus is a suitable remedy.

PIB 2:

NRA's should, where relevant, address the various implementation issues identified in this document (numbered 1 to 13) taking into consideration the principles associated with each implementation issue together with the circumstances of the particular case and its regulatory objectives.
PIB 3:

When determining the price of the retail service against which the minus will be subtracted to determine the price of the regulated wholesale service, the NRAs should consider a number of issues. These could include:

- **Whether to set the minus on a product-by-product basis or in reference to a group of products, using a portfolio approach**
- **How to match retail services with wholesale services where there is no direct link between the wholesale and retail services**
- **Whether discounts and temporary promotions should be taken into account and how this could be done**

PIB 4:

When calculating the value of the minus NRAs should consider a number of issues. These could include:

- **How the minus should be expressed, including either as an absolute value, as a proportionate value or as a hybrid of the two**

- **How any economies of scale that may be present should be taken into account, if at all.**
- **How to treat costs associated with temporary promotions and discounts**
- **Whether the notified operators' costs should be used, or those of an efficient new entrant, or some hybrid approach**
- **Over what time-period is it appropriate to assess the costs**
- **What is the appropriate rate of return on the retail services associated with the minus.**

PIB 5:

When implementing retail minus pricing, NRAs should consider a number of issues. These could include:

- **What the appropriate period of time between reviews of the minus could be**
- **How to assess the potential issue of a product squeeze i.e. the where the notified operator may increase the specification of a product without any corresponding price increase**

PIB 6:
The imposition of retail minus as a price control remedy needs to be kept under review by the NRA. Any review may be supported by cost accounting and accounting separation obligations.

PIB 7:
Using the obligation of cost accounting and accounting separation, the NRA can investigate whether the vertically integrated notified operator complies with the retail minus obligation, i.e. does not engage in margin squeezes or uses predatory prices. The cost accounting and accounting separation obligation can, therefore, support the implementation of retail minus.

PIB 8:
When an NRA imposes a retail-minus price control, coupled with the obligation of accounting separation and cost accounting on a wholesale market, it may be necessary, subject to proportionality to obtain information on a related market which may be unregulated in order to effectively monitor a price control based on retail minus.

Section 2

Introduction

National Regulatory Authorities (NRAs) implement the regulatory framework laid down in European Union (EU) and national legislation. The Independent Regulators Group (IRG) supports the process of harmonising the implementation of the new regulatory framework in EU member states and, as part of its ongoing activities, adopts Principles of Implementation and Best Practice (PIBs) with the objective of supporting this process.

Article 13 of the Access Directive "Price control and cost accounting obligations" allows for NRAs to impose obligations relating to cost recovery and price controls in situations where a market analysis indicates that a notified operator might sustain prices at an excessively high level, or apply a price squeeze, to the detriment of end-users.

The retail minus pricing methodology is a form of price control and as such is a remedy applicable (under the Access Directive 2002/19/EC and within the scope of Art.15 and 16 of the Framework Directive) to SMP (significant market power, hereinafter referred to as "notified") operators within the relevant markets as defined by the EU Commission Recommendation and/or as notified and accepted by the EU Commission in line with the requirements of Article 7, 8, 12 & 13 of the Access Directive 2002/19/EC.

The ERG's paper on remedies discusses in general terms a number of different competition problems that NRAs may have to consider and also discusses a range of remedies available to NRAs to address these competition concerns, one of which is securing access to network facilities, which can imply the use of retail minus pricing.

NRAs, in deciding what regulatory options to use to address specific competition problems and to achieve specific regulatory objectives should refer to the ERG Remedies paper. The Remedies paper addresses the issues that NRAs should consider when determining which remedies to implement to address identified competition problems. If NRAs then consider that a suitable remedy to address identified competition problems in a particular market is the implementation of a retail minus price control, this PIBs document is intended to be a useful reference as it addresses the issues that may arise in calculating retail minus prices.

As a form of price control, the Retail Minus pricing methodology could be used as an alternative to using a price control based on cost-based methodologies (such as Long Run Incremental Costs (LRIC) or Fully Allocated Cost (FAC)).

This document has the objective of providing guidance to NRAs in the implementation and establishment of wholesale prices based on a Retail Minus (RM) methodology.

The document is organised as follows. Section 3 provides a definition of retail minus. Relevant implementation issues of the retail minus methodology are discussed in Section 4, while Section 5 illustrates the cases in which such methodology could be supported by accounting separation and cost accounting.

