Finger, Matthias; Alyanak, Ismail; Mollet, Patrick

Postal Sector Overview and Dynamics

Ecole Polytechnique Fédérale de Lausanne,
Chaire de management des industries de réseau

June 2005 **MIR-REPORT-2005-005**

Abstract

This paper analyzes the change in the postal sector over the past 20 years and in particular the strategic drivers that are transforming the postal services industries such as institutional, market and technological developments. Taking the argument from here this paper defines the four major response strategies of postal operators all across the world to analyse how different firms and countries are reacting to the challenges of increased competition and changing consumer behaviour, also in preparation to impending liberalisation of postal markets. Finally the paper looks at the emerging and dominating influence of information technology on the postal services industry.

The analysis indicates that while the past changes have been driven mainly by deregulation policies, future changes, are likely to be driven by the information and communication technologies (ICT). Moreover the paper explores the dual role of ICT both as a change driver and as an opportunity for historical postal operators to successfully transform into modern adaptive enterprises, thereby turning the threat of ICTs into an opportunity to become high-technology services firms.

Table of content

1. HISTORY AND CURRENT STATE OF THE POSTAL SECTOR

Historically, posts date back to the first civilizations (e.g., Egypt), where messenger services served mainly the military. Later on, as commerce developed, messenger services also accompanied and supported commercial and clerical activities. In the late Middle Ages, private messenger services between cities became well established and actually turned out to be a commercial success. With the emergence of the modern Nation-State, postal services became nationalized all over the world and integrated into the State administrations. As a consequence, international postal activities became regulated as part of agreements between national governments. In this context, one must mention the creation, in 1874, of the Universal Postal Union in Bern, Switzerland, an organization which still exists today.

Ever since the 19th century, postal operators evolved as part of the development of the Nation-State and its public administration. In the late 19th century, telecommunications activities were integrated into the postal operator, giving rise to what became called the PTT, i.e., Post, Telephone, and Telegraph. Postal activities were monopolistic and driven by national political objectives, such as the support and development of communication activities, regional development, employment, and national cohesion. The environment for postal operators was stable, protected by national boundaries and monopoly. Also, technological progress in postal matters was very limited, as postal operations were mainly a manual activity, characterized by collection, transport, manual sorting, and manual distribution. Over this period, postal operators, in many countries, also became the main national employer. Yet, for posts little changed until the age of globalization.

This changed in the late 1970s and especially during the 1980s. Indeed, especially as a result of quality problems, private operators emerged offering in particular express, courier, and to a lesser extent parcel services. At the same time globalization quickly increased the need for cross border trade, most of these express couriers quickly expanded their services to the transnational level.

In parallel, a new phenomenon called "remailing" appeared in the postal sector. Remailing consists of collecting mail in one country, transporting it a country in which the prices are lower, and then resending it to the country of origin or to the addressee. Such remailing took advantage of the international agreements of the Universal Postal Union, yet helped some postal operators to garner significant profits. Over time, remailing decreased in importance, as most operators adopted it.

A significant liberalization effort was also introduced in 1992 by the European Commission. Three documents are particularly relevant here, namely it's Green Book, dated 1992, a First Framework Directive of 1997, and a second Framework Directive dated 2002. In its Green Book, the European Commission defined its thinking in postal matter and structured the future postal sector. In its 1997 First Framework Directive, the European Commission precisely defined the Universal Postal Service. Finally, in its 2002 Directive, the monopoly protection was reduced to 100 grams in 2003 and will be further reduced to 50 grams in 2006. We will discuss the role of the European Commission in restructuring the postal sector in chapter 2 in more detail.

Finally, the industry in the 1990s experienced a significant decline in mail revenues.

All these triggers of change have had, by the end of 1990s, significant effects on the historical postal operators. As a result organizational transformations had to be conducted to create professional corporate structures, change attitudes, move away from conducting business like an administrative entity and become agile market driven organizations. As part of this process, postal operators mainly focused on process innovation. This was also necessary, as there was no possibility to increase revenue by raising prices for postal services and products, and as the postal market was and still is no growth market.

In the 1990s the regional reactions to the changes introduced in the 1980s varied:

In Europe the combined triggers of change– i.e., the emergence of global competitors, re-mailing, the separation of telecommunications and financial services from posts, as well as the emerging role of the ICTs and especially the role of the European Commission – led to some very substantial changes. To recall, Dutch Post was by far the first one to move, basically because Posts and Telecom were not separated there and were transformed jointly: Dutch Post and Telecom were corporatized as KPN already in 1981 and only separated in 1998. Their Postbank was sold off and privatized in 1989. Deutsche Post was the next major operator to become corporatized in 1995 at the same time it was separated from Deutsche Telecom and the Postbank. Other operators followed suit in this corporatization process, notably the Scandinavians. By now every European country, inside or outside the European Union, has initiated reform processes to make their operators ready for competition.

The United States Postal Service is in the midst of a transformation plan, launched in April of 2002, in response to declining mail revenues. As a matter of fact, the United States Postal Service (USPS) is, since long, mainly active in the mail sector, while express and parcels are mainly handled by the private operators where UPS had a 47% market share in 2003, while Fedex had a share of 27%, and DHL 7%. The USPS is the biggest historical postal operator worldwide with revenue of $66 billion in 2003, making it the 11th largest corporation in the United States.[1] USPS remains a government department. A recent report by a Federal Commission argues to maintain the USPS as a public enterprise with the aim to service the citizens of the USA, rather than to privatise it. The Commission also suggests, that post offices should not be closed even though they may generate substantial financial losses.[2] Rather, the Commission argues that these losses are compensated by the induction of work sharing methods whereby certain processes (mail handling, sorting) can be performed by private companies, with the USPS only in control of the last mile.[3] With this work sharing policy USPS granted discounts to its partners totalling $15.2 billion and generated another 187,000 postal employees.[4] The American work sharing model offers a viable alternative to the European model of creating several vertically integrated operators competing against each other.

In contrast to Europe and North America, Asia's economies are growing vigorously and as such are currently the most dynamic in the world. Furthermore, the economies of Asia are increasingly integrating into the world economy and becoming a very important part of the global supply chain for manufacturing products. This means that efficient postal services are important to their economies. In Asia, there are ample opportunities for just-in-time and express delivery. Another important development is obviously the increased use of the information and communications technologies. Although protectionism is a serious issue in Asia, much more than in Europe or North America, there

---

1 President's Commission on the United States Postal Service (2003), p. 1.

2 Ibid. p. xiv.

3 Ibid. p. 84ff.

4 Ibid.

is nevertheless significant competition, for example in the express market.[5] Over time, therefore, the Asian postal market will very much resemble the European market with a number of global operators competing with national and regional players.

