



LRIC Bottom-up model for
interconnection
Consultation Document 4: Reconciliation

Summary of the comments

Prepared by BIPT
In collaboration with Bureau van Dijk Management Consultants

May, 7th, 2004

Consultation Document 4 – Reconciliation : summary of comments

Table of Contents

0.	<i>Introduction</i>	3
1.	<i>General framework for the reconciliation process</i>	4
1.1	CAPEX	4
2.1.1	Switching – Direct Network CAPEX	4
2.1.2	Switching – Indirect Network Support CAPEX	4
2.1.3	Transmission Equipment – Direct Network CAPEX	5
2.1.4	Transmission Equipment – Indirect Network Support CAPEX	5
2.1.5	Transmission Infrastructure – Direct Network CAPEX	5
2.1.6	Transmission Infrastructure – Indirect Network Support CAPEX	6
2.2	OPEX and company overhead	6
2.2.1	Introduction	6
2.2.2	Network OPEX costs	6
2.2.3	Overhead costs	6
2.3	Demand volumes	6
2.4	Routing factors	7
2.5	Miscellaneous items	7
3	<i>Choices to be made regarding the results of the reconciliation</i>	8
3.1	Application of the results with respect to tariffs	8
3.2	Choices regarding CAPEX	8
3.3	Choices regarding OPEX and overhead costs	9
3.4	Choices regarding demand volumes and routing factors	10
3.5	Choices regarding the miscellaneous items	10

0. INTRODUCTION

On September 17th, 2003, the BIPT issued its fourth and final consultation document regarding the development of a LRIC Bottom-Up model for interconnection, which is concerned with the reconciliation of the Bottom-Up model with the BIPT's Top-Down model. It drafted a methodology for the reconciliation and indicates the choices that have to be made w.r.t. the results of the reconciliation. On both issues, the sector was invited to provide input and phrase comments.

The present document summarises the comments made by the operators.

1. GENERAL FRAMEWORK FOR THE RECONCILIATION PROCESS

1.1 CAPEX

Question 2.1: The BIPT invites the operators to comment upon the proposed structure for investigating the main differences regarding CAPEX costs.

Summary of comments

All operators agreed with the proposed structure, although one operator suggested that the 2nd and 3rd level of differences might be switched as the operator believes that altering the order corresponds better to the cost allocation process in the Top-Down and Bottom-Up model.

2.1.1 Switching – Direct Network CAPEX

Question 2.2: The BIPT invites the operators to comment upon the list of differences that is identified and upon the priorities set by the BIPT.

Summary of comments

In general, operators considered the list of differences relevant and the priorities well set. However, some specific remarks were made:

- ✍ It was mentioned that the examination of differences due to annual price changes was considered to be important and that the sensitivity of the model to these price changes should be examined;
- ✍ It was noted that in the Top-Down model, direct network CAPEX costs for switching are not solely allocated to PSTN/ISDN services, but also to ATAP¹, which is not the case in the Bottom-Up model;
- ✍ It was asked why in category “Cost allocation” for switching no reference made to the split IC vs. non-IC PSTN/ISDN-services;
- ✍ Finally, it was said that, next to examination of differences in investment costs, also differences in annual costs should be examined (possible differences due to different prices and price changes).

2.1.2 Switching – Indirect Network Support CAPEX

Question 2.3: The BIPT invites the operators to comment upon the differences that the BIPT will investigate.

Summary of comments

In general, the operators considered the differences that will be examined the most relevant ones. Moreover, it was noted that the the sensitivity of the model to the mark-ups should be examined and that no priority was indicated for the examination of differences due to Indirect Network Support CAPEX, although this issue was considered to be important.

¹ The acronym ATAP stands for ‘Access To an Access Point’.

2.1.3 Transmission Equipment – Direct Network CAPEX

Question 2.4: The BIPT invites the operators to comment upon the list of differences that is identified and upon the priorities set by the BIPT.

