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**ESTIMATION OF THE PROFIT IMPACT ON THE INCUMBENT POSTAL  
OPERATORS FOR DIFFERENT SCENARIOS OF LIBERALISATION**

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**Introduction**

Modelling profit impact of different weight/price limits on the national providers' profitability, follow the concept developed and applied in the „upstream liberalisation study“ created by CTcon.

The profit impact calculation proposed in this paper compares profitability after liberalisation to profitability of each national postal operator before liberalisation.

Profitability is measured as the profit on turnover. There are define profit impact of liberalisation as the difference in profit rate on sales after liberalisation as compared to the profit rate on sales in 1997. The relevant profit rate refers to sales from items of correspondence up to 350 g.

**1. The profit impact model**

Estimating current and future profit rates, refer to data received from the postal operators directly during the course of the two CTcon studies on postal liberalisation. Figures given in the 1996 or 1997 annual reports are also applied.

Profit impact is basically calculated as:

$$\text{Profit Impact} = \text{Revenue Impact}_{\text{abs}} - \text{Cost Reduction}_{\text{vol}}$$

and

$$\text{Revenue Impact}_{\text{abs}} = V_{\text{lost}} * P_{\text{today}} + V_{\text{lib/attrleft}} * (P_{\text{today}} - P_{\text{compet}}).$$

$V_{\text{lost}}$  = Volume lost,  $P_{\text{today}}$  = Price (according to price list) today,  $V_{\text{lib/attrleft}}$  = non-reserved attractive volume left;  $P_{\text{comp}}$  = price in the liberalised competitive situation, Revenue Impact<sub>abs</sub> = absolute revenue impact (in EUR, later to be transformed into a difference in profitability), Cost reduction<sub>vol</sub> = volume driven cost reduction.

### Volume impact on revenues

The revenue impact is composed of the volume impact and the price impact of liberalisation. The volume lost is measured as the volume lost to competitors according to the four scenarios (see next in this paper). It compares the measured volume processed by the incumbent operator in 1997 to the volume calculated from the new market share in 2003. The 2003 volume includes 5 years of market growth. Some operators who serve rapidly growing markets, gain volume, since market growth over-compensates their loss of market share. Other operators suffer a net loss of volume in spite of market growth.

Market growth expectations for the mail market regularly reflect e.g. expectations of changes in gross national product, which varies largely between the European Member States.

We use those market growth rates that were estimated by the national operators during the data collection and verification phase. In most cases these growth assumptions are equally used in the operators' business plans.

The calculations are based on differentiated market growth expectations for letter on the one hand and direct mail on the other hand. Market growth expectations on letters integrated to the analysis range between -2% per annum in one Member State to +6% per annum in another. Market growth for direct mail is supposed to be positive in all 15 countries. The highest expectation amounts even up to 10% growth in volume.

### Price Impact on revenues

The price effect is calculated by applying the price reduction assumed in each scenario to the remaining liberalised and attractive volume. This calculation implies future price differentiation between attractive mail flows (urban and business) on the one hand and unattractive mail flows (rural, private) on the other. Prices for unattractive items are assumed to stay at the initial level.

### Volume driven cost impact

In order to reduce model and research complexity, and assume that between 1997 and 2003 only volume driven cost effects occur. Rationalisation effects are ignored

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completely. Based upon the information generated per country in the study on „upstream liberalisation“ estimate a cost coefficient which describes the percentage of change in total processing costs for every percent of change in processed volume.

The cost coefficient includes several basic assumptions. For each stage in the postal value chain, it has estimated the percentage of variable cost (costs driven by volume changes):

- For clearance, variable costs are limited to the cost for volume directly cleared at business customers. All other clearance costs are basically fixed.
- In case of manual sorting costs may vary proportionally with volume processed; for automated sorting, sorting costs change 0,5% if volume changes 1%.
- At a generally high level of total volume transported, costs for transportation can be reduced proportionally according to volume losses, if volume losses are not marginal. Thus, at the relevant volume levels between sorting plants, the potential cost-impact is next to 100%.
- 80% of the delivery costs for the universal service provider are estimated to be fixed.

The cost coefficient further applies these assumptions to the country specific cost distribution in the postal value chain. The average cost coefficient applied is about 0,25% change of letter costs for each 1% change in letter volume and 0,22% change of direct mail costs for each 1% change in direct mail volume.

In the relevant range of volume changes, the resulting cost coefficient is applied for decreasing volume (volume driven cost reduction) and increasing volume (volume driven increase of costs) respectively.

### Other assumptions

Besides the price impact on revenues and the volume driven cost impact further possible impacts are assumed to be stable. These effects comprise possible effects from inflation either on prices of postal services or on production factors (e.g. wages) and from changes in efficiency.

These assumptions mean that the calculated profit impact relies on the postal operators' ability to compensate increasing factor costs by rationalisation or by increases in prices of postal services (despite the possible effects on prices assumed within the scenarios).

### Results

There are presented the results in this part that are average figures for all of 15 incumbent Member States. Each Member State (or national postal operator respectively) is weighted equally in this average.

The basic finding is, that potential negative effects of reducing reservable area (see DIRECTIVE 2002/39/EC) on the national operator are in many cases over-compensated by expected growth in market volume. Comparing estimated profit on turnover after further liberalisation to profit on turnover 1997, in most cases we identify positive development.