Much of the developments in the postal sector outside the industrialized world and highly dynamic Asia are driven by World Bank policies, as well as by regional development banks, especially in Latin America and Africa.[6] However, unlike the European Commission, the World Bank approach to postal reform is mainly aimed at improving operations of the historical postal operator, generally by creation public-private-partnerships with private firms, or even by delegating the management of the historical postal operator to private firms altogether, as was for example the case in Argentina or Trinidad and Tobago. As a consequence, historical operators of some developing countries have managed to successfully modernize – either by themselves or with the assistance of donor countries or the Universal Postal Union (e.g., Tunisia, Morocco, and Tanzania). However, in many of the developing countries, the historical operators lack the means to restructure and modernize, thus falling more and more behind.

The postal industry over the past 20 yeas has experienced substantial changes which caused it to restructure itself. We have identified three strategic drivers that continue to transform the postal industry today.

---

5 International Postal Corporation (2004), *Strategic Perspectives on the Postal Market 2004-2006*, Brussels, p. 53.

6 The World Bank Group (2004), *The Postal Sector in Developing and Transition Countries*, Edited by Pierre Guislain.

2. STRATEGIC DRIVERS FOR TRANSFORMING THE POSTAL SERVICES INDUSTRY

2.1 Institutional and regulatory drivers

The European Commission has initiated a reform to reduce the monopoly protection of the historical operators (currently up to 50 grams in January 2006) and should ultimately abolish it. At the same time, the European Commission defines a so-called Universal Postal Service, which governments in turn impose upon their own historical public operators. From this combination – imposed Universal Postal Service obligation and monopoly reduction – comes a significant pressure on the historical postal operators, which are forced to restructure and become more efficient. The European approach is being looked at in other parts of the world, notably in Asia, even though this approach may ultimately not be without problems (see below).

Another major institutional actor in the postal sector is the World Bank. Indeed, the World Bank does play a role in the developing countries, where it has financially supported national governments to restructure their historical postal operators. The World Bank focuses mainly on national structural reform in which postal operator's corporatization, modernization, and privatization is often only one element of broader country specific regulatory reform efforts and not on postal sector reforms.

Finally, the third major actor in the global postal sector, the Universal Postal Union, has not played a major role in global postal sector reform, as it has mostly focused on the improvement of quality of service inside and across countries. However, it has not focused on major postal operator's restructuring, nor on sectoral reform, and this mainly because of a lack of financial means.

2.2 Markets dynamics and competition

2.2.1 Changing consumer behaviour

Consumer Behavior must be seen in the broader context of both globalization and the new information and communication technologies. As can be seen from the annexed data, 80% to 85% of total volumes in industrialised countries are generated by business customers who are increasingly globalizing.[7] At least the express market, and to a lesser extent the parcels market are increasingly international, while the mail market still remains mainly national. Overall, customers want faster, more reliable postal services, more choice of product (including more sophisticated products, such as tracking) and competitive prices which meet their individual requirements. Says the International Post Corporation *"the trend in demand is for postal and logistics services to be more standardised, available from a single buying point, across geographical areas and transport modes, for all consignment weights and types, in a range of time-definite options"*.[8] Finally, let us also mention that customers, especially bulk or direct mailers are organizing themselves into increasingly powerful lobbyists arguing in turn for better conditions from the operators.

---

7 Matthias Finger, Ismail Alyanak, Pierre Rossel (2005), *The Universal Service in the Communications Era*, Lausanne.

8 International Post Corporation (2004), *Strategic Perspectives on the Postal Market 2004-2006*, Brussels, p. 16.

2.2.2 Competition

Parallel to the globalization of the express and the parcel markets, new entrants have emerged – e.g., Fedex, DHL, TNT, UPS and national and sub-national parcel and express operators– some of which have been absorbed again by some of the historical operators or have been forced to collaborate in broader alliances. This in turn has led to postal operators not only offering global supply chain solutions, but offering logistical services. The aim of such multinationals is to save money by outsourcing those logistics to postal operators by cutting down warehousing and organizational costs.

Competition is also encouraged by customers and regulators who want to open up national markets to competition. Currently incumbents still generally have a market share of well over 90 percent in the letter market.[9] It is important to note that, with variations, 50-80 percent of letter mail volumes are still in protected reserved areas, but we anticipate that competitive pressure will only increase in the years to come. The following figure indicates the various degrees of market share of the historical postal operators in the different regions of the world and the different segments.

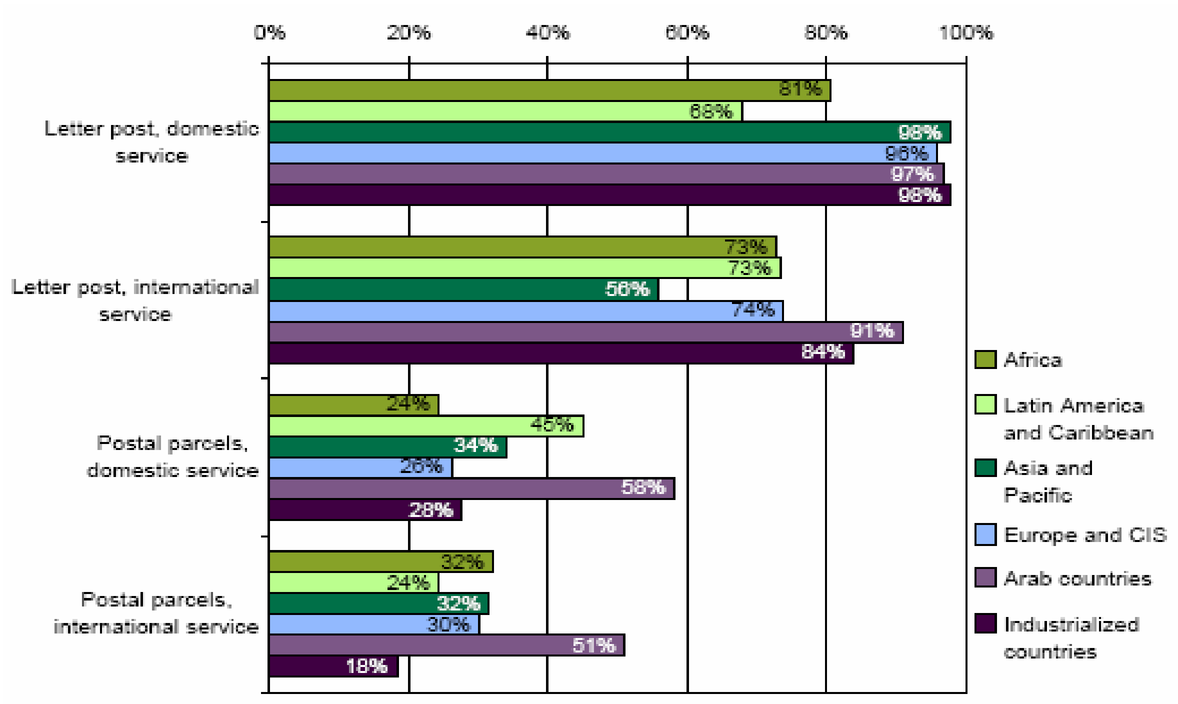

Figure 1: Market share of the historical operators by market segment and region (2002/2003). Source: UPU, Postal Market Review 2004, p. 13.