PIB 1:

An NRA should consider the competition problems that it faces in a particular market and its assessment of the various remedies available to achieve its regulatory objectives before concluding that retail minus is a suitable remedy.

Section 3

Definition of retail minus

Retail minus sets the price of a wholesale service[1] in relation to the price of a retail[2] service, rather than calculating the price of a wholesale service on the basis of the costs incurred in producing the wholesale service. As such, NRAs should note that the implementation of retail minus does not have as its objective the securing of cost orientated prices and as such will not necessarily result in cost-based wholesale prices.

When an NRA decides to use retail minus pricing, it has to determine the retail price and decide how to calculate the value of the “minus”. For example, when determining the retail price, relevant considerations could include how to treat any price discounts that may be present or what the price is when retail products are sold as a bundle of services. Moreover, questions could also arise over the exact specification of the costs to be included in the calculation of the minus. These and other issues are addressed in Section 4.

This Section addresses the basic application of the retail minus pricing methodology and some of the relevant characteristics of retail minus in relation to competition problems.

Figure 1 shows a simple illustrative example of the retail minus concept. The retail price on the left hand side of Figure 1 is composed of different elements which can be characterised in general terms as:

- costs associated with providing the wholesale element;[3]
- costs associated with retailing the service;[4] and
- any return that may be being made.[5]

The retail minus methodology begins with the retail price and deducts the calculated retail costs (the minus), resulting in a price for the wholesale service (shown on the right hand side of figure 1).

1 “Service” is used throughout this document, but could equally be referring to a product.

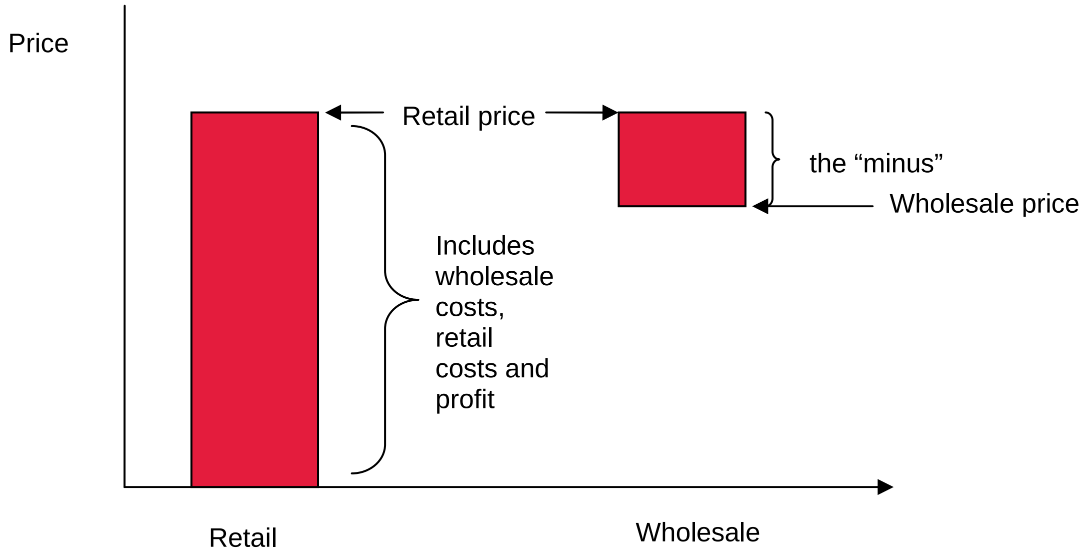
2 The terms “wholesale” and “retail” are used in the this document when discussing retail minus, but could similarly be replaced by “upstream” and “downstream” respectively.

3 Including the cost of capital associated with the wholesale element.

4 Including the cost of capital associated with those retailing activities.

5 These being returns in excess of the cost of capital

Figure 1 Retail minus concept (illustrative example)



Retail minus can be used by NRAs to reduce the ability of notified operators to pursue anti-competitive behaviours, including market foreclosure by vertically integrated notified operators through the implementation of a margin squeeze. Retail minus can also be used by NRAs to help to promote a sustainable competitive environment in the relevant retail markets as it may be used to facilitate efficient entry into those retail markets. However, the success or otherwise of retail minus in helping to achieve an NRA’s specific regulatory objectives will be dependent on a number of factors, many of which are discussed in Section 4.

