



EUROPEAN  
REGULATORS GROUP  
FOR POSTAL SERVICES

# **ERGP Report on the cross- subsidisation**

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## 1 Executive summary

This report investigates the phenomena of cross-subsidisation in the postal market, taking into account that the designated universal service provider (USP)/the incumbent provides several services through the same network (postal and non-postal; within the universal service obligations (USO) and non-USO; letters, parcels, unaddressed mail, etc.). In some cases, cross-subsidisation can be harmful for competition and end users.

The report identifies the theory and methods used for testing for potential cross-subsidisation in order to prevent adversely affecting competition, taking into account the regulatory accounting (including cost allocation) and other tools that can be used for the detection and prevention of such practices by NRAs.

The purpose of this report is to help NRAs to consider and manage any potential risks of cross-subsidisation in their markets. The work captures the relation between different regulatory principles applied in tariff regulation practices in dealing with cross-subsidisation risk. The project considers the framework of NRAs' duties and responsibilities and their practical approach in the form of regulatory tools and the impact they have.

The detection and measurement of cross-subsidisation that can be harmful for competition is generally recognised as a complex issue within economic literature. This is especially difficult in the sectors which are characterised by the large proportion of common and joint costs, where products and services are provided by operators through shared networks as it is a case in the postal sector.

This document provides an overview of the microeconomics theory of harmful for competition cross-subsidisation as well as methods and tools available to the regulatory bodies in order to detect and prevent cross-subsidies from adversely affecting competition.

Microeconomics theory provides the tests for cross-subsidisation occurrence and according to them subsidy-free prices should be set between specific relevant economic cost levels. However unlike the tests of predatory pricing conducted in past competition law cases that have taken place in the EU, testing for cross-subsidy is not yet included in a regulatory framework derived from the PSD or competition law.

The report is structured in six chapters:

Market context chapter – locates the analysis against current competition landscape of the postal market in EU.

The chapter on the economics of cross-subsidisation presents a summary of the economic theory behind the definition and measurement of cross-subsidies as well as discusses how the economic

theory and the tests proposed for assessing claims of cross subsidisation can be applied.

The legal environment chapter provides insights on the current legal environment concerning the issue of illegitimate cross-subsidisation in terms of postal regulation, competition law and other markets regulation in respective countries. The chapter presents also the most important antitrust cases related to cross-subsidisation in EU from other than postal markets. Those cases however predominately concerns predatory pricing and since no excessive prices have been tested, they reflect not complete cross-subsidization scheme.

The chapter on regulatory tools shows the tools that are already used or are available to NRAs in order to both detect the potential risk of occurrence of cross-subsidisation practices and to prevent them.

Last two chapters presents most important European and non-European competition cases related to the managing of potential risk of cross-subsidisation that have taken place on the postal markets.

Finally, the report is supplemented with an Annex 1 which presents in more depth the costing standards used in testing whether cross-subsidisation is harmful.

The report was prepared using a mix of desk research, data of previous ERGP reports and the analysis of the answers provided to the questionnaire regarding different aspects of the potential cross-subsidisation issues on postal markets of respective countries, submitted in March 2019 to ERGP members and observer countries NRAs.

The NRAs from the following countries have answered the questionnaire: Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

The report reflects the situation at the beginning of 2019. All data used in the report have been already collected by NRAs, which means that NRAs did not collect data specifically for the purposes of this exercise.

## 2 Market context of the report

The substitution of physical communication by electronic means and digitalisation, is on the one hand increasingly replacing paper correspondence, while on the other enabling a significant growth in the number of deliveries of goods ordered via e-commerce.

Digitalisation creates new business opportunities in the postal market, while increasing demand for better delivery solutions and growing competition are pushing margins and profitability.

Those technological, social and market changes have effectively divided postal markets into two different segments:

- Letter segment - in which structural letter volume decline has led postal operators to experience negative economies of scale and higher unit costs of providing postal services, which subsequently put pressure to reduce costs and increase prices.
- E-commerce parcels and packets segment - after growing by double digit rate for a number of years, the segment attracted many new entrants, which give the incentive to invest in new infrastructure to extend and improve capacity in order to provide parcel delivery services, implementing and optimizing tracking systems as well as introducing a variety of new delivery options (e.g. parcel lockers, pick-up points). However, such rapid development of e-commerce also led to growing expectations of consumers for reliable and convenient deliveries for a low price.

Promotion of competition in the postal services sector is one of the main goals of the Postal Services Directive (PSD). Access to postal networks is an instrument for promoting competition, which is safeguarded in Articles 11, 11a and 12 of the PSD.

Especially the application of Article 12 of the PSD is relevant for provisions related to tariff regulation, in particular cost orientation. Related to this, Article 14 distinguishes between services which are part of the universal service and those which are not and the principles of the allocation of costs.

It is obvious that tariffs have a direct impact on the postal market and can shape the future of the postal sector. They usually constitute one of the main regulatory concern and are used as key commercial tools, but can also be used as tools to harm competition.

According to the Copenhagen Economics Report<sup>1</sup>, in the 2013-2016 period the majority of national regulatory cases in the postal market were cases concerning USPs' pricing practices in terms of

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<sup>1</sup> Main Developments in the Postal Sector (2013-2016), 2018.

alleged predatory pricing or unlawful discounts which may be connected with inappropriate cross-subsidisation practices.

Cross-subsidisation is one of the ways to distort competition, which is a recurrent theme in public debates and often defamed after the regulation of postal market. Public monopolies increasingly find themselves operating not only in regulated markets, but also in non-regulated markets where they may be accused of transferring profit generated from regulated segments to non-regulated segments to hamper competition. The other side is that when costs are transferred, the regulated segment can become loss making and be subject to some type of compensation or, alternatively, leading to higher prices.

The distribution of postal items has a high proportion of joint and common costs linked to the joint delivery of letters and parcels, such as sorting facilities, vehicles and staffing in all the delivery-chain operations. For example, the large proportion of personnel cost means that the unit costs of the delivery operations are harder to reduce in comparison with the decreasing volumes and changes in the mix of letters and parcels. The need to efficiently use resources and achieve synergies and/or the need to compensate lost revenues trigger a potential risk in the allocation of costs pertaining to one product or service that would be transferred to another, which constitutes the corner stone of inappropriate cross-subsidisation. The applied methodology of allocation is a decisive element of the proportion of the fixed cost (LRIC, FAC, cost standards).

In the most general terms, an inappropriate cross-subsidisation occurs where profits from excessive pricing in non-competitive segment of the market is used to compensate losses from predatory pricing in competitive segment of the market.

On the other hand, it is worth to mention that the existence of cross-subsidies may be desirable to pursue specific policy objectives. For example, a regulator might impose uniform geographical tariffs which will lead to a cross-subsidy from customers in low-cost areas (urban), to customers in higher-cost areas (rural). In such cases, cross-subsidies arising from specific policy objectives might be seen as welfare enhancing and promoting social inclusion.

This report assumes that one of the most risky areas in terms of potential inappropriate cross-subsidisation occurrence on the postal market could be the border between the letter segment (in general, lesser competitive segment) and the parcel segment (usually the most competitive one ). In order to make some illustrative market background for the issue of inappropriate cross-subsidisation, the report provides a short snapshot of competition characteristics of both segments in focus, namely:

- Letter segments are highly concentrated. Although incumbent market shares have declined over the last few years in a number of countries, the USP generally maintains a very high market share in the letter stream in terms of both volume and revenues. In 2017 the average USP letter market volume share in ERGP countries was 93% (in 2013 = 91%). In terms of revenues the average share was even higher amounting to 97% (in 2013 = 93%) <sup>2</sup>.

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<sup>2</sup> Source: ERGP (18) 45 Report on core indicators for monitoring the European postal market.

It should be noted that in the foreseeable future letter volumes in some national markets may remain considerable, while in others volume decline may level out at some point in the next five to ten years<sup>3</sup>.

- In contrast, the situation in the parcel segments is different: markets are fragmented, there have been more market entries than exits, USPs' market shares are still significantly lower in a large number of the ERGP countries. In 2017 the average USP's express items market volume share in ERGP countries was 12% (in 2013 = 18%). In terms of express items revenues the average USP share market was amounting to 15% (in 2013 = 37%)<sup>4</sup>.

Despite the recent ECJ decision,<sup>5</sup> clarifying that courier express are postal operators, and the definition of parcel contained in the EC Cross border regulation,<sup>6</sup> apparently some NRAs are not empowered to collect certain data from all postal operators and there are still differences in definitions ("postal services", "express", "courier" etc.) across countries. Hence, the report's questionnaire asked NRAs about their qualitative assessment, how the USP on their markets are performing on the most competitive market for delivering e-commerce goods ("parcel market").

For the purpose of the questionnaire we have considered the features described in the document "Notice from the Commission on the application of the competition rules to the postal sector and on the assessment of certain State measures relating to postal services (98/C 39/02)" which are:

- guarantee of delivery by a given date;
- collection from the sender's address;
- delivery to the addressee in person;
- confirmation to the sender of delivery;
- tracking and tracing;

Generally, our goal in the mentioned question was to determine the performance of the USPs/incumbents in respective Member States in competition against global integrators (such as eg. UPS, DHL, DPD, GLS, etc.) in comparable product.

The table beneath presents the results.

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<sup>3</sup> Sources: Copenhagen Economics, Main Developments in the Postal Sector (2013-2016); PwC, The outlook for UK mail volumes to 2023.

<sup>4</sup> Source: ERGP (18) 45 Report on core indicators for monitoring the European postal market.