Finally, and as a result of growing competitive pressure in a mature market, one can already observe a significant concentration of processes. Just like in the airline industry, operators are integrating international networks, if they are not taken over by one of the big public operators, such as Deutsche Post World Net or TNT. Quite interestingly, it is the big former public operators which appear to be the most active ones in this concentration process (see chapter 3). For example, in the courier, express and parcels (CEP) business that is fully open to competition only a handful of companies are

---

9 Ecorys, Development of competition in the European postal sector, Study for the European Commission, Brussels 26 April 2005.

dominating the market in Europe. Since Europe has the most advanced and liberal postal market regime it may serve as an indicator of the evolving degree of concentration worldwide, as indicated by the figure below.

2.2.3 Suppliers

As postal operations increase in size and complexity, suppliers in postal matters are becoming increasingly important, both in hardware and software solutions. One may think here of the growing need for sophisticated sorting technologies (e.g., Siemens, Alcatel), other postal hardware (e.g., Pitney Bowes) or software solutions. As such, suppliers are evolving into significant stakeholders of the sector, and start to play an increasingly important role in its restructuring and future evolution.

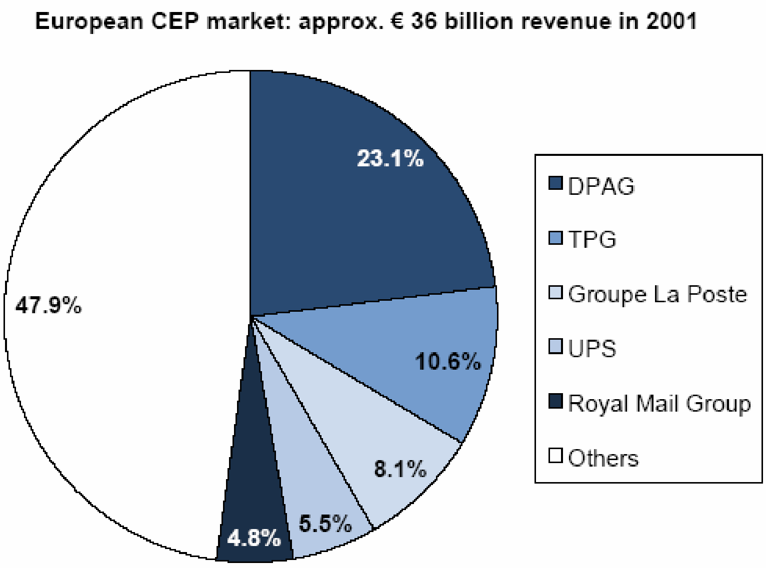

Figure 2: Main players in the European CEP market.
Source: wik consult (2004), p. 27.

2.3 Emergence and Impact of Information Technology

The ICTs are a significant factor that transforms and shapes the future of the postal industry. According to both the Universal Postal Union (UPU) and the International Post Corporation (IPC) especially letter mail has significantly slowed over the past years.[10] IPC, for example, estimates that letter mail volume growth in the 1990s has starkly slowed when compared to growth rates of the 1980s. At the same time the IPC argues that the correlation between GDP growth and letter mail volume growth is not holding anymore.[11] This so-called substitution effect in letter mail is attributed to the growing use of email and the internet by the consumers[12].

[10] International Post Corporation (2002), *Strategic Perspectives on the Postal Market 2002-2004*, Brussels, p. 21.

[11] Ibid. p. 18ff.

[12] Nader, Fouad H (2004), Mail Trends, Stamford, p. 1.

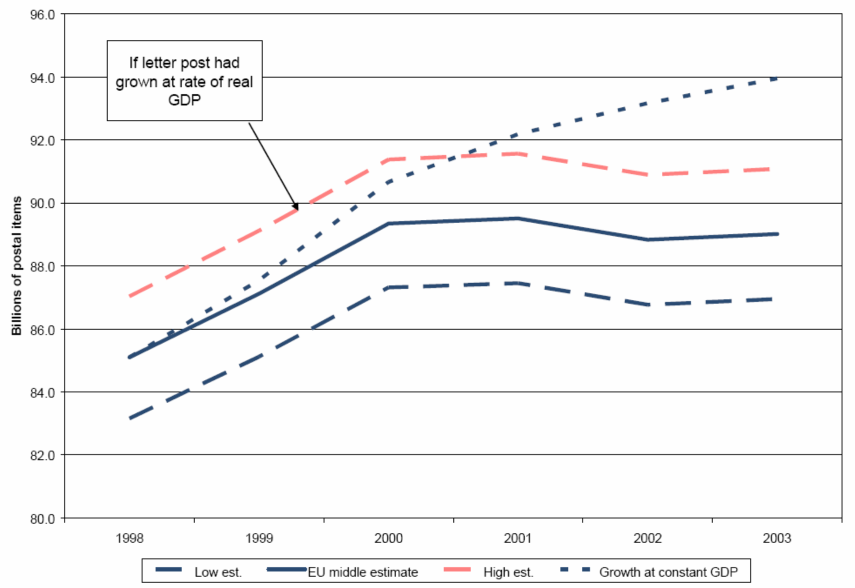

Figure 3: Letter mail growth forecasts in Europe.

What makes these ICTs particularly pervasive is the fact that they act simultaneously on a product and on a process/production level. Overall, the ICTs increase the availability of information to customers and thus reduce the information stronghold that the enterprise holds over the business. As a result, the customers are being empowered and can somewhat take control over the products and services. One can expect significant competition and innovation from this evolution, and only companies with the technical and organizational capability to be transparent to their customers will gain. At the same time the ICTs enable the postal operators to create new products and services and expand their revenue streams. Finally, the ICTs will also lead to significant efficiency gains in the production process, and postal operators capable of making best use of them will overall be better off in the future.

However, there are also signs which point into the opposite direction: Indeed, some argue that not only letter mail, but especially parcels and express may will be induced by the ICTs, rather than being substituted.[13] This phenomenon can best be understood by the changing consumer demands, as illustrated by the following figure.

