

# **ERGP Report on net Cost of USO – VAT exemption as a benefit or a burden**



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## EXECUTIVE SUMMARY

As part of the work on calculation of the net cost of the universal service obligation, the ERGP now presents a report on the distortive effects on the market caused by the VAT exemption for universal services and the implication for the net cost calculation.

This report deals only with the impact of the VAT exemption from a regulator's point of view. It does not deal with the VAT exemption as such as the decision on a VAT exemption lies outside the scope of the regulator's tasks.

The report starts with an overview of the legal framework and the present situation in Europe as regards VAT on postal services. The overview indicates that the situation differs between the European countries. The differences refer to for instance the exempted services, the exempted operators, the applied tax rate on not exempted postal services and whether downstream access prices are exempted.

In section 2 the effects of the VAT exemption are illustrated. The section highlights two important factors related to the VAT exemption that have impact on the postal market and how they interact. These factors are the VAT on inputs and the VAT on sales. As far as these factors are concerned the fraction of non rated customers, the proportion of hidden VAT, and demand elasticity are essential.

Section 3 covers the calculation of the effects of the VAT exemption. The section includes a review of previous work done. The review is in the first place based on three different case studies and is followed by examples showing how a calculation might work in practice.

In the final section, section 4, conclusions are summarized concerning the inclusion of the effects of the VAT exemption in the net cost calculation. Essential elements, which impact whether the VAT exemption represents a benefit or a burden that have to be considered in the net cost calculation, are highlighted. The elements highlighted are country specific conditions, postal market conditions, universal services conditions, the weight of hidden VAT and market conditions such as demand elasticity.

ERGP held a public consultation on a draft of the report 30 November 2012 – 23 January 2013.



# THE VAT TREATMENT IN THE CALCULATION OF NET COST OF USO

## 1 INTRODUCTION

Public postal services are made exempt from value-added tax (VAT) in the Member States of the European Union by the VAT Directive. The reach of the exemption varies in practice according to countries. The aim of the exemption was at first to lower the price paid by final consumers. With the opening of the market to further competition, this exemption of VAT may become a source of distortions within liberalized postal markets, resulting in an unequal playfield. Such distortions will occur for example when services supplied by the incumbent are exempted while its competitors are obliged to charge VAT to their customers. This situation will have two consequences on competition. On the one hand, for non-rated clients (or final consumers), the exempted postal service provider will have an advantage since its prices will be lower than those of a similar postal provider subject to VAT. Such an uneven fiscal treatment could provide a competitive advantage to the incumbent, attracting more non rated customers, but only if the exemption of VAT from which it benefits is greater than the size of VAT applied to its investments and intermediate purchases, which it is unable to reclaim as an exempted operator (the “hidden VAT”). On the other hand, rated customers will not be able to deduct VAT when supplied by the exempted operator, and will face a higher tax price because of the hidden VAT.

At the same time, the European legislation provides that universal service obligations (USO) shall be fulfilled in the most cost effective manner and the financing of the net cost – if any– should be competitive neutral (the “least market distortive” approach). The net cost to the US provider of having to provide the US needs to be calculated taking into account the VAT exemption effect which could compensate part of the overall net cost borne by the designated operator.

The net cost of USO is the revenues and costs differences between the current USP situation and the scenario where the same USP does not have any universal service obligations<sup>1</sup>. In this reference scenario, the USP won't be eligible for the VAT exemption anymore. Therefore, the net cost evaluation needs to incorporate the VAT exemption effects on the USP's price and costs, and also on the demand.

The European Commission has requested that ERGP evaluate the VAT exemption net effect on market distortions and net cost of USO, whether it represents a benefit or a burden to the USP. The aim is to assess the VAT exemption impact on the USO net cost calculation and its implications for postal market competition.

As the study is limited to the net cost aspects of the VAT exemption, issues such as the impact of the VAT exemption on residential clients, employment in the postal sector and welfare aspects are out of the scope of this study. The VAT exemption adds on to the complexity of the net cost calculation but the exemption as such and whether it could be justified from different perspectives is nevertheless out of the scope of the study.

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<sup>1</sup> ERGP 2011 net cost calculation report [http://ec.europa.eu/internal\\_market/ergp/docs/documentation/ergp-11-17-rev-1\\_en.pdf](http://ec.europa.eu/internal_market/ergp/docs/documentation/ergp-11-17-rev-1_en.pdf)



## 1.1 BRIEF SUMMARY OF THE LEGAL FRAMEWORK

The main text of EC legislation which applies to the VAT in the European Union is currently the Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax (hereafter “the VAT Directive”). This directive is a recast text that incorporates all provisions of earlier Council directives about the EC common system of VAT.

Article 132 of the VAT Directive stipulates that “1) Without prejudice to other Community provisions, Member States shall exempt the following under conditions which they shall lay down for the purpose of ensuring the correct and straightforward application of such exemptions and of preventing any possible evasion, avoidance or abuse: (a) the supply by the public postal services of services other than passenger transport and telecommunications service and the supply of goods incidental thereto”.

This article uses the same words as article 13, A, 1, a) of the Sixth VAT Directive 77/388/CEE of the Council of 17 May 1977 on the harmonization of the laws of the Member States relating to turnover taxes — Common system of value added tax: uniform basis of assessment, one of the essential pieces of the European legislation establishing the common system VAT which has been repealed by article 441 of the 2006 VAT Directive.

In a 2009 judgment<sup>2</sup>, the Court of Justice of the European Communities gives some precisions on what to understand from article 13A on the services that could be VAT exempt and the differences between exempted operators and those who are required to charge VAT on their sales.

With the liberalization of postal services across the EU under the Postal Directive, postal markets have been opened up to competition and the concept of a single postal services provider no longer exists in many Member States. In the United Kingdom the postal market was deregulated from January 2006. All postal services supplied by Royal Mail, the Universal Service Provider (USP), were VAT exempt, as VAT law exempts the supply of postal services by the ‘public postal service’ in the Member States, whereas services supplied by other competitors such as TNT Post UK, a company licensed to provide postal services in the UK, must be subject to VAT. TNT’s majority of customers were financial businesses who could not recover the VAT on their costs.

In 2007, TNT contested Royal Mail’s VAT-exemption on postal services. The Court examined whether the VAT law term ‘public postal service’, in the context of VAT exemption, has any meaning in a scenario where the incumbent in charge of the public postal service operates in competition with other postal operators in a liberalized market. Two issues were analyzed: 1) what does the expression “public postal service” embrace? (A designated universal service provider or a private postal operator); 2) could all postal services provided by the USP acting as the “public postal services” be exempted?

The Court concluded that:

- 1) *The concept of ‘public postal services’ in Article 13A(1)(a) of Sixth Council Directive 77/388/EEC of 17 May 1977 on the harmonization of the laws of the Member States relating to turnover taxes – Common system of value added tax: uniform basis of assessment, must be interpreted to cover operators, whether they are public or private, who undertake to provide, in a Member State, all or part of the universal postal service, as defined in Article 3 of Directive 97/67/EC of the European Parliament and of the Council of 15 December 1997 on common rules for the development of the internal market of Community postal services and the improvement of quality of service, as amended by Directive 2002/39/EC of the European Parliament and of the Council of 10 June 2002;*

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<sup>2</sup> case C-357/07EC, (TNT Post UK limited)



- 2) *The exemption provided for in Article 13A (1) (a) of Sixth Directive 77/388 applies to the supply by the public postal services acting as such – that is, in their capacity as an operator who undertakes to provide all or part of the universal postal service in a Member State – of services other than passenger transport and telecommunications services, and the supply of goods incidental thereto. It does not apply to supplies of services or of goods incidental thereto for which the terms have been individually negotiated.*

## **HOW CAN A PUBLIC POSTAL SERVICES ORGANIZATION DEDUCT VAT UNDER EC RULES?**

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Under the VAT system, a taxable person is a person who, independently, carries out in any place any economic activity, whatever the purpose or results of that activity<sup>3</sup>. Activities carried out by public postal services organizations are mostly of economic nature, thus such organizations are in theory taxable persons according to the VAT Directive.

The VAT mechanism is designed in a manner that VAT should only be a burden on final consumption. It is charged on the additional value of each transaction, and is collected at each stage of production and distribution. A business pays VAT on its purchases known as input tax, and charges VAT on its sales known as output tax. It will settle up with the tax authorities for the difference between the two. In the end the tax is borne by the final consumer. Supplies falling under a category exempted from VAT, i.e. activities of public interest are sold to the buyer without any VAT being applied to that sale. In that case, the VAT paid on inputs is not deductible.