<sup>5</sup> CJEU C-259/16 & 260/16 (Confetra, AICAI v. AGCOM) – Judgement of 31 May 2018.

<sup>6</sup> Regulation (EU) 2018/644 on cross-border parcel delivery services.



**Figure 1. Qualitative assessment of USPs performance on parcel markets**

Country	How successful is USP on parcel market?*	How USP was performing on parcel market over last 3 years?**	Key levers influencing its expansion/maintaining position
NL	market leader	expanding	developing network of click & collect points, developing network of parcel lockers, competing on prices, introducing new products
PT	market leader	expanding	introducing new products, developing network of click & collect points and parcel lockers, competing on prices, entering partnerships with e-retailers, mergers & acquisitions
RS	market leader	expanding	competing on prices
SI	market leader	expanding	developing network of parcel lockers, competing on prices
DE	market leader	expanding	developing network in general
LT	strong competitor	expanding	developing network of parcel lockers, competing on prices
LU	strong competitor	expanding	developing network of parcel lockers, entering partnerships with e-retailers
PL	strong competitor	expanding	competing on prices, introducing new products, entering partnerships with e-retailers
ES	strong competitor	expanding	Developing network of parcel lockers, entering partnerships with e-retailers, competing on prices, strategic alliances with Alibaba to introduce goods from China
UK	strong competitor	expanding	entering partnerships with e-retailers , competing on prices, introducing new products, network improvements

EE	strong competitor	expanding	developing network of parcel lockers, entering partnerships with e-retailers , competing on prices
HR	strong competitor	stable	entering partnerships with e-retailers
MT	weak competitor	stable	developing network of parcel lockers
HU	weak competitor	expanding	introducing new products, developing network of parcel lockers, competing on prices
LV	weak competitor	stable	entering partnerships with e-retailers
SK	weak competitor	stable	developing network of parcel lockers
DK	weak competitor	decreasing	-
CZ	weak competitor	decreasing	-
SE	weak competitor	decreasing	-
IT	weak competitor	expanding	introducing new products, entering partnerships with e-retailers, competing on prices, developing network of click & collect points and parcel lockers, growing of e- commerce performance;
CY	weak competitor	stable	competing on prices
AT	minimal success	stable	developing network of parcel lockers
EL	minimal success	stable	competing on prices
BG	minimal success	decreasing	-

\*- possible answers: market leader, strong competitor (on par with other key market players), weak competitor (clearly below par with other key market players), minimal success

\*\* - possible answers: expanding, stable, decreasing

Not applicable: BE, IE, RO, NO

Source: ERGP Regulatory Accounting WG questionnaire 2019, based on the replies of 28 NRAs.

In 12 countries , the incumbent postal operators are maintaining the position of a market leader or at least a strong competitor being on par with other key market players. Most successful operators are still expanding their position and one of the most often recurring key levers influencing its success stated by NRAs is price pressure that they are able to put on their competitors on this market.

### 3 Economics of cross-subsidisation

#### 3.1 Introduction

**In this chapter, an economic approach to the analysis of cross-subsidisation is presented. This should not be interpreted as the applicable legal framework derived from the PSD or in competition law.**

Cross-subsidisation occurs when relatively high prices from one set of products or services allow a company to set relatively low prices on another set of products or services. Not all forms of cross-subsidisation are considered harmful from a regulatory point of view. For example, uniform postal prices for universal postal services cross-subsidises services in remote and rural areas using the higher profits generated from the services in densely populated and urban areas, and is considered beneficial for social cohesion.

Harmful cross-subsidisation could occur when a company charges excessive prices<sup>7</sup> in the markets where it has economic market power, and uses the revenues it generates from those prices, to engage in predatory pricing<sup>8</sup> in other markets with varying degrees of competition.

For example, a USP could set excessive prices for some of its universal service letter products and use the extra revenues it generates to finance predatory low prices for the products it offers to the competitive parcels markets (e.g. bulk parcels products).

Harmful cross-subsidisation is therefore a combination of two types of abusive behaviour: excessive pricing and predatory pricing, with the former contributing to the funds enabling the latter.

A company could use various types of resources to finance predatory behaviour, e.g. surplus cash or debt finance. If excessive pricing is not one of the contributing sources, then strictly speaking those activities should not be considered as harmful cross-subsidisation, but a case of predatory pricing. Also, a company could use the revenues it generates from excessive pricing to set low prices in competitive markets. However, if the pricing strategy is not predatory, then the activities in question should not be considered as harmful cross-subsidisation, only a case of excessive pricing.

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<sup>7</sup> Excessive pricing occurs when an operator holds sufficient market power to be dominant and charge prices which have no reasonable relation to the economic value of the products supplied. To assess whether prices are excessive or not, they may be compared with the prices which the operator could have set if the market had been competitive.

<sup>8</sup> Predatory pricing involves pricing at low levels with the intention of driving the existing competitors out of the market or creating barriers to entry of new competitors. The predatory operator sets its prices at such low levels at which competitors or potential competitors cannot set their prices without making losses and ultimately going out of business.

### 3.2 Identifying harmful cross-subsidisation

The test to identify harmful cross-subsidisation is discussed in various sources in the economics literature<sup>9</sup>. An outline of the test is as follows: There may be harmful cross-subsidisation between two products with common costs, if the price of one product is greater than the Stand-Alone Costs ('SAC') of that product, while the price of the other product is lower than its Incremental Costs ('IC').

SAC is the hypothetical costs of a product if the company were to produce only that product and no other product that it produces in reality (see graph below). IC of a product is the increase in total costs of the company as a result of producing that product in addition to all of its other products (see Annex 1). Although the SAC test is described in economic theory, it has not been yet applied in the existing legal competition framework and thus this is not based on jurisprudence. When assessing excessive prices, focus can also be on the margins with the assumptions that the cost standard are prudent. So, when costs are substantially allocated to a service and there still is a very high margin, prices may be excessive.

The principles underlying the test are:

- it would be excessive for a company to charge a price for a product which is higher than the costs (including opportunity costs<sup>10</sup>) it would have incurred if it had had to produce only that product and nothing else; and
- it would be economically inefficient for that company to charge a price for a product which does not even cover the incremental cost of producing that product.<sup>11</sup>

The above can be illustrated by the following condition:

*An output  $j$  is neither the source of, nor the recipient of, cross-subsidy when:*

$$IC(j) \leq price(j) \leq SAC(j)$$

In other words, as long as the prices charged fall between the SAC and IC of those products, those prices would be subsidy-free. This would help ensure overall economic welfare is not adversely affected through excessive pricing, predatory pricing or cross-subsidisation.

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<sup>9</sup> Heald (1996), Contrasting approaches to the 'problem' of cross-subsidy; Cave and Mills (1992), Cost allocation in regulated industries; Heald (1997), Public Policy Towards Cross Subsidy.

<sup>10</sup> The opportunity cost of a resource is the value of the next highest valued alternative use of that resource. The opportunity cost of an investment, e.g. in a product, is considered to be the returns the investor would expect to earn for an investment of similar scale and risk. The cost of capital invested in a company is considered to represent the expected return.

<sup>11</sup> Comparison against the incremental cost benchmark is only one of the tests to prove predatory behaviour. There are further tests which often need to be performed, eg whether the behaviour is harmful to equally efficient competing operators.

Subsidy-free prices<sup>12</sup> are considered to benefit all users, because:

- no one pays more than they would have if they had to set up their own production facility; and
- no competitor is made worse off or forced to exit the market by prices below incremental costs.

How IC is calculated depends, among other things, on the time period under consideration. Short-Run IC ('SRIC') is calculated based on the current production capacity of the company, while Long-Run IC ('LRIC') is based on hypothetical future capacity which the company could expand into (see Annex 1.). In the case of companies (including those with network industries) where the costs of expansion are relevant for issues at hand, LRIC is typically used as the more appropriate cost standard.

Average Variable Cost ('AVC') is sometimes employed in considering predatory pricing, because it could be a more practical and yet adequate approximation for IC. AVC is calculated by dividing total variable cost of all the products concerned by their total volume.

NRAs often use Fully Allocated Costs ('FAC') in designing their regulatory remedies in the context of market regulation. The FAC however may not be the appropriate cost standard for testing harmful cross-subsidisation, because it involves allocating all the common costs.

Nonetheless, FAC could provide a good starting point for estimating SAC or IC in the absence of detailed modelling needed for more accurate calculation. For example, using IC-FAC ratios from other comparable contexts or excluding elements of common costs from the FAC could be useful strategies for estimating IC.

### 3.3 Preventing cross-subsidisation

Cost orientation based on the appropriate cost standards requirements (FAC, SAC, LRIC etc.) could be used to prevent excessive pricing and predatory pricing, and as such to prevent harmful cross-subsidisation. These requirements could be formulated as ex ante conditions on the prices set by a regulated company.

The cost orientation approach often adopted for such requirements is based on the concept of subsidy-free prices as explained above. Thus, the ex-ante control would require prices to be between some appropriate measure of SAC and IC.

Another approach that is often used by the NRAs is to ensure the identification, measurement and allocation of the incumbent's costs, and in particular its common costs, are carried out appropriately and in line with the economic principles of cost recovery. This approach could prevent the NRA from

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<sup>12</sup> Where there are large common costs, there can be considerable price discrimination, with different consumers paying significantly different amounts for the same product. This could occur without there necessarily being any harmful cross-subsidisation as long as all those prices remain between the SAC and IC of the associated product.

building bias into its costing to facilitate or help justify cross-subsidisation. It could limit the incumbent's ability to load costs on to the products in the uncompetitive markets, for example single-piece letters or USO products in general, while underestimating the costs of the products offered in competitive markets, for example parcels or some non-USO products.