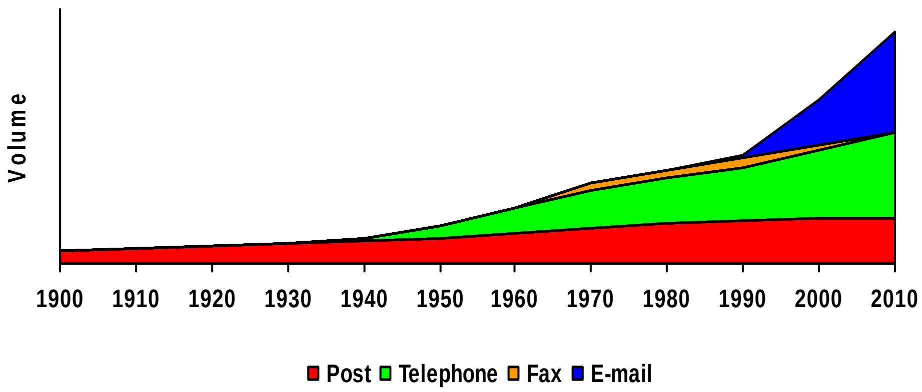

Figure 4: Communications developments.
Source: Matthias Finger, Ismail Alyanak, Pierre Rossel (2005), *The Universal Service in the Communications Era*, Lausanne.

13 Nader, Fouad H (2004).

The above figure clearly indicates that, on top a traditional ways of communicating by means of letter mail and even telephone, a new means – the internet – is emerging. One can anticipate that this will not be without consequences on the traditional forms of communication. We suspect that such new forms of communication may well substitute traditional letter mail, but will induce instead parcels and direct mail in much larger proportions.

As for production processes, the active use of the ICTs has already led to significant efficiency gains for most of the incumbents, a development which, in turn, has stimulated the market. Of particular interest here is the way the historical operators have made use of the ICTs when innovating: let us mention, in particular, the tracking and tracing technologies, as well as other investments into improving speed and quality of the postal service, such as for example high tech sorting centers. Indeed, thanks to the ICTs the historical postal operators have managed to simultaneously achieve several goals, namely efficiency gains in the production process, speed and faster delivery times as well as significant quality improvements. Today, most European historical postal operators do make active and systematic use of the ICTs in their production processes, and such improvements in the production process have also led to new products (e.g., tracking and tracing). Like in all other sectors that have opened up to competition, the customers have overall profited and the market has been stimulated and to a certain degree integrated at a supra-national level. In chapter 4 we will take a look at the possibilities opening up thanks to the use of information technology more closely and in much more detail.

But the postal sector has managed to turn the ICTs into a competitive advantage also when it comes to products and corresponding innovation. Indeed, the historical postal operators have developed attractive new services which make much more active use of the ICTs. Table No. 1 offers an illustrative list of such new postal services based on the active use of the ICTs:

Table 1: New ICT based postal services.

- online application to design and send direct mailings (including the online sale of mailing addresses),
- online ordering of all kinds of material, including stamps with the design and business logo of the customer,
- online shopping for stamps, envelopes, packaging material, letterboxes, storage and forwarding of mail, to different addresses and on different delivery days,
- integration of physical and non-physical mail through a dedicated, customized web-site (e.g. the mail is presented electronically and the customer may choose what he wants with it: deliver, archive, print, delete. Also other services are possible here like payment of bills),
- address changes (forwarding mail and also informing mailers about the address change),
- instead of trying to deliver the parcel in a standard way (irrespective whether the customer is at home or not) the recipient receives a notification through email or SMS with several delivery options (e.g. to drop-off points with 24-hours availability).
- Finally, there are also more flexible options for package returns, payments, and others more.

Consequently the Universal Postal Union (UPU) has created the term *“e-post”* to characterize the fact that the ICTs can and are being used to generate new postal business in the form of new services and perhaps even new postal business models.[14] Rather than simply transporting letters and parcels from A to B, the ICTs do indeed offer significant new possibilities to add value to such transport, and, by

[14] Universal Postal Union (2004). *Guide to Postal Reform – Module I – Foundation for Reform.* Bern, p. 8.

doing so, to help the historical postal operators become much smarter, as well as more customer focused.

In short, the proactive and systematic use of the ICTs by the historical and other postal operators in both product and process innovation has enabled them to face the threat of substitution in the mail segment and to actually take advantage of the internet and corresponding customer behavior in the parcels segment of the market. The postal industry has been able to reap significant benefits from the emergence of information technology by boosting productivity, launching new services, improve existing services, establish real-time management tools, improve working conditions for postal staff, refine management procedures, improve customer relations, and lowering operational costs. This has all been achieved thanks to the fact that, through the ICTs, value has been added to the traditional mail, parcels, and express services.

3. MAIN STRATEGIES PURSUED BY THE HISTORICAL OPERATORS

The developments in the postal industry as described above have a profound effect on the postal market and its major players. And the major players, so far, remain the incumbents, i.e., the national historical operators. In this chapter, we will identify the strategic options available to these historical postal operators, whereas in the next chapter we will examine in more detail whether and to what extent the ICTs can help these operators in their strategies. Indeed, given their respective strengths and weaknesses, postal operators across the world will be quite logically pursuing different strategies to prepare for an ever more competitive national, regional, and global postal market. They will inevitably have to become adaptive and flexible enterprises, and this regardless of the strategy they will pursue. We can already distinguish four major strategies pursued or likely to be pursued in the future, namely strategies of global integrators, of specialized players, of defenders, and of developing players. As a matter of fact, the last one is a strategy of government, rather than of an operator. We will analyze these four strategies in some detail, but before doing that, we will examine a series of underlying criteria, which to a large extent determine the strategies that can and will be followed.

3.1 Underlying criteria

Several factors determine what kind of strategies and operator has at its disposal and how he will be able to act in an ever more competitive market. We have identified four such factors, namely (1) the relationship between the historical operator and its government, a phenomenon also called "asymmetric market development", (2) type of ownership, (3) size of the home market, and (4) the degree of diversification. Together, these four factors significantly determine how a historical postal operator will be able to react to the above identified trends, and how the competitive postal landscape of the future will look like.

Like in all other liberalizing industries, market development is, at least in the beginning of the process, relatively uneven and differs from country to country. This is mainly due to the fact that the postal operators are historically public companies, and therefore the relationship between the postal operator and its government determines, to a large extent, whether and how the postal operator can or cannot take advantage of liberalization. Even in Europe, and though the Postal Framework Directive is mandatory for all EU member countries, it is put in force in a very heterogeneous manner in the different countries. This market disequilibrium creates opportunities for early moving incumbents from more protected markets to compete for more open markets while the opposite is not possible. Some companies can use reserved-area profits or national protection more generally to invest in other fully liberalised markets, a situation which is of course grossly unfair from a purely competitive point of view. One therefore would expect incumbents with a protected home market (or otherwise low competition) and a subsequent steady cash flow to go global and enter aggressively new markets. However, this strategy can only be observed in some rare cases (e.g., Germany). Rather, in countries with no serious signs of a full market liberalisation incumbents have not managed to become full scale global operators whereas the highly liberalised market of the Netherlands has generated a global player such as TNT. Some level of competition therefore (in conjunction with a large enough home market and easy access to capital from the financial markets) seems to be necessary to entice an incumbent into seeking to play a global role.