Operations may or not fall into the VAT scope:

- Activities out of the VAT scope are not taxable and do not give a right to deduction. The operator cannot recover the VAT paid on its purchases and will bear it as a final consumer would. This is the case in some Member States for example for dividends reversed by the postal operator's subsidiaries;
- in the case of an activity which is subject to VAT, the VAT paid on purchases is totally deducted from the VAT applied on sales;
- in the case of a taxable activity which is VAT exempted the operator does not charge VAT on its sales and cannot deduct the input tax. If one sends a postal object through a fully exempted operator, it will not be VAT-charged, but the operator has paid VAT on its inputs: the vans it uses, the post boxes it buys, etc. It cannot reclaim or deduct this VAT. In that case, the input tax paid and non-deducted will weigh down the operator's costs and be recovered through the prices. The final consumer will therefore be bearing the "hidden VAT".

The last situation should be distinguished from activities charged at a zero rate VAT. In this case, supplies are technically taxable, and though no actual tax is paid on them, they still count as part of a business' taxable turnover. VAT charged on inputs relating to zero-rated activities can be reclaimed, unlike the VAT incurred by a business in the course of an exempted activity.

As far as VAT deductions are concerned, a taxable person may only deduct VAT of goods or service in so far as such goods and services are used for the purpose of taxed transactions.

In the case of goods or services used by a taxable person both for transactions in respect of which VAT is deductible (i.e. taxable supplies) and for transactions in respect of which VAT is not deductible (i.e. exempted supplies), only the proportion of the VAT which is attributable to the taxable supply shall be deductible<sup>4</sup> (proportional deduction).

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<sup>3</sup> Art 9§1 VAT Directive

<sup>4</sup> Art 173 §1 al 1 VAT Directive



Member States may choose between several systems<sup>5</sup> to implement this rule. Art. 173§2 of the VAT Directive provide in this respect the following:

*“Member States may take the following measures:*

- (a) authorize the taxable person to determine a proportion for each sector of his business, provided that separate accounts are kept for each sector;*
- (b) require the taxable person to determine a proportion for each sector of his business and to keep separate accounts for each sector;*
- (c) authorize or require the taxable person to make the deduction on the basis of the use made of all or parts of the goods and services;*
- (d) authorize or require the taxable person to make the deduction in accordance with the rule laid down in the first subparagraph of paragraph 1 (thus proportional deduction), in respect of all goods and services used for all transactions referred to therein;*
- (e) Provide that, where the VAT which is not deductible by the taxable person is insignificant, it is to be treated as nil.”*

Further details about proportional deduction are provided in Articles 174 and 175 of the VAT Directive.

#### **THE MOTIVES FOR A TAX EXEMPTION IN THE POSTAL SECTOR**

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Postal services were made VAT exempt from the introduction of the VAT system in the 1970s for two reasons. First, they were seen as part of the state-funded activities in the public interest for which the VAT system has always included a series of exemptions<sup>6</sup>. The exemptions provided in Article 13A are intended to encourage certain activities in the public interest to meet the essential needs of the population at a reduced cost. This objective is the same, in essence, as that of Directive 97/67 to offer a universal postal service. Article 3(1) states that such a service involves the permanent provision of a postal service of specified quality at all points in their territory at affordable prices for all users.

Furthermore, it should be kept in mind that when the VAT system was established, the postal sector was characterized by monopolies and a limited range of services that were not subject to any competition.

#### **WHICH POSTAL OPERATORS ARE VAT EXEMPTED?**

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EU law and article 132 of the VAT Directive provides a mandatory exemption from VAT for supplies of postal services made “by the public postal services”. According to this statement, any postal operator, public or private, could be exempted from VAT forasmuch as it has been designated as a public postal services provider. Generally the application of this provision has been limited to the incumbent, responsible of delivering postal services to all and for public interest. All other postal operators have been then required to charge VAT on their postal supplies, and this uneven situation was justified until the full opening of the market.

The case of TNT Post UK for example, has confirmed that Royal Mail, as the operator providing the public postal service, is the only postal body in the UK eligible to exempt postal services from VAT. Moreover, the second part of the Court judgment implies that the VAT exemption only applies to the designated operator acting in the provision of certain postal services in the public interest.

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<sup>5</sup> Member States may combine these various systems. E.g. Article 46 of the Belgian VAT Code provides the proportional deduction as a general rule but derogations are possible on request to be able to apply a deduction method based on the effective use made of the upstream goods and services.

<sup>6</sup> Antony Seely (2010) VAT on postal services



## WHICH POSTAL SERVICES ARE EXEMPTED FROM VAT?

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- 1) All universal services supplied by the universal service provider, except for those services that have been individually negotiated or “meets the special needs of the customers”, are VAT exempt.

This includes services for letters posted individually (up to two kilograms) and postal packages up to 10 or 20 kilograms, including registered and insured service and some services that could be provided for blind and partially sighted persons. The designated operator shall provide these services at affordable prices. All services covered by the USO will remain exempt from VAT, whereas individually negotiated services will be liable to VAT at the standard rate. “Individually negotiated” services include those which are not available on the same terms and condition (i.e. in relation to price) to everyone. Those services are generally offered to businesses (banks, insurance companies, etc.) and can be object of negotiated tariffs breaking the general conditions of the universal service. Volume discounts could also be applied, this practice doesn’t follow a pre-existing discount framework.

Moreover, according to the guidelines which were adopted by the VAT-Committee in relation with the judgment C-357/07EC<sup>7</sup>, since individually negotiated postal services “meet the special needs” of the customers concerned and not the public interest, they must be excluded from the VAT exemption scope.

- 2) Terminal dues

Terminal dues are the remuneration given by the designated operator that sends a postal item to another country, to the destination’s postal operator for processing and delivering the item.

Article 2, 15) of the Postal Directive: “*Terminal dues: the remuneration of universal service providers for the distribution of incoming cross border mail comprising postal items from another Member State or from a third country*”.

Article 13, 1), 1 of the Postal Directive: “*In order to ensure the cross-border provision of the universal service, Member States shall encourage their universal service providers to arrange that in their agreements on terminal dues for intra-Community cross border mail, the following principles are respected:*

- *terminal dues shall be fixed in relation to the costs of processing and delivering incoming cross-border mail,*
- *levels of remuneration shall be related to the quality of service achieved,*
- *terminal dues shall be transparent and non-discriminatory*”.

Several agreements (REIMS<sup>8</sup>, UPC<sup>9</sup>) have been initiated to cap terminal dues mechanism regarding tariffs establishment and quality of service incentives.

In the specific case of terminal dues it has become the norm that article 132 of the VAT Directive is taken to include cross-border services and that universal service providers therefore do not pay VAT on terminal dues. With the changes brought by the VAT Package of 2010<sup>10</sup>, where terminal dues are since considered to take place in the country of the sender, the Commission gave its opinion<sup>11</sup> on how the

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<sup>7</sup> Guidelines resulting from the 90th meeting of 11 December 2009, Document B – taxud.c.1(2011)252529-662-ADD

<sup>8</sup> The agreement provides a system for terminal dues based on cost and service quality for postal operators. REIMS is currently signed by 26 European postal operators.

<sup>9</sup> Universal Postal Convention developed by the UPU which detailed several rules and special agreements to “regulate international mail exchanges and aiming to standardize and facilitate the relevant procedures and charges incurred in this transit” (COM (2004) 398).

<sup>10</sup> Directive 2008/8/EC of 12 February 2008 amending Directive 2006/112/EC as regards the place of supply services.

<sup>11</sup> taxud.d.1(2010)137650, VALUE ADDED TAX COMMITTEE (ARTICLE 398 OF DIRECTIVE 2006/112/EC) WORKING PAPER NO 658



exemption of article 132 should be applied to cross-border services. According to the Commission, three conditions should be fulfilled simultaneously:

- a) the cross-border service must be part of the universal service scope as defined by the sender's country ;
- b) the sending operator must be designated as a universal service provider;
- c) the receiving operator in charge of the delivery on the country of destination must be designated as a universal service provider.

## 1.2 THE PRESENT VAT SITUATION IN EUROPE

As an attempt to identify the difficulties which occur when setting up a net cost calculation and to be able to recognize eventual disparities between European countries practices and approaches, a Net Cost of USO and VAT as a Benefit / Burden questionnaire was sent to all the National Regulatory Authorities (NRAs) in April/May 2011. 29 replies were received and provided by the NRAs of Austria, Belgium, Bulgaria, The Czech Republic, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Latvia, Lithuania, Luxembourg, The Republic of Macedonia, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

The compilation of the answers among other things illustrates the state of play of the VAT system applied in the different States.

### WHICH STATES HAVE VAT EXEMPTION FOR POSTAL SERVICES?

26 of the 29 NRAs that have answered the questionnaire say that a VAT exemption applies to postal services in their country; only three countries do not have any VAT exemption on postal services (Norway, Sweden and Switzerland).

### WHICH SERVICES ARE VAT EXEMPTED?

20 NRAs answered that all universal services are exempted from VAT in their country (Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Lithuania, Luxembourg, Malta, Portugal, Romania, Slovakia, Slovenia, Spain and the United Kingdom). In Cyprus, Poland and Republic of Macedonia, all postal services are exempted. Luxembourg, Poland and Republic of Macedonia specified that it is all postal services and supply of goods related to these services provided by the designated universal service provider (USP) that were exempted from VAT.

