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**The postal network between competition and
Universal Service provision**

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Abstract

This paper explores the status and possible regulation of the postal network in the broader context of Universal Postal Service provision and competition. It highlights the fact that there are several different ways to even consider the postal network. It then identifies three possible analogies from which the regulation of the postal network could be approached, namely the banking sector, railways, and telecommunications. Finally, the paper highlights possible scenarios for the future regulation of the postal network. In conclusion, the paper identifies the various factors which may determine this possible future regulation of the postal network.

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INTRODUCTION

Since the 1990s the European Union has been embarking on an ambitious liberalisation programme in the field of postal services. By 2009 the current Postal Directive will expire and the postal services market will probably be fully liberalised.¹ Consequently, the European Commission has to submit proposals for a regulatory framework for a fully liberalised postal market to the European Parliament by the end of 2006. In doing so, the Commission will have to take into account the fact that a functioning and affordable Universal Postal Service will have to be an integral part even of a totally liberalized industry. A particular problem will be to develop a regulatory model that will on the one hand ensure that there is full competition in the market and on the other hand that the needs of the weakest consumers are taken into account. His dilemma between competition and Universal Service provision cannot be solved without considering the role of the postal network. Experiences from other already liberalised sectors, such as telecommunications, show that significant competition is possible but that there is need for some sort of regulation of the access to the network, so as to guarantee a minimum service (see Finger, Alyanak & Rossel, 2004).

The so-called postal network is commonly associated with the Universal Postal Service. By postal network, we understand the three following aspects, namely (1) so-called “first mile collection” (from pick-up of mail to the first mail processing step, including therefore post offices and collection boxes, (2) mail (and parcels) processing and handling, including transportation, and (3) so-called “last mile delivery” into either a PO Box or to the addressee. Generally, the postal network belongs to the incumbent and its current feature in any given country is the result of a historical evolution. This paper does not discuss the fact whether, in any given country, this postal network is appropriate to the needs of the consumers, whether it corresponds to operational requirements of the incumbent, or whether the costs of operating it are economically justified. Rather, the paper is located on a more abstract level and takes a postal network as a given and explores the different approaches to dealing with this postal network in light of both competition and universal service provision.

While the definition of the postal network is relatively straightforward, the definition of the Universal Postal Service is much less so. The term Universal Postal Service has first been used by the European Commission in its so-called Green Paper in 1992, in which a European postal policy was outlined, the logic of postal market liberalization was spelled out, and the philosophy of Universal Service protection was defined. After a long discussion lasting five years, the Council and the European Parliament adopted the first Postal Directive in 1997, in which significant political decisions were taken and subsequently implemented, both in terms of liberalization and Universal Service protection. The definition of the Universal Postal Service as retained by the Postal Directive conceives the universal postal service as a right of access to postal services encompassing a certain range of services of a certain specified quality to be provided throughout the territory of a Member State at an affordable price. More precisely, the Universal Postal Service is defined by the services involved as well as criteria such as accessibility, frequency, quality of service, and price. In reality, however, this

¹ Directive 2002/39/EC, recital 14.

universal postal service as defined by the Postal Directive was mainly as a codification of “*pre-existing arrangements*”.²

Table No.1: The Universal Postal Service as defined by the 97 Directive (Art. 3).

Range of services	Postal items up to 2 kg (items of correspondence, direct mail, books, catalogues, newspapers, periodicals ...) Postal packages (parcels) up to 10 kg (or 20 kg) Services for registered and insured items
Accessibility	Density of the points of contact and access points according to the needs of users
Frequency of clearance and delivery	One clearance and one delivery every working day and not less than 5 days a week
Quality of Service (transit time)	In line with standards for intra-Community cross-border mail (D+3 85%)
Prices	Affordable and so that all users have access

It is to be noted that the Universal Postal Service, as defined by the First Framework Directive of 1997 does not mention the postal network, which is merely an instrument for providing the service, and not a goal in itself. Universal Service considerations regarding the network – such as for example the density of post offices – have been introduced later on by certain countries (e.g., Germany). But such considerations do remain, up to now, the exception rather than the rule in Europe. In the United States, there is no such clear doctrine about the Universal Postal Service. There, the universal service can be defined as the provision of a maximum degree of effective and regular postal services (to include letters, printed matter and parcels) to practically the entire U.S. population at fair and equitable rates, and the provision of letters and media mail at uniform rates. This applies both to commercial customers as well as to individual consumers.³ In other words, in the U.S. the universal service to the final customer than it is a set of activities performed by the historical operator. In most other countries, the universal postal service is even less loosely defined, if it is defined at all. Often, it is simply equated to what historical postal operators do.