Almost identical considerations can be made with regards to ownership. Companies such as TNT, FedEx, UPS, and Deutsche Post which are listed on the stock market have relatively easy access to capital, whereas fully publicly owned operators which are not corporatized do not have this opportunity and are often constrained by limited public finances. There are also significant differences when it comes to government intervention. Listed companies are generally freer to pursue strategies solely based on rational business decisions and financed by the private sector whereas government owned or influenced firms have often stronger public service constraints. Letting the incumbents into private ownership seems therefore to be a strategic move, by which a government can increase the competitive ability of their postal operator. On the other hand, government ownership can impose constraints on the adoption of the most cost effective or profit maximising strategies. Political control can also prevent incumbents from investing in private companies or from entering into alliances. Ownership, together with the broader strategic attitude of governments vis-à-vis their operators, does therefore significantly influence the strategic capability of a historical operator.

A third factor determining this strategic capability pertains to the size of the home market. Indeed, a large home market (such as Germany, France, the United States, or China) means automatically a better starting point for an incumbent. Incumbents in large markets were and still, are able to build up larger and highly connected infrastructures which provide them with higher economies of scale. This asset enables them to enter new markets with a wider revenue basis, as well as cost-covering volumes. Also, related to the size of the home market is the market share of the incumbent in that market. As each and every European incumbent has maintained at an average a dominant share of 95% in the home letter market, the importance of the size of the home market becomes obvious. In 2004, for example, DPWN still holds a comfortable 92.2% market share (2003: 96%) in the German letter market which generated the necessary cash flow to finance expansion. Similar figures can be found for all other European incumbents in their respective letter markets. The importance of the home market becomes also apparent if the quota between domestic and international turnover is compared: In 2000, Royal Mail generated only 7.5% and La Poste 12% of its turnovers abroad. Only DPWN (33%) and TNT (75%, due to the small home market) have significant international turnovers.[15]

Keeping in mind that the future of the European postal market cannot be analysed on the level of mail business, it is obvious that the open, scale-intensive logistics market will drive and shape the future postal market. The fourth factor influencing the competitive behaviour of an incumbent postal operator is therefore the degree of its diversification. At the least, diversification covers letters, parcels, and express, but can extend to other services, such as financial services, or other value added services. It is such diversification which will allow a historical operator to create competitive differences and advantages. Diversified incumbents invest generally more time and money into market research and strategy development. On the other hand, over-diversification may well also be problematic as scarce resources may become spread too thin.

In a very simplistic way, one may conclude that, faced with liberalization, there are mainly two types of operators: on the one hand there are these operators which are capable of taking advantage of liberalization, whereas on the other hand there are the ones which, for one reason or another, cannot. The group of operators capable of taking advantage can again, in our opinion, be split into two, namely so-called global and specialized players. Among the global players, one can find European

[15] Source: annual reports of the companies involved.

Posts which have been capable of taking advantage of liberalization, but one can expect others (e.g., China Post, Japan Post, USPS) to follow suit, once their regulatory framework has been adjusted. Whereas large global and regional operators are actively seeking to expand into other markets, the strategy of most small posts can be described as being one of “cautious expansion”. Most European Posts, for example, have some interests or operations abroad, but are generally satisfied with their actual position. As a consequence, they are not expected to undertake bigger offensive moves in the near future, focused as they are on their niche markets and on consolidating their existing positions.

In short, one can conclude from this analysis of the underlying factors, that the historical postal operators do all have strategic options available to them, but that these options will heavily depend upon a series of factors, the most important of which certainly pertain to their past and current relationship with their respective governments, as well as to the size of their home market. We can therefore now turn to the four types of strategies we think are currently available to historical postal operators.

3.2 Global integrators

Global players, in our analysis, are historical postal operators which have been capable of taking advantage of liberalization and have or are about to create a globally integrated postal network which they either own or significantly control, and this in all three market segments that are express, parcels, and increasingly also mail. Postal companies pursuing this strategy follow their multinational customers and related trade flows and outsourced logistics. This process is very similar to what happens in the airline industry, where a limited number of historical national operators – e.g., Lufthansa, Air France, British Airways – have built up global networks of alliances (e.g., Star Alliance, Sky Team, and OneWorld). We predict a similar evolution in the postal sector, where integrated express, parcels, and perhaps mail services will be offered by two to three parallel networks, with at their core Deutsche Post World Net, TNT, and perhaps La Poste. This consolidation and network creation process is progressing along three main axes of vertical integration, horizontal integration, and diagonal integration:

- Vertical integration was pursued through upward linkages, thus increasing their reach by offering new product lines such as air transport services or logistical services, so as to take care of the whole transport and warehousing chain. Another form of vertical integration was pursued through downward linkages by buying courier and express companies, so to be able to service customer to the last mile (i.e., the homes of end customers). Obviously, the aim is to create an integrated service by offering the whole management of the supply chain under the single roof of the global integrator. At the same time, the economies of scale which are being built up can be used to increase the efficiency of the entire supply chain process by lowering costs for both the global integrator as well as the (end-)customer. Clearly, companies not following this route will struggle to remain competitive just as small airlines are forced to link up to large and globally integrated airlines.
- In this process, global integrators are buying competitors in other geographical areas, so as to expand their global reach and to build up their global network. Initially, global integrators have entered foreign markets which were open for competition and where legal and political hurdles were low for non-domestic firms. Therefore, it made sense to enter new markets via the acquisition or the setting up of express and parcel businesses, especially since this segment was already

operating within liberalized market conditions and did not belong to the reserved area of the national posts. Alliances and minority strategic shareholdings may also be part of this strategy to increase the global reach of global integrators, especially where taking over another firm is not opportune due to political or legal reasons.

- Finally, global integrators are teaming up with enterprises from other sectors in order to complement their production and marketing strategies. This is especially the case in conjunction with the upcoming information technologies that force all postal companies to offer new products and venture into unchartered territories that hitherto had been occupied by either media or telecommunications firms. For example track and trace services are to be found in this group. The general aim of diagonal integration is to allow for cross selling of new products in order to increase the profitability of the company on the basis of existing product lines. Just as with vertical integration, extra business can be generated by offering the customer a (virtual) one-stop shop.

The strategy of the global integrator is to expand their coverage both in horizontal and vertical ways so as to capture the market for so-called third party logistics and to act as a one-stop-shop for their industrial customers, whom they are following to markets abroad. Such postal operators are turning into full scale logistics companies. This way postal companies are taking care of the whole transport process from door to door of their industrial customers. It can be expected that only a handful of postal operators will play such a global role. Through consolidation and takeovers these global integrators will increase their market power even more, as they already have large networks generating enough cash-flow to further increase their market shares. The concentration and consolidation of the market around two to four such global integrators will also mean that the world will be served by a small number of relatively efficient postal operators that are able to use economies of scale. This will enable them to provide price-efficient services to their customers, as well as increase margins to secure a good return on the vast assets invested into the infrastructure. All other players will somewhat have to define themselves in relationship to these global integrators.