Retail minus can be used *ex-ante*, before the launch of a new service, and/or *ex-post*, as a margin-squeeze test, where the test is applied usually following a complaint lodged with the NRA. In evaluating the relative merits of *ex-ante* and *ex-post* application, consideration needs to be given to the overall regulatory objectives of the NRA.

Section 4

Determining the retail price, calculating the minus and other implementation issues

4.1 Introduction

In this document the amount to be subtracted from the retail price to set the wholesale price is referred to as the “minus”, as shown in figure 1 in the previous section. The value of the minus will be dependent upon the circumstance of the specific case under consideration, but conceptually can be thought of as being those retail costs saved by a notified operator from serving Other Authorised Undertakings (OAUs) on a wholesale basis rather than serving customers on a retail basis.

Thus, the retail minus formula can be represented as:

$$P_w = P_r - c$$

Where:

P_w is the retail minus derived wholesale price
P_r is the retail price
c is the value of the minus

Additionally, it can be considered appropriate by the NRA to include within the calculation of the minus, any additional costs incurred by the notified operator from providing OAUs with the relevant wholesale services. This would reduce the value of the minus and have the effect of raising the wholesale price compared to that in the formula above. However, this raises questions about how these costs should be recovered, in particular whether the notified operator’s retail customers should also contribute. This issue is discussed below under issues related to the calculation of the minus. Further discussion of these issues are considered in the IRG’s Cost Recovery PIBs document which addresses issues of cost recovery in more detail.

While the above example could suggest that implementing retail minus is a straightforward method for establishing a price control mechanism, experience has shown that the application of retail minus in electronic communications markets tends to raise many implementation challenges. This section of this document identifies a number of implementation issues that an NRA may encounter.

How an NRA considers the various implementation issues identified in this document will depend on the circumstances in the particular case and its regulatory objectives.

The implementation issues identified in this section of the document are split into three broad categories:

- issues related to determining the retail price
- issues related to calculating the value of the minus; and
- other associated implementation issues.

4.2 Issues related to determining the retail price

The retail price is the price charged to retail or downstream customers. However, the consideration of what the retail price is can raise a number of issues that any NRA contemplating implementing retail minus pricing will likely need to consider. These could include the following:

1. How to determine the retail price
2. Should retail minus be applied on a product-by-product basis or to a set of products?
3. How to match wholesale and retail services
4. How to treat discounts and temporary promotions

These issues are designed to provide guidance to NRAs and are non-exhaustive. Other issues may also need to be considered and differing market circumstances may mean that the detail of application is legitimately different.

1. How to determine the retail price

The retail price is the price currently charged by the notified operator to retail customers. As will be discussed below, the retail price can in fact be calculated in a number of different ways, depending on the circumstances under consideration. For example, in determining a retail price it could be relevant for an NRA to consider issues such as promotions, discounts, removal of one-off fees and timeframes and bundling of products/services (e.g. some tariff packages may include free calls, or free mobile hand sets). Some of these issues are considered in more detail below under points two to four.

2. Should retail minus be applied on a product-by-product basis or to a set of products?

One of the first decisions to be taken in applying the retail minus methodology is whether it is more appropriate to calculate the wholesale discount for individual products or for a group of products (portfolio approach).

On one extreme, setting wholesale prices using retail minus on a product-by-product basis could be seen as unnecessarily burdensome. At the other extreme, if retail minus were applied to the entirety of all wholesale and retail products, then the notified operator would have scope for cross-subsidisation within the bundle. This may mean that entry may not be possible for some services.

When deciding on this issue, a relevant consideration for NRAs could be the extent to which costs for different services within a bundle are similar. NRAs may also want to consider the extent to which the second approach above, i.e. assessing applying retail minus across a group of services, could allow scope to the notified operator to margin squeeze on a particular product or sub-set of products within the wider group of products while complying with its retail minus obligations overall.

It could also be relevant for an NRA to consider that, although it could be the case that the best competitive scenario for OAUs is to have the same product portfolio as the notified operator, OAUs may legitimately have strategies that focus on segments of the market different from those of the notified operator. For example, OAUs may wish to focus on business customers rather than residential customers. If it is the case that OAUs are competing over a sub-set of the services included within the retail minus bundle then this could mean that it is easier for the notified operator to act anti-competitively (and make it more difficult for OAUs to compete) while complying with its retail minus obligations overall.