Often, the NRAs monitor the incumbent's costing methodologies and information to identify changes and trends which may be inappropriate. Such monitoring work could also be applied as a measure to identify signs of potentially harmful cross-subsidisation as well as a measure of deterrence and prevention.

## **4 Legal environment**

This section of the report delivers background information concerning the legal provisions of cross-subsidisation and the role of the NRAs in Member States.

### **4.1 Article 12 and 14 Postal Services Directive 2008/6/EC**

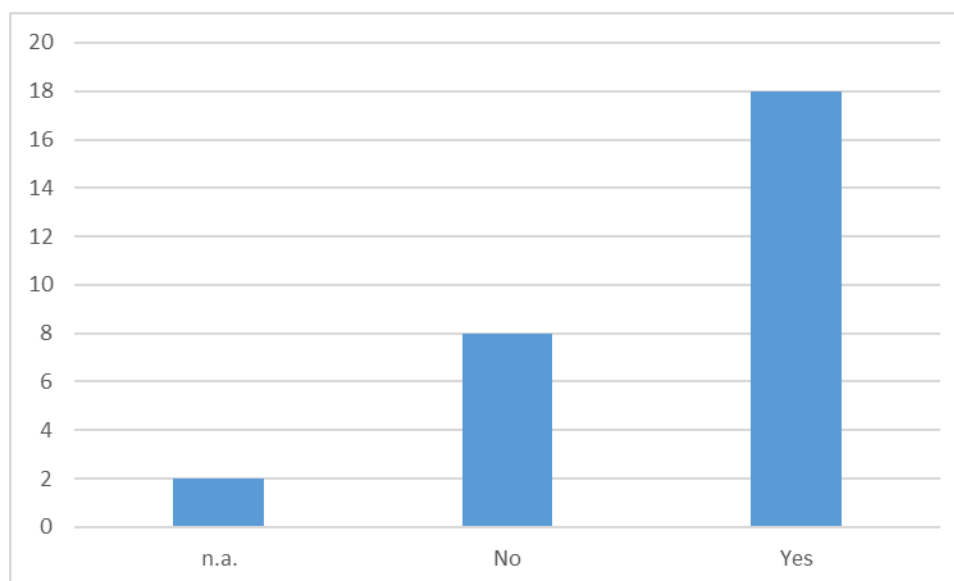
The Article 12 of the Postal Services Directive, as amended by Directive 2008/6/EC of the European Parliament and of the Council (3<sup>rd</sup> Postal Directive) is relevant for provisions related to tariff regulation, in particular cost orientation. This article ensures that the tariffs of the universal service comply with the affordability, cost-orientation, transparency and non-discriminatory principles.

On the other hand, Article 14 thereof concerns the distinction between services which are part of the universal service and those which are not and the principles of the allocation of costs. The accounting separation rules regulate the internal accounting system of the universal service provider and the allocation methods.

### **4.2 National legal environment**

Most of the Member States that answered the questionnaire have some sort of legal requirement in their national legislation – in the postal legislation or in the competition law – to consider or assess cross-subsidisation. According to the answers from NRAs, 8 countries do not have any legal requirement regarding cross-subsidisation. The majority of NRAs answered that they have some sort of requirement within accounting separation and cost accounting (see Figure 2).

**Figure 2. Assessing cross-subsidisation requirement within regulatory accounting of countries**



Source: ERGP Regulatory Accounting WG questionnaire 2019, based on the replies of 28 NRAs.

Cross-subsidisation within the scope of the universal service is in most countries legitimate and when distorting competition and resulting predatory pricing this is considered illegitimate. Ten answers indicated that the national legislation does not indicate when cross subsidisation is considered legitimate and when illegitimate.

In most of the Member States there is no definition of cross subsidisation in the law, but there are mentions to it regarding the supervision role (tariff control, net cost etc.) and sometimes its context (see Figure 2).

The most common responsibilities of the NRAs are:

- Approve tariffs for single piece services
- Verify unfair cross-subsidisation
- Impose tariff control for standard services
- Approve discount schemes

In the framework of the price control procedure (eg. price cap or tariff control) the NRAs may assess cross-subsidisation cases. According to the regulation, the source and the basis of the detection are the regulatory accounts and the cost allocation system of the universal service provider. In the case of non-compliance of the regulation, the NRAs are empowered to impose modifications and penalties or impose price changes on regulated services. In some countries tariffs are being reviewed on *ex post* basis. According to the accounting rules – in most countries - the USP should include in the Regulatory Accounts the source of inter-company and inter-segment revenue, in a matrix form, in order to show how charges flow between companies and operating segments.

Table below shows the responsibilities granted to each NRA to control cross-subsidisation.



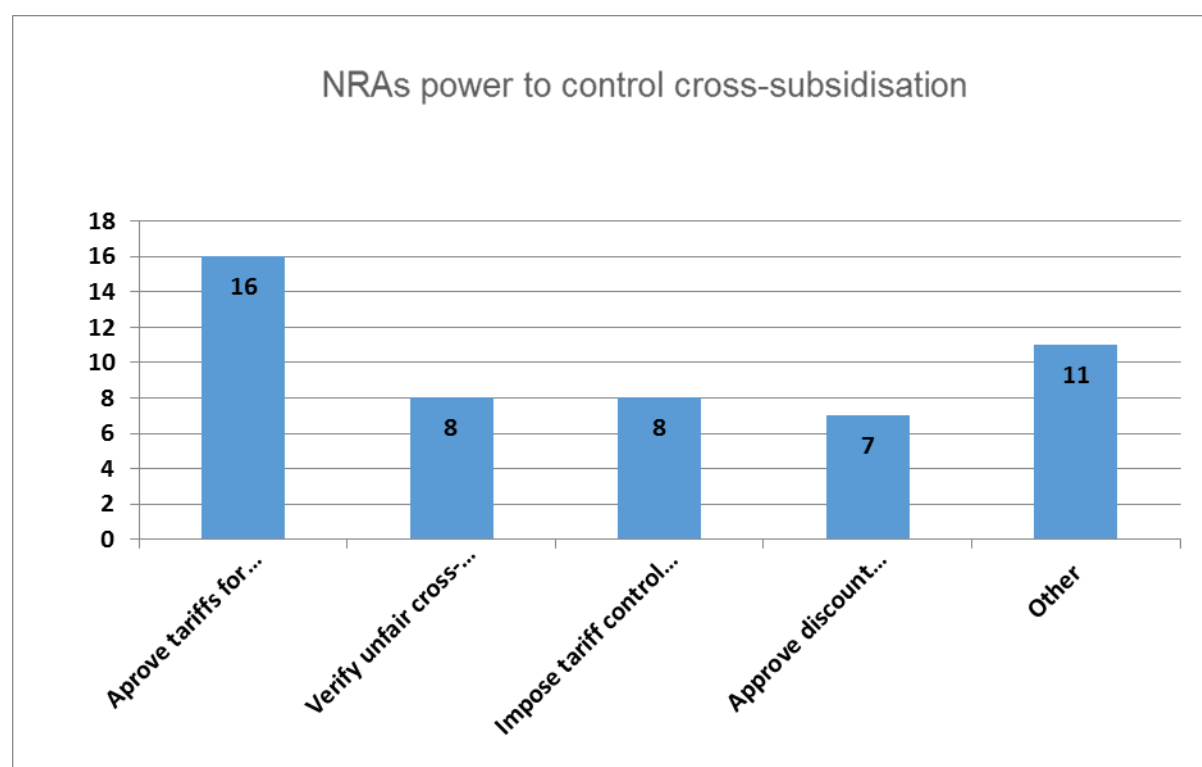
**Figure 3. NRA's power to control cross-subsidisation**

Country	Approve tariffs for single piece services	Verify unfair cross-subsidisation	Impose tariff control for standard services	Approve discount schemes	Other
DE	X	X			X
IE					X
ES					X
MT	X				
NL	X				
LU	X				
HU			X		X
LT	X	X			X
PL	X			X	
DK	X				
HR					X
IT					X
UK		X			X
AT			X	X	
BG	X		X	X	
CY	X	X	X	X	
CZ					X
EE		X			
EL	X			X	
RO	X	X	X		
RS		X			
SE					X
SK	X		X		
PT	X		X	X	X
BE	X				X
LV	X				
NO		X			
SI	X		X	X	

Source: ERGP Regulatory Accounting WG questionnaire 2019, based on the replies of 28 NRAs.

Figure 4 summarises such responsibilities. The most common responsibility is the approval of tariffs for single piece services (16 answers) followed by the verification of unfair cross-subsidisation and the tariff controls for standard services (8 answers in each case). The other responsibilities are reviewing tariffs on *ex post* basis. According to the accounting rules the USP should include in the regulatory accounts the source of inter-company and inter-segment revenue, in a matrix form, in order to show how charges flow between companies and operating segments. One of the NRAs verifies the analytical accounting of the appointed operator and the net cost of the universal postal service and to determine the level of the unfair financial burden. Depending on the national legislation, if NRAs detect that the affordability, transparency and cost orientation principles are not met, the NRA can declare whatever is appropriate for its consideration in the determination of the unfair financial burden. Therefore, the NRA may find an illegitimate cross subsidy principally when verifying the analytical accounting, and also when analysing the cost orientation of USP prices. In 2 member states the control of cost-orientation ensures that no cross-subsidisation could take place.