3.3 Specialized players

But this does not mean that a handful of global operators will by themselves dominate the global market. There will remain enough room for the other historical postal operators to position themselves, in particular if they have special competencies, be they geographical or commercial. Specialized players are therefore former historical operators seeking out a commercial niche, most likely by combining it with a geographical (e.g., regional) specialization. Possibly, they will be developing a regionally dominating role without global ambitions, be it in Europe, Asia, Latin America, or the Arab world. So far, we see such specialized players mainly in Europe because of their relative efficiency and their technical expertise (e.g., Danish Post, Swiss Post, but also New Zealand Post). But several postal operators from rapidly developing countries could also play a regional role, both because they have been restructuring rapidly and efficiently and because they have a strong home market (e.g., Malaysia Post, South Africa Post, Tunisia Post).

The relative success of these specialized players will heavily depend upon financial and political constraints. Per definition, such specialized players will not have the financial clout to expand on a large scale, simply because they will not have a sufficiently big or sufficiently lucrative home market, or because they have liberalized relatively late and were not able to take advantage asymmetric competition. Others still may have legal or political constraints, whereby they may lack the political support for privatization – as a pre-condition from raising money from the capital market – or simply be burdened by costly public service obligations. Others, like Royal Mail for example, may be handicapped by strong regulatory pressure constraining their profits and their competitiveness.

We think that there is room for a certain number of such specialized players, each having probably a regional focus, without however being obliged to join one the global alliances or networks. Again, the airline sector may serve as an analogy for this evolution, where strong specialized regional players continue to thrive outside of the main alliances (e.g., Emirates, Malaysian Airways, Turkish Airlines). Their success will depend, we think, on the following factors, namely to have particular high quality niche products, to successfully use the ICTs in their products, their processes, and their own management, to have a large home market, to be able to resist and compete successfully with invading global integrators in their home market and perhaps region, and to be able to expand their business into neighboring territories. In conclusion one can say that such specialized players can be expected to fulfill their role very well and they will probably be highly competitive in their respective markets, though clearly they will not be able to compete on a global scale.

3.4 Defensive players

Defensive players are small incumbents who have not managed, for several reasons to transform themselves sufficiently rapidly and sufficiently profoundly so as to take advantage of the liberalizing postal market. Consequently, these defensive players focus on their respective domestic markets and try to defend it as good as long as possible against the intrusion of both the global and the specialized players. Consequently, these posts are natural takeover targets and have to work out intelligent defense mechanisms to remain independent as well as profitable. Most likely, however, they will end up being integrated into one of the global networks or alliances, again like in the airline sector (e.g., Austrian Airlines, Scandinavian Airline System). In general, these defensive players mainly come from small markets and in certain cases, though less frequently, from countries with low postal development. Overall, we can identify the following constraints these defensive players are facing, most of them pertaining to legal and political factors:

- There are indeed often legal constraints which have hindered these historical operators to play an expansive role. For example, many postal operators were not allowed to expand abroad and act very much like a department of the national government. Consequently, they were not able to invest into foreign assets and had to remain within the Universal Postal Union mechanism for their trans-boundary activities.
- Political factors may also prevent or have prevented an operator from expanding. Indeed, there may have been strong domestic resistance to modernize the company and introduce private sector management methods, as well as conduct financial and organizational restructuring. In this case, postal operators are not able to cut their costs domestically to make finances available for expansion into new business areas. Furthermore, regulatory forces may have imposed costly public service obligations onto the postal operator, thus handicapping him.
- Also, some operators are simply not able to play a broader role due to the limited size of their home markets, and because they did not or were not able to move early enough so as to benefit from first mover advantages. This is typically the case of many of the operators in the accession countries and Central Asia, which were constrained by the political reality of the end of the Cold War.

The most commonly followed strategy here is to make up for the deficits of geography and size through the increased and smart use of information technology. Companies in small markets and other defensive players have to resort to alternative methods to keep their market shares stable and confront an attack by specialized and global players attempting to enter their markets. Vertical integration, as in contrast to just horizontal integration, might be the solution. Clearly, small players have to attempt to use the value chain more efficiently to wring out as much revenue from these value chains as possible. Also, another strategy to be followed is to team up with one of the larger companies and build alliances with global and regional players. It may very well be that a global integrator views the costs of entering a market as being too high and decide to align itself with a defensive operator. This will especially be the case in markets where traditional monopolies still persist and are unlikely to fall anytime soon. But it may also be worthwhile for a global integrator or specialized player to simply take a share in a small player. Such a strategic partnership would give the small player access to the global or at least regional network of the new partner company without having to build up these infrastructures on their own. Clearly, this strategy allows to efficiently use economies of scale. It is quite likely that such alliance systems will be built up along the lines of the alliances in the airline industry so to avoid unnecessary duplication of postal infrastructures.

3.5 Developing players

A fourth type of strategy pertains to some postal operators of developing countries and emerging markets. We call them “developing players”. They are constrained by both their weak national economies and their political systems and generally do not have the capacity to even defend themselves against the global integrators and the regional players. Furthermore, they are not attractive as takeover targets, given the state of their infrastructure, the amount and quality of their human resources, and the high degree of political interference. At times, even their own political authorities may have lost interest investing in them, given their difficulties to provide even the most basic public services. Many of such developing players can be found in Africa and Latin America.

In short, these developing players are often no longer strong enough by themselves to develop a strategy, as their future depends heavily on national macro-economic and demographic factors, i.e., on national economic development. In this case, the strategy to be adopted is not a firm strategy, but a strategy of national economic and infrastructure development, which in turn pertains to macro-economic policy. In this case, the key actors are often not the national government, but the World Bank or the regional development banks, which include postal operator reform within broader postal sector reform, and even more broadly within infrastructure reform. Political strategy therefore here consists mainly of creating a stable political climate, legal and regulatory security, a favorable investment climate and environment, a capable workforce, a solid management structure and team, and a good corporate governance mechanism and structure.

Finally, let us mention the fact that the ICTs will play a key role in this overall strategy for infrastructure, postal sector, and operator reform: indeed, here the ICTs will not just be seen as new products, improved process, or enterprise management tools. Rather, they will also be seen as a broader infrastructure in the service of economic and social development. And postal operators will be seen as a contributor to such new generation communication infrastructures. Not only is the challenge of postal reform bigger here, but so is the potential of its overall contribution. Needless to say, that posts, if successfully reformed, can make a significant impact on the development of these countries.

3.6 Conclusion

We have identified, in this chapter four types of strategies postal operators (or their respective governments in the case of the last strategy) can adopt so as to adapt to the liberalizing postal sector. In this conclusion, we would like to highlight, in a rather normative way, the six key factors that must be taken into account if one wants to successively adapt to liberalization, namely geographical expansion, product development, mergers and alliances, internal restructuring, reducing political, and corporate structure.

