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Study on the cost accounting systems of providers of the universal postal service

by

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The opinions expressed in this study are those of the authors and do not necessarily reflect the view of the European Commission.

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1. MANAGEMENT SUMMARY

The "study on the cost accounting systems of providers of the universal postal service" investigates European universal service providers' cost accounting systems with regard to regulatory processes.

1.1 Background and aims of the study

During the ongoing liberalisation process in the European postal sector a regulatory framework might be necessary not only to secure high quality but also to avoid cross-subsidies from the reserved sector to the non-reserved sector, adversely affecting competitive conditions in the latter. In consequence checking prices with regard to their cost orientation is an important aim of the national regulatory authorities. In order to generate corresponding transparency, information from the universal service providers' cost accounting system is needed.

Therefore the "Postal Directive 97/67/EC" (Directive) has established rules concerning **transparency of accounts** for universal service provision.[1] This transparency is necessary for setting and regulating prices in the postal sector. The study focuses on checking and documenting the **implementation of Article 14** in national postal laws and analyses the actual **application of Article 14** by each national universal service provider.

[1] The so-called "Transparency Directive" (Commission Directive 80/723/EEC of 25 June 1980 on the transparency of financial relations between Member States and public undertakings) is not applicable to the postal sector due to the existence of more specific rules in the "Postal Directive 97/67/EC".

1.2 Article 14 broadly implemented and applied

The investigation of the implementation of Article 14 in each national postal legislation revealed that **all Member States** have implemented or are going to implement requirements in the spirit of Article 14. That means the most important aspects concerning cost accounting are covered (see table 1.1).

Regarding the application we can conclude that **13 of 15 universal service providers** are applying a cost accounting system which is in line with the main aspects of Article 14:

- Separation of accounts for reserved universal services, non-reserved universal services and non-universal services.
- Cost allocation due to the allocation rules given by Article 14 (3).

One universal service provider is applying the allocation rules case by case and the remaining universal service provider is just establishing a cost accounting system which will be able to fulfil both aspects in future.

1.3 Conflicts concerning cost accounting data and cost accounting principles

The main objectives of the national regulatory authorities are to safeguard the universal service, to prevent discrimination, and to promote competition. Whereas the main objective of the universal service providers is to provide the universal service without deficit.

These objectives often cause conflicts during the regulatory process. The conflicts concern the subjects

- **Cost accounting data needs** for regulation. National regulatory authorities ask for more detailed data than the universal service operators are ready or able to deliver.
- **Cost allocation principles**. The involved parties per Member State dispute about allocation of common costs to services.

1.4 Activity-based fully distributed costing most suitable for managing and regulating

The evaluation of different cost accounting methods is based on the objectives of universal service providers and national regulatory authorities. All objectives of managing the postal business can be covered most suitable by an application of **activity-based fully distributed costing**. For the allocation of costs due to the use of resources as well as for decision-making and motivation total costs should be split between direct and common costs. Common costs should be split between variable and fixed costs. Furthermore, it is useful to differentiate costs between regions and customers.

In order to fulfil the regulatory tasks like price approval or price permission **fully distributed costs** plus extra charges for profit and risk have to be taken into account. These extra charges have to be checked for reasonableness. Potential customer discrimination can be prevented by checking if a tariff system is consistently applied. In case of individual tariff agreements, **customer-specific fully distributed costs** should be considered in the case of suspicion. To be able to identify adverse cross-subsidy – and therefore competitor discrimination – **long run incremental costs** should be taken into account.

1.5 Recommendations

The results of the study show that Article 14 is broadly accepted and that it lays down the necessary subjects for price regulation appropriate. Therefore no substantial change of Article 14 is necessary.

1.5.1 Recommendations to the European Commission

Nevertheless CTcon recommends the Commission to define some non-defined terms used in the Directive. CTcon proposes to specify the term “service” as **”postal service”** which distinguishes between letters, direct mail, parcels, newspapers, and other postal services, separated between reserved universal, non-reserved universal and non-universal services. Furthermore CTcon recommends defining the term ”prices geared to costs” as **”geared to fully distributed costs“** to the European Commission.

Additionally an European-wide **harmonisation of cost accounting terms** such as direct or common costs might be useful. Therefore the European Commission should think about a common definition of the most relevant terms.

Furthermore CTcon suggests slight specifications of Article 14 in order to lay down minimum requirements for cost accounting of the universal service providers. CTcon recommends an **activity-based fully distributed cost accounting system on an annual data basis**, which is already being used by 13 of 15 universal service providers.

Once postal services' prices are set, national regulatory authorities should check in the case of complaints potential customer discrimination as well as potential competitor discrimination, which takes place in the case of adverse cross-subsidy. CTcon recommends to do this by checking whether prices are based on a consistently applied tariff system or are geared to **customer-specific fully distributed costs** and by using the **long run incremental costs test**. Thus these additional cost accounting features should be prescribed as an expansion of Article 14 by the Commission.

Regulatory tasks obviously require a check of the applied cost accounting system by an independent body, approved by the national regulatory authority. In addition to Article 14 (5) CTcon suggests the Commission to lay down certain **specifications concerning the approval of cost accounting**. The independent body shall approve the separation of the cost objectives, the applied accounting principles according to Article 14 (3), the reconciliation of cost accounts to the financial accounts and the use of appropriate and consistently applied cost drivers. CTcon recommends that this approval should be done by an external body at least every three years and in case of changes of accounting principles.

Despite the fact that cost accounting principles might differ between the universal service providers, CTcon recommends **no further harmonisation** of cost accounting. The reasons are on the one hand that cost accounting principles differ between universal service providers due to different production processes and a harmonisation of production processes does not make any sense. On the other hand the national particularities (e.g. wage level, quality, size of country) make an European comparison of cost data difficult.

1.5.2 Recommendations to the Member States

CTcon recommends the Member States to incorporate the possibility to use the **price cap method** as an efficient regulation method to prevent excessive pricing in the national postal laws.

1.5.3 Recommendations to universal service providers

Furthermore CTcon recommends the universal service providers to look at the **best practice in cost accounting**. It contains

- activity-based fully distributed costing,
- on an annual data basis,
- separation of cost objectives between different postal services and between the different regulatory areas,
- separation of different cost types,
- planning of costs (standard cost accounting),
- case by case calculation of customer-specific fully distributed costs,
- case by case calculation of long run incremental costs.

In addition to the minimum requirements this best practice includes standard cost accounting in order to support management decisions, which of course influence the future and not the past. Additionally, prices have to be permitted for the future.

Finally, taking into account cost accounting experience as well as theory, CTcon describes an **optimal cost accounting** system which covers in addition to the best practice criteria

- calculation of the data on a monthly basis,
- cost separation between variable and fixed costs,
- cost separation between regions and customers,
- identification of universal service costs.
- This system would be most suitable for management and regulation of the postal sector.

Overview of the implementation and application of the most important aspects of Article 14 (the "spirit" of Article 14)

LEGAL IMPLEMENTATION			MEMBER STATE	APPLICATION IN PRACTICE	
Measures taken	Separate accounts	Allocation rules		Measures taken	Separate accounts
✓	✓	✓	Belgium	✓	✓
✓	✓	✓	Denmark	✓	✓
✓	✓	—	Germany	✓	✓
✓	✓	—	Greece	✓	✓
✓	✓	✓	Spain	✓	—
✓	✓	✓	France	✓	✓
✓	✓	✓	Ireland	✓	✓
✓	✓	✓	Italy	✓	✓
✓	✓	✓	Luxembourg	✓	✓
✓	✓	✓	The Netherlands	✓	✓
✓	✓	✓	Austria	✓	✓
✓	✓	✓	Portugal	✓	✓
✓	✓	✓	Finland	✓	✓
✓	✓	✓	Sweden	✓	✓
✓	✓	✓	United Kingdom	✓	✓

Table 1.1 Abstract of the fulfilment of Article 14 in the Member States (for a detailed description see Annex 1)

Source: National postal legislation, interviews with national regulatory authorities and universal service providers, CTcon

2. BACKGROUND, AIMS AND METHODOLOGY OF THE STUDY

2.1 Guarantee of universal service and controlled liberalisation process

Traditionally the postal sector has been regulated in order to control the monopoly – given by state – on the one hand, and to ensure the provision of universal postal service on the other hand.

Due to political decision of the European Community, *“the establishment of the internal market in the postal sector is of proven importance for the economic and social cohesion of the Community, in that postal services are an essential instrument of communication and trade”* (Directive, Recital 2).

To ensure a *“gradual and controlled liberalisation”* process a regulatory framework might be necessary *“in order to guarantee, throughout the Community, and subject to the obligations and the rights of the universal service providers, the free provision of services in the postal sector itself”* (Recital 8).

To do justice to the interests of all involved parties the Directive lays down common rules concerning the provision of the universal postal service. These rules include not only the guarantee of high quality and sound management of the universal service but also prevention from distortions of competition. Therefore *“the tariffs applied to the universal service should be objective, transparent, non-discriminatory and geared to costs”* (Recital 26 and Article 12).

2.2 Transparent and clearly ruled cost accounting as basis for price regulation and fair competition

In order to introduce transparency into the costs of various services and to avoid cross-subsidies from the reserved sector to the non-reserved sector adversely affecting the competitive conditions in the latter, information from the universal service providers’ cost accounting system is required.

The Directive contains, among other things, certain rules concerning *”transparency of accounts for universal service provision”* (Article 1).

Transparent cost accounting systems guarantee fast and uncomplicated price permissions and approvals, saving transaction costs for the universal service provider and the national regulatory authority. In addition they help the universal service provider to manage their business.

Article 14 lays down certain accounting rules, in particular the separation of accounts for reserved universal services, non-reserved universal services and non-universal services and the allocation method of costs.

These legislative requirements support the national regulatory authorities in permitting and approving prices with regard to the necessary criteria mentioned above.

2.3 Study focuses on implementation of Article 14 and on

drawing up recommendations

The aims of the study on the cost accounting systems of providers of the universal postal service are:

1. Scientifically-based analysis of different cost accounting methods, specifically useful for the postal and network-based business.
2. Gathering information and providing an overview of the present cost accounting methods practised by the universal service providers in the Member States and also in other countries as USA and New Zealand. Focus is on:
   - checking and documenting the implementation of Article 14 of Directive in national postal laws, and
   - analysing the actual application of Article 14 by each national universal service provider.
3. Laying down European minimum requirements for necessary transparency of cost accounting systems and describing critical points of accounting systems.
4. Identifying best practice for accounting systems which makes it possible to avoid adverse cross-subsidisation and to separate costs between reserved and non-reserved services and within the non-reserved services between universal and non-universal services.
5. Drawing up recommendations for the European Commission for transparency of cost accounting systems and as well for the information delivery process between universal service provider and national regulatory authority.

2.4 Interviews and workshops provide information and ensure high quality results

The work on the study was marked by close co-operation and regular contact with the European Commission as well as by consideration and evaluation of various sources.

The methodological approach of the study was also defined and performed in order to ensure involvement and inclusion of the main stakeholders from the postal sector in all 15 Member States. The method employed by CTcon includes in detail the following:

1. Systemisation and evaluation of publications (e.g. scientific literature, national legislation, annual reports, Internet pages, other public material) on postal universal services and networks.
2. Evaluation of CTcon knowledge, especially regarding the aspect of specific cost accounting problems in the postal sector.
3. Creation and evaluation of comprehensive questionnaires for the different parties involved. Finally 34 questionnaires were sent out, collected and evaluated by CTcon.
4. Target-oriented and structured interviews with representatives from organisations involved in postal business (national regulatory authorities, national universal service providers, private postal operators, associations, etc.). Overall 33 interviews were conducted.
5. Conduction of a cost accounting expert workshop in order to discuss first results and draft recommendations of the study, like European

minimum requirements on cost accounting.

6. Conduction of two workshops in order to generate a shared view of the collected information and/or newly developed ideas and suggestions. All participating organisations were asked to contact CTcon or the Commission in order to make contributions apart from the standard input channels planned as part of the methodology such as questionnaires and interviews.

3. IMPLEMENTATION OF ARTICLE 14 IN NATIONAL POSTAL LEGISLATION

Investigating the actual implementation of Article 14 in each national postal legislation, it has to be mentioned that all 15 Member States have implemented or are going to implement requirements in spirit of Article 14 into their national postal laws. All Member States are complying with the original intention of the Directive, including the fact that 15 national regulatory authorities had been established. Some of them were just set up in order to fulfil the requirements of the Directive.

The following section deals with the implementation of Article 14 (1) - (8) in each national postal legislation of all 15 Member States in detail.

3.1 Measures taken in accordance with the provisions of Article 14 in all 15 Member States, Article 14 (1)

Article 14 (1) requires that *“Member States shall take the measures to ensure..., that the accounting of the universal service providers is conducted in accordance with the provisions of this Article”.*

The research of postal laws, secondary legislation, decrees and accounting rules of the Member States and also the interviews conducted with the national regulatory authorities and universal service providers showed that all 15 Member States had undertaken measures to ensure that the applied accounting of the universal service provider is in line with Article 14.

3.2 Separation of accounts implemented in all 15 national laws, Article 14 (2)

According to Article 14 (2) each universal service provider shall keep separate accounts within its *”internal accounting system at least for each of the services within the reserved sector on the one hand and for the non-reserved services on the other. The accounts for the non-reserved services should clearly distinguish between services which are part of the universal service and services which are not.”*

The postal sectors of Finland and Sweden are legally liberalised. According to this situation the postal laws of these Member States do not contain requirements to separate accounts for reserved and non-reserved services. Nevertheless, both laws lay down that the internal accounting system shall clearly distinguish accounts for universal and non-universal services.

The postal laws of Belgium, Denmark, Greece, Spain, France, Ireland, Italy, Luxembourg, The Netherlands, Austria, Portugal and United Kingdom all contain a requirement to separate at least between three – as mentioned in the Directive – different accounts within their cost accounting system (see also table 3.1).

The German postal law, set into force before and left unchanged after the publication of the Directive, stipulates the separation of accounts for the licensed and the non-licensed sector. Considering the license conditions and the fact that there is no legal obligation to provide universal services for any postal operator in Germany (it is done voluntarily) this requirement covers the Directive.

3.3 Cost accounting principles implemented in 13 of 15 national laws, Article 14 (2)

In addition, the Directive requires that the above mentioned accounting systems should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"* (Article 14 (2)).

According to the first part of Article 14 (2), the postal laws of Belgium, Denmark, Greece, Spain, France, Ireland, Luxembourg, The Netherlands, Austria, Portugal, United Kingdom as well as Finland and Sweden include the requirements concerning the cost accounting system.

In the German and the Italian legislation nothing in this respect is mentioned. Nevertheless, in Germany it is laid down that the national regulatory authority may prescribe the form of the cost accounting system if the comprehension of the financial relations between postal services is not ensured by the universal service provider. According to the statement of the German national regulatory authority at the moment further rules for postal service providers having a dominant position in the postal sector are under discussion.

3.4 Cost allocation rules implemented in twelve of 15 national laws, Article 14 (3)

Article 14 (3) demands certain rules concerning the cost allocation to the reserved and to the non-reserved services.

Nine Member States (Belgium, Denmark, France, Ireland, Italy, Luxembourg, Austria, Portugal, United Kingdom) have adopted Article 14 (3) in their national postal laws in detail. All of these nine Member States have implemented Article 14 (3) a) which lays down that direct costs shall be assigned directly to the services.

According to Article 14 (3) b), common costs shall be allocated according to the use of resources or according to direct costs (Article 14 (3) (i) and (ii)). When neither direct nor indirect measures can be found, common costs shall be allocated according to previously assigned costs (Article 14 (3) b) (iii)). Eight of the nine Member States, except France, have also implemented these parts in detail into their national postal laws. The postal legislation of France contains the general requirement that the costs shall be allocated directly or indirectly to a particular service.

The Spanish postal legislation orders that the analytical accounts shall comply with the provisions of Article 14. The Netherlands' corresponding rules also lay down that the universal service provider shall establish a cost accounting system that complies with Article 14 (3). In Sweden there is no formal implementation of Article 14 (3), but the corresponding allocation rules of the Directive are interpreted as a full costing rule[2] which is laid down in the Swedish postal legislation. Therefore, all mentioned 12 Member States can be seen as having implemented Article 14 (3).

But in the German postal law there are no more details mentioned concerning the cost accounting (see chapter 3.3). There are also no allocation rules laid down in Greece's and Finland's postal legislation (see also Annex 1).[3]

3.5 Independent system check implemented in 12 of 15 national laws, Article 14 (5)

According to Article 14 (5) *"national regulatory authorities shall ensure that compliance"* of the cost accounting system of universal service providers with Article 14 of the Directive *"is verified by a competent body which is independent of the universal service provider"* and that *"Member States shall ensure that a statement concerning compliance is published periodically"*.

12 of 15 national postal laws have implemented Article 14 (5). The legislation in Greece contains the verification of compliance by a competent and independent body. The issue of the periodical publication of a statement concerning compliance with Article 14 is not mentioned, which is of minor importance compared with the implemented independent verification.

The three residual Member States (Germany, Spain and Finland) do not have any legal requirements with regard to Article 14 (5).

The verification by an independent body is implemented in different ways: The Belgian, Danish and Dutch legislation for example require an auditor independent of the universal service provider to ensure the compliance. In France, Ireland and Italy the postal laws specify that the independent body, responsible for the verification of the system, shall be engaged by the universal service provider. The postal legislation of Luxembourg requires that the national regulatory authority finances an auditor. In contrast to the preceding postal laws, the Greek, Austrian and Portuguese legislation lay down that the national regulatory authority is responsible for the approval of the accounting system. In Sweden it is required that the universal service provider itself shall submit corresponding reports that are based upon the applied accounting principles on request. Finally, in the British postal legislation nothing in detail is mentioned.

3.6 Accounting system information delivery implemented in 14 of 15 national laws, Article 14 (6)

Article 14 (6) of the Directive lays down that *"the national regulatory authorities shall keep available,...information on the cost accounting systems applied by a universal service provider, and shall submit such information to the Commission on request"*.