In this paper we will first present the main intellectual perspectives from which the question of the postal network at the crossroad between Universal Postal Service provision and competition can be addressed. It will then present three models of how to conceptualize a network in a liberalized environment, by referring each time an example from a different industry. Here the banking, the railways, and the telecommunications industries will be covered. In a third chapter, the paper will distinguish between two fundamentally different angles to approach a network, namely the angle of the firm on the one hand, and the angle of the macro-economically inspired regulator on the other. In a fourth chapter, we will try to apply the three industry models to the postal sector and explore four possible scenarios of what the postal network might become over the next 5 to 20 years. In conclusion, we will crystallize the key factors which may determine the possible evolution towards one or the other scenarios. However, this paper will not make any recommendations as to which of the scenarios is more likely or more desirable.

² Commission of the European Communities, Commission staff working paper, Annex to the Second Application Report of the Postal Directive (Directive 97/67/EC), 23.03.2005, p. 12.

³ The author wishes to thank Sandra Broadus from the U.S. Postal Service for this clarification.

1. INTELLECTUAL PERSPECTIVES ON THE POSTAL NETWORK

Intellectually, the postal network can be approached from a technical (engineering), from a political, or from an economic perspective, or from a combination thereof. We will not dwell here on the engineering perspective, but simply state that postal technology has significantly evolved over the past 20 years, both in terms of mail handling (e.g., sorting, automatization) and in terms of the use of the information and communication technologies when it comes to supervising such mail handling (e.g., tracking and tracing). Obviously, the very nature of the postal network evolves along technological progress. In this paper, we will take a current state of postal technology as a given, knowing, however, that both competition and universal service provision can be significantly affected by technological progress in the postal sector.

There are basically two perspectives when it comes to approaching the postal network from a political perspective. Both are related and pertain to the Universal Postal Service.

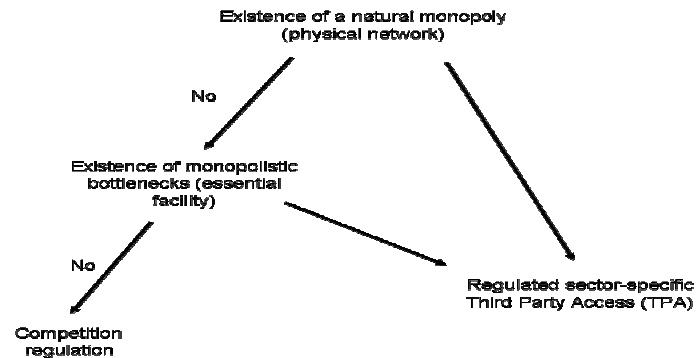
- (1) There is first the purely political perspective of the relationship between the postal network and the Universal Postal Service: here, the postal network is not seen as a tool for providing the Universal Postal Service, but rather as an Universal Postal Service in itself. This is in particular the case of “first mile collection” and “last mile delivery”. The existence of such a network is therefore seen as the guarantee to the consumer – or rather to the citizen – of his or her universal service rights, which are of course politically defined. The public authorities – often represented by the so-called postal regulator – thus ensure this guarantee. So far, only historical operators, called “incumbents”, have been providing a postal network that can be considered to be an universal service. Competition is a secondary issue here, as the primary concern of the political authorities is to ensure the existence of the network. Probably, if competition exists, this should not endanger the postal network that guarantees the Universal Postal Service, i.e., the incumbent which owns and operates the network (see next point).
- (2) Derived from this, there is secondly a public finance perspective of how to finance the Universal Postal Service. i.e., in other words the question of financing the network. This question of financing is obviously directly related to the importance, the extent, and the operations and therefore to the costs of the postal network (for the incumbent). Historically, financing the postal network as always been a major concern to the historical operators, given that their postal networks were generally rather luxurious and therefore costly, defined as they were by political rather than commercial considerations. This is even more so the case today, as incumbents are facing increasingly stiff competition (e.g., Finger, Alyanak & Mollet, 2005) and as consumer needs in terms of accessibility to the network have substantially evolved while the postal network generally has not (e.g., Finger, Alyanak & Rossel, 2005). Historically, also, the postal network as a means for universal service provision was financed by monopoly rents. With liberalization – and monopoly protection tending towards zero – the financing of the Universal Postal Service is put into danger. Several solutions have been proposed, such as the maintenance of a (small) monopoly, a public services fund into which all market players pay, or public subsidies for the provider of the Universal Postal Service. Forcing the competitors to use the network of the incumbent may however also appear as a means to contribute to the financing of the (costly) Universal Postal Service. Such forced access, it is argued, could lower the cost and burden of the Universal Postal Service not only for the incumbent but ultimately for the entire industry.