Summary of comments

In general, operators considered the list of differences relevant and the priorities well set. However, it was mentioned that:

- ✍ the examination of differences due to annual price changes is considered to be important and that the sensitivity of the model to these price changes should be examined;
- ✍ not only investment costs, but also annual costs have to be examined carefully (possible differences due to different prices and price changes).

2.1.4 Transmission Equipment – Indirect Network Support CAPEX

Question 2.5: The BIPT invites the operators to comment upon the differences that the BIPT will investigate.

Summary of comments

In general, the operators considered the differences that will be examined the most relevant ones. Moreover, it was noted that the the sensitivity of the model to the mark-ups should be examined and that no priority was indicated for the examination of differences due to Indirect Network Support CAPEX, although this issue was considered to be important.

2.1.5 Transmission Infrastructure – Direct Network CAPEX

Question 2.6: The BIPT invites the operators to comment upon the list of differences that is identified and upon the priorities set by the BIPT.

Summary of comments

In general, operators considered the list of differences relevant and the priorities well set. However, it was mentioned that:

- ✍ the examination of differences due to annual price changes is considered to be important and that the sensitivity of the model to these price changes should be examined;
- ✍ not only investment costs, but also annual costs have to be examined carefully (possible differences due to different prices and price changes).

2.1.6 Transmission Infrastructure – Indirect Network Support CAPEX

Question 2.7: The BIPT invites the operators to comment upon the differences that the BIPT will investigate.

Summary of comments

In general, the operators considered the differences that will be examined the most relevant ones. Moreover, it was noted that the the sensitivity of the model to the mark-ups should be examined and that no priority was indicated for the examination of differences due to Indirect Network Support CAPEX, although this issue was considered to be important.

2.2 *OPEX and company overhead*

2.2.1 Introduction

2.2.2 Network OPEX costs

Question 2.8: The BIPT invites the operators to comment upon the proposed approach for the reconciliation of OPEX costs and the list of items that could be investigated.

Summary of comments

It was mentioned that the the sensitivity of the model to the OPEX mark-ups should be examined. Moreover, it was asked why the examination of the impact of the source data for the calculation of OPEX costs on the value of the mark-ups takes high priority. Finally, it was mentioned that in order to assess the impact of PBS and restructuring costs, OPEX costs resulting from the Bottom-Up model shouldn't be directly compared with the OPEX costs resulting from the Top-Down model *an sich*; rather, they should be compared with Top-Down OPEX costs *excluding* PBS and restructuring costs.

2.2.3 Overhead costs

Question 2.9: The BIPT invites the operators to comment upon the proposed item that could be investigated.

Summary of comments

It was noted that in order to assess the impact of PBS and restructuring costs, overhead costs resulting from the Bottom-Up model shouldn't be directly compared with the overhead costs resulting from the Top-Down model *an sich*; rather, they should be compared with Top-Down overhead costs *excluding* PBS and restructuring costs.

2.3 *Demand volumes*

Question 2.10: The BIPT invites the operators to comment upon the proposition for the reconciliation of the demand volumes.

Summary of comments

The BIPT was asked to provide more information regarding the preliminary analysis that indicated that the influence of the different definition of demand volumes in both models is limited.

2.4 *Routing factors*

Question 2.11: The BIPT invites the operators to comment upon the proposition for the reconciliation of the routing factors.

Summary of comments

The BIPT was asked to provide more information regarding the preliminary analysis that indicated that the influence of the different definition of demand volumes in both models is limited. Moreover, it was noted that routing factors in both models should be absolutely coherent as the routing factor directly affect the allocation of costs to all traffic types.

2.5 *Miscellaneous items*

Question 2.12: The BIPT invites the operators to comment upon the proposed list of miscellaneous items that could be investigated.

Summary of comments

It was asked to examine the influence of the efficiency of the network on the interconnection tariffs.

3 CHOICES TO BE MADE REGARDING THE RESULTS OF THE RECONCILIATION

3.1 *Application of the results with respect to tariffs*

Question 3.1: The BIPT invites the operators to indicate which interconnection tariffs should be based on the results of the reconciliation and to motivate their opinion.