The national postal laws of every Member State, except Spain, contain these requirements concerning information on the applied cost accounting

2 In accordance with Recital 29.

3 Here it has to born in mind that the postal legislation in Greece is being adapted at the moment.

system. Spain has not implemented Article 14 (6) in the national postal law.

3.7 Accounting data delivery implemented in 13 of 15 national laws, Article 14 (7)

Article 14 (7) says: ”*On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission.”*

13 of the 15 Member States, except Spain and Finland, have implemented corresponding requirements in their national postal laws.

3.8 Article 14 (4) exception rule implemented in all 15 national postal laws

Article 14 (4) states that cost accounting rules other than described in Article 14 (3) can be applied only if they are compatible with Article14 (2) and have been approved by the national regulatory authority.

In general there are two possibilities to implement Article 14 (4) into national postal legislation: Firstly the legislator decides that Article 14 (3) has to be applied by the universal service provider completely. Secondly the legislative body leaves it up to the national regulatory authority to decide if the universal service provider has to apply Article 14 (3) completely or if he can open the exception rule to the universal service provider.

The postal laws of Denmark, Germany, Greece, France, Italy, The Netherlands, Portugal, Finland and Sweden do not contain further requirements with regard to exceptions concerning Article 14 (3). That means the national legislator decided that the universal service provider has to apply Article 14 (3) completely (first possibility).

Belgium, Spain, Ireland, Luxembourg, Austria and United Kingdom have implemented Article 14 (4) into their national postal laws, choosing the second possibility of implementation.[4]

3.9 Article 14 (8) exception rule implemented in none national postal law

Article 14 (8) lays down that where *”...a Member State has not reserved any of the services...and has not established a compensation fund...and...none of the designated universal service providers...is in receipt of State subvention,...the national regulatory authority may decide not to apply the requirements”* of Article 14 (2) - (7).

In addition in Recital 29 of the Directive it is summarised that *“...such cost accounting systems may not be required in circumstances where genuine conditions of open competition exist”*. Article 14 in consequence should only be considered as temporary solution that can be given up if the postal sector is fully liberalised.

In fact Finland and Sweden are the only Member States having no reserved services and therefore could be considered for the implementation of Article 14 (8) in their national postal legislation in order to make use of the permitted exception.[5] Nevertheless the postal laws of these Member States

4 Nevertheless, this exception rule is not used in practice, see chapter 4.7.

5 It had been put into question on the final workshop, whether in Finland and Sweden genuine conditions of open competition do exist in practice or not.

do not contain any rules with respect to Article 14 (8).

Thus each Member State decided that Article 14 (1) - (7) has to be implemented and applied completely.

3.10 National legislation concerning Article 14 implemented in time by ten of 15 Member States, Article 14 (1)

Article 14 (1) lays down that the Member States shall ensure *"within two years of the date of entry into force of this Directive, that the accounting of the universal service providers is conducted in accordance with the provisions of this Article"*. The Directive has been published by the European Community on January 1998 and entered into force in February 1998. Therefore the deadline for implementation was February 2000.

Ten of the investigated national postal laws comply with this date, they have been already set into force before the publication of the Directive or came into force between February 1998 and February 2000.[6]

In the residual Member States the time-frames are as follows (see also Annex 1):

- The Netherlands: the postal law came into force in June 2000

[6] For example the national postal laws of Denmark, Germany and Portugal have been set into force before the publication of the Directive. Except to Germany, they have been adapted after Directive's publication once again.
In Italy Article 14 (7) is implemented in an additional contract, came into force on 21 September 2000.

- Spain: the provision which handles the analytical accounts came into force in July 2000
- Ireland: the postal legislation came into force in September 2000
- Luxembourg: the postal law came into force in January 2001
- France: after several steps the postal law came into force in February 2001.

3.11 Non-defined term "service" caused different implementation and interpretation

The investigation of the actual implementation of Article 14 in each national postal legislation showed that the term "service" in the Directive is not clear enough defined, which leads to different interpretations from Member State to Member State and in some cases to conflicts between national regulatory authorities and universal service providers.

Article 14 (2) requires separate accounts to be kept for *"each of the services within the reserved sector on the one hand and non-reserved sector on the other hand"*. This general principle, however, does not define what is meant by "service".

Three potential interpretations of the term "service" can be distinguished:

- Firstly, services could be interpreted as "single services", e.g. standard letter up to 20g, standard letter 20-50g, standard letter 50-100g, etc., meaning services with different prices.
- Secondly, services could mean "groups of single services" as business letters, private letters, etc..
- Thirdly, services could mean "postal services", e.g. letter services, parcel services, direct mail and newspapers (see figure 3.1).

Postal services

- Letters
- Parcels
- Direct mail
- Newspapers

Groups of single services

- Private letters
- Business letters
- Letters up to 350g
- Letters over 350g etc.

Single services with different prices

- Letters up to 20g
- Letters 20 - 50g
- Letters 50 - 100g etc.

Figure 3.1 Different interpretations of the term "service"

Our examination of the interpretation of the term ”service” in each Member State was done by investigating the postal laws with regard to this issue in detail and/or asking the national regulatory authorities for their interpretation.[7]

According to our enquiries eight of the national regulatory authorities interpret service in their postal legislation as ”single service”. This means that they interpret the term service in the most detailed sense. In two Member States service is interpreted as ”group of single services” (e.g. letters up to weight boundary concerning the reserved area) and in two others service means ”postal service” (e.g. letter and parcel).

In two Member States we have not been successful in getting statements concerning the national interpretation. In one other Member State the problem of the definition of the term ”service” has not been handled until now.

However, all possible definitions include the following: If one service falls partly into the reserved and partly into the non-reserved sector (or partly into the universal and partly into the non-universal service area) it shall be accounted as if it was two separate services.

7 Reasons of data protection prevent CTcon to name the interpretation of the term “service” of each Member State.

3.12 Summary and conclusions

By taking all paragraphs of Article 14 into account six of the 15 Member States implemented the whole Article in time: Belgium, Denmark, Austria, Portugal, Sweden and United Kingdom.

In four additional Member States (France, Ireland, Luxembourg, The Netherlands) the postal legislation which covers the whole of Article 14, came into force after February 2000.

In Greece the implementation of Article 14 (3) is missing. Whereas it is worth mentioning that the postal legislation in Greece is being adapted at the moment and therefore will in future correspond with the requirements of Article 14.

The German postal law does not contain requirements of a part of Article 14 (2) as well as Article 14 (3) and (5). The postal legislation of Spain does not contain requirements of Article 14 (5), (6) and (7) whereas the postal legislation of Italy does not cover a part of Article 14 (2). Finally the Finish postal legislation, which will be adapted in 2001, does not include the requirements of Article 14 (3), (5) and (7).

At this point, it has to be mentioned again that, in spite of everything, all 15 Member States have implemented or are going to implement requirements in the spirit of Article 14 in their national postal laws.

The implementation differs from Member State to Member State: The implementation is either complete (for example Ireland) or in a more general way (for example Sweden). But even in those Member States in which the transposition is not complete, the practice shows that Article 14 is being applied by almost all national regulatory authorities and universal service providers.

Following Table 3.1 summarises the findings about legal implementation of Article 14 into national postal laws and gives a good overview.

Summary of the implementation of Article 14 into national postal legislation

	Implementation of the Directive in national legislation	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	FIN	S	UK
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Cost accounting systems in line with Article 14 by February 2000	✓	✓	✓	✓	—	—	—	✓	—	—	✓	✓	✓	✓	✓
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	no reserved services	no reserved services	✓
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Cost accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	✓	✓	—	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	✓
Article 14, (3)	Allocation of costs to services:															
	Direct costs shall be assigned according to use of resources	✓	✓	—	—	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	✓
	Common costs shall be allocated as follows:															
	Whenever possible allocation according to use of resources or according to direct costs	✓	✓	—	—	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	✓
	When neither direct nor indirect measures can be found, allocation according to previously assigned costs	✓	✓	—	—	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	✓
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body; Member States shall ensure that a statement concerning conformity is published periodically	✓	✓	—	✓	—	✓	✓	✓	✓	✓	✓	✓	—	✓	✓
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	✓	—	✓	✓
Article 14, (8)	Exception rule (Member States who have no reserved services)													—	—	

Table 3.1 Summary of the implementation of Article 14 into national postal legislation (for a detailed description see Annex 1)

Source: National postal legislation, CTcon

4. APPLICATION OF ARTICLE 14 BY UNIVERSAL SERVICE PROVIDERS IN PRACTICE

Analysing the actual application of Article 14 of the Directive by each universal service provider, a total view of the present situation shows that nearly all universal service providers have already established a cost accounting system which is in the spirit of the Article.

In the following section the application of Article 14 (1) - (8) of the Directive by the universal service providers of all 15 Member States in practice is investigated in detail.

Therefore, it has to be mentioned that at the moment one universal service provider does not have a fully established cost accounting system.[8] This means that our results concerning the different paragraphs of Article 14 partly refer only to 14 of 15 universal service providers.

Furthermore, there are two Member States where the national regulatory authorities have just been established recently. These national regulatory authorities have already started their regulating work but they have not yet been able to include all their regulatory tasks. So in some cases the results are presented without one or both of these Member States.

8 It is expected that this universal service provider will complete the establishment of the cost accounting system until mid of 2001.

4.1 Measures taken in accordance with the provisions of Article 14 by all 15 universal service providers, Article 14 (1)

The conducted interviews and follow-up phone calls showed, that all 15 universal services providers have undertaken measures to fulfil the requirements of Article 14.

For more precise descriptions of the applied accounting systems by the universal service providers see the following paragraphs 4.2 - 4.12.

4.2 Separation of accounts applied by 14 of 15 universal service providers, Article 14 (2)

Article 14 (2) of the Directive lays down that "*the universal service providers shall keep separate accounts within their internal accounting systems at least for each of the services within the reserved sector on the one hand and for the non-reserved services on the other. The accounts for the non-reserved services should clearly distinguish between services which are part of the universal service and services which are not.*"

14 universal service providers are keeping separate accounts, which cover these three areas (see figure 4.1). Since there is no postal monopoly in Sweden and Finland, these two providers are distinguishing between universal and non-universal services whereas the other twelve universal service providers are distinguishing between reserved universal, non-

reserved universal and non-universal services. One universal service provider does not yet have a fully established cost accounting system.

4.3 Consistent cost accounting principles applied by 14 of 15 universal service providers, Article 14 (2)

Additionally, Article 14 (2) lays down that "*such internal accounting systems shall operate on the basis of consistently applied and objectively justifiable cost accounting principles*". From our experiences in the interviews with the universal service providers, 14 of them are applying such accounting principles. As mentioned above one universal service provider does not yet have a fully established cost accounting system.

4.4 Cost allocation rules applied by 13 of 15 universal service providers, Article 14 (3)

13 universal service providers are actual fulfilling Article 14 (3), where it is mentioned how to allocate costs to each of the reserved and to the non-reserved services respectively. They are applying the required allocation rules in accordance to their definition of the term "service". One universal service provider is not allocating total costs to services as it is required in Article 14 (3). Another provider has not fully established a cost accounting system until now.

In the following we give a summarised overview about methods and cost allocation criteria, used by the 14 universal service providers who have already established a cost accounting system.

The specified 14 universal service providers are classifying their **cost objectives**[9] as follows: Two universal service providers are allocating costs to single services with different prices. Three universal service providers mentioned that they are allocating costs to single services, but not to each single service for which there is a different price. That means, they are allocating costs to groups of single services.[10] Three other universal service providers answered directly that they are allocating costs to groups of single services. Four others are allocating costs to postal services and finally two universal service providers stated that they are classifying their cost objectives according to process steps or in multiple ways respectively.

9 In cost accounting "cost objectives" are the final targets where costs are allocated to.

10 For distinction between "single services" and "groups of single services" see chapter 3.11.

Figure 4.2 shows that 13 of the 14 universal service providers already possessing a cost accounting system, have established a full costing method. That means that their systems are allocating total costs to the cost objectives. One universal service provider is applying direct costing, what means that not all costs are allocated to the cost objectives. Therefore the Article 14 (3)-requirement of allocating total costs to services is not fulfilled.[11]

Twelve universal service providers are using activity-based costing whereas two are applying activity-oriented costing (see figure 4.3). The latter are able to allocate costs to activities, but do not capture costs by activities. Activity-based or activity-oriented costing is an appropriate and detailed basis for allocating costs to services (see chapter 6.2.2).

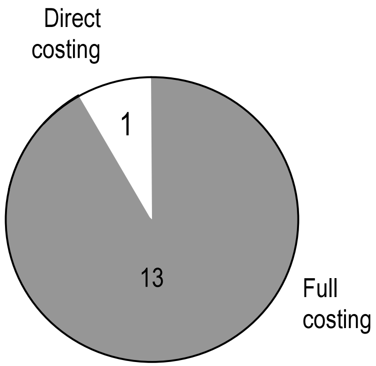


Figure 4.2
13 universal service providers are using full costing

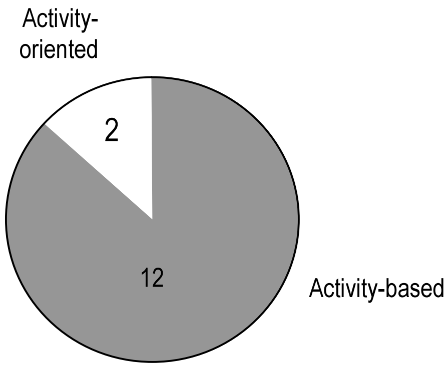


Figure 4.3
Twelve universal service providers are using activity-based costing

Figure 4.4 shows how the relevant 14 universal service providers are distributing their costs to cost objectives: twelve of them are distributing their costs via cost centres and processes. Three of those twelve universal service providers are also using either the possibility of distributing costs only via cost centres or only via processes. That means these three universal service providers are using two ways to distribute the costs to cost objectives. One universal service provider stated that the distribution is done only via cost centres and another one answered that he is distributing according to activity-based costing, this means via processes.

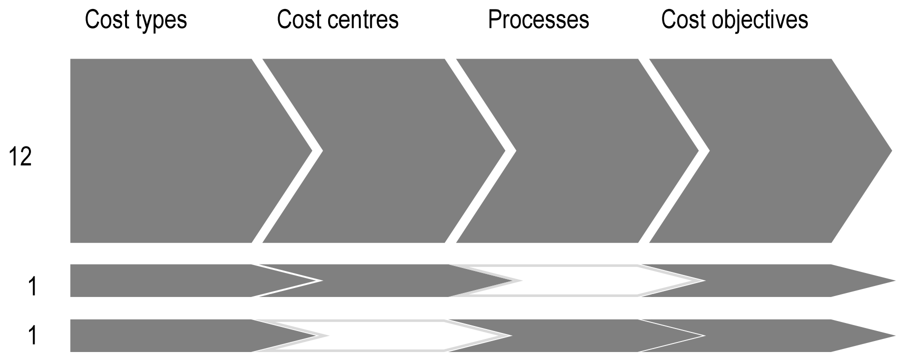
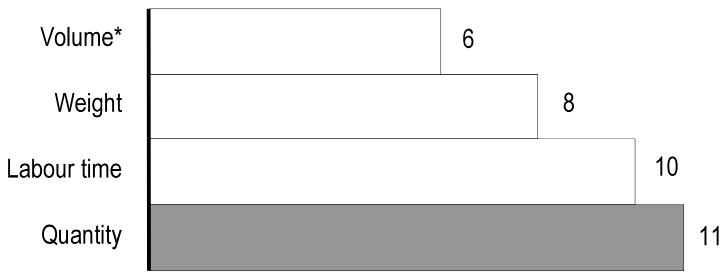


Figure 4.4 Distribution of costs to cost objectives

[11] For further clarifications and definitions concerning these cost accounting methods see chapter 6.

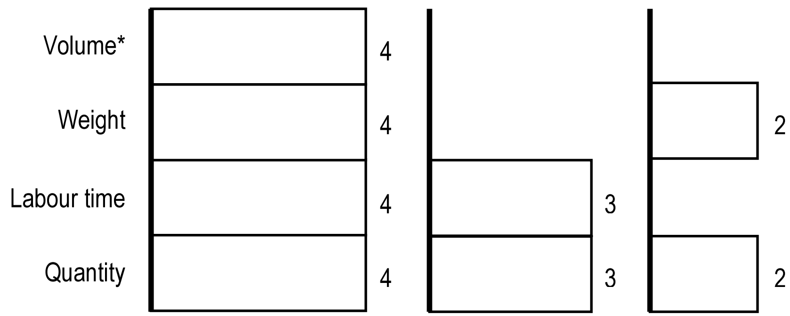
In most cases **production costs**[12] are allocated according to the use of resources. Figure 4.5 shows that some universal service providers are using more than one method. Nevertheless, eleven universal service providers are allocating production costs according to the quantity of postal items and ten of them according to the labour time needed. (Multiple statements per universal service provider had been possible.)



* length, width and height of postal items

Figure 4.5 Allocation basis for production costs

CTcon was able to identify certain patterns concerning the multiple allocation of production costs as mentioned above. The identification of such patterns could be done in nine of the relevant 14 cases. Four of these nine universal service providers are allocating their production costs according to volume, weight, labour time needed and quantity simultaneously. Three other universal service providers are using labour time needed and quantity, two others are allocating production costs according to weight and quantity as shown in figure 4.6.



* length, width and height of postal items

Figure 4.6 Simultaneous usage of allocation basis for production costs

Overall for the allocation of **overhead costs**[13] the following applies: Eight of the relevant 14 universal service providers are allocating overhead

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12 Production costs (e.g. costs for manual or mechanical sorting, costs of transport) are defined differently from universal service provider to universal service provider due to the different production processes and different classification of costs.

13 Overhead costs (e.g. accounting, management) are defined differently from universal service provider to universal service provider due to the different classification of costs.

costs which can be **directly assigned** according to the use of overhead services as depicted in figure 4.7 below. Here again multiple statements per universal service provider had been possible.

It is worth mentioning that two of the universal service providers are using all five possibilities to allocate their overhead costs, which can be directly assigned. Four are also using further criteria (as staff for example) and one universal service provider noticed that such allocation is "not applicable" in his cost accounting system.