While these political perspectives ultimately lead to somewhat protecting the Universal Service Provider (USP), i.e., the incumbent which is tasked with the provision of the Universal Postal Service, the consequences of the following three economic perspectives are more contrasted:

- (3) There is, thirdly, a public economy perspective regarding the rationale for duplicating the postal network: indeed, political economists are concerned about the costs of duplicating the postal network as they are for example concerned about duplicating the electricity transmission grid or the railway infrastructure. Would it indeed not make more sense to make a more efficient and productive use of an existing infrastructure instead of investing scarce financial resources into new and ultimately wasteful networks? Such public economic considerations are mostly grounded in considerations about positive externalities to be derived from a postal network. Such considerations, in turn, will lead to a joint usage of the postal network for reasons of overall public welfare gains. This perspective does not take its starting point in a political definition of the Universal Postal Service, but rather in broader considerations about public welfare in networks in light of competition. If it will ultimately lead to access regulation, such access regulation does not necessarily favour the owner of the network, i.e., the incumbent.
- (4) There is furthermore an economic competition perspective. This perspective examines to what extent the (postal) network constitutes an impediment to competition. There are two extreme cases here, namely the case where the network as a whole constitutes a natural monopoly, as is the case for example in the electricity transportation and distribution network or in the case of the railway infrastructure. There is also the other extreme case, where the network does not constitute an impediment to competition, as has been argued for example in the postal sector by de Bijl, van Damme & Larouche (2005). In terms of (network) regulation, both cases are relatively straight forward, where in the case of the natural monopoly the sector specific regulator will (among others) regulate third party access to the network.⁴ In the case of the absence of a natural monopoly, instead, only competition regulation applies. In between these two extreme cases one finds the doctrine of so-called “monopolistic bottlenecks”. Monopolistic bottlenecks define localized, stable, and network specific market power (Knieps, 2002). They constitute areas of a network where a natural monopoly situation is combined with significant sunk costs (Knieps, 2004). Monopolistic bottlenecks in the network industries are often assimilated to so-called “essential facilities” (Engel & Knieps, 1998: 19), which, in order to constitute monopolistic bottlenecks, must display the following two characteristics (see Knieps, 2006): (1) a facility is essential in order to reach customers and no active substitute is available. There is a natural monopoly situation and one supplier can make the facility more cost-efficiently than several suppliers, and (2) the facility cannot be duplicated on reasonable economic terms. There is indeed no potential substitute available. In this case, the costs are irreversible and there is no functioning second hand market for these facilities. In other words, in the case of a monopolistic bottleneck the established firm has network-specific market power just in those areas which present not only bundling advantages and consequently natural monopoly, but also irreversible costs. As a result, the firm which holds the monopolistic bottleneck enjoys stable market power, even if all market participants are perfectly informed, all consumers are prepared to switch provider, and minor price changes lead to a shift in demand. Subsequently, regulation of network-specific market power is

⁴ It has sometimes been argued that, though the postal network does not constitute a natural monopoly, economies of scale are so significant as to constitute a de facto barrier to entry. This argument has however been refuted by van Damme et al. in a recent study (2005).

justified in monopolistic bottlenecks cases along a sector specific regulatory approach. In postal sector PO boxes and address changes are sometimes considered as constituting such monopolistic bottlenecks. The follow graphic summarizes the logic of competition regulation as applied to regulating third party access to networks.



- (5) There is finally an industrial economy perspective (operations research) of how to efficiently operate a postal network. This is the question of the incumbent, or of any firm operating a postal network for that matter. More precisely, the question here is whether to share the entire or parts of the network with ones competitors does or does not make commercial sense. In the postal sector, this approach is commonly known as “worksharing” (see below). This perspective is of course not limited to the postal industry, but actually applies to any firm active along any given value chain, for which the automotive industry has always been the paradigmatic case in the management literature. Obviously, one would not talk here of access regulation, but rather of commercial agreements between the owner of the postal network (value chain) and its (partial) users.

We think that it is important to distinguish these five perspectives, as they are sometimes confused. Each of these perspectives is of course entirely legitimate in its own right and at least the economic perspectives do have solid intellectual foundations. Also, some of these perspectives are combinable, while others are not. For each of these perspectives, the postal network has a different meaning, as does have the access to the network and how to regulate the access to the network. The following table summarizes these differences:

Perspective	Definition of the postal network	Access to the postal network	Regulation
Political	Network is equated to the Universal Postal Service	No access discussion	Protection of the Universal Service Provider
Public finance	Network is equated to the Universal Postal Service	Access as a (possible) means to finance the Universal Service	Access regulation along political considerations
Public economy	Postal network as having positive externalities	Access as a means to avoid duplicating the network	Third Party Access
Competition	Natural monopoly Monopolistic bottleneck	Access as a means to enhance competition	Third Party Access
Industrial economics	Postal network as production / value chain	Access as a means to optimize production / operational costs	Worksharing