Three countries answered that some universal services are VAT exempted. In Germany, the exemption requires the USP to offer the totality of the universal service or a part of it in the entire country. According to the legal interpretation of the responsible tax authority, the exemption does not apply to services provided by the USP: a) due to individual contracts or agreements; b) due to different terms and quality-conditions or lower prices than those, which are generally open to all or due to lower prices than the prices approved according to the national Postal Services Act. In Latvia, the exemption only applies to letter-items lower than 50 grams. The Netherlands specified domestic transport of letters up to 2 kg, parcels up to 10 kg, and registered items and value-registered items fall within the scope of the universal service where the VAT exemption is applied. Cross border transport of books up to 5 kg and parcels up to 20 kg also falls within the scope of the USO and is as such exempt from VAT. This goes as well for domestic and cross border transport of postal items up to 7 kg which primarily contain Braille text for blind persons.

8 countries answered that they recently lifted the exemption for some postal services (Austria, Bulgaria, Croatia, France, Germany, Poland, Spain and the United Kingdom). To the question which services have been affected, several different answers have been presented. A variety of services like bulk mail, industrial direct marketing, postal money order services and access-services do not benefit from the exemption any longer.



The direct price effect from the lifted exemption is different according to the Member States. In Germany, the USP reduced the price for access-services whereas in France, the incumbent mechanically added the VAT on top of the previous ongoing price for rated customers and have adjusted its services to offset the effects of VAT for some clients who cannot recoup VAT.

#### **WHICH OPERATORS ARE SUBJECT TO VAT EXEMPTION?**

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In 23 countries only the USP is exempted from VAT (Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Republic of Macedonia, Romania, Slovenia, Spain, the Netherlands and the United Kingdom) or all operators which could provide universal services (Bulgaria, Germany and Slovakia).

#### **WHAT VAT-RATES ARE APPLIED TO THE POSTAL SERVICES THAT ARE NOT EXEMPTED?**

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The average VAT rate applied on postal services that are not exempted is 19.3% if considering all the respondents, and 20.25% for the EU27 member states. There is quite a disparity between European countries as the rate applied in one country (Switzerland) is 8%, in three countries (Sweden, Denmark and Norway), it is set at 25%, while the highest rate is 27% (Hungary).

#### **WHAT VAT-RATES ARE APPLIED IN RESPECT OF ACCESS TO THE USP'S POSTAL NETWORK?**

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A question was asked on how the VAT is allocated (when applicable) when an operator liable to VAT makes use of the downstream access regime or other options to use the postal network provided by an exempted operator. For example if an operator liable to VAT makes use of the downstream access regime provided by an exempted operator, pays none or full VAT on the bought access services even if the operator providing access in its network is exempted from VAT?

At least 8 national legislations allow the possibility to grant access to downstream network (Croatia, Estonia, Germany, Greece, Malta, Slovenia, Spain and the United Kingdom), though not all of them has effectively applied the possibility offered. Except for the UK where access is VAT exempt, all countries which have permitted access to postal network applied VAT on the access service. Moreover, the majority of the respondents that do not currently have an access system, assume that if it was the case, access services would include VAT. Since such services are not within the scope of the universal service, VAT exemption in that particular case is not considered justified.



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Table 1 The VAT on postal services in European countries

Country	VAT exemption regime applied	VAT rate on postal services	VAT exemption on all postal services (USP and alternatives)	Only the USP is exempted	VAT exemption on US only	VAT exemption on all USP's products	Recent changes	Effect of VAT changes
Austria	√	20%		√	√		The VAT exemption was lifted from non US products	The final prices were changed in the dimension of the amount VAT
Belgium	√	21%		√	√			
Bulgaria	√	20%		√		√	"Postal money orders" service has been taken out from the US scope, respectively lifted from the VAT exemption	The prices for "Postal money orders" has been increased after the service was taken out of USO
Croatia	√	23%		√	√		The VAT exemption was lifted from items of correspondence up to 2 kilograms, packages up to 10 kilograms, and up to 20 kilograms in international incoming traffic, cecograms up to 7 kilograms	USP asked the increase in prices
Cyprus	√	NA		√		√		
Czech Republic	√	20%		√	√			
Denmark	√	25%		√	√			
Estonia	√	20%		√	√			
Finland	√	23%		√	√		Since June 2011, the USP is VAT exempt	Decrease of parcels prices by 15% and stability of letters' tariffs
France	√	19,6%			√		The VAT exemption was lifted on some services from the Industrial Direct marketing and thus are no longer part of the US scope, thus subject to VAT	No change in net prices (VAT is added to current prices) and an adjustment of the services to offset the effects of VAT for some clients who cannot recoup VAT
Germany	√	19%		√	√		The VAT exemption scope was reduced. Bulk mail and access-services of Deutsche Post AG are not longer VAT exempted	Deutsche Post AG has reduced prices for access-services according to section 28 of the Postal Act (incidental services)
Greece	√	23%		√	√			
Hungary	√	27%		√	√			
Italy	√	21%		√	√		VAT at 22% as of July 2013	
Latvia	√	22%		√	Only letters up to 50 gr.			
Lithuania	√	21%		√	√			
Luxembourg	√	15%		√	√			
Malta	√	18%		√	√			
Norway	√	25%		√				
Poland	√	23%		√		√		
Portugal	√	23%		√	√			
Rep. of Macedonia	√	18%		√		√		
Romania	√	24%		√	√			
Slovakia	√	20%		√	√			
Slovenia	√	20%		√	√			
Spain	√	18%		√	√		The VAT exemption was lifted from 2005 to 2010 on USO from non reserved services	NA
Sweden		25%						
Switzerland	√	8%					Since 2009, the USP opted for liability to taxation under art. 22, para 1, of the VAT Act. All postal services are since liable to VAT	There were no change in final price
The Netherlands	√	19%		√	Some US: letters up to 2 kg, parcels up to 10 kg, postal items in braille up to 7 kg; domestic transport of registered items and value-registered items			
United Kingdom	√	20%		√	√		Bulk products came out of USO and lost their VAT exemption status. A minor product "keepsafe" was added to the USO scope and became subject to VAT	NA

Source: ERGP



## 2 THE EFFECTS OF A VAT EXEMPTION ON POSTAL MARKET

### 2.1 HOW DOES THE VAT EXEMPTION AFFECT THE INTERNAL MARKET?

A distortion of competition occurs if some businesses are allowed to charge VAT while others are exempted. The VAT exemption could be an advantage as well as an inconvenience for the exempted operator; the balance will depend, among other technical parameters, on its customer's portfolio. Indeed, the shift from a VAT exempted situation to a VAT-rated one could benefit rated customer released from the hidden VAT and which will have the possibility to deduct the VAT paid, but not final consumers because of the final price raise after the VAT rate application. The result of advantages vs. inconveniences must also be regarded as a counterpart of the universal service obligations.

Moreover, the VAT regimes in the postal sector may also have an effect on the make-or-buy decisions of operators. Dietl et al. (2010) stated in their analysis that if an operator is VAT exempt, it has a greater incentive to employ its own workers instead of subcontractors, since it cannot reclaim VAT on the expense it has to pay to the subcontractors. Therefore, VAT exempted operators may also influence the labour conditions in the postal sector. Tim Walsh (2011) stated that in the case of removing an incumbent's VAT exemption, national postal operators would face stronger incentives to outsource services currently provided in-house and entrants would have equal treatment in respect of VAT particularly in relation to the estimated 50 percent of volumes emanating from VAT exempted customers.

#### ILLUSTRATION

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Figure 1 illustrates the VAT mechanism in the postal sector considering both types of customer for a postal operator: final consumers or exempted customers on the one hand and rated customers on the other, as well as two types of services, exempted from VAT, comparable to universal services (situation 1 and 3) and rated services (situation 2 and 4). The example is based on the same postal offer for each situation, produced from intermediate purchases for a value of 20 and, a value added by the postal operator of 80 (which could for example cover labour costs). The sale price of the final good (excluding VAT) corresponds to the intermediate costs and the total value added. The VAT rate is set at 20%.