However, we think that there is one other key success factor which must be explicitly addressed, i.e., the particular status and role of the ICT. Indeed, we do think that even the global integrators will not be successful in the long run, if they do not manage to permanently innovate in terms of products, production processes, or simply overall management methods. An in turn, such innovation is not possible, in our view, without successful integration of the ICTs in all three areas.

4. THE ROLE OF THE ICTS IN SUCCESSFUL POSTAL BUSINESS STRATEGIES

The ICTs offer indeed new opportunities to all postal operators whether they are global integrators, specialized players, defenders, or developing players. Without doubt, they all can make use of these ICTs in order to pursue their respective strategies. The IPC speaks of the "*new postal market*", where information technology will help to formulate "*e-strategies*" as part of the already begun transformation process.[16] Indeed, with the help of the information and communication technologies these postal operators will be able to quickly adapt to market changes, further increase their internal efficiencies thereby cutting costs, offer new products, and develop new customer relationship capabilities (e.g., electronic identity services, .customer relationship management, multimedia capabilities for direct mail).

Probably the most interesting aspect here is that the ICTs offer yet another opportunity to expand besides the traditional geographical expansion route, which has mainly been dominated by the global and specialized players. Indeed, the ICTs offer the prospect of growing independently of their size and home markets, as the internet provides an almost unlimited platform for customer contact and with little possibility for the large operators to dominate. In fact, small players might very well team up with traditional software or internet firms so as to offer completely new services and therefore transform the postal market and industry. Just as small internet firms have been able to impact the global economy, small postal operators may become more competitive and innovative with the help of information technologies.

4.1 Process innovation

With growing competitive pressure, restructuring and streamlining of internal procedures appears to be most important for any postal operator. As we have seen, such restructuring has been undertaken by many of the historical operators since the 1990s. But, with the emergence of the ICTs such internal restructuring is entering yet a new phase. Indeed, improving internal production processes, so as to increase productivity and profitability by way of lowering operative costs appears to be particularly important for defensive players, as they cannot otherwise offset falling or stagnating revenue in their conventional businesses (e.g., letter mail) through expansion into other markets. But also global integrators and specialized players will want to increase productivity and efficiency by lowering the cost of production so as to make funds available for their expansion. Some areas of operational improvements include: mail handling operations, logistics operations, strategic sourcing and retailing.

4.2 Product innovation

Besides improving internal processes all postal operators have to deal with the external side of their business to strengthen their revenue base. We have already said that the ICTs are providing the postal operators with alternative customer interfaces and alternative products and services, or with additional ways of adding value to the existing products. Though still in its infancy and with limited present value to the postal industry, the development of e-post is a strategic move that will, we think, pay in

---

16 Ibid, p. 35.

the future. When embarking on such an e-Post strategy, postal operators will face the competition of telecommunications and internet companies which offer similar communication services. Also, for example, media companies are able to take away business in the advertising mail segment (newspapers delivering brochures with their magazines to their subscribers).

E-Postal services allow postal operators to increase the reach of their traditional products as well as to invent new products and services. Possible opportunities are, in our view, hybrid mail, electronic customer interfaces, catalogue and e-commerce management, supply chain visibility, tracking and tracing of products and services, certification and e-government services, and others more. This would enable especially local players to successfully resist global and regional players that want to enter their market, making it possible even for small postal operators to offer the full range of products and services on a global scale.

4.3 Enterprise management

Last but not least, postal operators continue to be one of the largest employers in their national markets. They need to modernize their management systems and techniques so as to fully control and drive the transformation strategies required for postal operators become successful. Ultimately, and in order to function effectively and efficiently as an organization, every company has to have enterprise structures in places that enable it to optimally fulfill its objectives. Such structures can substantially be improved by the use of the information and communication technologies by making them adaptive and reducing their overall cost. This is true for large players in the postal sector that want to be able to retain full control of their expanding operations without generating exploding costs, as much as for defensive players that want to concentrate on their home or niche markets. Specifically a postal operator may want to look at the following areas of ICT-enhanced postal enterprise management: financial services operations, customer management, business analytics, human capital management and enterprise operations management such as real estate, logistics etc.

4.4 Conclusion

In conclusion, let us nevertheless formulate a word of caution: if the ICTs are indeed powerful tools to help postal operators face the above outlined challenges, they constitute by no means a miracle solution. Indeed, ICTs can not substitute for strategy and especially not for tough decision, for example in the case of restructuring. However, the ICTs can help make information transparent, manage and structure such information, and therefore help make the right decisions. As such, the ICTs are an enabler of a strategy, not a strategy by themselves.

Depending on the strategy available to and chosen by the postal operator, the ICTs can of course play different roles:

- strategies of global players will therefore focus primarily on ICT-based enterprise management solutions, considering the amount of information available, as well as the complexity of global firms. But they will also focus on improving and streamlining processes by means of systematic and innovative uses of the ICTs.
- Specialized players, instead, will primarily be concerned by new ways and means of using the ICTs for product development and product innovation. In addition, the ICTs and especially the internet

may also be used to reach out beyond to new customers and especially to extend activities beyond the national borders.

- Defensive players, in turn, will start out by focusing on restructuring, and use the ICTs primarily for process improvements and innovations. Accessorily, they may also be looking at new ICT-based products.
- As for developing players and especially their respective governments, the ICTs do indeed offer significant opportunities, not so much for restructuring the postal operator, than rather for including the national postal operator in their overall national ICT strategies. And this in two different ways: on the one hand, the postal operator is simply one of the sectors touched by an overall national e-government or e-governance strategy, aimed at better services On the other hand, the national postal operator may also be one of the key players precisely in implementing such a strategy.

In short, no matter which type of postal player is concerned and which type of strategy is chosen, we are convinced that the ICTs do have a significant role to play in it. While the ICTs, as said above, are not in themselves the solution, there is, on the other hand, no solution without the ICTs either.

5. CONCLUSION

In the first chapter of this paper we have outlined the changes the postal sector has undergone over the past 20 years. We have argued that this change has been substantial and unprecedented and has led postal operators to loose significant market share in the parcels and the express, but not yet in the letter segments. However, letter mail has also come under pressure, yet not so much as a result of new entrants and growing competition, but mainly as a result of substitution. New communication patters, along with new information and communication technologies have indeed substituted mail. In chapter two we have then identified the main underlying drivers of these postal sector transformations: we have seen that it is especially regulatory changes that have initially driven the postal sector followed by emerging competition and related market dynamics. But we have argued that the most recent and also the most pervasive underlying driver of change in the postal sector have been and continue to be the information and communication technologies. We think that the full consequences of these ICTs onto the postal industry are not yet visible. In chapter three, then, we have identified and described the main strategies available to and chosen by the postal operators to face these sector-wide transformations. In particular, we have distinguished between the strategies of global players, specialized players, defensive players, ad developing players. While the three first are currently being adopted by different historical postal operator, the fourth one basically is a strategy to be adopted by governments, as postal operators in some developing countries are too weak to face the challenges of the transforming postal sector by themselves. In chapter four, finally, we have shown that and how the ICTs can play a role in helping the different postal operators realize their respective strategies. More precisely, we have distinguished between making use of the ICTs for postal process improvement and innovation, for product innovation, and for enterprise management. While all three types of uses of the ICTs are available to all postal operators, different strategies will of course proprietarily focus on different uses.