Where a notified operator is selling products in the retail market as a bundle it may be the case that the notified operator will be able to use its ability to bundle products to act anti-competitively. Where an NRA has concerns about such unfair bundling it may also be relevant to consider whether to apply the "incremental cost test" to the bundle (i.e. each of the products within a bundle must at least earn their incremental costs, while the bundle as a whole must cover all common costs of the bundle). However, it may be the case that this sort of test may not always be feasible, since retail minus pricing is often considered as a remedy when detailed cost data is not available.

One possible option available to NRAs deciding on the basis on which to apply retail minus could be to investigate whether it is the case that the value of the costs used to calculate the minus varies between different subsets of the service portfolio. A further option available is for an NRA to apply retail minus on a product-by-product basis initially, but as more evidence becomes available, to review the possibility of moving to a portfolio-based approach.

An NRA's ability to implement retail minus on a product-by-product basis could be limited by practical considerations. For example, there could be a number of different products, each of which has a number of different price elements, e.g. fixed charges, variable traffic charges, variable distance charges etc. Therefore, NRAs will have to carefully consider the circumstances of the specific case under consideration when deciding which approach to take.

3. How to match wholesale and retail services?

It is not always necessarily the case that wholesale services will have a corresponding retail service. i.e. the associated retail product will not necessarily involve "re-selling" of a wholesale product. This will be the case where the service provided at the wholesale level is purchased in order to provide a different service at the retail level. A common example of this could be when an operator uses a leased line at the wholesale level, but uses this wholesale product to form part of a retail offering into a non-leased line retail market.

4. How to treat discounts and temporary promotions?

When new products are launched and also for existing products, it may be the case that there is significant investment by the notified operator in temporary advertising and promotions to stimulate demand and boost market share. These promotions could include bundling of products and services or introductory offers such as a time period where free calls are available or the customer receives a free gift from the operator. The costs involved in this type of advertising and promotions need to be considered in a retail minus calculation, both in terms of calculating the retail price and in terms of calculating the minus[6]. Promotions, such as introductory offers, could be classified as revenue foregone and should be reflected in the retail price.

4.3 Issues related to calculating the value of the minus

Although conceptually calculating the minus could be straightforward, experience has shown that the application of retail minus in electronic communications markets is far from simple and may raise many implementation challenges for NRAs contemplating using retail minus. Moreover, as noted in the introduction to this Section, the value of the minus will be dependent upon the circumstance of the specific case under consideration, but conceptually can be thought of as being those retail costs saved by a notified operator from serving OAUs on a wholesale basis rather than serving customers on a retail basis. The introduction also added that it could be appropriate for an NRA to include in the calculation of the minus some of the additional costs associated with the notified operator providing OAUs with the relevant wholesale services. This would have the effect of reducing the value of the minus and increasing the wholesale price.

The implementation issues with regard to determining the minus that NRAs will likely need to consider could include the following:

5. Retail costs saved by serving OAUs on a wholesale basis rather than serving customers on a retail basis
6. Additional costs incurred by providing a wholesale service rather than a retail service
7. What are ways of expressing the minus?
8. How to consider the economies of scale
9. Whose costs should be used?
10. What timeframe to use in assessing retail costs?
11. What is the appropriate rate of return on retail services?

These issues are designed to provide guidance to NRAs and are non-exhaustive. Other issues may also need to be considered and differing market circumstances may mean that the detail of application is legitimately different.

5. Retail costs saved by serving OAUs on a wholesale basis rather than serving customers on a retail basis

‘Retail costs’ in this context is a broad term covering those costs incurred in the provision of retail services (i.e. activities which must be performed in order to provide services to a retail customer) but which are not required in order to provide the service to another network operator on a wholesale basis. If the operator does not sell the product at the retail level, some cost items attributable to that particular service or group of services can be saved.

It is difficult at the outset to determine a precise list of the costs to be excluded and it would be up to the NRA, depending on its regulatory objectives, to decide which costs to include or exclude in determining wholesale prices using retail minus. However, it is likely that these will include in whole or in part the following:

6 The question of how to treat these costs in calculating the minus is addressed in part 4.3.

- The costs of retail marketing, advertising and sales,
- The costs of finance and retail billing, including bad debts,
- Retail computing costs,
- Retail product development & management costs,
- Customer service costs (back and front office),
- Other overheads attributable to retail services/products.