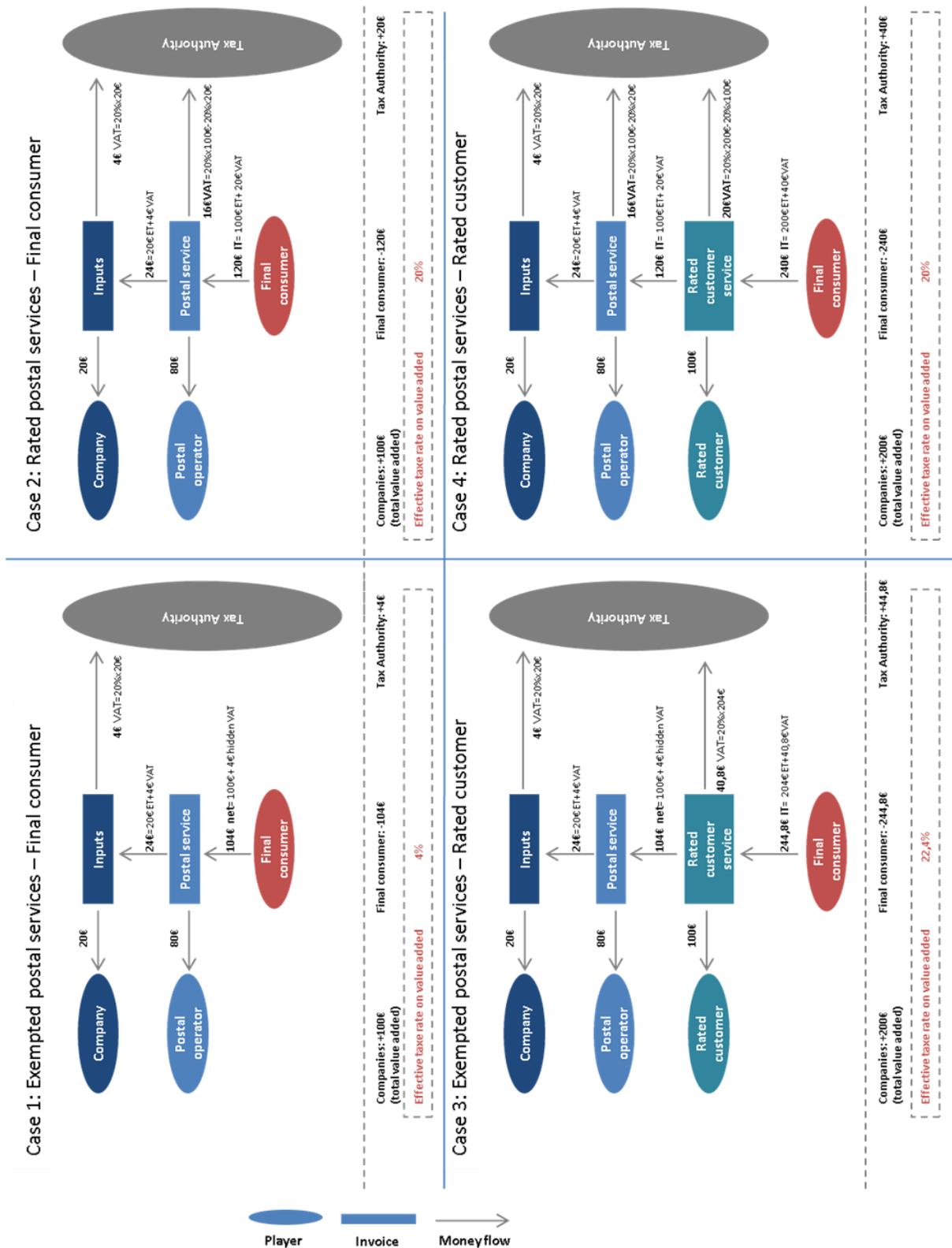
This example highlights two possible effects, yet opposite, of the VAT exemption, for customers facing the postal operator in two identical situations other than in VAT treatment:

- 1) for a final consumer, which is unable to recover VAT paid, choosing the exempted provider (case 1) for postal supplies is preferable. This is the case as the hidden tax supported does not overtake the VAT paid for the same postal object offered by a VAT-able provider (case 2);
- 2) for a rated customer the preference will go to a rated postal service (case 4), i.e. the postal provider operating as the universal service provider's competitors, otherwise it couldn't deduct the hidden VAT from the VAT given back to the Tax Authority (case 3). The final consumer will also benefit from a lower price.

In the end, the benefit or burden of a VAT exemption for a universal service provider will therefore depend on its client's portfolio. The more it has rated customers the more the VAT exemption will be a burden, as its products will not be as attractive as those of other rated operators, and the more it has exempted customers the more VAT exemption will be a benefit (i.e. in terms of lower prices).



Figure 1 The VAT mechanism in the postal market





This first figure shows market distortions brought by the VAT exemption system which prevails in the postal sector:

- the situation for the final consumer (the final price, and thus the demand) varies in the different cases;
- the hidden VAT affects the postal operator's costs and decisions.

## 2.2 THE IMPACT OF DIFFERENT VAT TREATMENTS ON THE MARKET

The rate of VAT varies among the Member States. In general the broader the VAT exemption of universal service provider and the higher the VAT rates, the higher the competitive advantage benefiting the universal service provider for VAT exempted customers and the higher the disadvantage on rated customers. For example, in the UK, an analysis by Postcomm (following its consultation on Royal Mail's special privileges including its exemption from VAT, in January 2004) suggest for instance that a lower rate of VAT (around 5%) applied to all postal services could mean achieving a 'level playing field' without significantly increasing postal prices.<sup>12</sup>

Dietl et al. (2010) conclude in their analysis that the USP's VAT exemption positively affects the USP's profit and reduces the entrant's profit. VAT exemption also strengthens the incumbent's relative competitive position and has positive effect on consumer surplus (see further in chapter 3.1). Also, the final report of the PricewaterhouseCoopers analysis of the impact of liberalization<sup>13</sup> argues that most of the competitors who participated in the survey mentioned that one of the main barriers to entry to the postal market is VAT exemption of postal operators. The IBFD (2004) concluded that competition would be least distorted the narrower the scope of the exemption.

Whether the potential for competition is significantly affected by the VAT exemption will depend on the wider competitive conditions, and how the benefits for the USP from economies of scope which derive from the provision of the universal service compare with the flexibility that a new entrant has, for example in respect of the number of days of delivery, and the scope of geographic coverage. The evidence to date is that these differ across different types of customer:

- **Residential and small business customers.** Here the economies of scope for the USP are significant and there has been little evidence of competition even in territories where competition has emerged for business mail. Therefore the impact of the VAT differential is likely to be small.
- **Large mail customers.** In a number of countries, competition has emerged for large businesses. This includes the Netherlands, Sweden and Germany, where competitors have won over 10% of all mail volumes and a greater proportion of mail sent by large businesses. Therefore the VAT differential may be one important factor to the USP in retaining market share, or in other countries to deter entry. The impact of the exemption will depend on the proportion of customers who are able to reclaim the VAT charged by other operators. We discuss this further below.
- **Large packet and parcel customers.** In most countries there is significant competition for the delivery of packets and parcels, where the benefits of scale are lower and there are lower barriers to entry. Here the VAT exemption is of limited benefit to the USP, more likely to be a burden, as most large customers of packets and parcels are able to reclaim input VAT, and it is more likely that the costs of 'hidden VAT' may offset or exceed any benefit from the exemption.

<sup>12</sup> Competitive market review (2004), Proposals for consultation (p.41)

<sup>13</sup> PriceWaterhouseCoopers (2006) The Impact on Universal Service of the Full Market Accomplishment of the Postal Internal Market in 2009 (p.92)



## 2.3 VAT PAID ON INPUTS

Under present VAT rules, incumbent national service providers in some countries are exempt from VAT for USO. Consequently, as we have seen in chapter 1, these operators cannot deduct the VAT that they incur on their expenses such as vehicles, fuel and equipment. These expenses are usually then being passed on to their customers as part of the price charged for their services in the form of "hidden VAT". Meanwhile, the postal services provided by competitors are subject to VAT so the operators can deduct any VAT incurred on their expenses. A considerable amount of business customers can deduct the VAT charged by private operators but cannot deduct the "hidden" VAT included in the USP's prices. This situation causes distortions in a market in which the two types of operators are increasingly in competition.

### VAT COSTS VS. STAFF AND CAPITAL COSTS

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Typically all expenses that are not related to labour and capital are subject to VAT costs for the universal service provider.<sup>14</sup> Therefore the VAT exemption of a universal service provider will also potentially affect the USP's outsourcing activities, since outsourcing can affect its capacity to reclaim VAT.<sup>15</sup>

VAT exemption in the postal sector influences the competition and also welfare, although the size of these effects is not clear.<sup>16</sup> Nevertheless, the results showed that the effects are highly sensitive to the operator's labour policies. Consequently, VAT exemptions have a different impact in countries with different labour regulations. The competitive effects of the "VAT regime" will also vary strongly between different customer segments.

Tim Walsh (2011)<sup>17</sup> in his analysis stated that the impact of VAT on different segments of customers is critical because unit cost of providing services are shaped as much by customer behavior and channel-specific transactional and operational support costs, as by the fact that they are product related.