2. HOW TO CONCEPTUALIZE THE POSTAL NETWORK IN A LIBERALIZED ENVIRONMENT?

In this chapter, we basically consider the postal network as a more or less coherent technical entity. We ask the question of what happens to this network in a competitive or liberalized environment from a static, rather than from a dynamic perspective. In doing so, we have identified three different models of how a network can be considered. To illustrate each of the three models, we refer each time to a different model. We thus use the example of the banking industry as a model, where networks will be competing and the example of the railways industry as an example where third party access to the entire network has to be regulated. And we finally use the example of the telecommunications industry as an example where third party access has to be regulated to a monopolistic bottleneck, i.e., to the so-called “last mile”.

2.1 Network competition: the example of the banking industry

In the postal sector, people who believe in (postal) network competition are the ones who argue that Posts actually have no physical network and that Posts are not network industries (e.g., de Bijl, van Damme & Larouche 2005). At best, the postal network can be compared to a retail network and therefore Posts should be compared to retailers (food, clothing) or banks.

Let us take the banking industry as an example: according to the European Banking Federation there were in 2004 8153 banks in the European Economic Area (European Union, Switzerland, Norway).⁵ These banks operated 199,901 branches. Over 3 million employees worked in these branches. Europe’s banks were managing assets with the value of 30,577 billion euros.

Obviously it is possible for the banking sector, which is mostly profit oriented, to offer all required services to the general population. It is important to note that the European banking sector itself is very fragmented. For example, there are 2400 banks in Germany, a country with a population of almost 83 million, whereas there are only 346 banks in the United Kingdom, with a population of 60 million. There are all in all a little over 45,000 bank branches in Germany in contrast to around 11,000 in the United Kingdom. This is clearly a significant difference, mainly due to the fact that most of the banks in Germany are publicly owned *Sparkassen* (local savings banks) and *Volksbanken* (local co-operatives). The British banking market in contrast is much more concentrated. But is there a difference in the size of either country’s banking markets or the GDP per capita? German banks were administering assets of 6,663 billion euros, whereas British banks were managing assets of 6,656 billion euros. So, clearly both countries have similar banking markets. Banks also play a very important role in the economic life of any country. The more advanced the banks and the financial markets, the higher the prosperity levels in this country, as banks provide finance to the economy for investments and job creation. Looking at GDP per capita figures will show which country is more prosperous: the United Kingdom leads slightly with \$35,500 per capita versus \$33,200 in Germany⁶. Obviously having fewer banks and bank branches does not have a negative impact on either prosperity levels or quality of banking services.

⁵ European Banking Federation, General Statistics on the European Financial Sector, www.fbe.be

⁶ OECD, , figures for 2004.

At the same time the banking and financial industry is severely regulated. There is multi-layered regulation from national regulators (e.g., the Financial Supervisory Authority in Britain) and central banks, supra-national regulators such as the European Commission and the European Central Bank, and international agreements such as the Basel convention that aims to strengthen the financial stability of the global financial system. Complicating this matter further, certain regulators are able to extend their competencies well beyond their own borders due to their own financial market's strength. Here, the US Securities and Exchange Commission is a very good example.

This example of the banking industry if applied to the postal sector will lead one to conclude that, with sufficient competition, postal operators will put into place the network that best serves their consumers. This is actually already the case in the logistics segment of the postal industry, where consumers are being served thanks to competition among the various operators. Regulation, of the network, in this model, would therefore not be required. However, there are also limits to this analogy, as the banking industry does not have any universal service obligation. Subsequently, there can exist quite a significant number of "unbanked" people, or categories of people for whom banking transactions can be significantly higher than for others.

2.2 Regulated network access: the example of the railway sector

In the postal sector, people who believe that access to the postal network as a whole should be regulated tend to consider the postal network either as being a physical network analogous, for example, to a railway network, or otherwise as being a natural economic monopoly which it is difficult to duplicate for a competitor. They generally also consider the postal network to be equated with an Universal Postal Service. As such public service provision is ultimately the very reason for the existence the network. .

We refer to the railway sector as being a paradigmatic example of such a regulated access model. Railways serve public policy objectives as they enable the population to travel from one spot to the other at modest or decent prices. For example, the Swiss and many other transport ministries believe that rail transport is an integral part of the policy to create social cohesion in Switzerland by connecting all citizens of the Confederation with each other.⁷ Furthermore, the ministry also believes that rail transport has a very important role to play in reducing CO2 emissions and in preserving the environment.