**Figure 4. NRA's tools to control cross-subsidisation by countries**



Source: ERGP Regulatory Accounting WG questionnaire 2019, based on the replies of 28 NRAs.

There are 6 countries where the National Competition Authority (NCA) can verify unfair cross-subsidisation. Additionally, there are 3 countries where the NRA and NCA are merged in one organization and there are 2 countries where the NRA can investigate and take action under competition law.

Only 5 NRAs (18%) see some need for further regulation using the following measures:

- monitoring system especially for ex-post regulated services,
- prohibition of cross-subsidisation in regulation,
- more competences in price control to the NRA by Postal Act,
- single piece tariff regulation is still needed (to maintain price affordability),
- given the fact that competition in the letter market is generally declining and price increases are often considered normal given the decline in letter volume, the danger of creaming the letter market and cross-subsidisation should still be top of mind.

#### 4.3 Breach of regulatory requirements

In the questionnaire, the NRAs were asked whether they have investigated any cross-subsidisation in breach of regulatory requirements. Three (DE, EE, SE) of the 28 NRAs answered that they have investigated cross-subsidisation in breach of regulatory requirements. In DE case, cross-subsidisation was detected among different affiliate companies and as a result interdicted (see further details of the German case in Chapter 6). In EE, as result of the investigation, the USP's cost accounting system had to be changed. In SE, the case was lost in court. PTS argued that cost allocation for competitive second class letters was flawed (unfair in respect to first class letters), so that it induced low prices in that segment. The court found the USP's cost allocation not to breach the rules of article 14 PSD.

Additionally, the Spanish NRA detected in the verification of the USP's analytical accounting of the year 2014 that costs of deployment of parcel lockers (CityPak) used solely for non-universal service (non-US) parcels were allocated to both US and non US parcels. Therefore, CNMC requested the USP to reallocate such costs exclusively to non-US parcels.

#### 4.4 Important antitrust cases related to cross-subsidisation in EU

In this section of the report we present most important antitrust cases<sup>13</sup> in EU related to cross-subsidisation, showing in brief relevant testing approach applied by competition authorities. **Those cases however predominately concerns predatory pricing only and since no excessive prices have been tested, they reflect not complete cross-subsidization scheme as described in Chapter 3. of this Report.**

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<sup>13</sup> Cases in this sub-section of the report were described based on: Testing for Cross-Subsidisation, FTI Consulting, 2016

## AKZO

In 1991 AKZO company was found guilty of predatory price-cutting. This case was extremely influential and set the precedent for other predatory pricing disputes. In this case, AKZO had contacted a new entrant from the UK, warning them to withdraw from the market or AKZO would reduce its prices. The Commission did not follow the test that assumes prices above average variable costs are lawful and considered the strategy of the dominant firm to be relevant i.e. whether or not the dominant firm had adopted a strategy of eliminating competition.

The European Court established two different approaches for determining whether a firm has engaged in predatory pricing (they are widely referred to as the "Akzo test") stated that:

- Prices below average variable costs are always being considered as abusive; and
- Prices below average total costs but above average variable costs are only considered abusive if an intention to eliminate competition can be shown.

The European Court of Justice concluded that sales prices below AVC had no other economic purpose than that of driving out competitors. The reason for this is that selling below AVC always results in losses that are higher than when not selling at all; furthermore, selling below AVC means an additional loss for each unit sold and thus a sacrifice is evident. If prices are above AVC but below ATC, a dominant firm may still be intending to drive out competitors who are as efficient as is the dominant firm, but are not capable of withstanding such competition in the long term due to fewer financial resources.

## Tetra Pak

In 1992 Tetra Pak was found guilty of predatory pricing in relation to its non-aseptic cartons and was found to be subsidising losses from its profits in the market for aseptic cartons. The cartons had been sold at a loss in seven Member States but most crucially cartons had been sold below average variable costs in Italy, hence meeting the first 'AKZO test' but the Commission also "gathered sufficiently clear and unequivocal data to be able to conclude that in that country, at least sales at a loss were the result of a deliberate policy aimed at eliminating competition"

## Wanadoo

On 16 July 2003, the Commission issued its decision concluding that France Télécom had abused its dominant position on the French market for the supply of high-speed internet access and issued a fine. The decision was based on evidence that there was a plan to restrict competition in the strategic market for high-speed internet access at the expense of competitors.

The Commission found that, from the end of 1999 to October 2002, Wanadoo, a subsidiary of France Télécom, marketed its ADSL services at prices which were below their average costs. It emerged from the European Commission's investigations that the prices charged were well below variable costs until August 2001 and that in the subsequent period they were approximately equivalent to variable costs, but significantly below total costs. Later appeals of the decision to the European Court of Justice were unsuccessful.

## 5 Regulatory tools

Throughout the development of the postal sector, before the liberalization of the market, cross-subsidisation was allowed as a sustainable source of financing the universal service area<sup>14</sup>.

Nonetheless, after the liberalisation which outlined the need for a competitive landscape, the potential harm of cross-subsidies was made evident and NRAs have started to use several tools in order to detect and prevent them.

As reflected in the answers to our ERGP internal questionnaire, in practice NRAs use various tools in order to detect and prevent cross-subsidisation, the main tool being cost allocation.

According to the answers regarding the cost standard, only one NRA uses FAC, SAC and incremental cost, one NRA uses incremental costs besides FAC and one NRA uses incremental cost alone. Another NRA undertook an analysis of the negative margin of some services within the USO taking into account the price and the cost provided by the fully distributed costs regulatory accounting system and focusing on the incremental costs of each of these services.

### 5.1 Detection of cross-subsidisation

The signs of cross-subsidisation could stem from as early as the methodology underpinning the USP's/incumbent's costing system and could occur in the application of the principles, especially the cost allocation drivers in case of unreasonable USP's propensity towards the USO products.

The combination of costs and profitability performance – especially the USO/non-USO margin analysis, or other analysis such as letter/parcel margin analysis etc. – could indicate if there is a potential risk of harmful cross-subsidisation. The values of cost drivers and their utilisation are utterly important in the cost allocation process and an improper use can lead to cross-subsidies. In principle, where cost orientation is in place, basically due to a proper allocation mechanism, this should be enough to lower the capacity for unfair cross-subsidisation. Pricing could be based on different approaches; some of them can specify the difference between legitimate and illegitimate cross-subsidies.

The application of discounts is a common practice of the USPs and could be an alarm bell that an unfair cross-subsidisation might be used in order to stretch the preferential prices beyond their costing capabilities. Nevertheless, NRAs are not always in charge with their assessment, either having their powers limited to the verification of transparency and non-discrimination or due to the

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<sup>14</sup> See e.g. Section 3 of the Notice from the Commission on the application of the competition rules to the postal sector and on the assessment of certain State measures relating to postal services (98/C 39/02).

fact that bulk mail may fall outside the scope of the USO. There were circumstances where competition authorities took charge of the assessment of the discounts and evaluated their legitimacy.

Complaints from third parties, where filed on reasonable basis, can start an investigation by the relevant authorities, usually the competition authorities or the NRAs with competition powers as well.

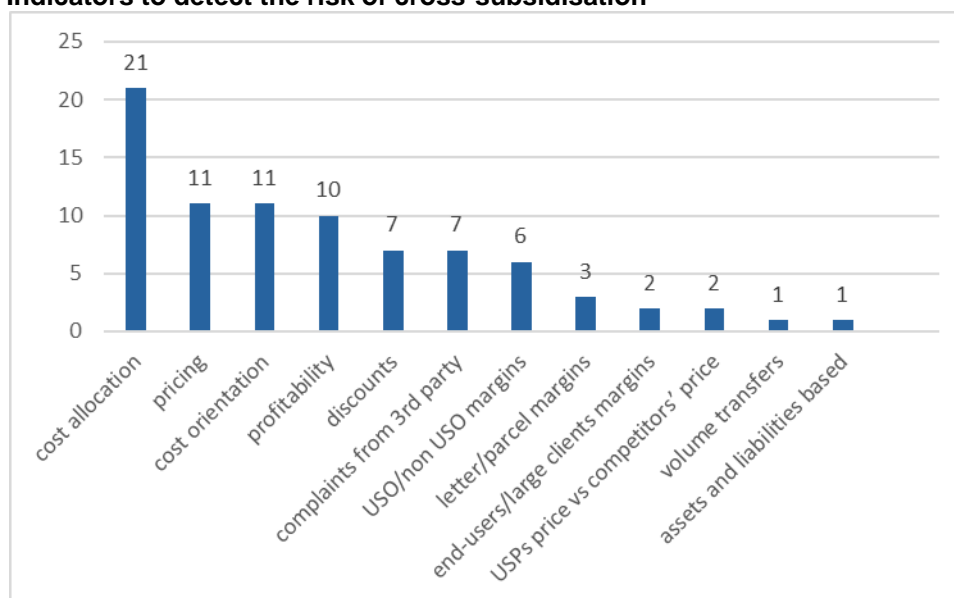
The comparison between the prices of the USP and those of its competitors make up a valid starting point for an eventual cross-subsidisation. This logic derives from the fact that where the competition is strong, the USP is tempted to subsidise the prices in order to keep the market share. The practical approach depends on the availability of data on several levels (e.g. prices, the level of competition etc.).

Assets and liabilities based information follow the pattern of revenues and costs to a certain degree and, specifically with the new investments, there might be a propensity to attribute them in full or in a larger proportion than justified to a certain service under USO while the actual utilisation would justify another allocation (a larger cost allocation to the non USO services).