The author looked at how the payment channels influences the postal operator behavior and how that correlates with VAT exemption issue. Postal payment channels such as stamps, meters and printed postage impressions are associated with different cost for operators, and a different range of benefits for mailers. These payment channels also represent significant cost drivers for postal operators. As postal operators have become more aware of the cost differences between payment channels so they have restructured prices to incentivize mailers to access their networks in the most cost effective manner. According to author, some member states have considered limiting the USO definition to for example stamped mail, but equivalent and substitutable letter mail might be treated differently for VAT purposes and so distort VAT inclusive prices. Payment channel distortions will be created to the extent that VAT exemption is limited to postal products based on the regulatory or definitional form rather than the substance of what constitutes universal service. Additionally, the distortion applies once it is found that USO services are in competition with products provided by non-USO providers and are treated unequally for the purposes of VAT.

### ALLOCATION OF VAT ON INPUTS BETWEEN VAT EXEMPTED AND NON-EXEMPTED SERVICES

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The presence of universal service providers that have VAT exemption for only some of their products and are required to levy VAT on other products may lead to even more complicated and more biased cases. Indeed, depending on the case, where such a universal service provider can be exempted from levying

<sup>14</sup> Compare to Les Actes de L'ARCEP (2010). Definition, classification and methodology for evaluating intangible benefits related to universal postal service (p.30)

<sup>15</sup> PriceWaterhouseCoopers (2008) The Impact on Universal Service of the Full Market Accomplishment of the Postal Internal Market in 2009 (p.92)

<sup>16</sup> Helmut Dietl, Christian Jaag, Markus Lang, Martin Lutzenberger and UrsTrinkner (2011), Impact of VAT exemptions in the postal sector on competition and welfare.

<sup>17</sup> Tim Walsh (2011) The economics of postal payments channels and EU postal VAT.



VAT on some of its products, the advantages towards exempted customers may be maintained, while at the same time the universal service provider can reclaim VAT on all or part of its inputs.<sup>18</sup>

A task for operators which have some exempt sales and some taxable sales is to work out how much VAT they can reclaim. If purchases are used for both purposes this can lead to complex calculations.<sup>19</sup>

## 2.4 VAT ON SALES

### THE FRACTION OF NON VAT RATED CUSTOMERS

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VAT exempted customers can represent a significant part of the USP mail volumes since they often include: public bodies, insurance companies, banks, healthcare institutions, charitable institutions and final consumers (as well as sometimes specific SMEs).

VAT rated customers can reclaim the VAT paid on their postal products because these products are an input into their own production processes. Reclaiming VAT is not possible for VAT exempted customers. Thus, for VAT rated customers, the before-tax price is relevant, while for VAT exempted customers, the after-tax price of the mail service from operator is relevant.

Research by Postcomm assisted by consultants Arthur D. Little (ADL), confirmed Postcomm's previous analysis that around 50% of customers by value cannot reclaim all the VAT charged to them. Some of the largest bulk mail customers are VAT exempt, including banks and financial institutions, charities, and some government departments. ADL believed that for competitors to win market share from Royal Mail, they would need to offer average discounts of around 20% to persuade customers to switch. This implies Royal Mail's VAT exemption is a significant barrier to entry.<sup>20</sup>

The fraction of non-rated customers is thus essential when determining the impact of a VAT exemption. Swiss economics includes this factor in their Working paper. The fraction of non-rated customers varies across mail segments. It was assumed to be 50% in the bulk mail segment of the letters market, and this value was in line with the current situation then in the German letters market, where DPWN recently reported a 50% fraction of non-rated customers.<sup>21</sup> This implies that an analysis of the VAT-rated customers has to be made in each segment of the market where the VAT exemption applies.

The general conclusion by Dietlet al. (2010) is that a VAT exempted incumbent will always be worse off when the fraction of non-rated customers is very low and it will be always better off when the fraction is very high.

Further, in their analysis they conclude that the before-tax price of the VAT exempted incumbent always increases in the tax rate, while the before-tax price of the non VAT exempted entrant decreases if the model parameters are within a reasonable range. This result can be explained by two effects.

- 1) as the incumbent cannot deduct VAT, higher taxes will directly lead to higher production costs.
- 2) a higher tax rate will increase the incumbent's output tax advantage, as the increased VAT rate is directly price relevant for the entrant's nonrated customers. Under reasonable calibration assumptions (minimal amount of nonrated customers relative to the size of  $\mu E$  (which stands for the fraction of rated inputs for the entrant)), the entrant will be forced to reduce prices to offset the increase in taxes without gaining market share in return. Marginally, the incumbent is able to

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18 PriceWaterhouseCoopers (2006) The Impact on Universal Service of the Full Market Accomplishment of the Postal Internal Market in 2009 (p.92)

19 VAT on postal services: Frequently asked questions (May 2003) Europe press releases, Memo/03/98 Brussels

20 Antony Seely (2010) VAT on postal services

21 Impact of VAT Exemptions in the postal sector on competition and welfare, Dietel, Jaag, Lang and Lutzenberger, p 6



increase prices. Hence, the two effects always have the same direction for the incumbent while they are ambiguous for the entrant.<sup>22</sup>

Similar results are presented in a study concerning the situation in Denmark. Post Denmark is exempt from paying VAT on USO products. However, its competitors must pay VAT. This gives Post Denmark a clear competitive advantage in respect of the customers who cannot set off the VAT as Post Denmark in fact can offer a lower price. Post Denmark has previously disclosed that its VAT benefit amounted to approximately DKK 200 million.<sup>23</sup>

### PROPORTION HIDDEN VAT AND DEMAND ELASTICITY

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When demand is relatively inelastic consumers take on a larger percentage of the taxation burden, and the reverse happens when demand price elasticity is relatively high. In principle the same applies to the allocation of hidden VAT between the USP and its customers.

But in the market under consideration this analysis is further complicated by the fact that many prices for postal services are regulated. These prices are not the result of equilibrium market interaction between supply and demand. Therefore we would need to consider the implications of relative elasticities in considering how the impact of the taxation burden will be split between the two sides of the market.

Published evidence in respect of econometric models show that the different mail categories exhibit significant price elasticity, in absolute value inferior to 1, save a few rare exceptions<sup>24</sup>. The most price sensitive demand is the demand coming from companies, particularly for advertising mail (direct mail). There may be an absolute increase in price elasticity as such mail forms an expanding share of mail sent in comparison to the total volume over time.

In addition, to the extent that we assume lower volume where operators are required to charge VAT to some customers, this requires an analysis of the cost impact of that lower volume. Specifically an estimation of the marginal cost of lower volume is required. The marginal cost will vary for different operators and different types of mail, but is likely to be significantly below 1, as much of the delivery network will represent a fixed cost as volumes decline.

### SUMMARY

In summary, there are many factors that influence the level of impact that different VAT treatment have on the postal market. Some authors claim that the USP's VAT exemption positively affects the USP's profit and reduces the entrant's one. On the other hand this could be too general a conclusion since some research showed that whether the market is significantly affected by VAT exemption depends on:

- wider competitive conditions;
- customers, whether they are residential or small business customers, large customers or large packet and parcel customers;

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<sup>22</sup> Impact of VAT Exemptions in the postal sector on competition and welfare, Dietel, Jaag, Lang and Lutzenberger, p 4

<sup>23</sup> What is the cost of Post Danmark's universal service obligation (2008) Copenhagen Economics

<sup>24</sup> For example, Postcomm's March 2011 "Analysis of Markets" which included details around Royal Mail's price elasticities for different types of mail



- the question of whether the customers of USPs and entrants are VAT exempted or not, because the general conclusion is that VAT exempted incumbent will always be worse off (in terms of value of the sales) when the fraction of non-rated customers is very low;
- the question whether the cost of “hidden VAT” exceeds any benefit from the exemption;
- tax rate, since for example, if the incumbent cannot deduct VAT, higher taxes will directly lead to higher production costs;
- price elasticity etc.

The effects of VAT treatments of USPs or entrants also depend on the question of how these treatments affect the VAT paid on inputs and VAT at sales.

Nevertheless, it is obvious that different VAT treatments do affect prices, volumes, cost, labor market and welfare, but the level of those impacts still needs further analysis. Therefore, it is important to stress that it is hard to define the actual consequences to the postal market due the different VAT treatments, because of many factors that influence these effects on one hand and because of the various situations and legislation systems in the countries of interest on the other.

### 3 THE CALCULATION OF VAT EXEMPTION EFFECTS (BURDEN/BENEFIT)

#### 3.1 REVIEW OF PREVIOUS WORK

The ERGP has reviewed different studies on the VAT and use some of these studies in this report<sup>25</sup>. In this section we present work that has been done on the calculation of the effects of the VAT exemption.

#### **BENEFITS OF UNIVERSAL SERVICES PROVISION TO ROYAL MAIL (CONSIGNIA) FINAL REPORT TO POSTWATCH BY LONDON ECONOMICS MARCH 2002**

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In London Economics report for Postwatch the consultants state that introducing VAT will most likely have a significant effect on the pricing structure, the competitive advantage and financial position of the USP. For some services the impact will be negative and for some positive. Given the significance of VAT rates in EU countries the effects of a change in VAT may well be significant.