Summary of comments

The BIPT noticed that the opinions of the operators differed greatly. Some stated that solely the Top-Down model should be used for the determination of all interconnection tariffs, whilst others argued that all interconnection tariffs should be based on the Bottom-Up model.

Remark of the BIPT

Please note that ATAP and IC Link tariffs cannot be reconciled as they fall outside the scope of the Bottom-Up model.

3.2 *Choices regarding CAPEX*

Question 3.2: The BIPT invites the operators to indicate how the volumes of switching equipment, transmission equipment and transmission infrastructure should be determined: should one retain the actually installed spare capacity (i.e. accepting the volumes of the Top-Down model), should one retain the proposed capacity utilisation of 90% (i.e. accepting the volumes of the Bottom-Up model) or should another amount of spare capacity be taken into account. Please motivate your answer.

Summary of comments

The BIPT noticed that the opinions of the operators differed greatly. Some stated that the volumes of the Bottom-Up model should be retained, whilst others argued that the actually installed spare capacity should be retained.

Question 3.3: The BIPT invites the operators to indicate whether other than modern equivalent assets, such as fiber and SDH, should be taken into account when setting tariffs. Please also indicate whether you consider the use of DWDM technology to be appropriate and please motivate your answer.

Summary of comments

Some stated that in an existing network, introducing modern equivalent assets does not necessarily lead to cost reductions and the continued use of the implemented technology might be the cheaper option. Others voiced the opinion that the use of fiber and SDH will lead to appropriate interconnection tariffs.

With respect to DWDM, some stated that the use of DWDM is cost efficient if one takes into account that the incumbent already possesses a network and that other than PSTN/ISDN services might use DWDM. Others believe that, given the size of Belgium and the high density of population, it is not optimal to use DWDM.

Question 3.4: The BIPT invites the operators to indicate whether Indirect Network Support CAPEX costs as determined in the Top-Down model or as determined in the Bottom-Up model should be retained and to motivate their answer.

Summary of comments

The BIPT noticed that the opinions of the operators differed greatly. Some stated that the Indirect Network Support CAPEX from the Top-Down model should be retained, whilst others argued that, if realistic mark-ups are used, Indirect Network Support CAPEX from the Bottom-Up model will be the best proxy for an efficient operator.

3.3 *Choices regarding OPEX and overhead costs*

Question 3.5: The BIPT invites the operators to indicate whether OPEX costs that are taken into account for the determination of interconnection tariffs should in- or exclude restructuring and PBS costs and to motivate their answer.

Summary of comments

The BIPT noticed that the opinions of the operators differed greatly. Some stated that OPEX costs should include restructuring and PBS costs, whilst others were convinced that OPEX costs should exclude restructuring and PBS costs.

Question 3.6: The BIPT invites the operators to indicate whether OPEX costs as determined in the Top-Down model or as determined in the Bottom-Up model should be retained and to motivate their answer.

Summary of comments

The BIPT noticed that the opinions of the operators differed greatly. Some argued that, if realistic mark-ups are used, OPEX from the Bottom-Up model will be the best proxy for the reality of an efficient operator, whilst others believe that the OPEX costs from the Top-Down model are the most representative ones and hence should be used.

Question 3.7: The BIPT invites the operators to indicate whether the overhead costs that are taken into account for the determination of interconnection tariffs should in- or exclude restructuring and PBS costs and to motivate their answer.

Summary of comments

The BIPT noticed that the opinions of the operators differed greatly. Some stated that overhead costs should include restructuring and PBS costs, whilst others were convinced that overhead costs should exclude restructuring and PBS costs.

3.4 *Choices regarding demand volumes and routing factors*

3.5 *Choices regarding the miscellaneous items*

Question 3.8: The BIPT invites the operators to indicate whether the cost of the actually installed signaling network should be retained, or whether the cost of the signaling network, dimensioned based on the demand at node level, should be retained. Please motivate your answer.

Summary of comments

While some argued that one should start at node level for the determination of signalling costs, others propose to retain the costs of the actually installed signalling network as they believe that modelling a signalling network, based on demand at node level, would require significant time resources and might jeopardise the BIPT's timing.