The transparency and availability of data to the NRAs are crucial in any evaluation of a possible cross-subsidisation, both to determine its extent and whether it falls within the legitimate or illegitimate circumstances.

Figure 5 shows indicators employed by the NRAs in order to detect harmful cross-subsidisation according to the answers to the internal questionnaire submitted by the ERGP.

**Figure 5. Indicators to detect the risk of cross-subsidisation**



Source: ERGP Regulatory Accounting WG questionnaire 2019, based on the replies of 28 NRAs.

According to the answers, the most used indicator, which has also been ranked first by some respondents amongst their tools, is cost allocation (21, i.e. 75% NRAs).

Some NRAs are able to evaluate the costs, revenues and volume at product level, including the breakdown on direct and indirect costs.

Profitability has been found as a good indicator by some NRAs, the more so where the comparison to costs can be easily undertaken and where other factors can be brought into the assessment as well.

Regarding the complaints from 3<sup>rd</sup> parties, several cases have been emphasized by the NRAs according to their experience or to their knowledge. These cases are:

- A competing parcel operators accused the USP of cross-subsidising parcels with profit from letter stream;
- A sanctioning report for possible unfulfillment of an agreement that established the service conditions for large clients, agreement concluded with the purpose of ensuring that the discounted prices cover the actual costs of the provision of the service;
- An appeal against the approval of the cost allocation system. The main complaints were: the use of different cost definitions other than those prescribed by legislation, the use of stand-alone model for competitive services, the use of revenues as allocation for common costs, NRA has not reviewed whether the costs are efficient costs, costs allocation not in line with PSD, difference in tariffs between USO and competitive services is too large<sup>15</sup>. The court case following on this appeal has been withdrawn.
- Complaints of compensation funds flowing from the operators to the USP
- Complaints from either end users or USP's competitors relating to:
  - 1) cross-subsidisation within the group of US services (not each weight category is cost-oriented),
  - 2) cross-subsidisation from US services to non-US services allowing USP to practice predatory prices for competitive services.
- Two investigations, one on excessive pricing and one on conditional rebates/ discriminatory pricing analysed by the NCA.
- Competitors in the parcel business have openly stated that there is a large risk for cross-subsidisation.
- Unfair prices in public procurements.

Volume transfers producing an increase in one service at the expense of another service (due to market forces/end user preferences or to pricing strategies) and assets and liabilities based

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- <sup>15</sup> ACM has made a decision on the appeal which can be found here: [https://www.acm.nl/sites/default/files/old\\_publication/publicaties/16053\\_bob-sandd.pdf](https://www.acm.nl/sites/default/files/old_publication/publicaties/16053_bob-sandd.pdf)

information have been identified to a lesser extent by the NRAs as indicators of possible harmful cross-subsidies.

### Services under price control

Price control is enforced in order to prevent or to eliminate possible abusive behaviours, including the harmful cross-subsidisation. As seen above, pricing has been considered by the NRAs one of the main indicators (11 answers, i.e. 40% NRAs) and therefore the extent to which it covers various services is an important factor.

Out of the 28 respondents, 25 have stated that there is price control in place and 3 NRAs responded that there is no price control as such (in one case there is no ex ante price control, but an ex post cost orientation requirement).

The price control varies throughout countries. In most of the cases it covers the USO area, either in the form of individual tariffs or in the form of a single basket of services. Sometimes it is focused on specific segments or is followed through customised approaches:

- licensed services and license-exempt parcels;
- detailed focus on the large clients' prices vs single piece tariffs (analysis of revenues and costs of both client types: cost would be oriented when their differences in revenues are aligned with their differences in costs);
- single letters under 50g, official documents;
- stamped letters up to 50 g;
- margin squeeze control covering some bulk mail products and safeguard cap control covering second class stamps for letters and parcels;
- stamped domestic letters only;
- USO products and regulated postal payment services;
- Specific price cap in postal law for price increases regarding single piece items (small users' basket); For new products or bulk mail, another methodology can be chosen.

### Adjustments of cost allocation noticed, undertaken or imposed by NRAs

In recent years the cost allocation systems have made the object of adjustments triggered in many situations by the willingness of the USPs to allocate a higher proportion of costs to the services within the US area, directly raising the question of the possibility of cross-subsidisation. Some of the key principles when elaborating the cost accounting systems are cost causality and consistency. The environment of the provision of postal services might have rapidly changed in the recent period, being characterized by the emphasis placed on the parcels and by the decline of the letter segment. In this context, the importance of cost allocation principles should be further reinforced, especially when letter and parcel services are provided in a joint network. Any change in the allocation drivers



should be filtered through these pillars of accounting and any mitigation of the consequences of the abovementioned environment should be sought after through appropriate mechanisms.

Notwithstanding these considerations, the cost allocation systems are not rigid constructions that should follow historical patterns; they could be adapted with careful assessment of the methodological concepts and the suitability of the methods.

According to the answers to our questionnaire, some of the noticeable adjustments in the recent period have focused on:

- cost allocation of last mile delivery costs between parcels and letters as part of the price-cap calculation;
- review of the allocation methodology not to be based solely on volumes, but on revenues, mail weight and mail format as well;
- allocation of joint/common costs, cost definitions;
- a steep rise in costs to single-piece letters;
- definition of activities into the Activity Based Costing (ABC) system, the practical calculation of the cost drivers and the classification of the overhead costs;
- detailed breakdown of costs by processes and services, more detailed information about the costs of processes and their direct assignment to the particular service or product;
- identification of the cost related directly to the USO;
- allocation of delivery costs;
- breakdown on fixed and variable cost, while in the previous exercises there was only a breakdown between direct, indirect and common costs;
- the improper allocation of costs between the group's postal activity and non-postal (e.g. banking) activity at the level of its retail network (post offices);
- Changes in the Weighted Average Cost of Capital (WACC) calculation methodology or changes in setting an appropriate return.

Several NRAs have mentioned unsuccessful attempts to allocate more costs to the USO segment to the detriment of the non-USO.

Other NRAs have underlined the importance of data availability needed in the form of increased level of detail in the cost accounting system.

With respect to the transparency of accounts, the internal questionnaire had a look at the statement of financial position breakdown as well. While some respondents have specifically stated that there is no breakdown on assets and liabilities (but on revenues and costs), in most cases this information is available and the level of detail is heterogeneous. Most of the times it is higher for USO services and there are cases where the data is provided for USO and non-USO services as well. In less than a third of the countries some figures are provided to the NRAs for non-postal segments.

## 5.2 Prevention of harmful cross-subsidisation

In order to prevent the practice of harmful cross-subsidisation, the NRAs can use different regulatory tools. Additionally, NRAs may base the prevention with a cost orientation approach. On the other hand, the NCA may also perform *ex post* investigations. All these matters are analysed in detail below.

The instrument most commonly used by NRAs is the “cost allocation methodology”. The second instrument would be “prices” (one NRA indicated that further action could be launched if US prices were not related to cost) followed by “discounts”.

The following tools were also mentioned by NRAs: “Accounting direction”, “Accounting separation between USO and other services”, “Measures based on competition law”, “Analysis of regulatory accounts, financial statements and other available information; assistance of independent audit; investigation of complaints”, “Inspection and, if needed, issuing decisions; in case of violation of rules, possibility to impose a fine”.

### Cost orientation methodology

A large number of NRAs (21, 75%) uses cost orientation to prevent harmful cross-subsidisation. The NRAs indicated the following methodologies regarding cost orientation:

- Cost of efficient service provision, concept of Equally Efficient Operator (EEO)
- Review product costs in regulatory accounts; review breakdown of direct and indirect costs versus prior year, taking into account volume where applicable
- Determination of “tariff headroom”(i.e. how much (%) the NRA allows the designated operator to increase the USO tariffs)
- The USO provider is obliged to make a clear distinction between USO and other services, i.e. to separate and report in its annual statement the revenues, costs, assets and liabilities of all services. In particular, the responding NRA indicated the following details required on such annual statements: 1) regulated services (USO and delivery of periodicals to subscribers in rural areas); 2) wholesale services; 3) retail services; 4) other services
- Verification of the general principle of cost orientation of the USO
- Fully Distributed Costs (FDC), audit of cost accounting system, ensure that they treat USO and not USO products in the same way (eg transfer prices).
- FDC methodology using ABC principle
- Fully Allocated Cost (FAC), Average Total Cost (ATC)
- Prices of the whole group of US services need to cover all FAC including reasonable profit and at the same time each category of US (not necessarily each weight category) needs to cover all FAC (not necessarily reasonable profit), which provides the USP with some degree of flexibility
- Check if the USP allocates costs in a justified way

- The results from the separate financial statements based on FAC ABC
- Cost allocation based on ABC methodology
- Reasonable margin above FAC on single piece tariffs
- Methodology of tariffs calculation
- Products accounts
- Single price approval system with data check at least once a year
- The Spanish NRA (CNMC) analyses cost orientation in the annual review of USP's US prices as such prices must be fixed taking into account the actual costs incurred for the provision of the service. As indicated in the High Court judgment of 19 June 2017, ratified by the Supreme Court Judgment of 19 December 2018, regarding the cost orientation of 2015 US prices: "the cost orientation principle is set to prices and, consequently, those of the tariffs are to adjust to it. Therefore, a cross subsidy of some services with others can infringe it"<sup>16</sup>. Cost standard(s) used regarding cost allocation methodology

The cost standard used more frequently by the NRAs regarding cost allocation methodology is FAC (24 answers, 86%). On the other hand, the Danish NRA employs incremental costs. Three NRAs stated "other methodology": MT, LU (together with FAC) and HR (ABC).