London Economics also tries to calculate the competitive advantage Royal Mail has over rival operators that don't benefit from VAT exemption.

London economics writes the profit expression, in the absence of VAT, in the following way:

$$\Pi = TR - C^{VAT-able} - C^{added}$$

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25 See appendix: References



The profit ( $\Pi$ ) is equal to the total revenue (TR) minus the costs of inputs on which VAT is paid ( $C^{VAT-able}$ ) minus the costs that are value-added by the operator, i.e. Capital and labour ( $C^{added}$ ). In this exercise it is assumed that the quantity sold stays constant.

If Royal Mail became subject to a 17.5% VAT on its sales, two things would happen with respect to the above expression:

- 1) a 17.5% premium on the exempt revenues will have to be imposed and paid to the tax authority;
- 2) the VAT paid on the inputs which are subject to VAT can be claimed back from the tax authority.

The new profit expression will thus be given by:

$$\Pi = \frac{TR(1+s)}{(1+t)} - \frac{1}{(1+t)} C^{VAT-able} - C^{added}$$

$s$  represents the share of the tax increase burden that will fall on consumers. This means that the profit is equal to the total revenues times the new expenditure paid by customers because of the tax increase, divided by the total VAT paid subtracted by the VAT the operator is able to claim back on inputs divided by the total VAT paid.

London Economics then says it is worth discussing the assumption that the quantity sold would remain unchanged in spite of the assumed level of increase in prices that Royal Mail's customers will face. This really depends on the mixture of customers that can claim VAT and those who can't. The authors say that assuming that 50 % of Royal Mail's customers are business customers and that they can almost entirely claim back the 17.5% VAT on postal expenditures; this means an increase in price for half the population and a decrease in price for the other half. The net effect on total demand is therefore ambiguous and the authors have assumed it to be zero.

London Economics summarizes the calculation while saying that the numbers for the benefit is substantial, but unlikely to be overestimated. If Royal Mail would have to keep its prices for USO products unchanged after the removal of the VAT exemption, the benefit from the VAT exemption would be even much larger than the scenarios where prices increase. In the case where Royal Mail has to take the full taxation burden, the benefit of exemption would be £736 million.

It is, however, a matter of judgment whether it is appropriate to include these as a benefit of USO, says London economics. In their base case assumptions they do not include these benefits (page 20 of the study).

#### **IMPACT OF VAT EXEMPTIONS IN THE POSTAL SECTOR ON COMPETITION AND WELFARE, SWISS ECONOMICS 2010 HELMUT DIETL, CHRISTIAN JAAG, MARKUS LANG, MARTIN LUTZENBERGER, URSTRINKNER**

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The paper sheds light on the main competitive impact of VAT policies while showing the consequences on overall welfare by presenting simulation results based on a calibrated quantitative model of the postal sector. This enables the authors to provide guidance on how to resolve the policy trade-off between a level playing field in the liberalized postal sector, consumer surplus and government tax revenues.

The authors analyze two scenarios where they model profits of both the incumbent and new market entrants: In scenario A the incumbent operator is VAT exempted while the entrant operator is VAT rated. In scenario B, both the incumbent and the entrant are VAT rated. Further in the model there are two types of customers, some that are VAT exempted, non-rated customers and some that are VAT rated. The model further assumes linear demand curves with equal slope for both operators. Demand of the incumbent



decreases in its own prices, while it increases in the price of the entrant operator. Demand is also positively related to a higher degree of product differentiation.

On the cost side, operator faces two types of costs: fixed costs and constant marginal costs. The fraction of the fixed costs that is non-labour costs is denoted by  $\mu^F \in (0, 1)$  where  $\mu \in (0, 1)$  stands for the fraction of marginal costs that is non-labour.

In order to predict competitive and welfare effects more precisely, they simulate a model using data for the Business to Consumer bulk mail market. This is the segment where competition is most likely to occur after full market opening. On the supply side they differentiate cost in three dimensions: variable/fixed, upstream/downstream and labour/non labour costs. With the calibrated model, they provide some insight into the overall competitive and welfare consequences of various tax regimes. They perform sensitivity analysis and derive recommendations for regulators, market players and VAT authorities.

The simulation results that they report are for the two scenarios. They use a “*Base case*” and a “*Symmetric case*”. In the *Base case* the incumbent and the entrant are assumed to have different cost structures. The entrant pursues a different business model with less fixed costs because it makes use of subcontracting in delivery, making the cost structure more flexible (variable) and yielding a larger fraction of VAT rated inputs. The *Base case* also assumes that the entrant is more efficient upstream (by more strongly incentivizing digital sorting) and downstream (with a reduced delivery frequency). Such models can be found in liberalized postal markets. The *Base case* also assumes that both the incumbent and the entrant pay equal wage rates, (see table 2 below).

Table 2 Major Cost Assumptions for the *Base case*

	Incumbent	Entrant
Fraction of fixed costs	40%	20%
$\mu^F$	30%	80%
$\mu$	30%	80%
Efficiency premium upstream	-	10%
Efficiency premium downstream	-	30%
Wage premium	-	-

In the second case (the *Symmetric case*), the entrant is assumed to have a cost structure same as the incumbent’s, and consumers do not prefer one operator over the other.

The authors point out that with a reasonable model calibration the USP’s VAT exemption (scenario A) positively affects the USP’s profit and reduces the entrant’s profit. Hence, it strengthens the incumbent’s relative competitive position and results in an uneven playing field. For example in the *Base case* that was explained above, both price and profit ratios are substantially higher for the incumbent in scenario A, meaning that the incumbent can charge higher prices in scenario A in relative terms and earn a higher profit at the same time. Despite its higher price level in scenario A, the incumbent achieves a higher market share in this scenario (this also occurs in the same scenario in the *Symmetric case*, but the incumbent’s market share is less compared to the *Base case* (all parameters even)).

**DEFINITION, CLASSIFICATION AND METHODOLOGY FOR CALCULATING INTANGIBLE BENEFITS RELATED TO UNIVERSAL POSTAL SERVICE, ARCEP COMMISSIONED THIS REPORT FROM WIK CONSULT, 2010**

The report analyses tangible and intangible benefits accruing to La Poste as a result of its universal service obligation. These are to be included when calculating the net cost for the USP caused by the universal



service obligations in application of the European Union's Third Postal Directive. The specific objective of this study is also to establish methodologies for quantifying intangible benefits.

In this report VAT exemption is identified as one of the *intangible* benefits related to the USO. According to the report, a benefit is classified as intangible when the USP's performance and cost accounting, and its calculation of the net cost of the universal service obligation, does not (fully) reflect the impact on revenues and cost that result from the existence of this benefit. The definition is relevant insofar as the identification of such benefits becomes necessary only if they are not already included in the USP's net cost calculation. The reason why the authors classify the VAT exemption as an intangible benefit is because they do not expect that La Poste's performance and costs accounts provide sufficient information to calculate the effect from the VAT exemption directly.

The following model is used for the profit of the universal service provider:

$$\Pi = pv - cv - c_0 + \Pi_{PM}$$

where:

$\Pi$  = operator's profit

$p$  = price (index) for services sold, net of VAT

$c$  = cost of production per unit of services

$v$  = total volume of services demanded

$c_0$  = (volume independent) overhead cost

$\Pi_{PM}$  = profit in the philately market

In France, companies that are completely or partly exempted from VAT have to pay wage taxes. As the VAT exemption is introduced, this wage tax adds to the cost of La Poste.

The authors conclude that the VAT exemption makes itself felt on cost through two channels, i.e. impact on per unit cost, which is multiplied by total volume, and impact on overhead cost. It is not clear whether impact on per unit cost and impact on overhead cost will on balance be negative, and therefore these impacts of the VAT exemption on profit be positive, or whether, because of the wage tax that goes along with the VAT exemption in France, they might on balance be positive, and have a negative effect on profit. Further, the authors point that the VAT exemption means a lower gross price for VAT non-rated customers, which has a positive effect on volume demanded, which effect is multiplied by the profit margin.

The exemption from value added tax influences La Poste's profit position in several ways according to the authors:

**Demand effects:** For the postal customers that can deduct VAT, VAT has no demand effect as long as the net price does not change. For the postal customers that cannot re-claim VAT, such as private customers and some large customer groups, the USP's VAT exemption is essential. For those customers, the VAT exemption means lower gross prices. At constant gross prices, these customers will demand more postal services if they are exempted from VAT. The VAT-exemption will therefore have a positive effect on the demand and the USP's profit.

**Cost effects:** The immediate influence of the VAT exemption is that La Poste cannot reclaim the VAT included in its input purchases. This effect is relevant for both volume dependent *operational costs* and for *overhead costs*. It is not clear whether the combined effect of wage taxes and the VAT exemption on profits is positive or negative. In an input to this study (telephone interview), La Poste has argued that the VAT exemption would, overall, be a disadvantage, but has not provided quantitative information on this matter.