Overhead costs which **cannot be allocated directly** are allocated according to the percentage of allocated production costs by five of the 14 universal service providers. The other universal service providers are using for example previously allocated costs, number of staff, revenues or multiple criteria as allocation basis (see figure 4.8, multiple statements per universal service provider had been possible). The universal service provider who is applying direct costing is not allocating such costs in his cost accounting system, but he is doing it case by case for the national regulatory authority.

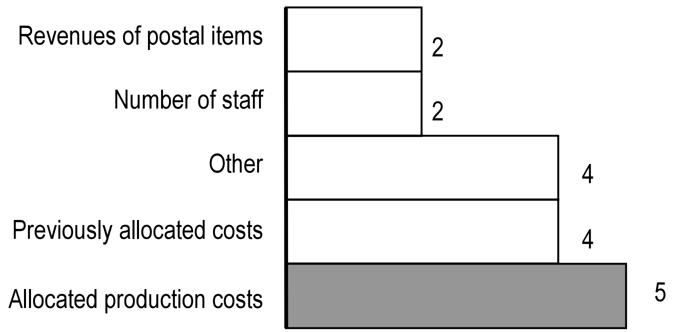

Figure 4.8 Allocation basis for overhead costs which can not be directly assigned

4.5 System checked by independent body in twelve of 15 cases, Article 14 (5)

In Article 14 (5) it is laid down that "*national regulatory authorities shall ensure that compliance*" of the cost accounting system from universal service providers with Article 14 of the Directive "*is verified by a competent* *body which is independent of the universal service provider*" and that "*Member States shall ensure that a statement concerning compliance is published periodically*".

In twelve of 15 Member States the cost accounting system of the universal service provider is being approved by an independent body. In one Member State the universal service provider does not let an independent body approve his cost accounting system but makes a report about his cost accounting system himself annually.[14] In another Member State the universal service provider has not implemented a cost accounting system yet. Finally, in one Member State the national regulatory authority has been just established and therefore this task is not yet fulfilled (see figure 4.9).

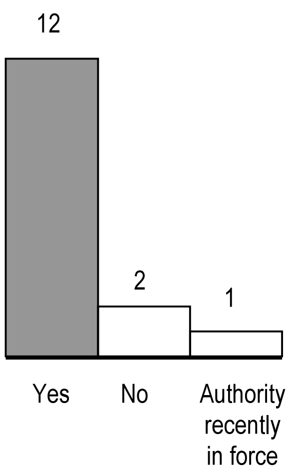

Figure 4.9 Approval of cost accounting system by an independent body

[14] It has to be mentioned that the respective cost accounting system is one of the very far developed systems within the European Member States.

Concerning the publication of the approval the following has to be pointed out: In nine of the twelve Member States mentioned above each national regulatory authority receives a report about the approval. In one Member State the national regulatory authority receives such a report only case by case since there is no legal right to receive it. In another Member State there is no statement concerning compliance given to the national regulatory authority and in one Member State the first respective approval has been done recently and it has not yet been decided if it will be published or not.

As remarked in chapter 3.6, the issue of periodical publication of a statement concerning compliance with Article 14 is of minor importance compared with the independent verification of the cost accounting system.

4.6 Accounting system information delivered by 13 of 15 universal service providers, Article 14 (6)

Article 14 (6) of the Directive lays down that "*the national regulatory authorities shall keep available, to an adequate level of detail, information on the cost accounting systems applied by a universal service provider, and shall submit such information to the Commission on request*".

13 of the 15 national regulatory authorities receive information about the system in the way of descriptions, reports, demonstrations, lectures, etc.. One of the national regulatory authorities has been just established. Therefore, this authority is not able to evaluate the accounting system information provided and to submit such information to the Commission,

even if the relevant universal service provider stated that he provides a large quantity of information to the authority. Finally, in another Member State the universal service provider until now has not fully established a cost accounting system.

4.7 Accounting data delivered by eleven of 15 universal service providers, Article 14 (7)

"*On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission.*" Article 14 (7) of the Directive was checked in practice by asking the national regulatory authorities if they are receiving information they have required.

Eleven national regulatory authorities are receiving accounting data information, nine of them are receiving all information they have requested whereas in the residual two cases not all required data information is delivered due to reasons of confidentiality of information (e.g. data of non-universal services) or human capacity on the part of the universal service provider. As mentioned at the beginning of this chapter, two national regulatory authorities are just recently in force and have therefore not yet demanded accounting data. One national regulatory authority has not yet received data information but due to our interview he is expecting to receive it until the end of 2001. Finally one universal service provider is not able to deliver cost accounting data due to the fact that the cost accounting system establishment is not yet finished.

4.8 Article 14 (4) exception rule not used by universal service providers

In Article 14 (4) it is stipulated that any cost accounting system might be applied, using other cost allocation rules than fixed in Article 14 (3), if these rules contain the separation of accounts for reserved universal services, non-reserved universal services and non-universal services as outlined in Article 14 (2). In our interviews with the national regulatory authorities we always received the information that they do not have the intention to permit or to lay down the possibility of applying any other accounting method than described in Article 14 (3).

4.9 Article 14 (8) exception rule not used by the Member States

Although Finland and Sweden are already liberalised Member States, they are not making use of the exception rule in Article 14 (8). Thus, all universal service providers have to apply a cost accounting system which covers Article 14 (1) - (7).

4.10 Article 14 applied in time by 13 of 15 universal service providers

According to Article 14 (1) Member States shall ensure "*within two years of the date of entry into force of this Directive, that the accounting of the universal service providers is conducted in accordance with the provisions of this Article*". That means that the cost accounting systems of the universal service providers should have been in line with Article 14 by

February 2000.

Concerning the 15 universal service providers we noticed that 13 of them are using their accounting systems at least since the date mentioned above.

Eight universal service providers had established their cost accounting systems a few years before the Directive came into force. Nevertheless, adaptations due to the introduction of the Directive were necessary in a few cases. The residual five universal service providers established their cost accounting systems after or even in 1997 so that we suppose the introduction of the Directive have had a high impact on the development or even on the introduction of the respective accounting systems.

The universal service provider who established his system after February 2000, namely at the beginning of 2001, developed the system with regard to the requirements of the Directive. Finally, the universal service provider who is still in process of establishing the accounting system, is developing his system with regard to the requirements of the Directive, too.

Finally, looking at all parts of Article 14 (1) - (7) at once, in relation to the results of all of the chapters above, nine universal service providers are fulfilling the whole of Article 14 in practice.

4.11 Standard cost accounting used by eight universal service providers

Usage of standard cost accounting is one additional application which is useful due to price permissions for the future.

Eight of the 14 universal service providers who have already established a cost accounting system are using standard cost accounting (see figure 4.10). This means they are planning costs for at least one year in the future.

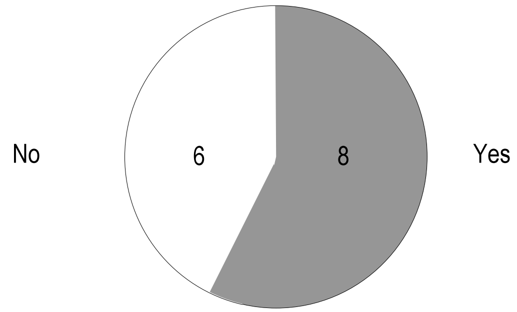

Figure 4.10 Usage of standard cost accounting by universal service providers

4.12 Summary and conclusions

Overall the interviews have shown that nearly all universal service providers are applying a cost accounting system which is in the spirit of Article 14 and nine of the 15 universal service providers have already established a cost accounting system which is in line with the whole of Article 14.

Cost accounting separation for reserved universal services, non-reserved universal services and non-universal services – as one main point in Article 14 – is undertaken by 14 universal service providers. The residual one will do it in the near future.

The Article 14 (3) cost allocation rules – as a second main point in Article 14 – are fulfilled by 13 universal service providers. One of the residual universal service providers will do it in the near future, whereas the other one is applying these rules case by case depending on the requirements of the national regulatory authority.

All other aspects of Article 14 are fulfilled by the universal service providers more or less detailed. For example: In one Member State the universal service provider approves the cost accounting system on his own. In two Member States the national regulatory authorities have been established just recently so that the flow of cost accounting information has not yet taken place. In another Member State the national regulatory authority has not yet received cost accounting data.

5. DIFFERENT OBJECTIVES DETERMINE THE REGULATORY PROCESS

The regulatory process, in particular price permission or approval, needs support by cost accounting information. The aim of Article 14 is the establishment of a clearly defined and high quality information source for regulation. Therefore a check if Article 14 is appropriate, has to start with examining the regulatory process. The needs of the regulatory process determine which cost accounting system is useful and which is not. If Article 14 does not lead to useful cost accounting systems and regulatory processes it should be changed.

Regulatory authorities and universal service providers want to ensure or provide the universal service with regard to different aspects. In the following section we describe these contrasting objectives and the resulting conflicts concerning the regulatory process.

5.1 Safeguarding the universal service, preventing discrimination, and promoting competition as national regulatory authorities' main objectives

By investigating the objectives of the national regulatory authorities it becomes evident that the main objectives of all national regulatory authorities are the guarantee of the provision of universal service on the one hand and the support of the liberalisation process by promoting competition on the other hand, whereas the following criteria are included:

- high or at least appropriate quality of service (Recital 30 and chapter 6)
- protection of customers' interests (Recital 12 and Article 3)
- ongoing development of postal services (interview)
- efficiency of production processes (interview)
- affordability of prices (Article 12)
- uniform tariffs (Article 12)
- transparency of prices (Article 12)
- prices geared to costs (Article 12)
- prevention of (customer and competitor) discrimination (Article 5)
- transparency of costs (Recital 29)
- prevention of adverse cross-subsidy (Recital 28)
- in several Member States: maintenance of traditional post offices, i.e. offices owned by the universal service provider (national postal legislation)

5.2 Providing universal service without deficit as elementary objective of universal service providers

Universal service providers want to provide all services within their postal network infrastructure without deficits due to the provision of the universal service. Thus universal service providers want to set prices for universal services (reserved and non-reserved services) which allow to cover total costs of the services and additionally a profit and risk margin.

Therefore prices might be wanted higher than affordable, if affordability means covering only parts of total costs. And prices might be wanted not uniform in competitive areas, because uniform prices lead to a situation where some services are too cheap and others are too expensive, compared with their costs. This opens the opportunity for competitors to offer the latter for lower prices and leave behind the incumbent with deficits.

Additionally some of the interviewed universal service providers want to reduce costs arising for example due to the maintaining of the post offices, mentioned in chapter 5.1. The universal service providers who are already running a reasonable share of agencies, stated that agencies are offering better services for lower costs per item than traditional post offices.

5.3 Conflicts about cost accounting data needs and cost allocation principles

The policy of universal service providers may contradict the policy of the national regulatory authorities, if the latter want to set affordable and uniform prices. Thus, conflicts and discussions during the regulatory process can be predicted, which are of course fruitful for regulation.

Based on the questionnaires, the interviews, and the expert workshop, CTcon gained the impression that there are no major conflicts between the national universal service providers and the regulatory authorities. Five universal service providers stated no (major) conflicts concerning data and regulatory process between them and the regulatory authorities. Five other universal service providers did not give any statements concerning conflicts due to the lack of experience or due to other reasons.

However, three **universal service providers** share the opinion that the level of detail concerning data and the required quantity of data being asked by the regulatory authorities is too high. One of those together with another universal service provider stated that they are in discussion with their regulatory authorities in respect to the allocation of certain costs to certain services. In another case it is mentioned that the distinction of regulated and non-regulated services is not defined clearly enough. One other universal service provider pointed out that the role of the national regulatory authority should focus on principles of setting prices instead of spending too much time on checking detailed data. Finally, in one Member State discussions about the license conditions arose.

The **national regulatory authorities** gave a slight other impression of their situation. Only one national regulatory authority did not mention any conflicts concerning the regulatory process.

All other national regulatory authorities stated no major conflicts, but some of them minor conflicts as follows: Five national regulatory authorities would prefer receiving a more detailed level of data or more data in general. Four national regulatory authorities criticised on one hand the time needed by the universal service providers to deliver information, whereas on the other hand two of them and another national regulatory authority stated the time needed by themselves to check the given material as a conflict. Three national regulatory authorities had the impression that the universal service providers do not (fully) accept their regulatory decisions. And – as mentioned from universal service providers alike – three national regulatory authorities stated the ongoing discussion concerning cost allocation criteria. One national regulatory authority proposed its universal service provider to introduce a standard cost accounting system in order to give better prognoses for future costs. Discussing the conflicts concerning regulatory process and cost accounting information, CTcon gained a good impression about cost accounting questions with regard to the regulatory processes. This impression was an important step to the proposal of minimum requirements concerning the cost accounting system of universal service providers and the approval of cost accounting data.

Recommendations concerning cost accounting can be derived after detailed research about usefulness and practicability of cost accounting systems for the national regulatory authorities as well as for the universal service providers, which will be reported in chapter 6. But conflicts arising about the pricing policy stand apart from cost accounting questions and therefore shall be discussed in the separate chapter 5.4.

5.4 Affordability of prices as controversial term for pricing policy

Article 12 of the Directive states that ”*prices must be affordable*”. Affordability of prices is a political and social characteristic. A price level is affordable if a huge majority of people accepts it as not expensive and uses postal services broadly. Affordable prices support equal living conditions for all citizens within the Member States.

Unfortunately, no definition of affordability is given in the Directive which is one reason for the mentioned conflicts and discussions between the national regulatory authorities and the universal service operators. Moreover, in economic theory there is no definition of affordability, too. From a theoretic standpoint every price level could be affordable. Affordability is shown by the fact that at least some customers accept and pay a given price for a service.

The subjective criterion ”affordability” could be measured by comparison with prices for substitutes, such as courier services. Compared to such services universal services are mostly cheaper, which means that affordability would be always secured. Another way to identify affordability is looking at the size of expenditures for postal services in percentage of the available net income per household. However, expenses for postal services are mostly marginal. Therefore, without any possibility to measure “affordability”, national regulatory authorities could arbitrarily judge any price as “not affordable”.

Besides the difficulties of measuring affordability, another problem arises: Article 12 asks not only for affordable prices, but as well for prices which are ”*geared to costs*”. This establishes an alternative pricing rule and leads to a situation of double-defined price level. In case of conflict should the price be affordable (which means low) or should the price be geared to costs (which might mean higher)?

For the context of our study we assume the pricing rule “geared to costs” as dominant pricing rule, because only this rule makes it necessary to support price permissions or approvals by cost data. The need for cost data raises the question of designing and harmonising cost accounting systems of universal service providers, which will be presented within our study.

6. SUITABILITY OF VARIOUS COST ACCOUNTING METHODS FOR POSTAL SECTOR

The following chapter shows the results of the evaluation of various cost accounting methods with respect to their use in the postal sector. Hereby we take into account the cost accounting rules of Article 14 as well as theoretical approaches of cost accounting and the application in practice by universal service providers, private postal operators and other companies.

6.1 Evaluating cost accounting methods on basis of universal service providers' and national regulatory authorities' objectives

A cost accounting method itself cannot be good or bad. The evaluation of a cost accounting method has to be done on basis of users' objectives. In the given context users are universal service providers and national regulatory authorities.

Universal service providers' objectives to be reached by cost accounting are:

- price setting,
- making entrepreneurial product and process decisions and
- motivation of the management for efficient behaviour.

National regulatory authorities' objective to be reached by cost accounting is:

- price approval and permission, which includes
  - checking if prices are geared to costs,
  - prevention of adverse cross-subsidy and
  - prevention of discrimination.

For working out pros and cons of various cost accounting methods, CTcon takes into account the following concepts, which are used in service industry practice and/or are discussed in theory:

- fully distributed costing (see chapters 6.2 and 6.3)
- long run incremental costing (see chapter 6.3)
- other partly distributed costing (see chapter 6.4).

6.2 Activity-based fully distributed costing appropriate for managing postal business

Fully distributed costing allocates the total costs of a company to the services provided by the company. In a first step costs are collected at the cost centre or responsibility area level, in a second step costs are allocated to services.[15] **Activity-based costing** is a special method of fully distributed

[15] See Jürgen Weber, Einführung in das Rechnungswesen II: Kostenrechnung, 5. Auflage, Stuttgart 1997, p. 205 ff.

costing. It collects costs at processes or activities and then allocates them to services. For a schematic example see figure 6.1 below. Activity-oriented costing – a term used within this study – collects costs at responsibility areas and then allocates them to activities as well as to services.

Whereas activity-based costing captures costs by activities, activity-oriented costing captures costs by responsibility areas and allocates them to activities. The results of these two methods are of course very similar.

