

EUROPEAN COMMISSION

DIRECTORATE GENERAL XIII
Telecommunications, Information Market and Exploitation of Research
Telecommunications and Posts
Telecommunications Regulatory Framework
Access to networks (ONP); Interconnection

Brussels, 6 November 1997

XIII/A/1

Interconnection in a liberalised telecommunications market;

Working document on Cost Accounting and Accounting Separation

This Working Document sets out the basis of a possible Commission Recommendation on Cost Accounting and Accounting Separation.

It should not be taken as an approved position of the Commission or of the Commission Services.

No inferences should be drawn from this document as to the precise form or content of future measures to be presented by the Commission

Introduction

The Interconnection Directive 97/37/EC¹ states in Article 8 that telecommunication organisations providing public fixed telephone networks and/or leased lines and which are designated by their National Regulatory Authorities as having significant market power (herein after referred to as 'notified operators') shall be required to keep separate accounts for their activities related to interconnection - covering both interconnection services provided internally and those provided to other operators - and other activities.

Moreover, in Article 7 it is stipulated that National Regulatory Authorities have to ensure that the cost accounting systems used by the organisations concerned are suitable for implementation of the interconnection obligations in particular with regard to the principles of transparency and cost orientation.

The Directive calls also on the Commission to draw up recommendations on cost accounting systems and accounting separation in relation to interconnection (Article 7(5)).

The purpose of the proposed Recommendation is to provide practical guidance to National Regulatory Authorities on how the requirements on cost-accounting and accounting separation in the interconnection directive could be implemented by notified operators. The proposed Recommendation (Part 2) will complement the recently adopted Recommendation on the principles for interconnection pricing².

The purpose of accounting separation is to make transparent to competitors and regulators, the costs, revenues and capital employed in different areas of the business. The cost-accounting system should be implemented in a transparent way showing the main categories under which costs are grouped and the rules used for the allocation of costs in particular with regard to the fair attribution of joint and common costs.

The financial reporting by well-defined business lines of the notified operator are provided only to fulfil regulatory requirements and transparency without prejudice to any other statutory or legal financial reporting required under national or Community law. Compliance with the cost accounting system must be verified by the NRA or another independent competent body appointed by the NRA, in accordance with Article 7(5) of Directive 97/33/EC.

¹ O.J. No L 199 of 26 July 1997

² C(97) 3148 of 15 October 1997

The approach proposed in this document will provide transparency in the derivation of interconnection charges, giving the regulator and competitors confidence that no anti-competitive cross-subsidies exist.

In accordance with Part 1 of the Recommendation on interconnection in a liberalised telecommunications market, interconnection costs should be calculated on the basis of forward-looking long run average incremental costs (LRAIC), since these costs closely approximate those of an efficient operator employing modern technology.

There are two ways of establishing interconnection costs based on a long-run average incremental cost approach:

- 1. a top-down approach that takes as the starting point the activity based financial accounts, in current cost-terms, as evaluated on an efficient operator and removes costs that are not incremental to interconnection, or which are redundant to an efficient operator.
- 2. a bottom-up approach that uses economic/engineering models to assess the efficient design and level of costs of building a network, and the allocation of those costs.

The reconciliation of these two approaches, if properly implemented, can help all parties to gain a clearer understanding of underlying network costs and their relationship to different network services, and thus can provide confidence in the accuracy of the costs so derived.³

The Arthur Andersen study on accounting separation in the context of ONP

Arthur Andersen has been commissioned by DG XIII to undertake a study on issues related to accounting separation and interconnection pricing in the context of ONP. The purpose of the study is to provide guidelines that may be applied by operators in the preparation of separate accounts in accordance with Article 8 of the Interconnection Directive (see annex).

The use of current cost accounting information ("CCA") provides a good practical calculation of the economic costs of a telecommunications network in a competitive environment. A top-down approach based on the analysis of accounting information, where

It should be noted that although a top-down model should provide useful insights to calculate the actual operating costs of a specific operator, a bottom-up economic/engineering approach in principle should provide a more objective reference model consistent with forward-looking long run average incremental cost principles. However, while 'bottom-up' models are becoming highly sophisticated, they are as yet imperfect, and so a reconciliation of both top-down and bottom-up approaches is advised for the foreseable future.

costs are attributed, as far as is practicle, to the activities that have caused them, and where asset valuations are at current cost, provides a cross-check of the calculation of long run average incremental costs as would be calculated by a bottom-up economic/engineering model.⁴ Valuation at current value provides input prices which closely match those that would exist in a highly competitive market.

Arthur Andersen proposes a pragmatic approach on accounting separation and current cost accounting information. The proposed framework focuses on the allocation of costs, revenues and capital employed for the purposes of preparing appropriate separate accounts. It requires the identification, reasonable causal attribution and separation of the operating costs and capital employed in the provision of interconnection (the "Core Network" business) from those related to other infrastructure and retail activities (the "Local Access Network" and "Retail" businesses).

The proposed guidelines are not intended to be binding, nor are they intended to provide a comprehensive set of allocation rules that operators must follow. Within the framework of principles proposed here individual operators and NRAs will need to develop their detailed allocation principles and to apply these to their own costs, revenues and capital employed.

The recommended framework

- 1. This framework concerns the implementation of accounting separation and cost accounting systems by operators designated by their national regulatory authority as having significant market power (hereinafter referred as 'notified operators') for implementation of interconnection obligations of Directive 97/33/EC in particular with regard to the principles of transparency and cost orientation.
- 2. Article 8 of Directive 97/33/EC requires that notified operators keep separate accounts for, on the one hand, their activities related to interconnection covering both interconnection services provided internally and interconnection services provided to others and, on the other hand, other activities.