Methodologies aspects:

- the amount of VAT that La Poste does not have to pay due to the tax exemption should be estimated for the (lower) level of sales in the situation where postal service are subject to VAT;
- net prices (without VAT) were kept constant to avoid complexity, and ensure consistency with the approach for calculating net costs and benefits more generally;
- La Poste would probably be able to pass through the VAT entirely on its customer due to the operator's strong market position. Normal business customers would however not be affected by this increase in gross prices;
- important input data needed to assess the benefit of the VAT exemption on profits includes the share of demand from non VAT-able customers and the price elasticity of those customers;
- most other input data should be available from La Poste's cost and performance accounts.

It should be mentioned that this study was criticized by the USP.

### 3.2 HOW A CALCULATION MIGHT WORK IN PRACTICE

Evaluating the VAT exemption effect within the net cost calculation means that one should analyse what the USP's reaction would be if it becomes VAT eligible. Several reactions are possible as we have seen in section 1.2. The USP may decide to apply the VAT on its actual prices or to maintain its prices with the lifting of the VAT exemption (the former net price becomes the price including VAT), if the benefits resulting from the ex-hidden VAT, i.e. VAT reclaimed on inputs (a possibility gained with the recalled exemption) exceeds or at least compensates the losses occurred with the decrease of the net price. The same conclusion was reached by the European Union, as mentioned in a press release in 2003<sup>26</sup>, where it considered that with the increasing use of technology in the postal sector, postal operators will have so much to gain from the deductible VAT "*paid on their expenses such as equipment, fuel and vehicles*", that a price increase won't be necessary, if they become VAT eligible.

Based on the considerations from previous examples, and the evidence available for the values of the inputs to the VAT benefit or burden on cost calculation, we provide an example of how the VAT benefit or burden might be calculated. In calculating the net benefit or burden, we consider the following effects on the USP:

- first, the demand effect, as to assess the impact of the VAT exemption we assume in the first place that prices before VAT (net prices) are unchanged in each scenario. Therefore, in the case where VAT is charged, prices are higher for residential and non-rated customers. Other customers will pay the same net price as they can reclaim the VAT. This will result in lower volumes due to price elasticity. We assume that volumes fall using a simple demand elasticity function<sup>27</sup>;
- secondly, the hidden VAT effect, where we assume that the USP will be able to reclaim VAT on its input costs;
- thirdly, the variable cost effect, where we assume that variable costs will be lower as volumes decline.

We use the following inputs to the VAT calculation:

- VAT impact – we assume 20% VAT, and that around half of mail by volume is to VAT exempted customers, but that this is higher for standard mail (i.e. stamped, franked mail with no bulk mail discounts) and much lower for packets. We assume 10% of the USP's costs are subject to VAT, which is unrecoverable given the VAT exemption;
- demand elasticity – we assume the average is just under -0.5, but that this is higher for bulk mail;

<sup>26</sup> VAT on Postal Services, FAQ (May 2003), Europe Press Releases, Memo/03/98, Brussels

<sup>27</sup> Change in demand = change in price x price elasticity



- costs – we assume costs are 80% of prices (i.e. a 20% margin as percentage of prices before VAT impact) and that half of the costs are variable with volume.

Table 3 provides an illustrative calculation of the impact of the VAT exemption on the profit of a USP with the following assumptions for USO/regulated services and volumes (with a VAT exemption assumed to currently apply to all these services):

Table3

Service	Standard Mail (single piece stamped, metered mail)	Bulk mail (transactional, advertising)	Packets
Current Volume	2000	1000	200
Current price	0.4	0.2	2
Price elasticity	-0.3	-1	-0.5
Percentage of customers unable to recover VAT	60%	40%	10%
Variable cost per unit exc VAT (40%)	0.16	0.08	0.8
Fixed cost per unit (exc VAT) (40%)	0.16	0.08	0.8
Percentage of costs subject to VAT (“hidden VAT”)	10%	10%	10%

We calculate first the profit of the USP with the exemption on all these services, and then apply VAT to all services. We calculate the volume impact of the higher prices using demand elasticity, and therefore the lower revenue achieved by the USP. We offset this with the benefit of lower costs due to the savings on variable costs, and the benefits from recovering the hidden VAT.

Table 4 Illustrative example of the profit impact of removing the VAT exemption, in the case where prices before VAT remain unchanged.



Table 4

	<b>Standard Mail</b>	<b>Bulk mail</b>	<b>Packets</b>	<b>Standard Mail</b>	<b>Bulk mail</b>	<b>Packets</b>
	<i>Exempt</i>	<i>Exempt</i>	<i>Exempt</i>	<i>VAT</i>	<i>VAT</i>	<i>VAT</i>
Elasticity				-0.3	-1	-0.5
Percentage of exempted customers				60%	40%	10%
Volume	2000	1000	200	1928	920	198
Price (exc VAT)	0.4	0.2	2	0.4	0.2	2
VAT rate	0%	0%	0%	20%	20%	20%
Price (inc VAT)	0.4	0.2	2	0.48	0.24	2.4
Gross Revenue	800	200	400	925.44	220.8	475.2
VAT revenue	0	0	0	154	37	79
Net revenue	800	200	400	771	184	396
Impact of elasticity				-3.6%	-8.0%	-1.0%
<b>Costs</b>						
Fixed (exc VAT, total)	560			560		
Fixed (allocated)	320	80	160	320	76	164
Variable (per unit, exc VAT)	0.16	0.08	0.8	0.16	0.08	0.8
Variable (total)	320	80	160	308	74	158
Net cost	640	160	320	628	150	323
Percentage of labour and other non-VAT)	90%	90%	90%	90%	90%	90%
Percentage of VATable costs	10%	10%	10%	10%	10%	10%
VATable costs	64	16	32	63	15	32
VAT paid	13	3	6	13	3	6
Gross cost	653	163	326	641	153	329
<b>Income</b>						
Net Revenue	800	200	400	771	184	396
Net costs	640	160	320	628	150	323
VAT cost (where exempt, hidden VAT)	13	3	6	0	0	0
Total cost	653	163	326	628	150	323
Profit	147	37	74	143	34	73
As margin	18%	18%	18%	19%	19%	19%
<b>Impact of charging VAT</b>				<b>-4*</b>	<b>-3*</b>	<b>0</b>
<i>As percentage of revenue</i>				<b>-3.6%</b>	<b>-8%</b>	<b>-1%</b>

Source: ERGP

(\*) Charging VAT in this particular example (considering the volume responses due to the price elasticity) would decrease the postal provider's margin. For standard and bulk mail. Therefore, in that case, the Vat exemption could be considered as a benefit.

In our base case example, where we assume that when lifting the VAT exemption the net price remain unchanged and the gross price becomes higher, there is relatively little impact of the VAT exemption on the USP's profit with a small VAT benefit. However we have highlighted in Section 2 that many of the inputs to the calculation are difficult to assess and may differ for different USPs. This can have a material impact on whether the VAT exemption is in practice a benefit or a burden.

We consider specifically the examples of the proportion of hidden VAT and the level of demand elasticity. Figure 2 shows the impact of varying the proportion of hidden VAT between 0% and 30%. At 0% all the burden of the VAT exemption in respect of the size of the impact of hidden VAT is removed and this represents the largest possible size of the VAT benefit. At 30% the impact of hidden VAT is significant and greatly outweighs the benefit of the exemption. The proportion of hidden VAT will always be limited



because of the labour-based nature of the postal network, but published evidence on the proportion of labour costs indicated that the rate could be as high as this in some countries.

Figure 2: The net benefit or burden of the VAT exemption for different proportions of hidden VAT

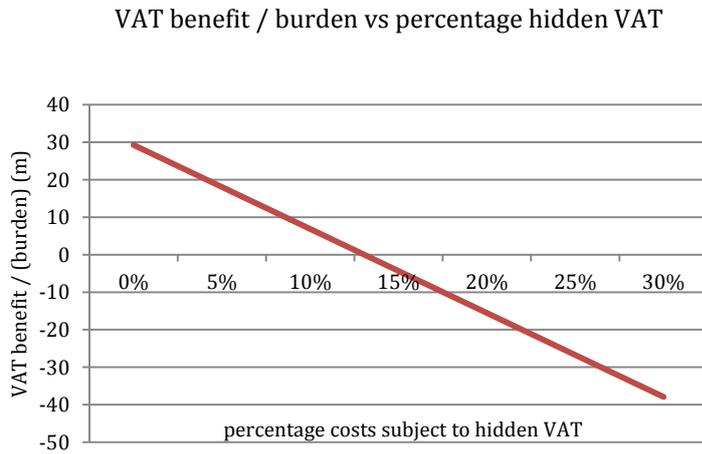


Figure 3 shows the impact of the industry demand elasticity. As discussed above, published evidence suggests underlying demand elasticity is likely to be relatively low on average, and well below -1, although some customers are more sensitive to prices. However, if competition emerges, the impact of higher prices for the USP could be much higher. Therefore, the scenarios with higher demand elasticity may be more realistic in a more competitive market such as the Netherlands or Sweden. In this case the VAT exemption may be a significant benefit. Where the demand elasticity is low, and customers will be willing to pay higher prices, the VAT exemption has little impact on net revenue and the hidden VAT will outweigh any benefit.