6. Additional Costs incurred by providing a wholesale service rather than a retail service

In certain circumstances additional costs may be incurred by providing a wholesale service rather than a retail service; these costs could include the following:

- Wholesale billing costs which are incurred as a result of a wholesale service,
- Administrative and/or operational costs associated with the provision of a wholesale service,
- Additional investment costs,

If an NRA concludes that it is appropriate to include some or all of these costs in its calculation of the margin the NRA should also consider how these costs should be recovered. Should the costs only be recovered from the OUAs (and by implication only from the customers of the OUAs) or should some or all of the costs also be recovered by the notified operator through its charges to its own retail customers. The latter approach may be more appropriate if the NRA considers that the notified operator's customers will benefit from the increased competition that could result in the retail market.

7. What are the ways of expressing the minus?

There are various different ways in which the minus can be expressed and NRAs need to consider which method is the most appropriate for the circumstance of the specific case under consideration and the specific regulatory objectives that the NRA is seeking to achieve.

The following is a list of possible options:

1. The minus is an absolute fixed monetary value: this means that the gap between retail prices and wholesale prices is a fixed amount. While a price control of this form has the advantage of preventing any decrease in the margins available to OAUs, it may not always be appropriate in order to promote competition within the market, particularly in a context of decreasing retail prices and increasing volumes.
2. The discount is a fixed percentage of the retail price. This option has the potential advantage of increased flexibility in terms of product pricing.

However, in the event of decreasing retail prices, there may be the risk that the corresponding wholesale prices will be reduced in absolute monetary terms to such a degree that there could in fact be a margin squeeze.

3. The discount is a combination of a fixed monetary value and a fixed percentage. This option allows the NRA to reduce the risk of a margin squeeze occurring while, at the same time, to take into account the evolving nature of the market. By using such a hybrid formula, in the event of decreasing retail prices, the absolute monetary value of the minus will decrease, but the minus expressed as a percentage will increase. Such an approach could also be a way for NRAs to achieve a balance between achieving flexibility, transparency and predictability for market players.

As a general principle, the first best option of expressing the minus will general be the option which best reflects the underlying cost structures of the services being considered. E.g. to the extent that the costs included in calculating the minus are expected to remain constant over the period in which the retail minus is in place, the first option may be most appropriate. However, if it is the case that the costs included in calculating the minus would be expected to decrease as retail prices fall, the second option may be more appropriate.

NRAs should further note that in practice setting the minus in the third, hybrid form can prove difficult in practice, both in terms of calculating the minus and in expressing the minus in a transparent manner.

8. How to consider economies of scale

A number of electronic communications markets are characterised by the presence of economies of scale. This is when the larger the volume of services provided by an operator, the lower the unit costs of providing that service. Therefore, NRAs considering implementing retail minus in markets that exhibit economies of scale should bear in mind when calculating the minus, a key issue may be the assumptions made regarding the volumes which can be achieved by the notified operator. In general, notified operators are more likely to be able to achieve high volumes and, therefore, benefit more from any economies of scale that may be present, compared to OAUs. The importance of this issue to an NRA may depend on the maturity of the market. In relatively immature markets where there are economies of scale and the market is growing unit costs are likely to change significantly as the volume of services provided increases.

9. Whose costs should be used?

Generally it will be appropriate to use the notified operator's costs to calculate the value of the minus. This will allow at-least-as-efficient firms to enter. However, because of the issues above, it is important that NRAs consider what/whose costs are used to calculate the minus. In practice there is a spectrum of various options available to NRAs, from using the notified operator's incurred costs at one end to using those of a hypothetical efficient new entrant at the other, as stated in the IRG Remedies paper. Between these two extremes, there are other options, including using a new entrants' incurred costs and using the notified operators' costs adjusted to take account of other factors, such as economies of scale. The main differences between an OAUs' and a notified operator's cost are likely to derive from differences in efficiency, economies of scale and economies of scope.

As discussed above, economies of scale and also economies of scope, mean that it could be the case that notified operators are able to benefit from these in a way that OAUs cannot. As a consequence of economies of scope, notified operators, generally being large, multi-product and possibly vertically integrated firms, have the opportunity to spread out common overhead costs across a number of products. On the contrary, OAUs rather than necessarily providing a full range of services, may focus on specific services and, consequently, have to allocate to their individual services a higher proportion (if not necessarily a higher absolute amount) of overheads than the notified operators tend to.