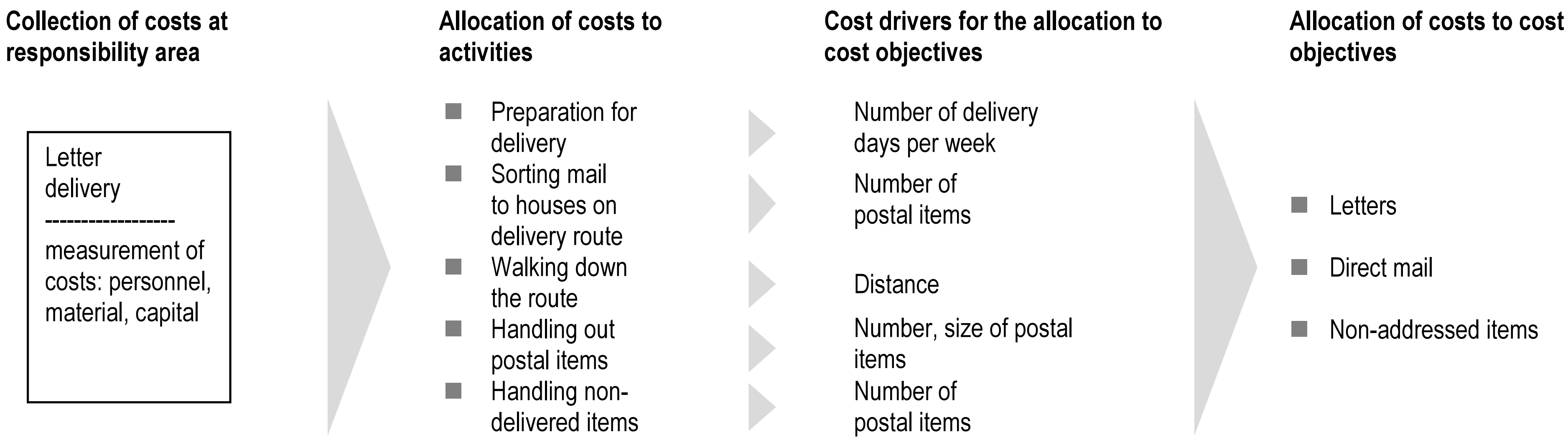

Figure 6.1 Schematic example of allocating costs on an activity basis

6.2.1 Cost orientation of prices reasonable

Prices of postal services can be set on basis of market research, which asks for customer's readiness to pay and for competitor's price level. But there are also four reasons why universal service providers should base their prices on fully distributed costs or at least cross-check their prices by cost and profitability analyses:

- Article 12 asks for "prices geared to costs" and Article 14 (3) prescribes allocating direct and common costs to services, which cover total costs. Additionally, Recital 29 mentions fully distributed costing.
- Prices should cover total costs for ensuring profitability and long-run existence of the company.
- After liberalisation of the postal sector competitors will offer postal services. Prices not geared to fully distributed costs might lead to an opportunity for competitors to "take the pick of the bunch".[16] If an universal service provider for example offers one service with a high profit margin and another service without profit, a competitor would of course take the opportunity only to provide the service with the high profit margin, leaving the universal service provider with the unprofitable service.[17]
- Most of the universal service providers offer a good proportion of services protected by a monopoly where no competitor indicates a market price level.

In addition to these reasons, practice shows that 13 of the 15 universal service providers and all interviewed private postal operators as well as the largest part of big companies from different industries are using fully distributed costing.[18]

6.2.2 Activity-based costing as data base for allocating costs to services

From the point of view of theory, activity-based or -oriented costing is most appropriate for allocating costs to postal services. Postal industry is a service industry. Services are provided by service people, carrying out different activities for different customers. For example one postman delivers letters, direct mail and newspapers at the same time. The use of the resource "postman" can be measured and allocated to services most precisely by looking at his different activities and the labour time used by each activity – this is the basic principle of activity-based or activity-oriented costing.[19] Alternatively the costs of a postman have to be collected by a responsibility area and have to be allocated to services using less precise

16 Under assumption of a similar cost structure between universal service provider and competitor.

17 Assumption: The competitor's production infrastructure and production process and therefore the cost function is similar to the universal service provider's.

18 See chapter 4.4 and Jürgen Weber, Einführung in das Rechnungswesen II: Kostenrechnung, 5. Auflage, Stuttgart 1997, p. 234.

19 See Jochen Holzwarth, Strategische Kostenrechnung? Stuttgart 1993, p. 142 ff. The idea of activity-based costing has firstly be mentioned more than 100 years ago by Eugen Schmalenbach, Buchführung und Kalkulation im Fabrikgeschäft, in: Deutsche Metallindustriezeitung, 15. Jg. (1899), S. 107.

allocation keys like number of postal items.

In practice, activity-based or activity-oriented costing is used or will be used by every universal service provider (see chapter 4.4) and by each interviewed private postal operator.[20] Moreover operators in other service industries regulated or not, generally use activity-based costing for allocating costs to services (e.g. telecommunication industry). It can be assumed that service operators are using the cost accounting system which is best suited for managing their business. Therefore it can be concluded from theory and from practice that activity-based or activity-oriented costing is the most appropriate cost allocation system for universal service providers to manage the postal business as service industry.

The data which lead to the activity-based costs per service or per postal item are:

- structure of activities
- amount and price of resources used per activity and
- number of postal items processed per activity.

Exact measurement of these data is elementary for the value of usage of activity-based cost information. It is in the universal service provider's own interest to give a high focus of attention to this base data in order to obtain robust cost information and in consequence for setting prices correctly.

6.2.3 Split between direct and common, variable and fixed costs for allocating costs to services

For postal businesses allocation of costs to services is the most crucial point, because postal businesses offer a range of services produced on a commonly used network infrastructure[21], which causes almost only common costs.

Article 14 (3) gives useful and clear rules for allocation of costs to postal services which are broadly accepted by the national regulatory authorities and the universal service providers. Since these rules are as well accepted by the private postal operators[22], they should remain unchanged.[23]

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[20] One interviewed private postal operator even recommended: "Activity-based costing is the best way to allocate costs since it follows the processes."

[21] The term "network infrastructure" is an economic term and should not be misunderstood as an essential facility like in telecommunication industry. In postal business there is no technical network which would be necessary for competitors' offer of services to customers.

[22] Result of our interviews with private postal operators.

[23] The problem of different possible interpretations of the term "service" in the European

For the framework of this study the authors try to give an interpretation of the general rules of Article 14 (3) which transforms the rules into more practical and meaningful cost accounting terms as follows:

Direct costs arise from the use of resources which can be allocated directly to one single service. Direct costs shall be allocated to services according to the use of resources.[24] For example: All capital, labour, energy, maintenance, and other related costs caused by a letter sorting machine can be allocated directly to the letter service if no other service (e.g. direct mail) makes use of this machine.

Common costs[25] in contradiction to direct costs can not be allocated easily to single services due to their origin or cause. The nature of common costs is that they result from producing a set of different services at the same time and with indivisible use of resources. For example: The costs of a postman's round are common costs because the postman delivers letters of different sizes, direct mail and newspapers at once.

Common costs can be split into variable and fixed costs. **Variable costs** vary with the amount of items collected, sorted and delivered. For differentiation from fixed costs it should be assumed that variable costs are that share of common costs which is proportionally varying within six months while the amount of items is varying within a range of plus/minus 20 percent.[26] Variable common costs shall be allocated to services according to their use of resources, e.g. labour time.[27]

The rest of common costs are fixed costs. **Fixed costs** do not change with the amount of mail. While cost accounting theory says that fixed common costs should not be allocated to services at all[28], cost accounting practice shows allocation of these costs to services.[29] Following Article 14 (3), fixed costs shall be allocated to services according to the previously assigned direct costs and variable common costs.[30]

Directive remains open. See chapter 3.11.

24 This is in line with cost accounting theory, see for example Jürgen Weber, Einführung in das Rechnungswesen II: Kostenrechnung, 5. Auflage, Stuttgart 1997, p. 80 ff.

25 In cost accounting theory there exists also the term "joint costs", which is similar to "common costs" and which will be used as a synonym within the framework of this study. *"Common costs result when multiple products are produced together although they could be produced separately: joint costs occur when multiple products are of necessity produced together."*, S. Davidson/C. Stickney/R. L. Weil: Accounting: The language of Business, New York 1979, p. 15

26 This definition identifies a good proportion of operative labour costs as variable costs. See Wolfgang Kilger, Flexible Plankostenrechnung und Deckungsbeitragsrechnung, 10. Auflage, Wiesbaden 1993.

27 Variable common costs can not be dedicated specifically to single services in a causal way. But allocating variable costs to services according to usage of resources is generally accepted in cost accounting practice. See Jürgen Weber, Einführung in das Rechnungswesen II: Kostenrechnung, 5. Auflage, Stuttgart 1997, p. 80 ff.

28 Fully allocated fixed common costs may lead to wrong production or price decisions, if one does not take into account that these costs do not vary with the amount of produced services. See Jürgen Weber, Einführung in das Rechnungswesen II: Kostenrechnung, 5. Auflage, Stuttgart 1997, p. 215 ff.

29 13 of 15 universal service providers are allocating fixed common costs to their services (see chapter 4.4). Moreover most of big companies from different industries are doing so. See Jürgen Weber, Einführung in das Rechnungswesen II: Kostenrechnung, 5. Auflage, Stuttgart 1997, p. 234.

30 Nevertheless it has to be mentioned that other rules of allocation would be possible.

6.2.4 Pricing of competitive services without universal service costs

It is conceivable that the universal service obligation causes costs which would not arise in case of the non-obligation. In the expert workshop the question arose, which services should cover these universal service costs.

As stated by some universal service providers, they would be able to organise their postal network in an economic ideal way if they were not obliged to provide the universal service.

Four universal service providers are calculating universal service costs as costs which they would not be exposed to in a free market environment. For defining universal service costs there are different approaches:

- Difference between actual costs of the universal service provider and costs of a not obliged (hypothetical or real) competitor (e.g. extra costs for the sixth delivery day or for delivery to rural areas).
- Loss of non-cost covering delivery routes.
- Total loss of all universal services.

Some universal service providers argue that competitive services should be priced on basis of fully distributed costs less universal service costs. Universal service costs could be covered by the reserved sector, by a fund or by the obliging state. Other universal service providers do not calculate universal service costs because they are not following this argumentation.

However, universal service costs might be identified in a voluntary, separate calculation for arguing that competitive services, produced on the universal service network, do not have to cover completely the fully distributed costs if they cover at least fully distributed costs less universal service costs. But there is not enough evidence from the interviews to recommend a general calculation of universal service costs throughout the European Union. Therefore the question, if the calculation of universal service costs is necessary and which method of calculation is the most useful one, should be answered individually on the Member State level.

6.2.5 Split between variable and fixed costs for decision-making and for motivation

From the interviews with the universal service providers, from earlier experience of the authors, and from cost accounting theory can be concluded that for managing the postal business a split between variable and fixed costs is helpful not only for allocating costs to services.

Universal service providers have to make management decisions, e.g. about service range, about the way of providing services, about the flow of production processes or about rationalisation measures. Therefore it is helpful to differentiate total costs between variable and fixed costs as described above (see chapter 6.2.3).

A lot of decisions influence variable costs and revenues, but not fixed costs. Contribution margins (revenues minus variable costs) of services should be calculated for decision support.[31] Other decisions are focusing especially on fixed costs, e.g. rationalisation decisions, where variable labour costs are often replaced by fixed machinery and capital costs.

Besides decision-making another important aspect of management is motivation to achieve cost-efficient behaviour. Therefore costs should be measured per responsibility area of managers. A cost budget, obtained by planning and budgeting routines, sets a limit for the manager. Within the limit he can act freely with the objective of not exceeding actual costs. As for decision-making it is very helpful to set a flexible budget, where the variable cost proportion of the budget depends on the actual processed number of postal items and the fixed cost proportion of the budget does not.[32]

31 See Hans-Georg Plaut, Grenzplankosten- und Deckungsbeitragsrechnung als modernes Kostenrechnungssystem, in: Kostenrechnungspraxis, Jg. 1984, p. 20–26 and p. 67–72.

32 See Wolfgang Kilger, Flexible Plankostenrechnung und Deckungs-beitragsrechnung, 10. Auflage, Wiesbaden 1993.

What can be learned from theory on the one hand, can be identified in practice on the other hand: A couple of postal universal service providers, competitors and other companies in service industries differentiate between variable and fixed costs for decision making and for budgeting.

6.2.6 Regional and customer cost differentiation useful

Under a fully liberalisation scenario, competitors are expected to differentiate regional prices, e.g. between city versus rural delivery or between letters collected and delivered within one city versus letters collected in one city and delivered in another city. This can be learned from interviews with private postal operators or from looking to letter or parcel competition in New Zealand, Sweden or Germany. Universal service providers should be prepared for price differentiation by calculating differentiated regional costs.

In practice a couple of universal service providers are already able to distinguish regional costs within their cost accounting system.

Another dimension of cost differentiation – just as important if competition occurs – is customer differentiation. Due to different activities per customer or due to different attributes of the customer's mail items the same service may cause different costs for different customers. As an example, parcel flows from business customers to business customers are causing less costs than parcel flows from business to private customers because of the higher drop factor (number of parcels dropped per stop of delivery van) in the business to business segment.

The importance of customer-specific cost accounting is evident in the parcel service market. Competitors, serving business customers, differentiate costs and prices between customers. Without such a differentiation the universal service providers will probably lose market shares to competitors.

6.2.7 Existing costing principles sufficient for cross-border services

The provision of cross-border services (dealt with in Article 13) does not require special features or arrangements with regard to cost accounting. Cross-border services pass through parts of the general production process; so in consequence there are no differences in cost accounting principles between cross-border services and domestic services.

While using the same cost accounting principles, the universal service providers should be able to distinguish the costs of cross-border services from the costs of domestic services due to the different range of costs caused by each type of service. Cross-border services use only parts of the general value chain – either from collection to exchange offices (export) or from exchange offices to delivery (import). In case of export terminal dues have to be paid to the universal service provider of the destination country which causes additional costs compared to domestic services. Therefore cross-border services most probably do not cause the same range of costs than domestic services.

6.2.8 Summary and conclusion

All objectives of **managing the postal business** (price setting, decision-making and motivation for efficient behaviour) can be covered very well by an application of activity-based fully distributed costing. Total costs should be split between direct and common costs. Common costs should be split between variable and fixed costs. Furthermore, costs should be differentiated according to regions and customers.

Almost all universal service providers are already operating or are going to implement a fully distributed costing system, activity-based or activity-oriented. The cost splits and cost differentiation mentioned are performed by some cost accounting systems.

Facing the ongoing liberalisation process, CTcon proposes that the universal service providers implement these cost splits and cost differentiation.

6.3 Fully distributed costing and long run incremental costing for regulating prices

6.3.1 Cost-based prices required by Article 12

Article 12 requires that prices are ”geared to costs”. The inconsistency between ”prices geared to costs” and regional ”uniform tariffs”, as mentioned in Article 12, is obvious because costs of allocation and delivery in rural areas exceed costs of collection and delivery in urban areas by far. Uniformity of tariffs is an option to be decided by the Member States. If a Member State opts to apply uniform tariffs the requirement of prices geared to costs can only be meant by averaging costs throughout the national territory.

To further clarify the term ”geared to costs” three steps are necessary:

- It has to be defined what is meant by the term “costs” in the context of Article 12, e.g. efficient costs or fully distributed costs,
- the allocation of costs to services has to be determined (already dealt with in chapter 6.2.3),
- profit and risk margins for the services have to be fixed (see figure 6.2).

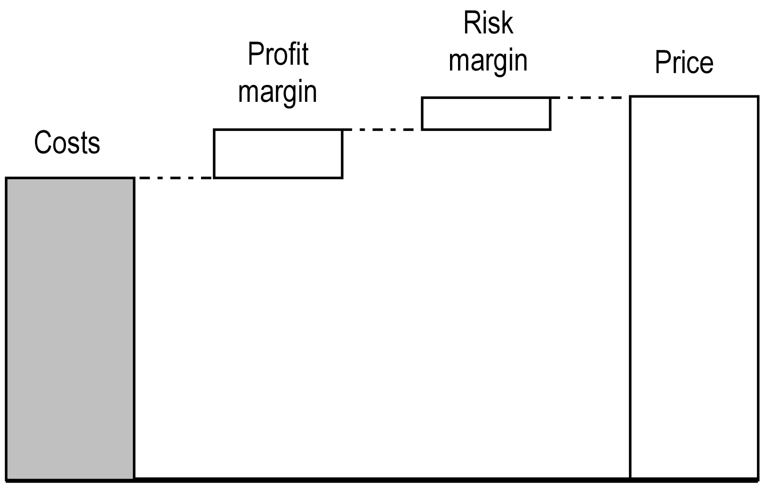

Figure 6.2 Components of price calculation and price regulation

6.3.2 Fully distributed costs more useful for monopoly pricing than efficient costs

The term ”costs” could be read as ”efficient costs”. Efficient costs are costs of a hypothetical operator acting in a perfect competitive market. In non-reserved industries where the price is a competition factor, suppliers try to reduce costs and prices permanently (under the economic theory). In reserved sectors competition can be simulated by stipulating the operators to use only efficient costs as basis for prices.

A couple of national regulatory authorities are applying the method of efficient costs for regulating the reserved area.[33] Regulation of a postal sector does include long-term ensuring of service provision (Directive, Recital 8). If prices are based on efficient costs and efficient costs are less than total costs, a gap remains. But an universal service provider can only survive if he is able to cover all costs by revenues or if losses are covered by third parties. If the "inefficient" proportion of total costs is caused by universal service costs, a fund solution might be appropriate for financing the gap. However, a fund model is only effective if substantial competition has been already established which is able to carry the fund burden.

This leads to the conclusion that the gap between total costs and efficient costs has to be closed by reserved services themselves. Therefore "efficient costs" are less useful as a basis for monopoly prices than fully distributed costs are if the term "prices geared to costs" implies total cost coverage by the sum of all services.

6.3.3 Fully distributed costing provides data for checking customer discrimination

The national regulatory authorities shall regulate prices in a way that no discrimination takes place. Discrimination can be seen from two different points of view. Customer discrimination as discrimination between different customers and competitor discrimination as preventing other postal service providers from market entry or ousting them out of the market.

For approving non-discrimination between different customers the following two criteria have to be taken into account:

- different customers shall pay equal prices for processing identical quantity and quality of mail and
- different customers shall pay different prices for different services whereas the price differences shall correspond with the cost differences.

In order to approve non-discrimination with regard to competitors,

- competitors should not be ousted due to country-wide price dumping by the universal service provider and
- competitors should not be ousted due to customer-specific price dumping by the universal service provider.

The second aspect of customer discrimination and the second aspect of competitor discrimination are different in result, but identical in reason. Therefore, it has to be approved that there are fair relative customer pricing and country-wide absolute price levels.

Fair relative customer pricing might be ensured by an **uniform tariff**. However, an uniform tariff could be identified to be discriminatory since sometimes postal items, although equal in weight and volume, create different costs, e.g. depending on rural or city delivery. Moreover, large quantity senders stated that they are paying discriminatory high prices compared to small senders if an uniform tariff does not allow discounts for work-sharing (e.g. pre-sorting) or for injecting large quantities of items at one time into the postal network. Large quantity of items give rise to economies of scale at least for collection.