In addition, railways are an integral technical system, as is for example electricity or gas transport and distribution. The coherence of this technical system must therefore be preserved, so as to guarantee its optimal (technical) function. This essentially technical consideration leads to a separation of transport from the infrastructure, whereby the railway regulator must ensure that transport operators will have fair and non-discriminatory third party access to the usage of the railway network. In other words, there should be one national, technically integrated railway infrastructure operator, providing the infrastructure services. The (railway) regulator then makes sure that the transport operating companies can access this infrastructure network at fair prices, as well as at non-discriminatory conditions.

⁷ UVEK, www.uvek.admin.ch, Speech of Transport Minister Leuenberger "Verkehrspolitik ist Gesellschaftspolitik" 26/11/2005.

This model can, in theory, also be applied in the case of the postal sector: one could consider that the integrated postal network of the incumbent – i.e., collection, sorting, and distribution – is the equivalent of a physical network. Other operators could use this network, whereby they would differentiate each other mainly in the services rendered to the final customer. This model, however, remains quite theoretical in the postal sector, as the postal network can be compared to a railway network only by analogy.

2.3 Limited regulated access: the case of telecommunications

Rather than a full-fledged and integrated technical system, many people consider the postal network to be a distribution network, analogous to the “last mile”, i.e., the fixed telephone line connection to the households. Indeed, historical postal operators generally do have a well developed distribution network, and it is worth looking at the telecommunications industry to see what can happen to such a distribution network in the context of liberalization.

In the telecommunications sector, the issue of the last mile has emerged relatively late (Felisberto, et al., 2005). Indeed, it is only after the liberalization of the telecommunications equipment first, and of the telecommunications backbone later, that the last mile became seen as a monopolistic bottleneck and impediment to total liberalization. As such, the last mile in the telecommunications sector defines the physical cable that links the individual household to the dispatching central owned by the historical operator. It is generally not deemed efficient to duplicate this last mile for economic reasons. Therefore, first the European Commission and subsequently the national regulators have forced the historical operators to open up their last miles to the competitors. As a consequence, the competitors now have direct access to the final customers, while simply renting the last mile at a regulated price.

Looking for example at the German telecom market, one can see that the regulator takes a very active approach by forcing the historical incumbent to open up its network to competitors. As a matter of fact, today all operators are allowed to use the network of Deutsche Telekom at a regulated price. These new competitors then re-sell minutes to end-consumers. The impact on the telecommunication industry is obviously very strong. According to the federal regulator, the Bundesnetzagentur, 2304 telecom companies (including mobile operators and internet firms) were registered in early 2005.⁸ Of these 316 were offering voice services using the network of the historical operator Deutsche Telekom and while another 100 were also their own networks.⁹ The impact on competition is even more remarkable when looking at the minutes sold by the incumbent Deutsche Telekom and its competitors. Whereas in 1997 Deutsche Telekom was the sole service provider with 178 billion fixed-line minutes supplied, the market share of the incumbent had dropped to 54 percent in 2004 within a much larger market.¹⁰ Obviously, this also had a profound effect on the price of telephone calls. For example a national call during the day within had been costing 30.7 cents in 1997. In January 2005 the price had dropped to 1.7 cents – a price decrease of 94 percent!¹¹

⁸ Regulierungsbehörde für Telekommunikation und Post, Annual Report 2004 (German version), p. 22.

⁹ Ibid. p. 23.

¹⁰ Ibid. p. 36.

¹¹ Ibid. p. 40.

The downside of this access regulation model to the last mile though is that competitors do not invest into building new landlines. In 1998 there were 46.53 million landlines with a Deutsche Telekom share of 99.7 percent and competitors controlling a tiny share of 0.3 percent.¹² In 2004 the number of landlines had increased to 54.55 million (i.e., by 8 million in a saturated market). The share of Deutsche Telekom had dropped only to 92.4 percent and the incumbents had installed half the new capacity of 8 million new lines. Therefore, one can clearly say that this regulation model is of limited value as an investment, but also as an innovation tool.

This last mile access regulation model can easily be transposed to the postal sector. Indeed, one can argue that the postal distribution network is very similar to the fixed telephone line distribution network, and that competitors should be able to make use of it at regulated prices. This would allow competitors to enter into the market relatively easily, as it would also most likely lead to growing volumes and cheaper prices. But it would of course also disincentivize the incumbent to significantly invest into the distribution network. However, there is also a significant difference when it comes to pricing: indeed, the special feature of the telecommunications industry is that both the sender and the receiver have to pay the fixed fee, whereas in the postal sector there is no price signal from the receiver's end. As a matter of fact, only the sender pays.