Figure 3 the net benefit or burden of the VAT exemption for different levels of price elasticity

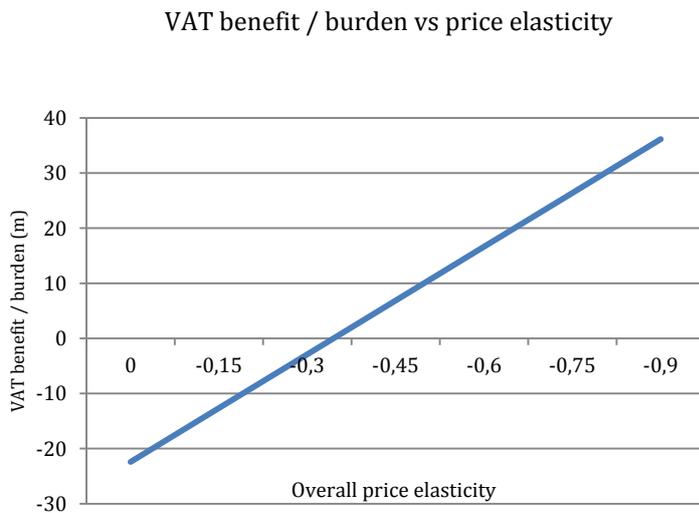




Table 5 summarizes the impact on the benefit or burden of the VAT exemption of changes to the inputs to the VAT calculation:

Table 5

Input factor	Type of impact	Size of impact
VAT rate	Higher rate increases total impact – either greater benefit or greater burden	Proportionate to size of benefit / burden
Percentage customers who can recover VAT	Higher percentage who can recover VAT reduces the benefit of the exemption – as such customers are not impacted by the exemption	Could be significant, but outside USP’s control and likely to be similar for most USPs
Demand elasticity	Greater elasticity results in a greater benefit of the exemption – where competition results in very high demand elasticity for the USP, the benefit may be significant	See above
Cost elasticity (i.e. percentage variable cost)	Greater variable cost reduces the benefit of the VAT exemption – lower volumes with VAT charged can be offset to a greater degree by lower costs	Likely to be relatively small as cost variability will often be fairly low for a small change in volumes.
Percentage hidden VAT	Greater percentage hidden VAT reduces the benefit of the VAT exemption	See above

Several possible reactions from the postal operator are possible when lifting the VAT exemption:

- 1) as we have seen in the above example, the USP could decide to maintain the net price (excluding VAT) and apply the VAT rate;
- 2) the USP may also decide to benefit its clients from the cost decrease brought by the decline of the hidden VAT, and lower the net price by the equivalent decrease of costs;
- 3) the USP may also bear the VAT and keep the same gross price for its customers. The net price will therefore be lower than the one in the first case. Rated customers will benefit from such a decision; whereas this situation would be neutral for non rated customers;
- 4) the USP may want to apply different prices for each type of its clients, and maintain the net and the gross price.

Considering the above example, these four situations would have different effects on the USP’s profit and customers’ demand. The next table illustrates those reactions.



Table 6 The USP's possible reactions to standard mail's VAT liability

	USP's reaction to VAT liability	Prices	Direct effects on profit from the exemption lift	Effects on USP's customers
<b>The initial situation</b>	USP is exempted	Net price = Gross price =0,4	-	same price for rated and non rated customers
<b>Case 1</b>	maintain the net price and add VAT	Net price = 0,4	<b>+9%</b> (an economy brought by the disappearing of the hidden VAT)	neutral for rated customers; worse situation for non rated customers
		Gross price = 0,48		
<b>Case 2</b>	lower the net price and add VAT <small>(the USP decides to benefit its clients from the cost economy)</small>	Net price = 0,36	<b>0%</b> (the changing situation is neutral for the USP)	better situation for rated customers; worse situation for non rated customers
		Gross price = 0,44		
<b>Case 3</b>	maintain the gross price, the net price decreases	Net price = 0,32	<b>-13%</b> (due to a lower net price)	better situation for rated customers; neutral for non rated customers
		Gross price = 0,4		
<b>Case 4</b>	maintain both net and gross prices <small>(price discrimination between clients)</small>	Net price = 0,4	non rated customers = case 3 <b>(-13%)</b> rated customers = case 1 <b>(+9%)</b>	neutral for rated customers neutral for non rated customers
		Gross price = 0,4		

(\*) price elasticity = 0%

Source: ERGP

The benefit or burden of the VAT exemption must then be analyzed depending on other assumptions, i.e. how would the customers react. Indeed, if the USP decides to keep the gross price stable the situation won't change for final consumers, however rated customers, which now have the possibility to deduct the VAT on the USP's supply, would benefit from a more attractive net price.

## 4 INCLUSION IN THE NET COST CALCULATION

### 4.1 A NECESSARY BUT COMPLEX EXERCISE

The evidence provided in this report indicates that the VAT exemption in the postal market affects competition, prices, welfare, make-or-buy decisions of operators, and the relative cost of postal services and competitive options open to different segments of customers. When calculating the USO net cost, the VAT regime should be taken into account. Nevertheless, the effect of VAT exemption on the postal market depends on many factors, such as member states national VAT legislation, labour regulation, customers segments, USO definition, types and shares of costs within the incumbent's costing system, different payments channels, different products of the incumbent etc. Therefore, it is important to stress that it is hard to determine the actual consequence on the postal market due the VAT exemption because of the many factors that influence these effects on the one hand and because of the various situations and legislation systems in the different countries on the other.



Even though the range of the benefit or burden varies due to a number of factors, it is clear that the VAT-exemption has to be considered when assessing the net cost of USO.

In a reference scenario where the USP is no longer designated, the former incumbent will no longer be VAT exempted. This is likely to have impact on the business strategy and how the company will position itself on the market. When setting the reference scenario and assessing this scenario to see whether the scenario is viable and credible, this has to be considered. In section 4.2 the essential elements to be considered when calculating the effects of the VAT exemption are summarized.

Quantifying the effect caused by the fact that the universal service provider will no longer enjoy the VAT-exemption is a complicated issue. Nevertheless it has to be included in the net cost calculation.

Based on the articles that serve as a basis for this work such a calculation includes a number of assumptions representing a considerable amount of uncertainty. In addition it further complicates the exercise described in the previous ERGP report on Net cost calculation.

#### 4.2 ELEMENTS TO BE CONSIDERED IN THE NET COST CALCULATION

VAT exemptions that cover only national postal operators may distort competition and the distortion varies among the member states. Furthermore, even if individually negotiated prices – with business customers, for example – don't benefit from the exemption, this is insufficient to end the distortions created by the multi-tier tax system in the European postal market. The products declared to be part of "universal service" and VAT exempted are also in more or less direct competition with other postal services that do not benefit from the exemption.

In this report we have considered that there are a variety of elements which impact whether VAT represents a benefit or a burden for a USP. We have specifically highlighted that the actual effect is impacted by:

- *country-specific conditions*: for example the wage taxes which arise in France;
- *postal market conditions*: the impact of the VAT exemption on competition and therefore the size of the revenue benefit for the USP of the VAT exemption;
- *universal service conditions*: the scale of the universal service and therefore the proportion of revenues and costs which are subject to the VAT exemption;
- the amount of *hidden VAT*;
- the *share of rated and non-rated customers* for USO services; and
- *market conditions*: competition and elasticity, to decide whether the USP should keep net prices constant or VAT included prices constant.

The VAT exemption has to be considered when setting the reference scenario that serves as a basis for the calculation of the net cost and when assessing this scenario. A VAT exemption for services provided under a universal service obligation causes implicitly a market distortion (distorted prices and/or a hidden VAT). This distortion is likely to have an effect on the net cost for the provision of universal services. As a consequence it has to be taken into consideration when calculating the net cost of USO. In a situation where a USO is no longer imposed on the incumbent the company will not be subject to a VAT exemption. This has to be regarded when calculating the net cost.

Furthermore, the VAT exemption should also be reflected in the cost allocation methodology to make sure that the hidden VAT is allocated only to VAT exempt products and, at the same time, VAT rated products must not bear the hidden VAT.



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The analysis indicates that there is no clear answer as to whether the VAT exemption provides a benefit or a burden. It therefore indicates that particular care needs to be taken in assessing the competitive impacts, and specifically whether the VAT exemption is significantly distorting the competitive market. If this were to be the case, then it will be more difficult to confidently assess there to be a net cost. It will be more difficult to assess the counterfactual and to state that there can be a “least distortive” solution consistent with both the different VAT treatment and the finding of an unfair burden.



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