Where network architecture is sub-optimal some discrepancies can arise when comparisons are made with bottom-up models. Therefore the implementation of a bottom-up economic/engineering model is also desirable to identify and remove inefficiencies in network operating costs.

The purpose of accounting separation is to provide an analysis of information derived from the accounting records to reflect as closely as possible the performance of parts of the business as if they had operated as separate businesses.

3. For the purposes of accounting separation and regulatory reporting by notified operators, disaggregation of the operating costs, capital employed and revenues, into the following broad business lines is deemed to be appropriate:

• Core-Network (switched infrastructure)

The Core-Network represents the provision of interconnection services.

• Local Access-Network (local loop infrastructure)

Local Access-Network business includes the cost involved in the provision of connections to the telephony network.⁵

Retail

The Retail business includes the activities mainly related to the provision of fixed telephony services to end users. Separate accounts should be prepared for each activity within Retail that is subject to regulation (i.e. leased lines, telephony).

• Other Activities

Other activities provided by the notified operator may include un-regulated activities as well as other type of regulated activities. ⁶ Accounts for regulated and un-regulated activities should be kept separate.

Section 1 of the Annex defines the scope of each Business. Transfer charges between busineses are identified in Section 2.

This will include those components of the network dedicated to a particular customer including, for example, the local loops and the line cards and ports located at concentrators and/or exchanges.

NRAs will need to determine the other type of regulated activities for which separate accounts should be prepared taking into account transparency requirements demanded by national or Community law (i.e. mobile activities).

4. The separate accounts should be prepared on a current cost basis. The allocation of costs, capital employed and revenue should be done in accordance with the principle of cost causation and activity based costing ("ABC").

The costing system of the notified operators will need to be sufficiently detailed to permit - as far as possible - the allocation of costs to unbundled network components in particular to determine the cost of unbundled interconnection services.

A well defined cost-allocation system should enable at least 90% of the costs to be allocated based on direct or indirect cost-causation⁷.

Un-attributable costs (the cost which can only be attributed in an arbitrary basis) should be clearly identified in a specific account and be the object of a specific treatment by the NRA (i.e. to be distributed according to the rules determined by each Member State, in accordance with the Community's competition rules and obeying the principles of transparency and proportionality.

It is recommended that the NRA undertakes a public consultation with market players on the adoption of sound allocation methods and the specific treatment to be given to unattributable costs.

Section 3 of the Annex outlines the principles to be followed in order to allocate costs, capital employed and revenues when preparing separate accounts;

Section 4 of the Annex provides guidance on the application of those principles to the calculation of operating costs including depreciation; Section 5 does the same for the cost of capital and capital employed and, Section 6 on revenues.

5. A key element of the 'current cost accounting' (CCA) methodology is the evaluation of network assets at forward looking or current value of an efficient operator, that is at the value that would prevail if the market were vigorously competitive. This requires that the depreciation charges included in the operating costs should be calculated on the basis of current valuations of equivalent assets, and consequently, the reporting on the capital employed should also be in a current cost basis.

Directly attributable costs are those costs that can be directly and unambiguously related to a product or service. Indirectly attributable costs are those costs that can be apportioned to products or services on a measured non-arbitrary basis based on the relationship of the costs with directly attributable costs (i.e. using usage factors for each consuming shared resources).

It is recommended that the methodology and criteria for the evaluation of network assets at current value is fixed by the NRA after a public consultation with market players.

6. With regard to pricing, NRAs may require efficiency factors to be applied in recognition of the fact that the use of CCA values for the network may not fully reflect the costs of an efficient operator⁸.

Some of the assets may be in excess of requirements or network architecture may be sub-optimal. Implementation of a bottom-up economic/engineering model will help provide information about these inefficiencies.

7. Under accounting separation, the financial reporting should provide a profit and loss statement and balance sheet for each of the separate businesses. Transfer charges or purchases between businesses should be clearly identified. The reporting should be made on a current cost accounting basis.

Section 7 of the Annex indicates the content and formats of the financial regulatory reports to be provided.

For consistency, the financial reports of these separate regulatory accounts should be consolidated into a profit and loss statement and a balance sheet for the company as a whole. A reconciliation of the separate regulatory accounts to the statutory accounts of the operator is also suggested.

8. In accordance with Article 7(5) of Directive 97/33/EC information about the cost allocation methodologies and criteria employed in order to prepare separate accounts must be made available on request to interested parties, including other market players. This should be at a level of detail that makes clear the relationship between costs and charges of network components and services. In particular the basis on which un-attributable costs have been allocated between different accounts should be provided.

It is recommended that the level of detail required by the NRA is made available to interested parties and should be enough to enable the average costs of unbundled interconnection services to be identified.

9. NRAs should make the accounting records from notified operators available on request at a level of sufficient detail to ensure that there has been no undue discrimination between the provision of services internally and those provided externally.

In those Member States that operate schemes to finance Universal Service obligations and/or access deficit contributions, NRAs should also make available sufficient accounting information to ensure that there is no discrimination between charges levied on other operators and those levied (implicitly) internally.

10	0.These a	accounting	guidelines	are	concerned	with	regulatory	reporting	and	they	are	not
	intende	d as a repla	cement for	any	statutory fi	nanci	al reporting	g that may	be re	quire	d in	the
	Membe	r State.										

11. This framework will be reviewed by the Commission by 31 July 1999 at the latest.