In this chapter we have presented three different models of how to consider networks in a liberalized environment, namely network competition, regulated access to an integral infrastructure network, and limited regulated access to a network's last mile (monopolistic bottleneck). While all three models are in theory possible in the postal sector, the second model is nevertheless the least likely one given the fact that the postal network is not a physical infrastructure comparable to a railway or a gas network and thus does not constitute a natural monopoly.

3. TWO ANGLES ON NETWORKS: FIRM AND REGULATOR

Answering the question of network access for new competitors is surely one of the most controversial issues to be solved by the European Commission when further liberalizing while at the same time ensuring the Universal Postal Service. Indeed, the postal network is not only a significant cost factor for the historical postal operator, but it also constitutes a significant advantage over its competitors. Furthermore, it is a significant element of the postal value chain, and its efficient operation is indispensable for any postal operator so as to guarantee both reliability and quality. To recall, in the postal services industry price, speed, reliability, and quality of service are key factors that influence the decision of customers (both businesses and households) whether or not to use a specific postal operator.

The question of network access therefore is of paramount importance to any postal operator. Especially, postal operators with a very good and efficient network must think twice before opening it up to competitors. Likewise, the same question of network access constitutes a crucial question for regulators both when it comes to creating competition and to ensuring a good Universal Postal Service. In this chapter, we will examine both of these points of view on network access, i.e., first the point of view of the firm and then the point of view of the macro-economically inspired regulator.

¹² Ibid. p. 25.

Other points of view could of course also have been considered, and would also have been legitimate, such as for example the point of view of the national political authorities (government) or consumers. If different categories of consumers (e.g., businesses and households) will most likely have different diverging opinions, governments also generally do not have a unified point of view about network access, torn as they are between the conflicting objectives of guaranteeing the Universal Postal Service, financing the Universal Postal service, ensuring competition (via regulation), and protecting their historical operator in the case of public ownership. Some rare governments may be able to reconcile these conflicting perspectives in a more or less stable institutional framework, as is for example the case in the U.S. (e.g., worksharing combined with a Postal Rate Commission).

3.1 The point of view of the firm

From the point of view of the firm, there are both arguments for and against the opening up of the network to its own competitors. As a matter of fact, one can identify two arguments for and one argument against the opening up the postal network:

- A first argument in favour opening up of the postal network pertains to costs. Indeed, if the postal operator has free capacity on its network – especially in the case of loosing market shares due to growing competition – it can be economical to rent out this free capacity to some of its competitors on a commercial basis. Of course, this argument remains positive only as long as the prices for using the network are set commercially and are not regulated, especially not regulated to the detriment of the network owner.
- A second argument in favour of opening up the network pertains to strategy: indeed, the incumbent has no strategic interest in its competitors engaging in network competition. It may therefore be in its strategic interest to open its network to its rivals so as to discourage them from building parallel networks.
- A similar but opposite arguments can be used against opening up the postal network. Indeed, opening up the network to its competitors, even on a commercial basis, always bears the danger of the regulator stepping in. In this case, regulators generally push down access prices so as increase competition, as they generally also want to make it available to ever more competitors.

Overall, one may conclude that, from a firm's perspective, the arguments in favour of the opening of the network to its competitors prevail, provided however that regulatory intervention can be avoided in the long run.

3.2 The point of view of the regulator

When considering to regulate access to an incumbents postal network, regulators may look at one or more of the four first perspectives outlined in chapter one, i.e., the perspective of guaranteeing the Universal Postal Service, the perspective of financing the Universal Postal Service, the macro-economic perspective of not duplicating the network, and the perspective to foster competition. In this section, we will discuss two dilemmas the regulator is faced with when deciding about access to the historical operator's network, namely the dilemma between symmetric and a-symmetric access regulation on the one hand and the dilemma between regulated and negotiated access ton the other.

Regulating access to an incumbent's network is, by its very nature, a profoundly a-symmetric activity. But, depending on network access conditions and price, this can be made more or less a-symmetric. In other words, the regulator has it in his hands to decide what market share the incumbent must lose and what degree of competition is deemed acceptable. The debates and experiences of the telecommunications sector may serve as a perfect illustration here. But, in addition to telecommunications, considerations about the Universal Postal Service and its financing play a much more important role in the postal sector. Therefore, a-symmetric regulation favouring market opening and the loss of market share of the incumbent always has to be balanced against considerations of whether – thanks to a given access price – the incumbent will be able to finance its Universal Service obligations, as defined by the political authorities.