#### Actions performed by other National Competition Authorities

The following actions from other national competition authorities were reported:

- The NCA performed ex-post actions (DE, IT, RO, RS, SK).
- In Spain, the alternative operators' association (ASEMPRE) alleged in 2002 to the NCA that Correos would hold contracts with large clients jointly encompassing both liberalised services with reserved services, with large discounts (predatory prices) based on cross-subsidies. The NCA concluded that it was not possible that Correos carried out cross-subsidies from the reserved area to the non-reserved area, based on data of the analytical accounting in 2001 and 2002<sup>17</sup>. However, the NCA decided in December 2004 to initiate the Conventional Termination Agreement establishing the service conditions to Correos' large clients with the purpose of ensuring that Correos' prices, once the discounts are applied, cover the actual costs for the provision of the service. That Agreement was signed in September 2005. In 2011 the NCA open a sanctioning report to Correos for possible

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<sup>16</sup> The Supreme Court's Judgment is available (in Spanish) at:

[www.poderjudicial.es/search/contenidos.action?action=contentpdf&databasematch=TS&reference=8651413&statsQueryId=109735154&calledfrom=searchresults&links=%221812%2F2018%22&optimize=20190208&publicinterface=true](http://www.poderjudicial.es/search/contenidos.action?action=contentpdf&databasematch=TS&reference=8651413&statsQueryId=109735154&calledfrom=searchresults&links=%221812%2F2018%22&optimize=20190208&publicinterface=true)

<sup>17</sup> Available in Spanish at: [www.cnmc.es/expedientes/r-60504](http://www.cnmc.es/expedientes/r-60504)

unfulfillment of such an Agreement regarding the discounts applied to 33 of the 204 contracts with large clients in 2009<sup>18</sup>. The sanctioning case afterwards in 2011 was therefore not based on analysis of cross subsidies but on an analysis of the discounts to large clients (based on contracts signed in 2009) that disclosed the infringement of the Conventional Termination Agreement, imposing a fine to Correos of 4.8 million €.

- In Poland, there was one NCA's antitrust case in year 2000 regarding harmful cross-subsidisation in the water supply/sewage disposal sector but it was dismissed by the Supreme Court later on.

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<sup>18</sup> Available in Spanish at: [www.cnmc.es/expedientes/snc001111](http://www.cnmc.es/expedientes/snc001111)

## 6 Cases – inside EU

### 6.1 Germany

The German regulatory agency Bundesnetzagentur (BNetzA) was faced with issues of cross-subsidisation in several cases. Pursuant to the German Postal Act and related legal framework, cross-subsidisation occurs as a combination of high pricing in one region or product segment and associated discounting pricing in another region or product segment. One prominent decision of regional cross-subsidisation concerned a subsidiary of Deutsche Post AG (DP AG): First Mail Düsseldorf GmbH (First Mail). Cross-subsidisation between product segments had to be dealt with as part of the Price-Cap Procedure in 2018/19 concerning the letter and parcel segment as well.

#### First Mail

First Mail started as a competitor to the German incumbent DP AG in the letter market. It offered end-to-end bulk mail services exclusively to business customers, mostly transactional and direct advertising mail. Its business activities were limited to the region of North Rhine-Westphalia, a densely populated state in the West of Germany with high level of competition in the letter market. Apart from First Mail, one of the largest competitors to DP AG, Postcon, was also active in this region.

In 2004 DP AG acquired First Mail in order to offer a low budget letter service to bulk senders through this subsidiary (similar to airline companies with a low budget branch). No authorisation for the merger by the German competition authority was needed, since the revenues of First Mail were below the necessary threshold.

The newly integrated subsidiary would allow for more pricing flexibility in tendering procedures and negotiations with large senders. DP AG could bypass its transparent access price scheme which must be non-discriminatory for all customers and negotiate lower access prices individually through First Mail. The rationale behind this strategy was to regain customers from alternative operators in this highly competitive region. Consequently, DP AG decided to continue First Mail's business focus with its existing customer base, product portfolio and price structure. It merely intensified First Mail's marketing and sales activities.

In the beginning of 2011, Postcon – one of the main competitors of DP AG – issued a complaint to BNetzA arguing that this price strategy impairs competition through discrimination and price-dumping via under-cutting access prices. This kind of harmful cross-subsidisation threatened Postcon's possibility to compete with the incumbent and weakened its business model in targeting the business clients specifically in this highly urbanized region. The question of harmful cross-subsidisation arises in this case due to the regional pricing (regional cross-subsidisation). Whenever prices in a region with fierce competition are lower than prices in regions with relatively low competition, there might be harmful cross-subsidisation between the regions. As long as First Mail operated independently of DP AG, no restrictions or limitations applied to their pricing decisions.

Based on this complaint, BNetzA started an investigation against First Mail and DP AG. It evaluated cost data, annual reports, forecasts and business cases of First Mail. Furthermore, BNetzA compared the product portfolio and discount schemes of the regulated companies. First Mail continually suffered losses as seen in its annual reports. The cost assessment further clearly showed that First Mail did not charge prices high enough to cover its incremental costs and thus was not complying with the principle of cost orientation laid down in the Postal Act. In line with competition law First Mail as a 100%-subsidiary of DP AG was seen as part of the regulated enterprise. Hence, all rules laid down in the German Postal Act applied to First Mail as well. Equal prices had to be charged for equal service under comparable conditions. Pricing differentiation can only be justified in cases of different cost structures between the single companies due to diverging production conditions. Regardless of whether the prices of First Mail were based on the cost structure of First Mail or that of DP AG, they were deemed to be below the cost of efficient service provision. Additionally, these prices prejudiced the competitive opportunities of other companies (in this case Postcon) in the relevant letter market. From a business perspective, such an acquisition strategy could be justified as part of an expansionary policy or aimed at complementary production resources. The advantages of these policies could result for example in wider regional coverage of delivery services through cooperation or in using synergies by extending the business portfolio to upstream, downstream or neighbouring market segments.

Duplicating a postal network in a region where DP AG was already offering the same kind of services contradicts commercial behaviour. Network industries like the postal sector are characterized by a high portion of network costs and high economies of scale. The higher the volumes processed in a network, the lower the unit costs. Cost orientation or minimising unit costs therefore requires the optimal utilisation of the existing network. However, a division of letter volumes between two networks of the same company can never result in optimal utilisation.

In the case of First Mail, harmful cross-subsidisation could be detected due to the lack of cost coverage (prices below incremental costs). As a consequence, private and business customers of DP AG indirectly pay all costs not covered by First Mail's prices. They therefore subsidise DP AG's strategy which weakens competitors in a large postal market. Furthermore, regionally subsidisation takes place between regions of high and of low competition. Based on this investigation, BNetzA ruled that DP AG violated the German Postal Act by infringing pricing criteria through price-dumping as well as discrimination between customers. As a remedy, BNetzA requested First Mail to adjust its contracts in terms of prices and conditions to those of DP AG. Following the decision DP AG abandoned its attempt in creating a low budget brand.

### Price-Cap Procedure

BNetzA is confronted with legitimate and illegitimate cross-subsidisation within the Price-Cap procedure: there is a form of cross-subsidisation which is enshrined in the German legislation and a form of cross-subsidisation prohibited by law due to its anti-competitive effects. Legitimate cross-subsidisation is not thought to distort competition since only the incumbent incurs this type of cost. The prohibition of this form of cross-subsidisation weakens the postal market in general as the incumbent would be unable to compete in the non-Price-Cap segments.

Ex-ante price regulation in form of Price-Cap concerns certain single tariff products of DP AG. The

price increase is determined for one basket of products entailing particularly letter products, including international letters and value added services.

Two components constitute the corridor of price increase: the inflation rate and the X-Factor. The latter is calculated using the unit costs, profit margin and extraordinary costs. Unit costs are classified as costs of efficient service provision entailing the production cost of clearance, sorting, transport and delivery as well as overhead costs. Furthermore, the German Postal Act grants DP AG to include extraordinary costs which consist of costs for universal service provision and costs resulting from the succession as former public state administration. They originate within the Price-Cap basket as well as within the non-Price-Cap segments.

The unit costs as efficient costs are distributed according to the principle of causality taking into account the utilization of network elements. In contrast, extraordinary costs are distributed according to the concept of Ramsey pricing<sup>19</sup>. They are therefore added to those products that can bear these additional extraordinary costs. The difficulty arises when determining whether a product segment outside the Price-Cap basket is capable to cover additional costs. This assessment is done based on operational profit of the non-Price-Cap segments. Only the remaining costs are transferred from the non-Price-Cap segments to the Price-Cap basket. This reallocation of extraordinary costs is a legitimate form of cross-subsidisation but entails the risk of illegitimate cross-subsidisation when falsely allocated. Key issue is determining which costs are treated as costs of efficient service provision and which types of costs are extraordinary. The higher the extraordinary costs, the greater is the potential of cross-subsidisation.

While extraordinary costs can be transferred between the Price-Cap and non-Price Cap segments, illegitimate cross-subsidisation occurs as soon as one of these two bear the costs of efficient service provision of the other. This constitutes a violation of the principle of causality. Within the Price-Cap Procedure 2018/19 BNetzA had to determine how to allocate the delivery costs. Whenever parcels and letters are delivered jointly which is the case for 33,700 areas, DP AG argued that the delivery network was set up to deliver letters. This reasoning would lead to parcels only bearing incremental costs while the majority of fixed costs for maintenance should be attributed to the letter segment (Price-Cap). Incremental costs are part of the costs of efficient service provision. If only incremental costs are recovered, the product does not bear any extraordinary or common costs. This would result in the possibility to increase prices of the Price-Cap products and trigger illegitimate cross-subsidisation. In line with national and European legislation, BNetzA therefore could not follow this logic. Instead, the regulatory agency attributed the joint delivery costs to all processed products according to the network utilization.