For these reasons, whenever the notified operator is able to derive significant benefits from economies of scale or scope, it may not always be appropriate to use its costs to calculate the minus, as this may result in the minus being too low such that it precludes efficient new entry. As way of illustration and as noted above, in the case where there are economies of scale, a possible alternative could be to use the notified operator's costs, but to adjust these in order to reflect the economies of scale that may be available to an efficient OAU. This approach could reduce the benefits to the notified operator derived from the presence of economies of scale. The effect of this approach would be to increase the value of the minus, leading to a lower wholesale price for any given retail price.

A further alternative, as noted above, could be to begin with the costs which would be borne by an efficient new entrant to the market, built up from a model of potential new entrant costs. This may appear to be a more realistic measure of the actual environment of a new market entrant and could possibly position an OAU (with efficiency levels similar to those of the notified operator) to enter the market and compete on a forward-looking cost basis.

10. What timeframe to use in assessing retail costs?

In calculating the minus, it may be necessary for an NRA to take into consideration the costs currently incurred, the costs that may be incurred in the future and the costs incurred in the past. In relatively immature markets, particularly when products are launched firms may focus on expanding the market at the expense of tight or even negative margins in the short term, in the expectation that sufficient returns can be achieved in the future over the product's lifecycle.

It is likely to be the case that unit costs start decreasing as a firm acquires a better understanding of the market. Moreover, it is often the case that firms discount their prices (often following the introduction of new products) in an attempt to boost demand, partly to encourage take-up and partly to enable lower unit costs. It is possible that on a superficial view costs would seem to be relatively high initially and retail prices comparatively low if these prices have been set to stimulate demand of a service. Therefore, NRAs will need to consider the extent to which they take these, sometimes short-term, issues into account when calculating the minus. NRAs also need to be aware to ensure that “penetration pricing” (which this is often referred to as) does not result in “predatory pricing”.

This issue of discounts and temporary promotions also arises when determining the retail price and is discussed at point four above. However, it may also be appropriate for an NRA to include the associated costs in the calculation of the minus (although taking care to avoid double counting). A possible option available to an NRA for including these costs into the calculation of the minus is to incorporate them into a discounted cash flow analysis. This approach could mean that the retail minus calculation is based on an average of prices (standard and promotional) over a period of time. Permanent discount schemes, such as bulk or volume discount schemes (if applicable) could be treated in the same way i.e. on an average of prices across the standard price and the discounted price and weighted by sales volumes in each category.

In order to calculate the minus, it may be appropriate for an NRA to set a timeframe on historic and future costs which may be based on either the notified operators' expectations (relying on their experience) or on the OAU's expected costs.

11. What is the appropriate rate of return on retail services?

An NRA should consider whether the minus should also account for a return on capital employed for those retail costs included in the calculation of minus. If an NRA decides that the minus should include this, then there are potentially a range of possible approaches available to calculate the level of this cost to be included. These possible approaches could include using the notified operator's weighted average cost of capital (adjusted to reflect risks in the specific market if the NRA has adopted a divisional cost of capital) or using an estimate for a benchmark of cost of capital of the sector, or using an alternative measure of returns such as return on turnover.

4.4 Other associated implementation issues

There could be other issues that an NRA considering implementing retail minus pricing may wish to take into account.

12. How often should the margin be assessed?

NRAs, as well as determining the retail price and calculating the value of the minus, also need to consider how often any price control based on retail minus should be assessed and what circumstances could trigger a review.

One option would be to review the value of the minus every time there is a retail price change. While in theory this could ensure that the control is highly responsive to the market and that any change in product or service offering could be accommodated, this approach may not provide the level of comfort, or visibility, required by all operators. Moreover, in a market where there are numerous price changes this would create a significant resource burden on the NRA as well as the notified operator and OAUs and create significant time lags between retail price changes and amendments to the minus. For these reasons, this option may not always achieve the intended regulatory objectives.

Another option would be to fix the minus for a multi-year period, for example by linking any review of the minus to the market analysis process. One of the potential advantages of such an approach is that decisions about the level of the minus (and by implication the level of wholesale prices) would be taken consistently with the reviews of market definition and market power. Moreover, NRAs would have the opportunity to verify whether the remedies imposed, as a result of previous market reviews, have been effective and proportionate in addressing SMP and to examine the level and nature of market entry.