A second dilemma pertains to the nature and degree of regulatory intervention in the case of access regulation. It has become common in some other network industries – and especially in electricity and gas – to make a distinction between regulated and negotiated access regimes:

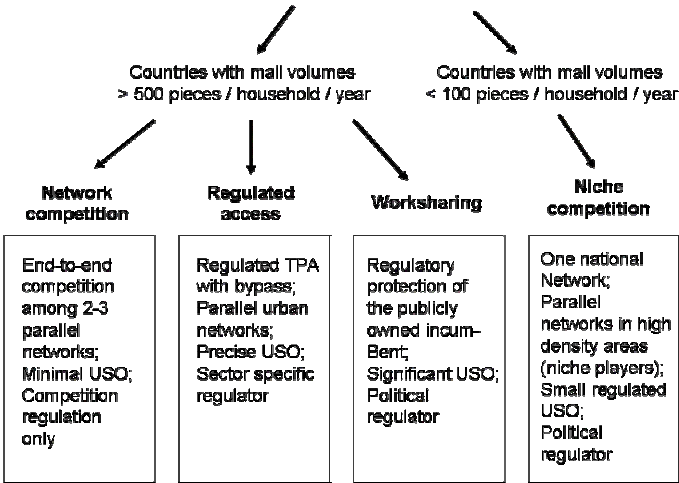
- Regulated access refers to strict and transparent rules on so-called Third-Party Access (TPA), where are defined ex-ante. Such rules generally pertain to access points, access prices, interoperability standards, and others more. In the case of the postal sector, such ex-ante defined access rules may pertain to monopolistic bottlenecks as seen in chapter 1, such as for example to the access to PO boxes, address changes, other data bases, and perhaps the distribution network of the telecommunications model is chosen.
- Negotiated access refers to the legal obligation imposed upon the historical operator to allow competitors to use its network on a commercial basis. There is also regulatory intervention in the case of negotiated access, but such regulator intervention is basically ex-post, i.e., the regulator intervenes only in the case the owner and the users of the network cannot agree. Generally, the regulator also oversees and approves the access contracts, basically from a competition regulation perspective (e.g., abuse of dominant position). However, experience in the electricity sector shows that the negotiated access model is unstable, as it sooner or later ends up in a regulated access model. If applied in the postal sector, a similar evolution is also most likely to take place.

In this chapter, we have presented the points of view of the firm and of the macro-economically inspired regulator when it comes to access to a network. We can conclude that, while it may make commercial sense to open one's network to competitors, there is also an almost natural tendency for regulators to step in and to regulate such access in an ever tighter ex-ante fashion. This natural tendency will still be reinforced if one adds considerations on organizational dynamics and bureaucratization.

4. FOUR POSSIBLE SCENARIOS FOR THE POSTAL SECTOR

In this chapter, we want to combine considerations of the above three chapters into four possible scenarios regarding the possible evolution of the postal network. As a matter of fact, these scenarios build on the three models outlined in chapter two but are slightly modified so as to accommodate the considerations made in chapters one and three. The scenarios have been discussed and refined during the regulatory experts meeting of the International Post Corporation on February 22nd 2006 in Brussels, and the author wishes to thank all participants for their input. The following four possible scenarios have thus been identified, namely (1) full-fledged postal network competition, (2) regulated

Third Party Access to the incumbent’s network, (3) worksharing, and (4) a situation where the historical operator maintains a network with emerging competition only in selected niche markets. The following graphic summarizes these four possible scenarios:



4.1 Full-fledged postal network competition

This first, looking the following two scenarios builds on high volumes in letter mail. It foresees two to three full-fledged competing postal networks in any given country with only competition regulation as regulatory intervention. In other words, there will be no network access regulation. There may of course still be some regulation pertaining to the Universal Postal Service, but such Universal Postal Service regulation would basically be limited to granting and supervising licences on Universal Post Service, and would have nothing to do with the definition of and the access to the network. In fact, the Universal Postal Service would be minimal and exclusively be defined in terms of services to the weakest consumers (e.g., a postal safety net), whereby the provision of these services would not be tied to any particular network characteristics. We have argued elsewhere that this evolution towards full-fledged network competition is further being accelerated because of technological developments and evolving consumer behaviour (see Finger, Alyanak & Rossel, 2005).

In this scenario postal networks evolve along consumer demand and market developments. Both investing in and scaling down of networks will obey strictly commercial considerations. If there is demand, services will be offered to household consumers and especially business customers and networks supporting these services will be developed. And this is what is already happening in both business and consumer logistics (mostly parcels) where regulation has remained very light so far. Such network competition has already favoured and will continue to favour large logistics operators such as DHL, UPS, or Federal Express, which can actually afford to build parallel networks. For Europe, this will most probably mean that a few European postal operators will become pan-European service providers. Incumbents of small countries may then integrate such pan-European postal networks in a very similar way as is currently the case in the air transport industry.