The examples show the fine line between legitimate and illegitimate cross-subsidisation. Regulated companies attempt to transfer as many costs as possible to the Price-Cap segments in order to improve their competitive position on the non-Price-Cap segments. The regulatory agency takes into

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<sup>19</sup> Ramsey pricing is the second best option. In this case, it means costs cannot be distributed according to causality (the first best option) but have to be distributed according to their respective ability to bear additional costs.

account their justified concerns and rebalances these with the concerns of competitors as well as consumers.

## 6.2 Denmark<sup>20</sup>

Post Danmark and Forburer-Kontakt were postal operators in Denmark with Post Danmark operating as the USP. In 2003 Post Danmark agreed contracts for unaddressed mail with three major supermarkets that were formerly major customers of Forburer-Kontakt, including the company Coop. To achieve this Post Danmark offered a price to the Coop that was 'materially lower' than Forburer-Kontakt's price. The price offered allowed Post Danmark to cover its average variable costs but not average total cost and Forburer-Kontakt submitted a complaint to the Danish Competition Council. The basis for the complaint was that PD had:

*"abused its dominant position by practising a targeted policy of reductions designed to ensure its customers' loyalty by, firstly, not putting its customers on an equal footing in terms of rates and rebates, and secondly, by charging FK's former customers rates different from those it charged its own pre-existing customers without valid cost justifications".*

The Danish court applied the second AKZO test and found that PD had not engaged in predatory pricing. On appeal, the Danish court referred the case to the European Court of Justice, which reviewed the Danish Competition Authority's calculations for average incremental costs. The ECJ noted that the estimate reflected "the great bulk of the costs attributable", and therefore were high enough not to constitute abuse. Furthermore the European Court of Justice observed that Forburer-Kontakt had remained in the market following the alleged abusive and had also managed to win back the business of the customer concerned.

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<sup>20</sup> Based on: FTI Consulting, Testing for Cross-Subsidisation, 2016



## 7 Cases – outside EU

### 7.1 Canada<sup>21</sup>

Canada Post Corporation is a fully state-owned company with the sole privilege to collect, transmit and deliver letters. Canada's postal system is regulated by the Canada Post Corporation Act (CPC Act). Unlike in the EU countries, there is no national regulatory authority for postal services in Canada. The regulation is managed directly by the federal government.

In terms of cross-subsidization the main issue is a potential subsidization between the parcel and the letter business. Since there is no full liberalisation on the postal market in Canada, Canada Post is the only provider of letter services. For parcel delivery, the company has to compete with other providers. In order to prevent illegitimate cross-subsidization therefore, it has to be made sure that Canada Post cannot direct revenues from its letter to its parcel and other competitive segments.

Canada Post's competitors have repeatedly accused the company of doing just that: using its privileged position and damaging their competitive ability in the courier, parcel delivery and flyer markets through cross-subsidization. Several of these allegations have been investigated by the Competition Bureau of Canada without finding illegal cross-subsidization. In 2000 a case was brought to the International Centre for Settlement of Investment Disputes by the United Parcel Service of America (UPS) under the North American Free Trade Agreement (NAFTA).

The International Centre for Settlement of Investment Disputes came to a decision in 2007 and rejected the claim brought by UPS as a whole. UPS claimed that Canada Post breached NAFTA concerning unfair treatment, anti-competitive and predatory conduct. It alleged unfair treatment in respect of network access as UPS was denied access to the monopoly infrastructure, unlike Purator, a subsidiary of Canada Post. Furthermore, UPS stated that "Canada does not require a market or commercial rate of return upon its investment in Canada Post. As a result of this and other more favourable treatment, Canada Post is able to price its non-monopoly products at below properly or fairly attributable costs [...]. Canada Post is further able to use these advantages to develop and compete in non-monopoly postal services markets, without properly attributing costs incurred in so

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<sup>21</sup> Canada Post Corporation. (2019, March 29). Retrieved from <http://www.canadapost.ca>

United Parcel Service of America Inc. v. Government of Canada. ICSID Case No. UNCT/02/1. (2007).

Government of Canada. (2017, December 21). Cases filed against the Government of Canada: United Parcel Services of America, Inc. v. Government of Canada. Retrieved from <https://www.international.gc.ca/trade-agreements-accords-commerciaux/topics-domaines/disp-diff/parcel.aspx?lang=eng>

Canada Post Corporation. (2018). Annual Report 2018: Financial Section. Retrieved from [https://www.canadapost.ca/cpc/assets/cpc/pdf/annual-reports/2018\\_AR\\_Financial\\_Sections\\_en.pdf](https://www.canadapost.ca/cpc/assets/cpc/pdf/annual-reports/2018_AR_Financial_Sections_en.pdf)

doing and while pricing below those costs”<sup>22</sup>.

UPS’ claims failed due to several reasons. Firstly, the Tribunal did not find Canada Post and UPS companies to be in similar circumstances because of the differences between the postal and courier segment. Canada Post was also not found to be a party to NAFTA and as such not subject to Canada’s non-discrimination obligations under the Treaty. Furthermore, the Tribunal considered that Canada Post performs public policy functions not subject to solely commercial purposes such as universal services.

According to the CPC Act, customer postage rates are established ex-ante for domestic lettermail and U.S. and international letter-post items as well as fees for some services in a process that takes six to nine months. Commercial rates (those for large volume mailers) are set by Canada Post with a notice 60 days in advance. Apart from the CPC Act, several other measures are in place to detect and prevent harmful cross-subsidization. One of these is the Financial Administration Act (FAA) requiring Crown corporations like Canada Post to submit a five-year corporate plan, including a yearly operating and capital budget. Quarterly financial performance reports and an audited annual report are submitted to Parliament.

The major tool, however, in order to prevent harmful cross-subsidization is the Annual Cost Study Contribution Analysis. The Analysis is prepared by Canada Post and audited by an independent auditing company (lastly for the Annual Report 2018 by KPMG). The auditor examines whether harmful cross-subsidization occurred. It found that “based on the Annual Cost Methodology the Entity did not cross-subsidize its competitive services with revenues from exclusive privilege services”<sup>23</sup> (Annual Report 2018, p. 54). The Analysis subtracts the long-run incremental cost of services from the revenues of these services. Long-run incremental cost is the total annual cost caused by the provision of a service. The result is called the long-run incremental contribution. Whenever the competitive group of services is found to generate a positive long-run incremental contribution, no cross-subsidies took place (cross-subsidization test). In 2018 the competitive groups of services earned C\$ 976 million (see chart below).

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<sup>22</sup> United Parcel Service of America Inc. v. Government of Canada, 2007

<sup>23</sup> Annual Report 2018, p. 54

## Annual Cost Study Contribution Analysis

**Year ended December 31, 2018**

(in millions of Canadian dollars, unless otherwise indicated)

### Long-run incremental contribution from exclusive privilege, competitive, concessionary and other services

The following analysis is based on the assignment of 61% of the total non-consolidated costs of Canada Post Corporation to individual services or groups of services.

	Exclusive privilege	Competitive	Concessionary	Other	Total
Revenue from operations	\$ 3,063	\$ 3,294	\$ 24	\$ 239	\$ 6,620
Long-run incremental costs	(1,739)	(2,318)	(17)	(136)	(4,210)
<b>Long-run incremental contribution</b>	<b>\$ 1,324</b>	<b>\$ 976</b>	<b>\$ 7</b>	<b>\$ 103</b>	<b>\$ 2,410</b>
Percentage of revenue	43 %	30 %	29 %	43 %	36 %
Unallocated fixed costs					\$ (2,702)
<b>Contribution before the undernoted items</b>					<b>\$ (292)</b>
Investment and other income					77
Finance costs and other expense					(55)
<b>Loss before tax – Canada Post segment</b>					<b>\$ (270)</b>

(Annual Report 2018, p. 55)

Independently of whether a third party or the government act as postal regulator, transparency through regular reporting requirements appears to be an effective tool in order to detect and prevent harmful cross-subsidization.

## 7.2 Australia<sup>24</sup>

The Australian Competition and Consumer Commission (“ACCC”) has a role under the Australian Postal Corporation Act to assess whether Australia Post is cross-subsidising its non-reserved services (generally, services it provides in competition with others) with revenues from its reserved (statutory monopoly) services. This would be a concern because Australia Post could damage competition in competitive markets by the use of its legislated monopoly.

To undertake its cross-subsidy assessment, the ACCC relies on information provided by Australia Post in its regulatory accounts. The regulatory accounts provide detailed revenue and cost information disaggregated by defined service groups and by the following categories:

- Direct costs are solely associated with a particular service (for example, cost of goods sold can be directly attributed to products sold in Australia Post’s retail stores). Due to the shared and labor-intensive nature of Australia Post’s operations, it has very few direct cost items relating to

<sup>24</sup> Assessing cross-subsidy in Australia Post, ACCC, 2016

specific mail services.