While a longer-term fixed minus may provide more visibility to the operators, if there is a lack of responsiveness to change on the part of the NRA, this could risk jeopardising the establishment of sustainable competition in the retail market. It may be that the second approach outlined above is more suitable to mature and fairly predictable markets.

In considering this question, NRAs should bear in mind the circumstance of the specific case under consideration and the specific regulatory objectives that the NRA is seeking to achieve.

13. How to deal with product squeeze

A further issue associated with the implementation of retail minus is the potential for a notified operator to "product squeeze". One way that a product squeeze can be affected by a notified operator is by it increasing the specification of its retail product without necessarily reflecting the costs associated with this increased specification in its retail price. This can have the effect of reducing the ability of OUAs to compete with the notified operator, even though there is a requirement on the notified operator to maintain a minimum margin between its wholesale and retail prices.

This issue could, in some respects be addressed through more frequent reviews of the minus as set out under issue 12 above, or indeed through the NRA predicting potential changes in specification of the notified retail services when the minus initially calculated. However, these options have associated difficulties as discussed in more detail above.

PIB 2:
NRAs should address the various implementation issues addressed in this document in line with the recommendations outlined in the principles stated below taking into account its own regulatory objectives.

PIB 3:
When determining the price of the retail service against which the minus will be subtracted to determine the price of the regulated wholesale service, the NRAs should consider a number of issues . These could include:

- **Whether to set the minus on a product-by-product basis or in reference to a group of products, using a portfolio approach**
- **How to match retail services with wholesale services where there is no direct link between the wholesale and retail services**

- Whether discounts and temporary promotions should be taken into account and how this could be done

PIB 4:
When calculating the value of the minus NRAs should consider a number of issues. These could include:

- **How the minus should be expressed, including either as an absolute value, as a proportionate value or as a hybrid of the two**
- **How any economies of scale that may be present should be taken into account, if at all.**
- **How to treat costs associated with temporary promotions and discounts**
- **Whether the notified operators' costs should be used, or those of an efficient new entrant, or some hybrid approach**
- **Over what time-period is it appropriate to assess the costs**
- **What is the appropriate rate of return on the retail services associated with the minus .**

PIB 5:
When implementing retail minus pricing, NRAs should consider a number of issues. These could include:

- **What the appropriate period of time between reviews of the minus could be.**
- **How to assess the potential issue of a product squeeze i.e. the where the notified operator may increase the specification of a product without any corresponding price increase.**

Section 5

Issues relating to Cost Accounting & Accounting Separation

The imposition of a Retail Minus price control mechanism may need to be kept under review by the NRA. This may be supported by coupling the price control obligation with the obligation of accounting separation and cost accounting systems.

This solution should prevent vertically integrated notified operators from resorting to predatory pricing or margin squeeze practices as a way to protect their market power. Moreover, this obligation can provide additional insight when determining the retail costs and, therefore, in the calculations to establish the wholesale price.

When a retail-minus price control is imposed on a wholesale market coupled with the obligations of accounting separation and cost accounting, it may be necessary to obtain information on a related market (which may be unregulated) in order to ensure the effectiveness of such an approach. In fact, on Recital 5 of the EU Commission's Recommendation on Accounting Separation and Cost Accounting Systems states that *"Operators may operate in markets in which they have been designated as having significant market power, as well as in competitive markets where they are not so designated. In order to carry out its regulatory tasks, a national regulatory authority may need information about markets where operators do not have SMP. When an obligation for accounting separation is imposed on a notified operator with SMP on one or more markets, the imposition of accounting separation may cover markets where the operator does not have SMP, e.g. to ensure the coherence of data"*.[7]

PIB 6:
The imposition of retail minus as a price control remedy needs to be kept under review by the NRA. Any review may be supported by cost accounting and accounting separation obligations.

PIB 7:
Using the obligation of cost accounting and accounting separation, the NRA can investigate whether the vertically integrated notified operator complies with the retail minus obligation, i.e. does not engage in margin squeezes margins or uses predatory prices. The cost accounting and accounting separation obligation can, therefore, support the implementation of retail minus.

PIB 8:
When an NRA imposes a retail-minus price control, coupled with the obligation of accounting separation and cost accounting on a wholesale market, it may be necessary, subject to proportionality to obtain information on a related market which may be unregulated in order effectively monitor a price control based on retail minus.