<b>New weight limit</b>	<b>estimated average probability</b>	<b>150 g</b>	<b>100 g</b>	<b>50 g</b>	<b>20 g</b>	<b>0 g</b>
<b>Scenario A</b> Volume -5%, price -25%	30%	14,9%	14,3%	12,4%	8,6%	-9,3%
<b>Scenario B</b> Volume -10%, price -15%	30%	15,2%	14,7%	13,2%	10,0%	-3,8%
<b>Scenario C</b> Volume -25%, price -10%	30%	14,9%	14,4%	12,5%	8,9%	-7,9%
<b>Scenario D</b> Volume -50%, price -5%	10%	14,1%	13,9%	10,7%	5,3%	Not relevant
<b>Weighted average over all scenarios</b> according to estimated probability						
		14,9%	14,4%	12,5%	8,8%	-7,0%

**Tab. 1** Profit impact of the new weight limit in percentage points of profit on turnover from items of correspondence

For example at a 50 g weight limit and with scenario A market reaction, the average European incumbent operator will still have dramatically higher profit on turnover. If he had 10% profitability in 1997 we estimate a 22,4% profitability (+ 12,5%) in the liberalised situation after 2003.

The positive development during analysed period can be explain by two basic effects:

- market growth touches the total volume while competition does only touch parts of the business,
- given large economies of scale, additional volumes trigger substantially increased profit rates.

Relevant aspects that are not explicitly included in the quantitative analysis

Because proposed model is limited, there are several substantial aspects excluded from the analysis that will have measurable positive impact on the operators' observable profitability after liberalisation.

Some of these aspects should be named briefly:

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- Development of service-quality before the date of further liberalisation would make it much harder or even impossible for new competitors to win quickly large market shares as outlined in the above scenarios.
- Product- and price-differentiation efforts could further limit the price reduction and volume loss effects. Acting strategically in the market before liberalisation could put the national provider in a position to clearly avoid e.g. scenario C or D.
- Process rationalisation efforts can and will widen the general profit margin in the postal sector. For many postal operators there is still sufficient potential in rationalisation, so that the competitive effects indicated in the scenarios can be compensated (e.g. automated sorting for the postman's walk).
- Marketing and publicity efforts can and will help to strengthen the incumbent operator's participation in the expected market growth. Those efforts may increase the market growth by activating additional demand for innovative postal products.
- Last but not least, profitability might be increased by actively participating in the European market rather than just defending one national market. International activities in all possible forms (own start-up postal operations or (partial) acquisition of local or national postal players) can and will be used as the European postal market develops.

### Conclusion

This paper shows that - even if a reduction of the reservable area or a not compensated increase of factor costs (e.g. increasing wages) would have net negative impact on the incumbent postal provider - there are still several means to compensate by positively using market conditions. Moreover, the fact of liberalisation may lead to increasing volume (lower prices may induce growth in volume) which will be partly also to the benefit of the incumbent operator.

*Lektoroval: Doc. Ing. Jozef Strišš, CSc.*

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### Literature

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### Resumé

#### **ESTIMATION OF THE PROFIT IMPACT ON THE INCUMBENT POSTAL OPERATORS FOR DIFFERENT SCENARIOS OF LIBERALISATION**

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The paper give one from possible way of kvantification stroke of liberalization postal sector on current postal operator. With respect to lack relevant information is analyse sight on current postal operator in frames EU. By obtaining needed data would be possible apply also on postal sector CR.

From those analyses is evident, that European commission passing successive liberalization of postal sector EU (inclusive CR) would have not peril current postal operator dealt incidence onwards takings growth and dealt incidence going takings advantage of current national postal operators on competition (savings from range and line, sign etc.).

### Summary

#### **ESTIMATION OF THE PROFIT IMPACT ON THE INCUMBENT POSTAL OPERATORS FOR DIFFERENT SCENARIOS OF LIBERALISATION**

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Modelling profit impact of different weight / price limits on the national providers' profitability, follow the concept developed and applied in the „upstream liberalisation study“. Profit impact calculation compares profitability after liberalisation to profitability of each national postal operator.

Profitability is measured as the profit on turnover. There are define profit impact of liberalisation as the difference in profit rate on sales after liberalisation as compared to the profit rate on sales in 1997. The relevant profit rate refers to sales from items of correspondence up to 350 g.

### Zusammenfassung

#### **ENTWICKLUNG EINSCHÄTZUNG DES VORTEILS BESTEHENDEN POST OPERATOREN FÜR VERSCHIEDENE SZENE DER LIBERALISIERUNG**

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Der Artikel präsentiert hier ein aus der möglichen Arten für Einfall Quantifizierung des Post Sektor Liberalisierung an bestehend Post Operatoren. In Bezug auf mangelnde der relevant Informationen ist die Analyse abgezielt an bestehend Post Operator im Rahmen EU. Mit Erlangung der erforderlichen Daten würde möglich auch an Post Sektor CR es applizieren. Aus durchgeführten Analysen es liegt klar zu Tage, dass durch die europäisch Kommission Genehmigung fortschreitend Liberalisierung des EU Post Sektor (einschließlich CR) soll die bestehende Post Operatoren nicht bedrohen einesteils wegen die Folgerungen des progressiv marktwirtschaftlich Wachstum und einesteils wegen die Folgerungen der bestehenden marktwirtschaftlichen Vorteile der bestehenden Innerstaatlichen Post Operatoren gegenüber der Konkurrenz (Spargelder aus Umfang und Sortimentes, Zeichen etc.).

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