



# **Institut for Nationaløkonomi**

Handelshøjskolen i København

**Working paper 5-2001**

**RULES THAT MATTER:  
LIMITS TO COMPETITION POLICY  
HARMONISATION IN EU ENLARGEMENT**

Peter Møllgaard

Jochen Lorentzen

---

**Rules that matter:  
limits to competition policy harmonisation in EU enlargement\***

Peter Møllgaard<sup>↓</sup> & Jochen Lorentzen  
Copenhagen Business School  
[hpm.eco@cbs.dk](mailto:hpm.eco@cbs.dk) & [jl.int@cbs.dk](mailto:jl.int@cbs.dk)

---

**Abstract**

The paper analyses the extent of and the reasons behind limits to competition policy harmonisation in EU enlargement. Our focus is on vertical restraints. First, we compare the relevant legal regimes towards vertical agreements in the EU and in Eastern Europe. We then describe competition policy practice in all ten EU candidate countries and point out differences both between East and West and among the candidates. Finally, we use insights from case studies of subcontractor agreements in the car industry to highlight instances of non-conformity between (1) East European competition law and practice and (2) EU rules and East European competition law enforcement. Our conclusion targets an underdeveloped competition culture as primary culprit for limits to effective – as opposed to merely legal – harmonisation of competition policy in the run-up to EU enlargement.

COMMENTS VERY WELCOME

First draft: March 2001. Revised May 2001.

---

\* This research was undertaken with support from the European Union's Phare ACE Programme 1997. The content of the publication is the sole responsibility of the authors and it in no way represents the views of the Commission or its services. We are grateful to Eeva and Valters Abele (LV), Valdone Darskuviene (LT), Marek Jakoby (SR), Kostadin Kolarov (BU), Mirjam Moènik (SI), Matija Rojec (SI), Eva Soliwoda (PL), Miklos Somai (HU), Tihanió Tótu (HU), Liviu Voinea (RO), Iwona Zaczek (PL), and Alena Zemplerova (CR) for providing key data for this paper. We also thank participants in seminars at the University of Ljubljana and at the Copenhagen Business School, especially Jette Knudsen, for helpful comments and suggestions.

<sup>↓</sup> Corresponding author: Department of Economics, Copenhagen Business School, Solbjerg Plads 3, DK-2000 Frederiksberg, Fax: +45.38 15 25 76

## 1 Introduction

Rules matter. The 1993 Copenhagen European Council specified that candidate countries for EU accession must adjust their administrative structures, “so that European Community legislation transposed into national legislation is implemented effectively through appropriate administrative and judicial structures.” When accession negotiations with the first group of applicant countries started in March 1998, the EC Commission split up the *acquis communautaire* into individual chapters and organised bilateral screenings in which it asked the negotiating teams from Central Europe whether

- they could accept the relevant chapter of the *acquis*
- they had already adopted the laws necessary to comply with the *acquis*
- if not, when they intended to adopt such laws
- whether they possessed the administrative structures and other capacity to implement and enforce EU laws properly
- if not, when these structures would be put into place.

In other words, only when the process of rule harmonisation is complete, will accession happen. Many of the negotiating chapters are already closed. Among the more difficult that remain open is Chapter 6, competition policy. The Commission’s plan is to negotiate the conditions for membership relating to Chapter 6 in the second part of 2001, with a view provisionally to close it. It plans to focus particularly on state aid. Given the history of soft budget constraints in Eastern Europe, this is not surprising. What is surprising is that formal rule alignment features more prominently in EU monitoring than either rule enforcement or rule receptivity by local (i.e. non-EU) subjects (see also Fingleton *et al.*, 1996, chap.9).

This paper explains why this is a problem. Within competition law and policy it focuses on vertical restraints, because this is an area that receives more attention in the EU than in the candidate countries, so it lends itself to a litmus test of whether harmonisation is effective or just an approximation of words. The paper thus adds to the sparse literature covering implementation experience in transition countries (cf. Dutz & Vagliasindi, 2000; Hoekman & Djankov, 2000). Section 2 describes the rules governing vertical agreements in EU competition law. It also covers the rules pertaining to the relationship between the EU and the candidate countries of Eastern Europe. Section 3 characterises similarities and differences between EU and East European competition rules. It discusses how the Commission interprets competition policy harmonisation and suggests what may be wrong with its approach. Section 4 produces evidence of anti-competitive behaviour between domestic and foreign firms in East Europe’s emerging automotive sector. Section 5 concludes.

## 2 The legal regime towards vertical agreements in the EU and in the Europe Agreements

The EU has recently changed its legal regime towards vertical agreements by attempting a more economics-based, less legal-form based, approach towards their assessment. At the same time, the Europe Agreements consider the approximation of competition laws one of the areas that are particularly important for the candidate countries’ economic integration into the European Community (Van den Bossche,

1997, p. 25). This means that vertical agreements will be assessed according to criteria based on Articles 81 and maybe 82 of the EC Treaty at the very latest when EC conform rules have been implemented in the candidate countries. This section gives an overview of the current legal regime towards vertical agreements in order later to use this to assess the conformity of the candidate countries' competition policy, both in terms of substantive law and practice. We end the section by outlining briefly the conditions of the Europe Agreements in this respect.