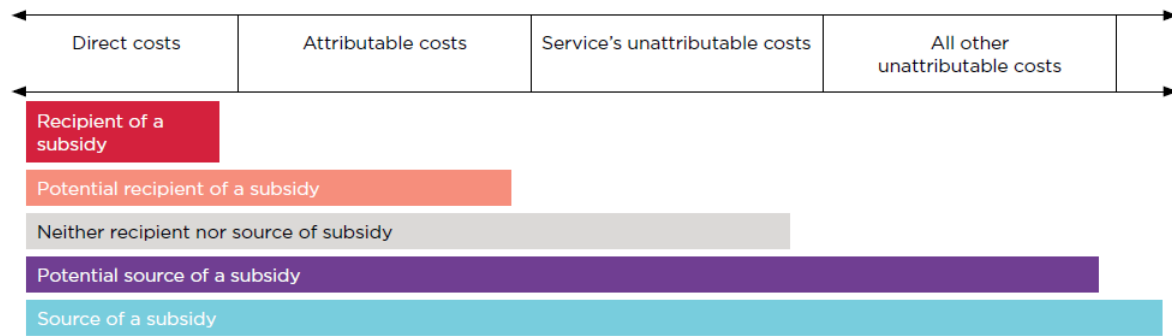
- Attributable cost items are part of a pool of common costs that are identifiable to a particular service by a separable cause-and-effect relationship. For example, the labour costs associated with processing and delivering letters can be described as attributable.
- Un-attributable costs are part of a pool of common costs but are not readily identifiable to any particular service. For example, costs associated with senior management and central support functions such as finance and corporate affairs are classified as un-attributable costs.
- The above categories of reported costs in the regulatory accounts are considered by ACCC as sufficient proxies for the economic for testing for cross-subsidisation and thus no specific advanced calculations for LRIC and SAC are required.

For the assessing potential cross-subsidies for Australia Post, ACCC perform two tests to determine if a cross-subsidy is present:

1. The first is the stand-alone cost test for whether a service is a source of cross-subsidy:
  - The stand-alone costs are defined as the costs that an efficient competitor would incur in providing just that service or group of services.
  - In testing Australia Post's regulatory accounts for cross-subsidy, the lower bound of the stand-alone cost test is assumed to be the service's fully distributed cost (i.e. the sum of the service's direct, attributable and un-attributable costs). Where the service's revenue exceeds fully distributed cost, it may be a source of subsidy.
  - The upper bound of the stand-alone cost test is assumed to be the sum of the service's direct and attributable costs, and the total of all of Australia Post's un-attributable costs. Where the service's revenue is above this upper bound, it is a definite source of subsidy.
2. The second test is the incremental cost test for whether a service is a recipient of cross-subsidy:
  - In respect of testing Australia Post's regulatory accounts for cross-subsidy, where revenue is less than direct costs, the service is a recipient of a subsidy. This is the lower bound of the incremental cost test.
  - Where revenue is sufficient to cover the direct costs, but less than the sum of direct and attributable costs, the service group is assumed to be a possible recipient of a subsidy. This is the upper bound of the incremental cost test.

The range of possible cross-subsidy results is presented graphically below.

Service revenue recovers:



## 8 ANNEX 1 – Costing standards used in harmful cross-subsidisation testing

Various cost modelling standards has been used in defining price floors and ceilings in order to monitor compliance with cost orientation obligations in regulatory environments. Comparison of product revenues and relevant (average) costs estimates provide information about sustainable, long term product profitability as well as potential cross-subsidies.

In this Appendix we present costing standards used in harmful cross-subsidisation testing.

### Incremental Cost (IC)

Incremental Cost has been used as an estimate for marginal costs in network industries which typically have large proportions of fixed capital costs. It is often considered to be the most appropriate benchmark from an economic perspective for assessing the prices offered by firms who are dominant in a market (and potentially profiting from price increases or decreases in that market).

A profit maximising firm would not be expected to price a service below IC in the long run - it would rather set prices at least to recover its incremental costs.

An increment is the output over which the costs are being measured, and theoretically there is no restriction on what products, services or outputs could collectively or individually form an increment. In extremis:

- the cost of providing an extra 1 unit of output of a service will equal to the its marginal cost,
- the cost of providing the entire output of company will equal the total cost the company incurs.

More commonly, increments are related to the output of a whole service.

Beneath formula illustrates IC of a service A:

$$IC(A) = C(A,B) - C(\emptyset,B)$$

where:

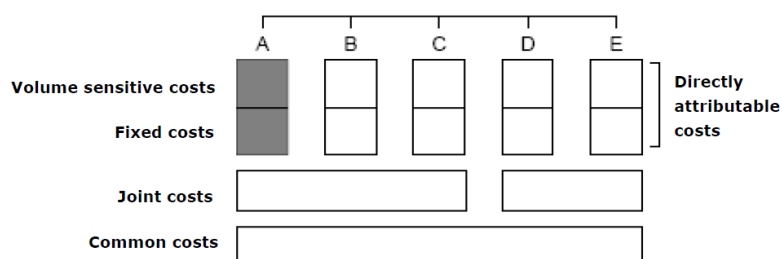
IC(A) - Incremental cost of service A

C(A,B) - total cost of company producing service A and B

C( $\emptyset$ ,B) - total cost of company producing no longer service A while producing service B at the same volume level

So incremental cost of service A is equal to the total cost avoided (saved) by company through ceasing production of service A, ceteris paribus. Costs saved by ceasing of an increment of service A volume consists of course of its variable (or volume sensitive) costs as well as fixed costs that are directly attributable only to that service. On the graph below the incremental costs of Service A is shaded.

Graph A1. Incremental cost of a service



In other words, long run incremental cost is the cost of producing a specific additional increment of a given service in the long run (the period over which all costs are variable) assuming at least one other increment is produced. It includes all the directly assignable variable economic costs of a specific increment of service, which is usually less than the whole service.

Incremental costs can be calculated taking two approaches in terms of time span under consideration:

- Long Run (LRIC) - defined as a length of time in which all inputs are variable and thus avoidable. It means that the operator is assumed to efficiently undertake capital investment or divestment to increase or decrease the capacity of its existing productive assets.
- Short Run (SRIC)- defined as a length of time in which at least one input into the production process is fixed. Thus, a characteristic of the short run is that capital investment decisions are predetermined and cannot be changed.

LRIC costs can be divided by the relevant increment volume it can be referred to as the long/short run average incremental cost (LRAIC/SRAIC), though this is often shortened back to LRIC/SRIC.

### Stand Alone Cost (SAC)

The stand alone cost (SAC) of a service is the cost of providing that service on its own, including all common costs associated with that service. It therefore attributes all of the common cost to the increment. As such, SAC has been used as an indication of the maximum cost and therefore price that could reasonably be applied because a price that exceeds it would not be efficient but rather excessive.

Beneath formula illustrates SAC of a service A:

$$SAC(A) = C(A,B) - IC(B)$$

where:

SAC(A) - Stand Alone cost of service A

C(A,B) - total cost of company producing service A and B

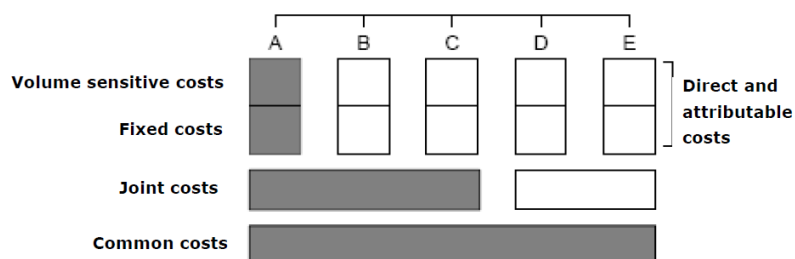
IC(B) - Incremental cost of service b

So stand alone cost of service A is equal to the total costs related anyhow to the service A and not related to service B (which is achieved by deducting incremental cost of service B).

After deducting of incremental cost of B whatever remaining cost must build-up the standalone cost of service A. Stand alone cost will include thus all direct variable, activity specific fixed costs and common fixed costs associated with the service in question.

On the graph below the Stand Alone cost of Service A is shaded.

Graph A2. Stand Alone cost of Service A



Please, note that for two services company model used in this Appendix, the following applies<sup>25</sup>:

$$IC(A) + SAC(B) = C(A,B)$$

<sup>25</sup> Proof:  $IC(A) + SAC(B) = C(A,B) - C(\emptyset,B) + C(A,B) - IC(A) = C(A,B) + C(A,B) - IC(A) - C(\emptyset,B) = C(A,B) + C(A,B) - [IC(A) + C(\emptyset,B)] = C(A,B) + C(A,B) - C(A,B) = C(A,B)$



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**COUNTRY CODES AND NRA ACRONYMS**

Country	Acronym	NRA
Austria	AT	RTR
Belgium	BE	BIPT
Bulgaria	BG	CRC
Croatia	HR	HAKOM
Cyprus	CY	OCECPR
Czech Republic	CZ	CTU
Denmark	DK	FSTYR
Estonia	EE	ECA
France	FR	Arcep
Germany	DE	BNetzA
Greece	EL	EETT
Hungary	HU	NMHH
Ireland	IE	COMREG
Italy	IT	Agcom
Latvia	LV	SPRK
Lithuania	LT	RRT
Luxembourg	LU	ILR
Malta	MT	MCA
Netherlands	NL	ACM
Norway	NO	Nkom
Poland	PL	UKE
Portugal	PT	ANACOM
Romania	RO	ANCOM
Republic of Moldova	MD	ANRCETI
Republic of Serbia	RS	RATEL
Slovakia	SK	RU
Slovenia	SI	AKOS
Spain	ES	CNMC
Sweden	SE	PTS
United Kingdom	UK	Ofcom