[33] Some of them are even applying efficient costs for the universal service area in order to give an incentive to the universal service provider to provide services efficiently.

A good solution to ensure fair customer pricing is provided by a consistently applied **tariff system**. This tariff system should be based on activity-based full costing[34], taking into account cost advantages by work-sharing or by economies of scale, possibly taking into account additional cost-relevant factors like delivery to rural versus city areas or drop-factor.

Some universal service providers do not apply a tariff system for large customers, but negotiate individual agreements about services, quality and prices, which is in line with Article 12. In this case, information about activity-based **fully distributed costs** per customer would be an ideal basis for checking both aspects of customer discrimination in the case of suspicion.[35]

Even if prices are comparable between comparable customers, the absolute price level of this service, set by an universal service provider, might be very low, forcing existing competitors out of the market or preventing potential competitors from entering the market. The minimum price level which is non-discriminatory with regard to competitors can be indicated by the **long run incremental costs test**. Chapter 6.3.5 will show this in detail.

[34] In case that a universal service provider is calculating universal service costs, it is conceivable that the tariff system for competitive services is based on fully distributed costs less universal service costs (see chapter 6.2.4).

[35] The cost information for setting non-discriminatory customer-specific prices for competitive services could also be based on fully distributed costs less universal service costs.

6.3.4 Size and allocation of profit and risk margins to be determined

After having allocated fully distributed costs to postal services, margins for profit and risk have to be added to the costs to obtain prices geared to costs. The risk margin covers the risk of cost change during the time period for which the price will be set.[36]

[36] This risk margin can be different for different customers since the expectations concerning the changes in costs (e.g. due to expected changes in the product portfolios or in collection or delivery costs) vary from customer to customer.

The Directive does not mention the subject of profit and risk margins. From the authors' discussions with national regulatory authorities and with universal service providers two questions arose:

1. What size of profit margin and of risk margin is allowed?
2. Is it possible to set different profit and risk margins for the three areas reserved universal services, non-reserved universal services and other postal services?

The following opinions are based on the authors' experience from other studies in the postal sector and on discussions with one national regulatory authority and two universal service providers – which may not be representative. Nevertheless, there is a great deal of theoretical and practical evidence for these opinions.

Ad 1. Size of profit margin and risk margin: The **profit margin** should be oriented to the amount of equity of the company. Profit is to be expected by the investors as return for investing their capital. This must be considered equally if an universal service provider is owned by private shareholders or by a government. An idea about the fair size of the profit margin could be established by analysing actual profits of transportation and logistics stock-companies. This margin reflects profit after covering risks, thus a risk margin has to be added for calculating prices.

The **risk margin** should be oriented to the amount of costs. In the postal business the major part of the costs consists of personnel costs. This bears the risk of higher than planned wage increases. Compared to the relatively small amount of equity needed, the risk of wage increases could be much higher than can be covered by a "normal" profit margin. Additionally the risk margin should take into account the share of fixed costs. The higher the share of fixed costs the higher is the risk of a deficit after reduction in quantity of postal items .

Ad 2. Different profit and risk margins for different services: Prices in the non-reserved universal service area should be **freely** set by the universal service provider according to the size and allocation of profit and risk margins to single services. If the universal service provider does not abuse a potential dominant market position, sector-specific regulation is not necessary. If he does, European and national competition law should be used for stopping discriminatory or prohibitive pricing.

Allocation of profit and risk margin for reserved services can be done with the inverse elasticity rule[37], by decision of the universal service providers or by decision of the national regulatory authorities. Cost orientation would make sense under the expectance of increasing competition after stepwise liberalisation of the postal sector.

Article 12 allows individual agreements on prices with customers. In order to prevent customer discrimination there should be a similar profit margin per customer and there could be a different risk margin per customer due to different customer risks.

6.3.5 Long run incremental costs appropriate for identifying cross-

[37] The elasticity of demand is the percentage change in quantity divided by the percentage change in the price that "causes" the quantity to increase or decrease. A low elasticity of demand means that a price increase leads only to a small quantity decrease. In consequence the inverse elasticity indicates the value of usage of service for the consumer.

subsidy

The identification of cross-subsidy could be calculating long run incremental costs. This feature might be necessary in the case of complaints or suspicion that adverse cross-subsidy is taking place.

Cross-subsidy means one single service or service group creates a surplus which is used for covering losses of other services. This situation would have two effects, neither of which are desirable:

- The surplus might result from excessive prices paid by customers, reducing customer's welfare.
- The deficit might result from insufficient prices, preventing competition and therefore preventing efficient, customer-oriented services.

In the postal industry excessive prices could occur in reserved areas. Due to economic theory prices might be too high if they exceed stand alone costs of services[38] plus profit and risk margin, possibly plus universal service costs.

Within competitive areas excessive prices are not to be expected. Postal business does not allow establishing a long term dominant market position because there are only a few essential facilities (e.g. post office boxes or information about address changes) which could conserve or foster the establishment of a natural monopoly. Competition in the parcel business, in the cross-border bulk mail business and in the direct mail business has lead to low, rather than high prices and profit margins.

Low prices themselves are not a problem, because customers receive postal services for little money. It is only in the case of insufficient prices, being subsidised by excessive prices in other areas, that customers are paying too much for the latter services. As long as different customer groups use both services approximately in the same intensity, they only subsidise themselves. The situation will become unbalanced if one customer group purchases more of the too expensive and less of the too cheap services. In this case cross-subsidy allocates money from one part of the society to another. This might be political useful, e.g. in case of redistribution of money from rich to poor households.[39] However it is difficult to identify which group of households is paying too much and which group is paying too little after allocating business mail costs to goods produced in the economy and after consuming the goods by the groups of households. Therefore absence of cross-subsidy reduces the risk of inadvertently subsidising rich households by poor households.

Besides relocation of money amongst society groups, insufficient prices may oust competitors from the market or prevent potential competitors from market entry (competitor discrimination). Competition enforces efficiency of both, the incumbent operators and the new entrants. Additionally, competition brings quality and variety of services closer to customer needs.

[38] G. R. Faulhaber: Cross-Subsidization: Pricing in Public Enterprises, American Economic Review, Vol. 65/1975, p. 970.
For the definition of stand alone costs see also ANNEX 2.

[39] See also 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, in Official Journal OJC 39, 06.01.1998 (Notice): *"This form of subsidization may sometimes be necessary, ... For instance, unprofitable mail delivery in rural areas is subsidized through revenues from profitable mail delivery in urban areas."*

In the long run both aspects seem to be more valuable for customers than short-term low prices.[40]

Services which do not cover their full costs are not automatically adverse cross-subsidised. In the case of systematic and continuous non-coverage of the full costs a special investigation concerning the relevant services has to be done.[41] The economic network theory identifies cross-subsidised services by using the **long run incremental costs test**[42]. Every service, produced together with other services on one economic network, is free from adverse cross-subsidy if it covers at least its long run incremental costs, which are costs arising additionally in the case of providing an additional service on an already existing network. (For a schematic diagram of long run incremental costs see figure 6.3). The contribution margin of this service even covers a share of the network costs. The long run incremental costs test has been used recently by the European Commission to check if there are cross-subsidies from the reserved letter services to the competitive parcel service of Deutsche Post.[43] It has to be taken into account that non-universal services and universal services often are produced on one common network. In this case the non-universal service should cover at least its long run incremental costs minus universal service costs, if such are included in the long run incremental costs.

[40] See Recital 28.

[41] See also Notice: *"If services were offered systematically and selectively at a price below average total costs, the Commission would, on a case-by-case basis, investigate the matter under Article 86, or under Article 86 and Article 90(1) or under Article 92."*

[42] G. R. Faulhaber: Cross-Subsidization: Pricing in Public Enterprises, American Economic Review, Vol. 65/1975, p. 970.

[43] Official Journal of the European Communities, L 125/27: Commission Decision (2001/354/EC), 20 March 2001, Case No. COMP/35.141 – Deutsche Post AG.

Long run incremental costs of a service can be derived from the cost accounts, analysing which share of costs of each activity and of each cost type can be eliminated in the long run under the hypothetical assumption that the analysed service does not longer exist. Such an analysis takes a lot of detailed know how about postal production processes and about long run changeability of costs.

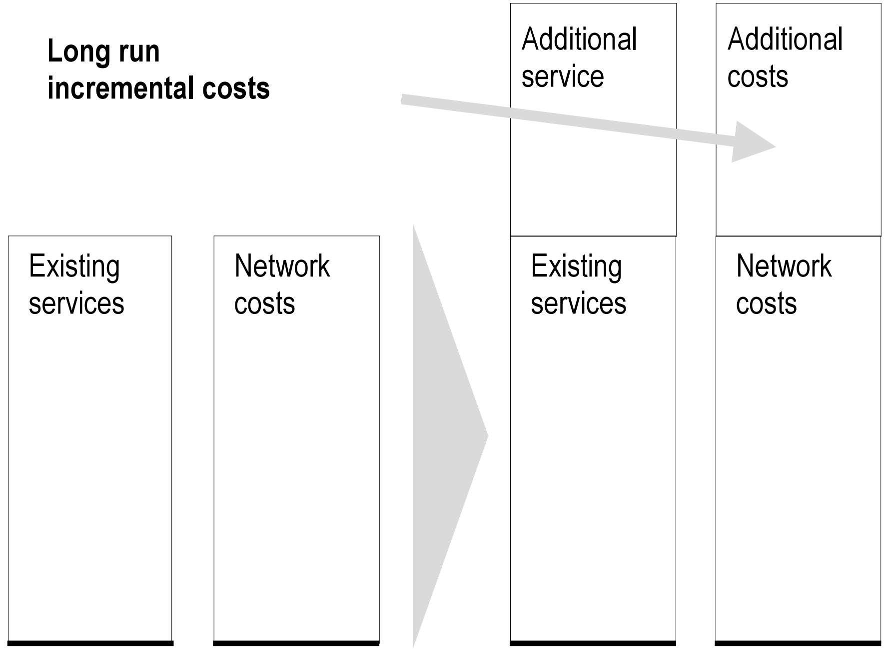

Figure 6.3 Schematic diagram of long run incremental costs

Long run incremental costs can not be calculated and captured in a cost accounting system because long run incremental costs can not be easily derived from the financial ledgers like total costs. Furthermore, long run incremental costs of every service provided by a company do not add up to total costs of a company. But showing total costs of the company is an essential prerequisite for a cost accounting system.

6.3.6 Long run incremental costs not useful for setting prices

Long run incremental costs reflect the situation in network based businesses most accurately. But whereas the definition of long run incremental costs has already been given, e.g. in telecommunications regulation, the measurement of these costs is quite difficult: The costs of every area of responsibility or every activity have to be checked in order to examine if these costs could be eliminated in the long run when hypothetically giving up the analysed service.

For setting prices the long run incremental costs are a floor which should not be undercut, at least not for a long period of time. However, a price floor is not a price. Not all services using one common network can be charged only with their long run incremental costs. Either one main or basic service (e.g. the universal service) covers all remaining costs or every service has to cover a share of the remaining common costs. What share of the remaining common costs would be a fair share can not be defined by theory. Therefore long run incremental costs (and/or stand alone costs) should be only calculated in supplementary calculations case by case.

6.3.7 Summary and conclusions

In order to fulfil the regulatory tasks of **checking prices** according to the criterion ”geared to costs” and to prevent discrimination, fully distributed costs plus extra charges for profit and risk have to be taken into account. To be able to identify adverse cross-subsidy long run incremental costs should be considered case by case.

6.4 Other partly distributed costing methods not suitable for fulfilling universal service providers’ and national regulatory authorities’ objectives

The long run incremental cost method is a method which allocates only parts of total costs to services. Other partly distributed costing methods allocate only direct costs or only variable costs to services, based on the accounting theory, that only these costs can be influenced by changes in service quantity and therefore other cost elements are not relevant and even more misleading for managerial decisions.[44]

Despite decision making, accounting theory admits that for pricing total costs have to be considered, because revenues have to cover total costs anyway.[45]

A look to practice shows that only one of 15 universal service providers

44 See Jürgen Weber, Einführung in das Rechnungswesen II: Kostenrechnung, 5. Auflage, Stuttgart 1997, p. 238 ff.

45 See Klaus Aghte, Stufenweise Fixkostendeckungsrechnung im System des Direct Costing, in: Zeitschrift für Betriebswirtschaft, 29. Jahrgang (1959), p. 404–418.

is using a partly distributed costing method (direct costing). And with regard to price regulation he is allocating total costs to services case by case.

From theory as well as from the situation in practice it can be recommended that other partly distributed costing methods are not suitable for pricing and for price regulation. This can be concluded equally from the perspective of the universal service provider and from the perspective of the national regulatory authority, too.

6.5 Critical points and practical problems of fully distributed costing

As shown fully distributed costing is appropriate for managing as well as for regulating postal business. Some critical points and practical problems have to be solved. CTcon picked up such problems in discussions with the Commission, with the national regulatory authorities and with the universal service providers. The recommendations are based upon arguments of the interviewees, upon cost accounting theory and upon the authors' experience in other industries.

6.5.1 Planned costs as extension for actual cost information

Since prices are set for future, planned (or standard) costs should be used as basis for price calculations. But planned costs have to be handled carefully because plans could be missed and costs could be higher or lower when the future becomes the past.

- Actual costs obviously must be covered and therefore should be the basis for prices.
- Planned costs show future developments and should be taken into account besides actual costs.

6.5.2 Valuation of assets with historical purchasing price

Depreciation and interest for equity are capital costs, calculated on basis of the value of assets. Cost accounting principles allow the individual company different ways of identifying the value of assets, e.g. historical purchasing price or replacement value.

Even in a world of increasing asset prices, depreciation from historical purchasing prices in combination with calculation of interest for the actual capital employed pay back all investment expenditures. The interest rate and the capital employed shall be calculated in a way as to cover the actual interest for total debt, if the interest for equity is added as profit margin to the costs for setting prices. Otherwise the interest rate has to cover the weighted average cost of capital (debt plus equity). Under this interest rate condition CTcon recommends to depreciate assets

- from its historical purchasing price and
- according to its expected time of use.

Due to the opinion of the authors, the question, which asset value is best basis for calculating capital cost, is not as important as often discussed for postal business. Postal business (in contrast to e.g. telecommunications business) is not capital intensive. Therefore fixing the method of calculating capital costs in one or another way has only limited impact to the total costs of postal services. Any harmonisation measures on European Union level seem not to be worth the effort.

In contrast, application of a **consistent method**, left **unchanged** over years and **accepted** by both, the universal service provider and the national regulatory authority, is much more important for efficient and effective price regulation.

6.5.3 Charges of earlier years to be covered by reserved services

Cost accounting methods usually do not include charges of earlier years as part of the actual costs. Charges for future years become part of the annual profit and loss statement by calculating provisions. Provisions should be part of the annual costs and should be allocated to services. This means that in later years charges caused by earlier years will be covered by the provisions and the problem of earlier year's charges minimises.

Postal universal service providers in the Member States usually are or have been public institutions without profit and loss statement. Some of them did not calculate provisions in former years, e.g. for civil servants' pensions. Such charges of earlier years have to be covered by actual revenues to prevent deficits in the actual profit and loss statement.[46] Charging competitive services with such burdens of the past would discriminate universal service providers against its competitors and would distort fair competition. Consequently prices of monopoly services should be set by taking those charges into account.

[46] The German postal law for instance allows to charge services with the burden of pensions for former years, caused by the switch from Deutsche Post from a public institution into a private company (see Post-Entgeltregulierungsverordnung §3,(4)).

6.5.4 Addition of Value Added Tax (VAT) if obliged

Regarding Value Added Tax (VAT) two different cases have to be taken into account:

- Services for which the universal service provider is obliged to add VAT and
- Services for which he is not obliged to add VAT.

In the first case the universal service provider consequently is allowed to deduct VAT-proportions from his expenses. In this case incoming VAT has to be passed to the taxation authorities and the VAT proportion of the expenditures has to be refunded by the taxation authorities. VAT runs through the financial accounts without cost impact and does not change anything in cost accounting. Net prices of postal services have to be fixed on basis of cost (without VAT). After that VAT has to be added to the net prices to obtain the customer's price.

In the second case the universal service provider consequently is not allowed to deduct VAT from his expenses. No VAT has to be passed, but no VAT can be refunded by the taxation authorities. Therefore VAT is an integral part of the costs. Prices have to be fixed on basis of costs including VAT.

Finally it has to be mentioned that an universal service provider, who is providing services with the obligation to add VAT and simultaneously other services without this obligation, has to set prices for services differently, each as described above. If both categories of services are produced on a common network infrastructure, the costs have to be split by revenue proportion. VAT is only allowed to be deducted from the relevant share of expenses.

6.6 Cost accounting methods of United States Postal Service and New Zealand Post

6.6.1 Split between attributable and institutional costs by United States Postal Service

The United States Postal Service (USPS) applies, in agreement with the Postal Rate Commission, a special method of allocating costs to services:

USPS divides all services into service groups, so called types of mail. Types of mail are for example ”First-Class Mail”, ”Standard Mail”, ”Periodicals” or ”Express Mail”. Within one type of mail there are different price categories in dependence of weight, quantity, volume or distance between sender and addressee. To allocate costs to these types of mail, USPS distinguishes between attributable and institutional costs.

Attributable costs can be identified as the costs of specific services. They generally include ”quantity-sensitive” costs, such as labour and vehicles that can be assigned to specific types of collection, sorting, transport or delivery. Furthermore they also include fixed costs specifically incurred for particular types of mail. **Institutional costs** consist of joint or common costs that cannot be attributed to any specific service. They are fixed overhead and capital costs that are not quantity-sensitive and do not correspond to any specific collection, sorting, transport or delivery activities.

USPS allocates attributable costs directly to each type of mail whereas institutional costs are allocated by using the inverse elasticity rule[47]. This means institutional costs are allocated according to the value of usage of services for the customer. Prices follow the cost allocation. Consequently customers pay high prices for services where they are willing to pay more and vice versa (Ramsey Pricing).