4.2 Regulated Third Party Access to the incumbent's network

Unlike the previous scenario, this scenario foresees regulated Third Party Access to the postal network of the Universal Postal Service provider, which is most likely going to be the incumbent. Such regulated Third Party Access may in fact just be an intermediary step towards bypass, whereby competitors are allowed not to use the incumbent's network, in which case parallel networks are likely to emerge in densely populated (urban areas).

While this scenario does foresee a precisely defined Universal Postal Service, the main driver for this scenario however is competition (and not financing of the USO), and the model is somewhat inspired by the deregulation of the last mile in the telecommunication's industry (e.g., Nicholson, 1994). This means that a sector specific postal regulator will force the incumbent to open up his distribution network, his sorting centres, his PO boxes, his address databases, or even his collection network, as well as other elements of his value chain, to competitors, arguing that these elements constitute monopolistic bottlenecks impeding competition. Depending on the degree of pressure the regulator wants to put on the incumbent, he can choose a regulated or a negotiated access model, even though, as we have seen above, there is a strong likelihood that the regulated model will ultimately prevail. The current regulatory practice in the United Kingdom can be seen as a possible illustration of this second scenario, which can, by the way, further evolve. Indeed, one can imagine, for example the fragmentation of the national network into zones with different zonal prices, as one will most likely also observe the emergence of somewhat artificial markets as created by regulatory intervention.

4.3 Worksharing

A third possible scenario is what we call "worksharing", a term which has been coined in the context of the United States. However, our scenario is not simply a copy of the US practice, but rather a somewhat idealized version of it. Indeed, we use the word "worksharing" so as to highlight the fact that there is no regulator defining access conditions and prices, as well as the fact that the prices for utilizing the incumbent's network are more or less freely negotiated between the incumbent and the competitors and supervised by a politically inclined "regulator". There are two arguments which justify this scenario, i.e., the Universal Postal Service on the one hand and competition on the other.

- Unlike in the case of the regulated access scenario, the very reason for this worksharing scenario is the existence and political guarantee of an Universal Postal Service, defined in terms of (mail) distribution to individual households as end users using criteria of quality, accessibility and affordable price. Also, this scenario foresees some sort of Universal Postal Service provision licence given to the universal service provider, i.e., most likely to the incumbent. With this licence, the universal service provider simultaneously receives Universal Postal Service obligations and targets, as well as the exclusivity for distribution. In other words, bypass is not possible and the incumbent is somewhat protected from end-to-end competition.
- On the other hand, the competitors have right to feed mail into every point of the postal value chain, i.e., collection, outward sorting, transport, inward sorting, and delivery. The universal service provider in turn has the commercial freedom to negotiate the prices for using its network (value chain). In doing so, the universal service provider is accountable to the political regulator, which simultaneously takes on competition and sector specific regulation functions.

This worksharing scenario obviously offers significant opportunities for large as well as for small scale competitors, which can become specialists in some of these postal access points and corresponding production processes. Especially small operators will use the opportunity to increase their business by specialising in those areas where they have a comparative advantage over other operators. While a strong historical operator will remain, this scenario will however favour the emergence of significant, probably rather small scale competitors.

4.4 Niche competition

This fourth niche competition scenario builds on low mail volume s(less than 100 pieces of mail per household per year). It is therefore not economical for a competitor to build parallel networks, except perhaps in very densely populated urban areas. This scenario does foresee a certain Universal Postal Service which is equated with some of the activities of the incumbent. There may or may not be a regulator, but in any case such regulation will be quite political in nature, as both the Universal Postal Service provision and the financial viability of the incumbent must be ensured. Competition regulation will in any case be a secondary concern.

5. CONCLUSION

Each of these four scenarios somewhat strikes a balance between the guarantee of an Universal Postal Service on the one hand and competition on the other. While the first and the second scenarios (network competition, regulated Third Party Access) are more inclined towards competition, the third and the fourth scenarios (worksharing, niche competition) are more inclined towards Universal Service protection and the protection of the Universal Postal Service provider, for that matter.

One may ask which factors actually favour one or the other scenario. Obviously, all scenarios depend upon market development (scenarios one to three will only develop in the case of sufficient market maturity). Also, all the scenarios also depend upon politics, namely the politically desired degree of competition and even more so the political confidence (or absence thereof) in the incumbent. This is particularly the case of scenarios No.1 and No.2. Let us mention that the evolution towards one or the other scenarios will also depend upon the existence, the nature and the power of the regulator. This is particularly true for scenario No.2.

Finally, one may ask to what degree these scenarios are stable or not. Obviously, scenario No. 1 is the ultimate stable situation, but also scenarios 2 and 4 can be considered as being relatively stable, while scenario 3 appears to us to be relatively unstable in the long run.

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