7 Recommendation on accounting separation and cost accounting systems under the regulatory framework for electronic communications (C(2005) 3480 final):

Section 7

Glossary of Terms

Accounting Separation: The preparation of separated accounts for costs, revenues, assets, liabilities and capital costs associated with a specific business or with specific businesses in the accounts of the notified operator. The aim of accounting separation is to reflect the performance of markets, as if they were separate businesses operating independently of each other. Transactions between these markets are treated as if these took place between separate entities.

Bundling: consists of selling different services in a package. The bundled services may be indispensable to each other i.e. the usage of one service is a pre-condition to use the other one, but this may not necessarily be always the case. If the bundled services can be used independently of each other then the term ‘tying’ can also be used.

Cost-based methodologies: determining the price of a wholesale service based on the costs incurred to produce the service, for example using the long run incremental costs methodology or the fully allocated cost methodology.

Downstream Market: A market which may be a retail market and which is closer to the end-user in the value chain of a product or service. In order to be able to provide a service in the given market, market players active in the downstream market probably use the services of another, upstream (usually wholesale) market.

Efficient Entry: means that the market entry is attractive only to those OAUs that have a cost per unit of a product or service which is equal or lower than the costs of their competitors and/or the notified operators in the relevant market taking into consideration the market circumstances, technological innovation and the size of the service provider.

Foreclosure of the Market: excluding competitors from the market through the creation of an environment (by a notified operator in a relevant upstream or downstream market), which make it practically impossible for new entrants to compete effectively.

Incremental cost test: in general prices are not considered predatory, if they cover at least the incremental costs, i.e. the directly attributable costs; when applying the incremental cost test to a bundle, the price of the bundle is not considered predatory if each of the products within the bundle earns at least its incremental costs, while the bundle as a whole must cover all overhead costs of the bundle.

Margin Squeeze: is a situation in which a vertically integrated dominant operator uses its control over an input supplied to downstream OAUs preventing them from making a profit on a downstream market in which the dominant operator is active. The notified operator could in theory affect a margin squeeze in a number of ways as follows:

- raise the input price levels so that OAUs could no longer sustain a profit downstream,
- engage in below cost selling in the downstream market, while maintaining an overall profit through the sale of upstream services,
- raise the price of the upstream input and lower the price of the downstream retail product/service to create a margin squeeze.

Notified Operator: An operator that has been notified with a position of SMP in a relevant market following the conclusion of the market analysis.

OAU: Other Authorised Undertakings.

Penetration Pricing: setting the price of a service below cost in order to build up market share, develop the market (increase market size) and make profits later on in the life-cycle of the service. Penetration pricing is often used in case of new developing markets or when a company wants to enter an existing market. It may be difficult to distinguish penetration pricing from predatory pricing, since both are characterized by pricing below costs. Whereas predatory pricing is aimed at eliminating competitors and thereby creating market power, which can be exploited later on using excessive pricing to generate monopoly rents, penetration pricing is aimed at entering and developing a market, where over the life-cycle of the product normal profits will be earned.

Retail minus pricing: determining the price of a wholesale service by deducting a margin (the minus) from the price of a corresponding retail service.

Predatory Pricing: setting the price of a usually downstream (retail) service below the reasonable level that deliberately causes short term losses to eliminate competitors and so regain these losses in the future through excessive pricing. Predatory pricing may be used by a vertically integrated operator, which has an SMP in the relevant upstream (wholesale) market, in order to foreclose the downstream (retail) market from competitors.

Significant Market Power (SMP): A position of economic strength affording an undertaking the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers, the concept of SMP is identical to the concept of dominance according to Art. 81/82 ECT and case law.

SMP Operator: see Notified Operator.

Unfair bundling: as bundling can have positive effects (for consumers), it is not considered to be per-se anti-competitive, only unfair bundling is forbidden. Bundling is considered unfair when a competitor is not able to replicate the bundle at the price at which the dominant operator offers it, either because the price is predatory or because the elements of the bundle cannot be bought separately at prices which add-up to the price of the bundle (so-called **adding-up rule** or **adding-up test**). In both cases, consumers will choose the bundle as it offers them a net benefit which the competitor cannot match. Thus the bundling is unfair.

Upstream Market: A market which may be a wholesale market, distant from the end-user in the value chain of a product or service. Market players active in the upstream market provide services for another, downstream (usually retail) market.