The Postal Rate Commission accepts the described allocation of costs to the types of mail to permit prices. Finally, it should be mentioned that during the permission process the Postal Rate Commission investigates in detail whether costs are attributable or not.

6.6.2 Activity-based costing at New Zealand Post

The Postal Service Act 1998 introduced competition to postal services in New Zealand by removing New Zealand Post Limited’s statutory monopoly on the carriage of letters. This means that any company or individual is allowed to carry letters for profit, as long as that company is registered as a postal operator by the Secretary of Commerce (national regulatory authority). At the moment there are approximately 30 other postal operators active beside New Zealand Post (NZ Post). Most of them are either focused on certain regions or specialised in several services, e.g. courier services, document exchange, newspapers etc.

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47 The elasticity of demand is the percentage change in quantity divided by the percentage change in the price that ”causes” the quantity to increase or decrease. A low elasticity of demand means that a price increase leads only to a small quantity decrease. In consequence the inverse elasticity indicates the value of usage of service for the consumer.

Under the regulations NZ Post is required to disclose separate profit and loss statements for letters carried within New Zealand for less than 80 cents (the previously reserved area) and other services in its annual report.

NZ Post's method of allocating costs: a separation of all services into service categories. To allocate costs to these categories NZ Post distinguishes between **operation expenditure** (costs which can be allocated directly to a service category) and expenses, which are relating to **more than one** service category.

Operation expenditures are allocated directly to service categories. Expenses relating to more than one service category are allocated using the following rules:

- Activity-based costing (ABC) is used where available.
- Where ABC is not available, an alternative basis is used, e.g. weight, mail, volume or direct labour.

General overhead costs are allocated based on survey results, provided by cost centre owners.

6.6.3 Conclusion

Both companies, USPS and NZ Post, operate a fully-distributing cost accounting system. The allocation rule of USPS is quite special, worked out in several year's discussions with the Postal Rate Commission. For European universal service providers this method does not seem to be suitable because existing cost accounting systems would have to be changed substantially. NZ Post's allocation method is very similar, if not identical, with European methods, using activity-based costing.

No important lessons concerning cost accounting systems can be learned from the two postal operators, given the highly developed cost accounting systems of most of the European universal service providers.

7. SUMMARY AND RECOMMENDATIONS

7.1 Summary of the research and main issues

As described in **chapter 3** all Member States have implemented or are going to implement legislative requirements in the spirit of Article 14 in their national postal laws.

But some terms in the Directive are not defined, which leads to different interpretations from Member State to Member State and in some cases to conflicts between national regulatory authorities and universal service providers. Key problems are the term ”service” (see chapter 3.11) and the term ”geared to costs” (see chapter 6.3).

In **chapter 4** it is pointed out that 13 of 15 universal service providers are applying a cost accounting system which is in spirit of Article 14, that means they are fulfilling the main aspects of Article 14. One universal service provider will have a cost accounting system which cover the Article 14-requirements in the near future. Another universal service provider is applying the allocation rules according to Article 14 (3), as one main aspect, only case by case depending on the requirements of the national regulatory authority. Implication of Article 14 into practice did not raise big issues.

Chapter 5 shows that different aims often cause conflicts between national regulatory authorities and universal service providers during the regulatory process. In the interviews these conflicts had been stated as “minor” ones, perhaps because in some Member States the national regulatory authorities are just recently in force or have not jet fulfilled regulatory tasks such as price permission or approval of prices in the case of complaints.

The expected conflicts concern the subjects

- Cost accounting data needs for regulation. National regulatory authorities might ask for more detailed data than the universal service operators are ready or able to deliver.
- Cost allocation principles. The involved parties per Member State might dispute about allocation of common costs to services.

From the evaluation of different cost accounting methods in **chapter 6** we derive on the one hand characteristics of cost accounting appropriate for managing the postal business and on the other hand characteristics needed for regulating prices.

The most important cost accounting aim for **managing** postal business is setting prices and calculating profits per service. Therefore fully distributed costs should be allocated to the services as a basis for price setting since the Directive demands prices “geared to costs”, since prices should cover total costs, and since total cost-based prices are to be expected under emerging competition. Activity-based cost allocation reflects the cost situation most detailed and most appropriate for the postal industry.

The split between direct, variable common and fixed common costs is on the one hand suitable for allocation of costs due to the use of resources. On the other hand a split between variable and fixed costs is helpful for making business decisions and motivating the management for cost efficient behaviour.

Furthermore cost differentiation between regions and customers is useful for managing. Cost differences between rural and urban areas are obvious and will lead to different prices in the case of full liberalisation. Customer-specific costs are useful for price setting for special customers or customer groups.

Regulating according to the Directive means that prices should be "geared to costs". Costs should be understood as fully distributed costs because prices shall cover total costs. Partly distributed costing methods like direct costing or allocating efficient costs would allow the universal service provider to set prices due to his subjective decision. Therefore, partly distributed costing methods are not useful for price regulation.

Potential customer discrimination can be prevented by checking if a tariff system is consistently applied. In case of individual tariff agreements, customer-specific activity-based costing information is needed in case of suspicion of customer discrimination.

In addition to the information about cost allocation it has to be checked if the profit and risk margins are reasonable. The profit margin should be oriented to the amount of equity whereas the risk margin should be oriented to the amount of costs and to the share of fixed costs. The allocation of these margins to universal services for setting prices should be determined by the universal service provider in co-operation with the national regulatory authority. The allocation has of course to be done without customer discrimination.

Finally, competitor discrimination in form of adverse cross-subsidy can be avoided, if the revenues of a service cover its long run incremental costs.

7.2 Recommendations to the European Commission

7.2.1 Requirements of Article 14 in general sufficient

Due to the state of the implementation of Article 14 in the national postal legislation and due to the application of the Article 14-requirements in practice there is no need for action, neither concerning implementation and application nor concerning a substantial change of Article 14 itself.

Nevertheless, CTcon recommends the Commission to define some terms used in the Articles 12 and 14, and to specify the Article 14 slightly.

7.2.2 Definition of terms of Articles 12 and 14 recommended

It is our recommendation the Commission should not define exactly how cost accounting shall be done by universal service providers and how national regulatory authorities shall regulate prices in detail. It should be a task for the Commission to give a general guideline for the Member States as already done in the Directive.

For implementing this guideline there should be at least a common understanding of terms of central importance. Therefore the Commission should define exactly the debatable terms "service" and "geared to costs", used in the Directive.

CTcon recommends as follows:

- The term ”service” can be interpreted as ”single service” (e.g. standard letter up to 20g), ”group of single services” (e.g. business letters) or as ”postal service” (e.g. letter service). CTcon proposes to specify this term as ”postal service” which distinguishes between letters, direct mail, parcels, newspapers, and other postal services, each separated between reserved universal, non-reserved universal and non-universal. Due to the production process and the regulatory status these groups are different. The single services within one service are too similar to be differentiated by national regulatory authorities. Fulfilling national regulatory authority's objectives should not be as detailed as checking, if the counter parcel up to 5 kg is priced fairly compared to the counter parcel from 5 to 10 kg.

- Prices ”geared to costs” due to Article 12 should be defined as ”geared to fully distributed costs”, where Article 14 (3) sets allocation rules. The margin for profit may be different for different services but shall be equal for customers using the same services. The margin for risk shall reflect the individual risk of each service and each customer.

Additionally an European-wide harmonisation of cost accounting terms such as direct or common costs might be useful. Therefore the European Commission should think about a common definition of the most relevant terms. CTcon makes an effort to clarify the mostly misunderstood cost accounting terms used within this study, taking into account the findings of the interviews and especially our learning at the expert workshop (see Annex 2).[48] This could be a good basis for a common European definition of terms.

7.2.3 Slight specifications of Article 14 define minimum requirements for cost accounting

On basis of the needs for fulfilling the national regulatory authorities' objectives, CTcon derives minimum requirements concerning cost accounting systems and approval of the cost accounting method. A minimum standard will be able to limit potential conflicts between national regulatory authorities and universal service providers. Therefore it seems to be very helpful to set mandatory minimum requirements for cost accounting for the Member States' universal service providers – most probably as slight specifications of Article 14.

7.2.3.1 Cost accounting should be on basis of an annual activity-based fully distributed costing

A minimum standard for cost accounting (summarised in figure 7.1 below) is the separation of cost objectives between different postal services (like letters, parcels, direct mail, newspapers) and between the different regulatory areas (reserved, non-reserved universal, and non-universal services). Non-postal services of course should be kept as separate cost

[48] Certain cost accounting terms, such as production or overhead costs, are defined differently due to different production processes and different classification of costs (see chapter 4.4). A common definition of such terms is not appropriate and not necessary.

objectives.[49] This is already stated in Article 14 (2), so that no further specification is necessary.

The method of allocating direct and common costs to these cost objectives is fixed in Article 14 (3). In general this is sufficient but in order to be more precise, CTcon recommends to add the use of activity-based costing as basis for allocating costs to services.

Finally, an annual reporting cycle for cost accounting data seems to be sufficient for regulatory processes. It has been worked out at the expert workshop that the annual cost data should be available within the first six months of the following financial year.

Thus CTcon recommends to specify Article 14, mandating **activity-based fully distributed costing on an annual data basis.** According to the knowledge of CTcon up to the present date 13 universal service providers are already fulfilling these minimum requirements for the current cost accounting (see chapter 4.4).

Additionally, CTcon recommends to expand Article 14 by two cost accounting features:

- Universal service providers' cost accounting system should be able to show **customer-specific fully distributed costs** if there is no general tariff system applied. A complaint, only to be expected in case of individual pricing, would force the universal service provider to reveal information about customer-specific fully distributed costs to the national regulatory authority or to the competition authority.
- Universal service providers should be able to calculate **long-run incremental costs** per service, in case of suspicion about adverse cross-subsidy between services. These calculations should be checked by the national regulatory authority or by an independent accounting expert.

Since there had not been stated any relevant complaints the universal service providers have not yet provided such cost accounting information to the national regulatory authorities. Furthermore CTcon can not mention if the universal service providers are able to do so.

- Activity-based fully distributed costing
- Annual data basis
- Separation of cost objectives between different postal services and between the different regulatory areas
- Case by case calculation of customer-specific fully distributed costs
- Case by case calculation of long run incremental costs

Figure 7.1 Minimum requirements for cost accounting

7.2.3.2 Check of the cost accounting principles by an independent body should be specified

To prevent conflicts during the regulatory process and to ensure an efficient approval of the applied cost accounting system for both sides, national regulatory authorities and universal service providers, there should

[49] It is not necessary to submit all available cost accounting data to the national regulatory authorities. For instance data concerning non-postal services (e.g. financial services) are not to be given to the national regulatory authorities. It has only to be checked by an independent body, if cost allocation between the postal and the non-postal services follows consistent principles.

be minimum requirements concerning the **regulatory process** as well.

Article 14 (5) already requires a verification of compliance of the applied cost accounting system with the cost allocation rules of Article 14 (3) or other compatible allocation rules.

Based on the interviews and the workshop results CTcon recommends to specify Article 14 (5): The independent body should approve

- the **separation of cost objectives** between postal services and the regulatory areas,
- the cost accounting principles due to Article 14 (3)
- the **reconciliation** of cost accounts to the financial accounts.[50]
  - the use of appropriate and consistently applied **cost drivers**.

This approval should be done at least every three years and in the case of changes of accounting principles. By sample surveys the national regulatory authority should decide if it is necessary to approve the system within the three years period.[51]

Despite the fact that the national regulatory authorities itself are independent by their constitution, CTcon recommends that the accounting principles shall be checked by an expert, e.g. an auditor or a consultant, approved by the national regulatory authority. During the interviews CTcon got the impression that several universal service providers would have much more confidence in opening their systems and accounts to an expert who does not have an own interest in the process of price approval.

7.2.4 Cost accounting principles are sufficient

Article 14 (3) gives reasonable and useful cost allocation rules. Each universal service provider is calculating or will calculate actual costs following clearly defined principles which are or can be audited externally. Despite the fact that cost accounting principles might differ between the universal service providers, CTcon does not recommend a further harmonisation of cost accounting principles due to two reasons:

- The most important differences between cost accounting information from different universal service providers are caused by different cost **allocation** principles. All universal service providers stated in the interviews that they are allocating or will allocate costs to services according to the use of **resources**. But as long as postal production processes differ from operator to operator, the differentiation between direct and common costs, the differentiation between variable and fixed costs, and the definition of individual

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50 Costs are derived from the expenditures of the company, which are defined by external accounting laws, rules or standards. According to Article 15 the financial accounts shall of course also be checked. International standardised accounting principles such as IAS (International Accounting Standards, see ANNEX 2) are not applicable for cost accounting because they do not rule cost allocation to services which is the most important point in cost accounting

51 A couple of national regulatory authorities participating at the workshop does not agree with the proposal of CTcon. They are of the opinion that it is necessary to approve the system every year.

cost allocation bases per activity differs necessarily.[52] An obligation to harmonise postal production processes within Europe obviously would not make any sense – neither outside nor inside the universal service area.

- Different organisation of **production processes** by the universal service providers, and different **qualities** of services (above the minimum set by the universal service) are accepted by the Commission. Furthermore, the differences between the Member States in terms quantity of daily mail per household, size of the country, general wage level, labour times, purchasing power parity etc. are well-known. Therefore neither prices nor costs of postal services could be harmonised between Member States. That means even cost accounting data of harmonised systems could not be compared. As such cost data is not comparable between universal service providers there is no need for harmonisation of cost accounting methods or principles.

In achieving national regulatory authority's objectives, costs must only be comparable between **different years** and between **different services** of the national universal service provider.

[52] There are for example universal service providers who are sorting mail and/or parcels mechanically and others who are sorting manually. Furthermore there are e.g. universal service providers who are doing the transport themselves and others who are outsourcing it.

7.3 Recommendation to the Member States: Price cap method prevents excessive pricing

As mentioned in chapter 7.1, conflicts are to be expected between national regulatory authorities and universal service providers concerning level of detail of cost accounting data needed for regulation and concerning cost allocation principles. In the opinion of CTcon the conflicts might be reduced most effectively by using the **price cap method** for approving postal tariffs. Therefore we recommend that the Member States to incorporate the possibility of price cap regulation within the national postal laws.

The price cap method sets a framework for price development of services which are either legally or de facto out of competition. Due to the lack of competition excessive pricing might occur. Under a price cap regime price de- or increases are subject to the decision of the regulated company, limited only by a price cap. The average price of a group of services ("basket") is not permitted to go up further than the inflation rate minus an X-factor. If the initial average price of a basket seems to be not excessive[53], then price cap ensures that the future average price will not be excessive.[54]

Inflation rate is the expected price increase of resources mainly used by the industry – for postal business it should be the wage index[55]. X-factor is

[53] This might to be ensured within the Member State before using price cap.

[54] Obviously the price cap method is not appropriate for checking customer or competitor discrimination.

[55] Opinion of CTcon, that does not reflect necessarily the views of the European Commission.

defined as being the expected productivity increase of the postal industry. Alternative calculations use the consumers' price index as the inflation rate. In competitive markets this index already incorporates resource price increase as well as productivity increase. Therefore no additional X-factor would be necessary.[56]

Once the price cap formula is fixed, price approval or permission is easy. Due to the reduction of single regulatory tasks the costs of regulatory processes will be reduced on both sides, the national regulatory authority and the universal service provider. At the same time the method also sets incentives for the universal service provider to increase his efficiency and not to manipulate his cost data.

Furthermore, a price cap method ensures postal operator's entrepreneurial freedom for acting or reacting quickly to changes in demand. Thus, a wider range of action for the universal service provider concerning pricing is guaranteed and a competitive environment is simulated which protects customers from unfair price increases.[57]

In our interviews four national regulatory authorities mentioned that their approval of prices is done, among other things, by using a price cap method. As we did not explicitly ask each national regulatory if a price cap method is applied, the number actually could be higher. It has to be mentioned that the price cap method is used by national regulatory authorities which are more experienced than the European average regulatory authority. Possibly the regulatory experience in price approval processes shows that price cap is an efficient method to prevent excessive pricing.

56 An additional X-factor could correct potential overestimation of inflation rate by the method of inflation measurement.

57 For further aspects see also Beesley, Michael E. and Littlechild, Stephan (1989): The regulation of privatizised monopolies in the United Kingdom, RAND Journal of Economics Volume 20, no. 3, p. 454-472.

7.4 Recommendations to universal service providers

7.4.1 The European best cost accounting practice contains standard cost accounting

CTcon identified a best practice in cost accounting (summarised in figure 7.2 below) which is in line with the minimum requirements for the current cost accounting (see chapter 7.2.2) and in addition to that fulfils two other aspects which supports the management of the postal business in a better way. Simultaneously this best practice makes it easier for the national regulatory authority to approve prices or to permit tariffs.

Standard cost accounting on an annual basis has already been applied by eight of the 15 universal service providers. Planned cost data are useful in order to support management decisions, which of course change the future and not the past. Additionally, prices have to be permitted for the future.

The distinction between the different cost types as an additional aspect in cost accounting should give a good overview of the origin of costs.

CTcon recommends to consider the best practice in cost accounting as an orientation basis. Eight universal service providers are already applying such a system.

- Activity-based fully distributed costing
- Annual data basis
- Separation of cost objectives between different postal services and between the different regulatory areas
- Separation of different cost types
- Planning of costs (standard cost accounting)
- Case by case calculation of customer-specific fully distributed costs
- Case by case calculation of long run incremental costs

Figure 7.2 Best practice in cost accounting

7.4.2 Optimal cost accounting handles problems like quantity-dependencies of costs and short-term management decisions

Taking into account cost accounting experience as well as learning from the interviews and from theory, CTcon developed an optimal cost accounting system which would be most suitable for management and regulation of the postal sector (but which has not yet been applied anywhere). In addition to the best practice criteria the following cost accounting features are optimal:

- Cost separation between variable and fixed costs to obtain insight into the quantity-dependencies of the costs of postal activities (see chapter 7.1).
- Cost separation between regions and customers (see chapter 7.1).
- Identification of universal service costs (see chapter 6.2.4).
- Monthly report cycle as optimal basis for short-term management decisions.