In short, one can summarize the main messages of this study as follows:

1. A postal operator which – after all the changes the sector has already undergone and as likely to undergo in the future – thinks that it does not have to transform itself is probably lost. In other words, the transformation of a postal operator is unavoidable and in most cases already substantially under way.
2. The information and communication technologies are increasingly becoming the main driver of the postal industry, and their role is multifaceted and highly pervasive: besides driving organizational and product changes like in any other industry, the ICTs also create new communication patterns and consumer behaviors and by doing so change the very nature of postal communication. In the future, we think, posts can no longer be thought independently of the information and communication technologies.
3. Different postal operators – depending upon their historical background – respond differently to these challenges. We have identified in this study four such possible strategies. Yet, in each of these strategies, the ICTs will inevitably play a key role, be it in support of process, product, or enterprise management innovation.

6. ANNEX

In 2003 the overall revenue generated by the global postal industry amounted to $259 billion according to the Universal Postal Union.[17] 91 percent of this revenue was generated in industrialised countries (USA, Canada, EU and other Western Europe, Japan, Australia). Revenue breakdown based on product segments was as follows: 58 percent of revenue was generated with conventional letter mail, 23 percent with parcels and logistics services, 14 percent with financial services and another 5 percent with other services.

Table 2: Postal revenue make-up in 2003.

Region	**Letter mail**	**Parcels/Logistics**	**Financial Services**	**Other**
Africa	60%	10%	19%	11%
Latin America	62%	20%	3%	15%
Asia/Pacific	31%	13%	42%	14%
East Europe	44%	6%	26%	24%
Arab countries	45%	4%	30%	21%
Industrialized countries	60%	25%	12%	3%

Source: Universal Postal Union.

According to the UPU in 2003 there were 660,000 post offices all over the world. The number of employees working in those offices was approx. 5 million. Both the number of post offices and postal employees is recording a steady fall. Especially the number of post offices in the industrialized countries has fallen dramatically, and continues to do so, i.e., in average by 15 percent in the period since 1988. Likewise global postal staff numbers have fallen by 20 percent in the same period from 1988 up to 2003. According to the UPU, the post office density is still highest in industrialized countries with 4,062 persons served per post office. The figures for the other regions are: Africa 85,022 persons served per post office, Arab countries 36,558 customers per post office, Asia and Pacific 24,876 customers per post office, Eastern Europe 5,564 customers per post office and in Latin America 21,408 customers per post office.[18]

In 2003 in total 430 billion letters have been sent. The vast majority was sent domestically with 424 billion letters and “only” 6 billion were sent to an international address. In the five years to 2003 domestic letter mail traffic has increased on average by 0.5 percent annually, whereas international letter mail traffic has decreased on average by 4.7 percent annually. The following table gives a good overview about letter mail traffic, domestic and international, of the various regions (all figures in billions of items):

[17] Universal Postal Union (2004), *Postal Market 2004 – Review and Outlook*, Bern, p. 5.

[18] Universal Postal Union (2004), *Postal Market 2004 – Review and Outlook*, Bern.

Table 3: Letter mail past growth and forecast.

	Domestic		International	
Region	1999-2003	2004-2008*	1999-2003	2004-2008*
Africa	-7.60%	1.30%	-9.80%	0.00%
Latin America	2.20%	1.60%	-10.30%	1.60%
Asia/Pacific	-1.00%	0.00%	-6.20%	-1.50%
East Europe	2.80%	1.70%	-4.70%	0.90%
Arab countries	-4.10%	2.70%	-9.40%	2.30%
Industrialized countries	0.60%	-0.50%	-3.40%	-0.50%

Source: UPU.

In 2003 4.4 billion parcels in the domestic service were delivered all around the world. In the international service only 47 million parcels were delivered that year.[19] In other words, parcels do still have a limited market share, yet tend to grow more rapidly than letters. And again, parcels are mostly sent domestically. The following table offers an overview of this market segment (all data in millions of parcels delivered):

Table 4: Parcels past growth and forecast.

	Domestic		International	
Region	1999-2003	2004-2008*	1999-2003	2004-2008*
Africa	2.70%	-0.40%	-10.80%	1.30%
Latin America	10.00%	2.50%	10.80%	3.00%
Asia/Pacific	-3.00%	-1.10%	2.60%	1.10%
East Europe	-5.00%	1.20%	3.70%	1.40%
Arab countries	1.40%	3.40%	-1.30%	2.60%
Industrialized countries	1.70%	0.50%	3.30%	0.60%

Source: UPU.

In 2003 total volume of express items globally was 34.7m, up 6 percent from the previous year.

Table 5: Evolution of the express market.

	2002	2003	Change
Africa	0.3	0.3	0.00%
Latin America	1.5	1.6	6.67%
Asia/Pacific	13.0	14.3	10.00%
East Europe	0.7	0.7	0.00%
Arab countries	0.6	0.8	33.33%
Industrialised countries	16.6	17.0	2.41%
Total	32.7	34.7	6.12%

Source: UPU, Postal Market 2004, p. 9

[19] Ibid p. 8.

In short, one can thus see a relatively stagnating and still mainly monopolistic mail market, a slowly growing parcel market, and growing express market.

Légende tableau

Légende figure

7. BIBLIOGRAPHY

[1] Commission of the European Communities. 1992. Green Book on the Development of the Single Market or Postal Services. Brussels.

[2] Commission of the European Communities. 2004. White Paper on Services of General Interest. Brussels.

[3] Ecorys. 2005. Development of competition in the European postal sector. Study for the European Commission. Brussels.

[4] FINGER, Matthias, Ismail ALYANAK, Pierre ROSSEL. 2005. The Universal Service in the Communications Era. Lausanne.

[5] International Post Corporation. 2002. Strategic Perspectives on the Postal Market 2002-2004. Brussels.

[6] International Post Corporation. 2003. Strategic Perspectives on the Postal Market 2003-2005. Brussels.

[7] International Post Corporation. 2004. Strategic Perspectives on the Postal Market 2004-2006. Brussels.

[8] NADER, Fouad H. 2004. Mail Trends. Stamford.

[9] Universal Postal Union. 2004. Postal Market 2004 – Review and Outlook. Bern.

[10] Universal Postal Union. 2004. Guide to Postal Reform – Module I – Foundation for Reform. Bern.

[11] WALSH, Tim. 2001. Delivering Economic Development. London.

[12] World Bank Group. 2004. The Postal Sector in Developing and Transition Countries. Edited by Pierre Guislain. Washington.