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ANNEX 1: IMPLEMENTATION OF ARTICLE 14 IN NATIONAL POSTAL LEGISLATION – SUMMARY PER MEMBER STATE

The following section gives a summary about the state of implementation of Article 14 in national postal legislation per Member State.

The research of postal laws, secondary legislation, decrees and accounting rules of the Member States and also the interviews conducted with the national regulatory authorities and universal service providers showed, that all 15 Member States had undertaken measures to ensure that the applied accounting system of the universal service provider is in line with Article 14 (**Article 14 (1)**).

Belgium

The legislative body of Belgium implemented the Directive through the adoption of the "Loi du 21 mars 1991 portant réforme de certaines entreprises publiques économiques (M.B. 27/3/1991) TITRE IV RÉFORME DE LA RÉGIE DES POSTES", being into force since August 1999. The Article with respect to the implementation of Article 14, is Article 144.

This adopted postal legislation contains the requirement to separate at least between three – as mentioned in the Directive, **Article 14 (2)** – different accounts within the universal service provider's cost accounting system.

According to the second part of **Article 14 (2)** the Belgian postal legislation includes the requirement that the accounting system should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"*.

Furthermore the Belgian legislator adopted **Article 14 (3)** in detail into its national postal legislation. That means according to postal law the universal service provider De Post has to follow exactly the rules of the Directive concerning the cost allocation to reserved and to non-reserved services.

Belgium also implemented **Article 14 (4)** into its national postal legislation. This means that the legislative body left it up to the national regulatory authority, the Belgian Institute for Postal Services and Telecommunications, to decide if the universal service provider has to apply Article 14 (3) completely or if he can make use of the exception rule.

The Belgian postal legislation contains as well the implementation of **Article 14 (5)** of the Directive. The verification by an independent body is implemented as follows: The national postal legislation requires an auditor independent of the universal service provider to ensure the compliance.

In addition Belgium's legislative body implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

Finally the delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is required in the Belgian postal legislation.

Implementation of Article 14 in Belgium - Overview

	Implementation of Article 14 in Belgian legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – Loi du 21 mars 1991 portant réforme de certaines entrprises publiques économiques (M.B. 27/03/1991) Titre IV RÉFOME DE LA RÉGIE DES POSTES (L)
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes – L, [Article 144*quinquies*] (M.B. 18 août 1999): 01.1.2000
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes – L, [Article 144*quinquies*] (M.B. 18 août 1999)
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes – L, [Article 144*quinquies*] (M.B. 18 août 1999)
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes – L, [Article 144*quinquies*] (M.B. 18 août 1999)
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes – L, [Article 144*sexies*] (M.B. 18 août 1999) § 1er a)
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes – L, [Article 144*sexies*] (M.B. 18 août 1999) § 1er b)
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes – L, [Article 144*sexies*] (M.B. 18 août 1999) § 1er b)

	Implementation of Article 14 in Belgian legislation	
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	yes – L, [Article 144*sexies*] (M.B. 18 août 1999) § 2
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes – L, [Artiqcle 144*septies*] (M.B. 18 août 1999)
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – L, [Article 144*ter*] (M.B. 18 août 1999) § 3
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes – L, [Article 144*ter*] (M.B. 18 août 1999) § 3
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	L: 18.08.1999

Table A.1 Implementation of Article 14 in Belgium

Source: Belgian postal legislation, CTcon

Denmark

The Ministry of Transport in Denmark (MT, Danish regulatory authority) has issued “Accounting Regulations” for among other the keeping and the presentation of accounts by Post Danmark and subsidiaries thereof – in force since January 1996.

These Accounting Regulations contain the requirement to separate at least between three – as mentioned in the Directive, **Article 14 (2)** – different accounts within the cost accounting system of the universal service provider.

Similar to the second part of **Article 14 (2)** the Accounting Regulations for Post Danmark include the requirement that *”Post Danmark shall ensure that the system of calculation, ..., is quality-certified in accordance with a generally approved international standard.”* (Accounting Regulations for Post Danmark, Section 12 (1)).

The Danish legislator also established rules which comply with **Article 14 (3)** in detail. The Accounting Regulations do not contain further requirements with regard to **Article 14 (4)**. That means the national legislator decided that the universal service provider has to apply Article 14 (3) completely and cannot make use of any exception rules.

The Accounting Regulations for Post Danmark do also fulfil **Article 14 (5)**. The verification by an independent body is implemented as follows: The Danish postal legislation requires a public accountant appointed by MT to ensure the compliance.

Furthermore Denmark implemented requirements concerning information on the applied cost accounting system in accordance with **Article 14 (6)**.

Finally the delivery of detailed accounting data arising from the system of the universal service provider (as mentioned in **Article 14 (7)**) is required in the Accounting Regulations.

Implementation of Article 14 in Denmark - Overview

	Implementation of Article 14 in Danish legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes - Accounting Regulations for Post Danmark
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes - Accounting Regulations for Post Danmark: 01.01.1996
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes - Accounting Regulations Sec.11
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes - Accounting Regulations Sec.11
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes - Accounting Regulations Sec.12
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes Accounting Regulations Sec.10(1)-(6)
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes Accounting Regulations Sec.10(1)-(6)
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes - Accounting Regulations Sec.10(1)-(6)
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	nothing mentioned

	Implementation of Article 14 in Danish legislation	
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes – Accounting Regulations Sec. 10(7) and 14
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – Accounting Regulations Sec. 3(2)
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes – Accounting Regulations Sec. 3(2)
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	Draft postal activity act L 82: 01.07.1995 Draft postal Danmark act L 81: 01.07.1995 Accounting Regulations for Post Danmark: 01.01.1996 Competition Guidelines for Post Danmark: 01.01.1996 Executive order on the concession granted to Post Danmark: 12.02.1999

Table A.2 Implementation of Article 14 in Denmark

Source: Danish postal legislation, CTcon

Germany

The German postal law, set into force in January 1998 and left unchanged after the publication of the Directive, stipulates the separation of accounts for the licensed and non-licensed sector. In addition, it is laid down that the national regulatory authority may prescribe the form of the cost accounting system if the comprehension of the financial relations between postal services is not ensured by the universal service provider. According to the statement of the German national regulatory authority (Regulierungsbehörde für Telekommunikation und Post, RegTP) at the moment, it is in progress to discuss about further rules for postal service providers having a dominant position in the postal sector.

In conclusion a part of **Article 14 (2)** and **Article 14 (3)** are not implemented in the German postal legislation.

The postal law of Germany does not contain any requirements with regard to **Article 14 (4)** concerning exception rules.

The verification of the cost accounting system by an independent body (according to **Article 14 (5)**) is as well not implemented in the German postal legislation.

The German legislator laid down in the postal law that all information from postal service providers which is necessary for fulfilling regulatory tasks has to be given to RegTP. Thus **Article 14 (6)** is covered by the German postal law indirectly.

Finally the delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is as well indirectly required in the German postal law.

Implementation of Article 14 in Germany - Overview

	Implementation of Article 14 in German legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – information of the regulatory authority put at CTcon's disposal by the European Commission
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes - Postgesetz, PUDLV and PentgV (Post-Entgeltregulierungsverordnung): 01.01.1998
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes – Postgesetz §10, 2
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes – Postgesetz §10, 2
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	nothing mentioned
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	nothing mentioned
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	nothing mentioned
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	nothing mentioned

	Implementation of Article 14 in German legislation	
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	nothing mentioned
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	nothing mentioned
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – Postgesetz §37 and §45, 1
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes – Postgesetz §37 and §45, 1
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	Postgesetz, PUDLV and PentgV: 01.01.1998 information of the regulatory authority put at CTcon's disposal by the European Commission: 23.05.2000

Table A.3 Implementation of Article 14 in Germany

Source: German postal legislation, CTcon

Greece

First it has to be taken into mind that the present postal law of Greece – in force since December 1998 – is being adapted at the moment in order to comply with the requirements of the Directive.

The present postal law contains the requirement to separate at least between three – as mentioned in the Directive, **Article 14 (2)** – different accounts within the cost accounting system of the universal service provider Hellenic Post.

According to the second part of **Article 14 (2)** the national postal law of Greece includes the requirement that the accounting system should "*operate on the basis of consistently applied and objectively justifiable cost accounting principles*".

There are no allocation rules according to **Article 14 (3)** laid down in Greece's postal legislation. The postal law of Greece does not contain any requirements with regard to **Article 14 (4)** concerning exception rules either.

The verification of compliance by a competent and independent body (**Article 14 (5)**) is implemented as follows: The law lays down that the national regulatory authority, the Ministry of Transport and Communications, is responsible for the approval of the accounting system. The issue of the periodical publication of a statement concerning compliance with Article 14 is not mentioned which is of minor importance compared with the implemented independent verification.

Greece implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

The delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is also required in the Greece postal law.

Implementation of Article 14 in Greece - Overview

	Implementation of Article 14 in Greece legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – postal law
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes – postal law, 18.12.1998
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes - postal law article 17, (4)
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes - postal law Article 17, (4)
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes - postal law, article 17, (4) (“suitable costing principles”) approved by E.E.T.T. (National Council for Telecommunications and Post), which is supported by the Minister for Transportation and Communications
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	nothing further mentioned
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	nothing further mentioned
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	nothing further mentioned

	Implementation of Article 14 in Greece legislation	
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	nothing mentioned
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes - postal law, Article 7(4) j: "E.E.T.T. monitors correct bookkeeping... and approves the costing system..." (not mentioned: publication)
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – postal law, Article 7(4) j,
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes – postal law, Article 7, (4), j
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	Postal law: 18.12.1998

Table A.4 Implementation of Article 14 in Greece

Source: Greece postal legislation, CTcon

Spain

The national postal law of Spain (in force since July 1998) contains the requirement to separate at least between three – as mentioned in the Directive, **Article 14 (2)** – different accounts within the universal service provider's cost accounting system.

The provision (Law 24/1998, Second transitional provision) which handles the analytical accounts came into force only in July 2000.

This legislation orders that the *"analytical accounts shall comply with the provisions of Article 14"* (Law 24/1998, Second transitional provision, no. 1).

According to the second part of **Article 14 (2)** the second transitional provision in Spain does not only imply the requirement that the accounting system should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"* but also implies the allocation rules according to **Article 14 (3).**

Spain implemented **Article 14 (4)** into its national postal legislation. That means the legislative body left it up to the national regulatory authority (Ministerio de Fomento) to decide if the universal service provider (Correos y Telégrafos) has to apply Article 14 (3) completely or if he can make use of the exception rule.

Spain does not have any legal requirements with regard to **Article 14 (5), (6) and (7)**.

Implementation of Article 14 in Spain - Overview

	Implementation of Article 14 in Spanish legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes - Law 24/1998
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	no - Law 24/1998, Second transitional provision: analytical accounts shall comply with the provisions of Article 14 of Directive 97/67/EC until 14 July 2000
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes – Law 24/1998, Article 29, additional: "duly audited accounts"
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes – Article 29
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes - Law 24/1998, Second transitional provision: analytical accounts shall comply with the provisions of Article 14 of Directive 97/67/EC
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes - Law 24/1998, Second transitional provision: analytical accounts shall comply with the provisions of Article 14 of Directive 97/67/EC
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes - see above
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes - see above

	Implementation of Article 14 in Spanish legislation	
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	yes - Law 24/1998, Article 29 and Second transitional provision: analytical accounts shall comply with the provisions of Article 14 of Directive 97/67/EC
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	nothing further mentioned
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	nothing further mentioned
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	nothing further mentioned
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	Law 24/1998: 14.07.1998 Second transitional provision: analytical accounts shall comply with the provisions of Article 14 of Directive 97/67/EC until 14 July 2000

Table A.5 Implementation of Article 14 in Spain

Source: Spanish postal legislation, CTcon

France

The legislative body in France implemented Article 14 of the Directive by amending the French postal law of June 1999. The addition (Décret nº 2001-122 du 8 février 2001 relatif au cahier des charges de la Poste) only came into force in February 2001.

This legislative amendment contains the requirement to separate at least between three – as mentioned in the Directive, **Article 14 (2)** – different accounts within the cost accounting system of the universal service provider La Poste.

As laid down in the second part of **Article 14 (2)** the addition also includes the requirement that the accounting system should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"*.

Additionally the French legislator implemented **Article 14 (3)** into its amendment of the postal law. There the general requirement that the costs shall be allocated directly or indirectly to a particular service is contained.

The postal legislation of France does not contain further requirements with regard **Article 14 (4)**. That means the national legislator decided that the universal service provider has to apply Article 14 (3) completely without any exception.

Furthermore the French postal legislation contains **Article 14 (5)**. The verification by an independent body is implemented as follows: The national postal legislation specifies that an independent body engaged by the universal service provider is responsible for the verification of the system.

France implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

Finally the delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is required in the addition.

Implementation of Article 14 in France - Overview

		Implementation of Article 14 in French legislation
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes - Décret nº 2001-122 du 8 février 2001 relatif au cahier des charges de la Poste (D), LOI nº 99-533
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	no - D: 08.02.2001, LOI nº 99-533: 25.06.1999
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes - D, Annexe VIII 1º
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes - D, Annexe VIII 1º ("service universel activités financières")
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes - D, Annexe VIII 2º
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes – D, Annexe VIII 2º ("...des charges directes et des celles qui ne peuvent être directement affectées à un service particulier")
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes - see above
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes – see above

	Implementation of Article 14 in French legislation	
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	nothing mentioned
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes- D, Annexe VIII 3º
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes - D, Annexe VIII 3º
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes - D, Annexe VIII 3º
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	D: 08.02.2001, LOI nº 99-533 du 25 juin 1999: 25.06.1999

Table A.6 Implementation of Article 14 in France

Source: French postal legislation, CTcon

Ireland

The postal legislation of Ireland (European Communities (Postal Services) Regulations, 2000, especially Article 12) only came into force in September 2000.

These Irish regulations contain the requirement to separate at least between three – as mentioned in the Directive, **Article 14 (2)** – different accounts within the cost accounting system of the universal service provider An Post.

According to the second part of **Article 14 (2)** the national postal legislation includes the requirement that the accounting system should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"*.

The Irish legislator adopted **Article 14 (3)** in detail into its national postal legislation.

Ireland also implemented **Article 14 (4)**. That means the legislative body left it up to the national regulatory authority (Office of the Director of Telecommunication Regulation) to decide if the An Post has to apply Article 14 (3) completely or if it can make use of the exception rule.

The national postal legislation contains **Article 14 (5)**. Whereas the verification by the independent body is implemented as follows: The national postal legislation of Ireland specifies that an independent auditor engaged by the universal service provider is responsible for the verification of the system.

Furthermore Ireland implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

Finally the delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is required in the national postal legislation.

Implementation of Article 14 in Ireland - Overview

	Implementation of Article 14 in Irish legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – European Communities Regulations (ECR)
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	no – ECR, 27.09.2000
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes – ECR 12. (2)
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes – ECR 12. (2)
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes – ECR 12. (2)
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes – ECR 12. (3) a)
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes – ECR 12. (3) b (i), (ii)
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes – ECR 12. (3) b (iii)
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	yes – ECR 12. (4))

	Implementation of Article 14 in Irish legislation	
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes – ECR 12. (5) ("auditor engaged by provider")
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – ECR 12. (6)
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes – ECR 12. (7)
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	ECR: 27.09.2000

Table A.7 Implementation of Article 14 in Ireland

Source: Irish postal legislation, CTcon

Italy

The Italian postal legislation including Article 14 is the Legislative Decree No 261, which came into force in July 1999.

This postal legislation of Italy contains the requirement to separate at least between three – as mentioned in the Directive, **Article 14 (2)** – different accounts within the universal service provider's cost accounting system.

The Italian postal legislation does not include the requirement that the accounting system should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"* (**Article 14 (2)**).

Nevertheless, the Italian legislator adopted **Article 14 (3)** in detail into its national postal legislation.

The postal legislation of Italy does not contain further requirements with regard to **Article 14 (4)**. That means the national legislator decided that the universal service provider (Poste Italiane SPA) has to apply Article 14 (3) completely and cannot make use of any exception rules.

In addition the Italian postal legislation contains **Article 14 (5)** by specifying that an independent body engaged by the universal service provider is responsible for the verification of the system.

Furthermore Italy implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

Finally the delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is laid down in the contract in which the obligations of Poste Italiane Spa towards the Government are set.

Implementation of Article 14 in Italy - Overview

	Implementation of Article 14 in Italian legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – Legislative Decree No 261 (LD)
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes – LD, Article 7 (1) 23.07.1999
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes – LD, Article 7 (1)
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes – Article 7 (1)
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	nothing mentioned
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes – LD, Article 7 (2), a
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes – LD, Article 7 (2), b (i), (ii)
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes – LD, Article 7 (2), b (iii)
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	nothing mentioned

	Implementation of Article 14 in Italian legislation	
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes – LD, Article 7, (3)
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – LD, Article 2 (2), s
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	Contratto di Programma, Article 7
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	LD: 23.07.1999 Contratto di Programma: 21.09.2000

Table A.8 Implementation of Article 14 in Italy

Source: Italian postal legislation, CTcon

Luxembourg

The postal legislation of Luxembourg (Loi sur les services postaux et les services financiers postaux, especially Titre VI and VII) only came into force in January 2001.

This postal legislation contains the requirement to separate at least between three – as mentioned in the Directive, **Article 14 (2)** – different accounts within its cost accounting system.

According to the second part of **Article 14 (2)** the Luxembourg postal legislation includes the requirement that the accounting system should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"*.

The legislator of Luxembourg adopted **Article 14 (3)** in detail into its national postal legislation.

Luxembourg also implemented **Article 14 (4)** into its national postal legislation. That means the legislative body left it up to the national regulatory authority (Institut Luxembourgeois de Régulation) to decide if the universal service provider (P&T Luxembourg) has to apply Article 14 (3) completely or if it can make use of the exception rule.

The national postal legislation contains as well **Article 14 (5)**. The verification by an independent body is implemented as follows: The postal legislation of Luxembourg requires that the national regulatory authority finances an auditor.

Luxembourg implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

Furthermore the delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is required in the Luxembourgian national postal legislation.

Implementation of Article 14 in Luxembourg - Overview

	Implementation of Article 14 in Luxembourgian legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – Loi sur les services postaux et les services financiers postaux (LP)
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	no – LP, 01.01.2001
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes – LP Titre VI, Art. 22 (1)
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes – LP Titre VI, Art. 22 (1)
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes – LP Titre VI, Art. 22 (1)
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes – LP Titre VI, Art. 22 (2) a
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes – LP Titre VI, Art. 22 (2) b (i), (ii)
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes – LP Titre VI, Art. 22 (2) b (Iii)

	Implementation of Article 14 in Luxembourgian legislation	
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	yes – LP Titre VI, Art. 22 (3) (not mentioned: obligation to inform the Commission)
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes – LP Titre VII, Art. 25 d)
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – LP Titre VI, Art. 22 (4)
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes – LP Titre VI, Art. 22 (4)
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	LP: 01.01.2001

Table A.9 Implementation of Article 14 in Luxembourg

Source: Luxembourgian postal legislation, CTcon

The Netherlands

The "General Guidelines Decree" (especially §6) of The Netherlands – in force since June 2000 – deals with the implementation of Article 14.

These General Guidelines contain the requirement to separate at least between three different accounts within the cost accounting system of the universal service provider – as mentioned in the Directive, **Article 14 (2)**.

Similar to the second part of **Article 14 (2)** the Guidelines include the requirement that the accounting system should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"*.

Article 14 (3) of the Directive demands certain rules concerning the cost allocation to the reserved and to the non-reserved services. The corresponding Dutch rules lay down that the universal service provider TPG shall establish a cost accounting system that complies with Article 14 (3).

The General Guidelines of The Netherlands do not contain further requirements with regard to **Article 14 (4)**. That means the national legislator decided that TPG has to apply Article 14 (3) completely without any exception.

The General Guidelines contain **Article 14 (5)**. They require an independent auditor to be designated by the Dutch regulatory authority OPTA to ensure the compliance.

Additionally The Netherlands implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

And finally the delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is required in the national postal legislation.

Implementation of Article 14 in The Netherlands - Overview

	Implementation of Article 14 in Dutch legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes - General Guidelines Decree (GGD)
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	no - GGD: 01.06.2000
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes – GGD, § 6, 2
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes – GGD, § 6, 2
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes – GGD, § 6, 3
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes – GGD, §6, 3
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes – GGD, §6, 3
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes – GGD, §6, 3
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	nothing mentioned

	Implementation of Article 14 in Dutch legislation	
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes – GGD, § 6, 3
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – GGD, § 6, 3
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes – GGD, § 6, 3
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	GGD: 01.06.2000

Table A.10 Implementation of Article 14 in The Netherlands

Source: Dutch postal legislation, CTcon

Austria

The postal laws of Austria (including “Postgesetz“ and “Post-Kostenrechnungsverordnung“) were set in force at the beginning of 2000.

These postal laws contain the requirement to separate at least between three – as mentioned in the Directive, **Article 14 (2)** – different accounts within the universal service provider’s cost accounting system.

According to the second part of **Article 14 (2)** the postal laws include the requirement that the accounting system should *“operate on the basis of consistently applied and objectively justifiable cost accounting principles”*.

The Austrian legislator adopted **Article 14 (3)** in detail into its national postal legislation.

Austria as well implemented **Article 14 (4)** into its national postal legislation. That means the legislative body left it up to the national regulatory authority to decide if the universal service provider has to apply Article 14 (3) completely or if he can make use of the exception rule.

The verification by an independent body, required in **Article 14 (5),** is implemented as follows: The Austrian legislation lays down that the national regulatory authority (Bundesministerium für Verkehr, Innovation und Technologie) is responsible for the approval of the accounting system of the universal service provider (Österreichische Post AG).

Furthermore Austria implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

And finally the delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is required in the Austrian postal legislation as well.

Implementation of Article 14 in Austria - Overview

	Implementation of Article 14 in Austrian legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – Postgesetz, Bundesgesetzblatt für die Republik Österreich, 71. Verordnung (Post-Kostenrechnungsverordnung)
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes - 01.01.1998 Postgesetz §31, (1) Article 10(4): 01.01.2000 Bundesgesetzblatt für die Republik Österreich, 71. Verordnung (Post-Kostenrechnungsverordnung): 01.03.2000
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes - Postgesetz §10, (4) and §31 (2)
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes - Postgesetz §10, (4)
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes - Postgesetz §10, (4)
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes - Post-Kostenrechnungsverordnung § 4 (1)
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes - Post-Kostenrechnungsverordnung, § 4 (2)
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes - Post-Kostenrechnungsverordnung, § 4 (2)

	Implementation of Article 14 in Austrian legislation	
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	yes - Postgesetz §10, (5)
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes – Postgesetz §10, (5) and (6) and Post-Kostenrechnungsverordnung, § 1 (2)
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes - Post-Kostenrechnungsverordnung, § 1 (3)
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes - Postgesetz §11, (8) and §27 (2)
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	Postgesetz: 01.01.1998 Article 10(5): 01.01.2000 Post-Kostenrechnungsverordnung: 01.03.2000

Table A.11 Implementation of Article 14 in Austria

Source: Austrian postal legislation, CTcon

Portugal

In Portugal the implementation of Article 14 was done in time. The "Statute Law no. 448/992" entered into force in November 1999 and the "Decree law 102/99" as well as the "Agreement no. 21/99" in July 1999. In addition the implementation of Article 14 is done in Portugal by annual price conventions based on the "Decree law 207/92" which came into force in October 1992.

These postal laws contain the requirement to separate at least between three – as mentioned in **Article 14 (2)** – different accounts within cost accounting system of the universal service provider, CTT Correios de Portugal (CTT).

Similar to the second part of **Article 14 (2)** the national postal laws include the requirement that the accounting system should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"*.

The Portuguese legislation cover the allocation rules of **Article 14 (3)**.

The postal laws of Portugal do not contain further requirements with regard to **Article 14 (4)**. That means the national legislator decided that CTT has to apply Article 14 (3) completely and cannot make use of any exception rules.

The Portuguese legislation lays down that the national regulatory authority, Instituto das Comunicações de Portugal is responsible for the approval of the accounting system. Thus the verification by an independent body, as mentioned in **Article 14 (5),** is implemented in Portugal.

In addition Portugal implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

The delivery of detailed accounting data arising from the system of CTT (according to **Article 14 (7)**) is also required in the Portuguese postal legislation.

Implementation of Article 14 in Portugal - Overview

	Implementation of Article 14 in Portuguese legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – Agreement, Decree-law 102/99, Statute Law 448/99
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes - Agreement:1999 Decree-law 102/99: 26.07.1999 Statute Law 448/99: 04.11.1999
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes – each annual price convention (e.g. 2000: clause 4(6), signed on 23.12.1999 based on Decree law 207/92, Article 3) in connection with Guidelines for the establishment of a cost accounting system for public service mail (decision: 02.02.1996)
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes – see above
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes – each annual price convention (e.g. 2000: clause 4(6), signed on 23.12.1999 based on Decree law 207/92, Article 3) in connection with Guidelines for the establishment of a cost accounting system for public service mail (decision: 02.2.1996)
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes – Statute law 448/99 Premise 13: 1-3 and Decree Law 102/99 Art. 19 (1) and each annual price convention (e.g. 2000: clause 4(6), signed on 23.12.1999 based on Decree law 207/92, Article 3) in connection with Guidelines for the establishment of a cost accounting system for public service mail (decision: 02.02.1996)

	Implementation of Article 14 in Portuguese legislation	
Article 14, (3)	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes - see above
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes – see above
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	nothing mentioned
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes - Decree Law 102/99 Art.19(2)
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes - Decree law 448/99 Premise XVII(2)-(5)
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes - Decree law 448/99 Premise XVII(2)-(5)
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	Agreement:1999, Decree-law 102/99: 26.07.1999 Statute Law 448/99: 04.11.1999

Table A.12 Implementation of Article 14 in Portugal

Source: Portuguese postal legislation, CTcon

Finland

The Finish postal legislation “Decision of the Ministry of transport and Communications” (DMTC), handling the issues of Article 14, came into force in February 1999, some relevant parts of it in February 2000.

Since the postal sector of Finland is legally liberalised the postal legislation of this Member State does not contain requirements to separate accounts for reserved and non-reserved services. Nevertheless DMTC lays down that the internal accounting system shall clearly distinguish accounts for universal and non-universal services. That means the first part of **Article 14 (2)** is implemented in Finland.

In accordance with the second part of **Article 14 (2)** the Finish postal legislation includes the requirement that the accounting system should *“operate on the basis of consistently applied and objectively justifiable cost accounting principles”*.

The Finish legislator did not implement **Article 14 (3)** into its national postal legislation and the postal legislation does not contain further requirements with regard to **Article 14 (4)**.

Article 14 (5), which requires the verification of the cost accounting by an independent body, is also not covered by the Finish postal legislation.

Nevertheless, Finland implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

The delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is not required in the Finish postal legislation.

In fact Finland is one of the two Member States having no reserved services and therefore would be considered for implementing **Article 14 (8)** in its national postal legislation. Nevertheless the postal laws of Finland do not contain any rules with respect to Article 14 (8).

Thus the legislative body of Finland decided that Article 14 (1) - (7) has to be applied completely, even if it is not completely implemented in the national legislation. It has to be kept in mind that already in 2001 there will be a new Finish postal law.

Implementation of Article 14 in Finland - Overview

	Implementation of Article 14 in Finish legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – Decision of the Ministry of Transport and Communications (DMTC)
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes – DMTC: 10.02.1999 Section 7 and 11: 10.02.2000
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	there are no reserved services
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes - DMTC Section 7 (within the universal postal service, cost accounting shall be by type of item)
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes – DMTC, Section 7
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	nothing mentioned
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	nothing mentioned
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	nothing mentioned

	Implementation of Article 14 in Finish legislation	
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	nothing mentioned
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	no – only: DMTC, Section 7 Description of the cost accounting systems to the Ministry (not mentioned: independent body and publication)
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – DMTC, Section 7 Description of the cost accounting systems to the Ministry
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	nothing mentioned
Article 14, (8)	Exception rule concerning Member States who have no reserved services	nothing mentioned
	Law came into force:	DMTC: 10.02.1999, Section 7 and 11: 10.02.2000

Table A.13 Implementation of Article 14 in Finland

Source: Finish postal legislation, CTcon

Sweden

The Swedish postal legislation covering the issues of Article 14 is "The National Post and Telecom Agency's Decision" (decision) which came into force in July 1998.

Due to a legally liberalised postal sector the postal legislation of Sweden does not contain requirements to separate accounts for reserved and non-reserved services. Nevertheless the decision lays down that the internal accounting system shall clearly distinguish accounts for universal and non-universal services (in accordance with the first part of **Article 14 (2)**).

According to the second part of **Article 14 (2)** the Swedish postal legislation includes the requirement that the accounting system should *"operate on the basis of consistently applied and objectively justifiable cost accounting principles"*.

In Sweden there is no formal implementation of **Article 14 (3)**, but the corresponding allocation rules of the Directive are interpreted as full costing rule which is laid down in the Swedish postal legislation.

The postal legislation of Sweden does not contain further requirements with regard to **Article 14 (4)**. That means the national legislator decided that the universal service provider Post & Telestyrelsen has to apply Article 14 (3) completely and cannot make use of any exception rules.

The national postal legislation as well contains **Article 14 (5)**. In Sweden it is required that the universal service provider shall submit respective reports that are based upon the applied accounting principles on request.

Additionally Sweden implemented requirements concerning information on the applied cost accounting system according to **Article 14 (6)**.

The delivery of detailed accounting data arising from the system of the universal service provider (according to **Article 14 (7)**) is required in the Swedish postal legislation.

Sweden is one of the two Member States having no reserved services and therefore would be considered for implementing **Article 14 (8)** in its national postal legislation. Nevertheless, the postal laws of Sweden do not contain any rules with respect to Article 14 (8) either.

Thus the legislative body of Sweden as well decided that Article 14 (1) - (7) has to be applied completely.

Implementation of Article 14 in Sweden - Overview

	Implementation of Article 14 in Swedish legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – Decision, Government Bill

	Implementation of Article 14 in Swedish legislation	
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes – Decision: 01.07.1998 Government Bill: June 1998
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	there are no reserved services
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes - Decision 5.2
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes - Decision 5.2
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes – not directly mentioned The Terms and Conditions of Licence (01.07.1998) do not repeat the demands of Article 14(3). However they specify that the prices for each of the services which can be distinguished in the price lists should be compared to a fully distributed cost calculation
	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes - see above

	Implementation of Article 14 in Swedish legislation	
Article 14, (3)	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes – see above
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	nothing mentioned
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes - Decision 5.3
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes - Decision 5.3
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes - Decision 5.3
Article 14, (8)	Exception rule concerning Member States who have no reserved services	nothing mentioned
	Law came into force:	Decision: 01.07.1998, Government Bill: June 1998

Table A.14 Implementation of Article 14 in Sweden

Source: Swedish postal legislation, CTcon

United Kingdom

United Kingdom's Postal Services Act 2000 – in force since July 2000 – does not contain Article 14 in a direct way. In the postal legislation of United Kingdom it is stated that the requirements according to Article 14 of the Directive have to *"comply with the requirements of the EU Postal Services Directive"*. That means that the Directive – including **Article 14** – is implemented one to one in the national postal legislation of United Kingdom.

Implementation of Article 14 in United Kingdom - Overview

	Implementation of Article 14 in British legislation	
Article 14, (1)	Measures taken in accordance with the provisions of Article 14	yes – Postal Services Regulations, Postal Services Act
	Cost accounting systems of universal service providers are conducted in accordance with the provisions of the Directive within two years of the date of entry into force of it	yes – Postal Services Regulations 1999 (SI 1999/2107), Postal Services Act: 28.7.2000
Article 14, (2)	Separate accounts within management accounting systems at least for reserved and non-reserved services	yes - Postal Services Act 2000, Explanatory Notes, 6: "The reforms (The Postal Services Regulations 1999) comply with the requirements of the EU Postal Services Directive (97/67/EC)."
	Clearly distinguish accounts for the non-reserved services between universal and non-universal services	yes – see above
	Management accounting systems operate on the basis of consistently applied and objectively justifiable cost accounting principles	yes – see above
Article 14, (3)	Allocating costs to each of the reserved and to the non-reserved services respectively:	
	Direct costs shall be assigned according to use of resources	yes – see above

	Implementation of Article 14 in British legislation	
Article 14, (3)	Common costs shall be allocated as follows:	
	Whenever possible allocation according to use of resources or according to direct costs	yes - see above
	When neither direct nor common measures can be found, allocation (of common costs) according to previously assigned costs	yes – see above
Article 14, (4)	Other cost accounting systems in compatibility with (2) and approved by the national regulatory authority The Commission shall be informed prior to application!	yes – see above
Article 14, (5)	The national regulatory authorities shall ensure that consistency with one of the described systems in (3) or (4) is verified by a competent and independent body Member States shall ensure that a statement concerning conformity is published periodically	yes - see above
Article 14, (6)	National regulatory authority shall keep available information on the national applied cost accounting system and shall submit such information to the Commission on request	yes – see above
Article 14, (7)	On request, detailed accounting information arising from these systems shall be made available in confidence to the national regulatory authority and to the Commission	yes - see above
Article 14, (8)	Exception rule concerning Member States who have no reserved services	
	Law came into force:	Postal Services Act: 28.7.2000 Postal Services Regulations 1999 (SI 1999/2107)

Table A.15 Implementation of Article 14 in United Kingdom

Source: British postal legislation, CTcon

ANNEX 2: GLOSSARY OF TERMS

Activity-based costing	A fully distributed costing method which captures costs of resources consumed by activities. Costs are allocated to cost objectives by assigning activity costs to cost objectives based on the use of activities by each cost objective
Activity-oriented costing	A form of fully distributed costing in which costs are allocated to activities but are not captured by activities
Common costs (or indirect costs)	Costs that cannot be economically identified with a cost objective (different identifications possible)
Direct costing	A form of partly distributed costing in which only direct costs are allocated to cost objectives
Direct costs	Costs that can be economically identified with and specifically assigned to a relevant cost objective (different identifications possible)
Efficient costs	Costs of a hypothetical postal operator in a perfect competitive market, who is able to design his processes, resources and capacity ideally to the structure and quantity of postal items to be processed
Fixed costs	Cost that do not change with the quantity
Fully distributed costing	A method of cost accounting in which the sum of all costs is allocated to the cost objectives

International Accounting Standard (IAS)	International applicable standards for external reporting of companies elaborated from the International Accounting Standards Committee (IASC) in order to reach a world-wide harmonisation in tendering of account
Long run incremental costing	A form of partly distributed costing in which only long run incremental costs are allocated to cost objectives
Long run incremental costs	Costs of a service which could be eliminated in the long run when hypothetically giving up this service
Marginal costing	A form of partly distributed costing in which only variable costs are allocated to cost objectives
Non-regulated service	A service where price and quality are not to be approved or permitted by a national regulatory authority
Partly distributed costing	A method of cost accounting in which only a part of all costs is allocated to the cost objectives
Price cap	The average price of a group of services may increase only by the rate of inflation minus a correction factor for productivity increase or for correcting potential measurement problems in the inflation rate
Regulated service	A service where price and quality are to be approved or permitted by a national regulatory authority
Reserved service	The universal service provider as single provider is allowed to provide a service for which there are no close substitutes. It is not allowed for another postal operator to enter the postal sector by offering that service

Stand alone costing	A form of partly distributed costing in which only stand alone costs are allocated to cost objectives
Stand alone costs	Costs of a service which would arise when hypothetically providing only this service
Standard costs	Expected or planned costs of services produced in a period based on expected level and price of input
Uniform tariff	Nation-wide same price for the same service
Universal service costs	Costs that arise additionally to the "normal" cost by universal service providers because of the obligation to provide universal services
Variable costs	Costs that vary with the quantity