The basis of the following is mainly Art. 81 of the EC Treaty dealing with agreements although Art. 82 prohibiting the abuse of domination is also partially relevant. We base the overview mainly on the EU Commission's interpretation of the new regime as expounded in its "Guidelines on Vertical Restraints" (Commission Notice, OJ C 291, 13.10.2000, pp. 1-44).

## 2.1 The current EU regime towards vertical agreements

Article 81(1) of the EC Treaty prohibits agreements, including vertical agreements, if they

1. affect trade between Member States, and
2. prevent, restrict, or distort competition.

Such vertical agreements are referred to as vertical restraints (VRs) and these are automatically void. However, vertical agreements may be exempted from the prohibition if their benefits outweigh the anticompetitive costs. This is according to Art. 81(3) that allows the antitrust authority to declare Art. 81(1) inapplicable if (and only if) the agreement:

1. contributes to improving the production or distribution of goods or to promoting technical or economic progress,
  2. while allowing the consumers a fair share of the resulting benefit,
- and does not
3. impose unnecessary restrictions for the attainment of these objectives;
  4. allow the parties to eliminate competition for a substantial part of the products.

The European Commission has adopted Regulation (EC) No. 2790/1999 of 22 December 1999 on the application of article 81(3) of the Treaty to categories of vertical agreements and concerted practices (OJ L 336, 29.12.1999, p. 21), the Block Exemption Regulation (BER). The BER exempts from Art. 81(1) vertical agreements provided that the market share of the **supplier** does not exceed 30 percent of the relevant market. However, in the case of exclusive supply obligations, the exemption is granted provided the market share of the **buyer** does not exceed 30 percent of the relevant input market.

Blacklisted are

- a) resale price maintenance
- b) agreements that have as their objective the restriction of sales by the buyer to customers according to territory or otherwise (subject to four exceptions)
- c) restrictions of active or passive sales to end users by members of a selective distribution system
- d) restrictions of cross-supplies between distributors within a selective distribution system

- e) restrictions agreed between a supplier of components and a buyer who incorporates these components which prevents end-users, independent repairers and service providers from obtaining spare parts directly from the supplier.

Vertical agreements between firms with a market share of less than 10 percent of the relevant market are generally considered to fall outside the scope of Art. 81(1) according to the Commission's *de minimis* notice (Notice on agreements of minor importance of 9 December 1997, OJ C 372, 9.12.1997, p. 13). Thus the BER really has effect on vertical agreements between firms with a market share of between 10 and 30 percent. Vertical agreements relating to all intermediate and final goods and services are covered except distribution of automobiles that is covered by a specific block exemption (Commission regulation (EC) No. 1475/1995, see OJ L 145, 29.6.1995, p. 25). This block exemption is currently under review (see e.g. European Commission, 2000k).

In general, the BER does not apply to vertical agreements falling within the scope of any other block exemption (see "Guidelines on Vertical Restraints" at par. 45). In addition to the block exemption on car distribution, this means that the BER does not apply to vertical agreements covered by Commission regulation (EC) No. 240/96 on technology transfer (see OJ L 31, 9.2.1996, p. 2). However, some intellectual property rights (IPRs) also fall within the scope of the BER. Article 2(3) of the BER includes vertical agreements containing certain clauses on IPRs assigned to the **buyers** and thereby excludes from the BER all other vertical agreements containing IPR clauses.

There are three sets of rules that may apply to vertical agreements containing IPR clauses:

1. BER Art. 2(3)
2. Commission regulation (EC) No. 240/96 on technology transfer
3. The Commission Notice of 18.12.1978 concerning its assessment of certain subcontracting agreements in relation to Article 85(1) of the EEC Treaty (OJ C 1, 3.1.1979, p.2)

According to the Commission, the BER complements the technology transfer regulation and the notice on subcontracting. The Commission opines that Art. 2(3) of the BER means that "the Block Exemption Regulation does not apply when the IPRs are provided by the buyer to the supplier, no matter whether the IPRs concern the manner of manufacture or of distribution. An agreement relating to the transfer of IPRs to the supplier and containing possible restrictions on the sales made by the supplier is not covered by the Block Exemption Regulation. This means in particular that subcontracting involving the transfer of know-how to a subcontractor does not fall within the scope of application of the Block Exemption Regulation. However, vertical agreements under which the buyer provides only specifications to the supplier which describe the goods or services to be supplied are covered by the Block Exemption Regulation" ("Guidelines on Vertical Restraints" at par. 33).

We now go through each of the three sets of mutually exclusive rules on technology transfer and know-how and vertical restraints. We do so starting chronologically with the Notice on Subcontracting, proceeding to the Regulation on Technology Transfer and ending with the BER rules.

### 2.1.1 Notice on Subcontracting

The 1978 Notice on Subcontracting represents the Commission's views on subcontracting and is thus not legally binding. It does however provide a guideline for how the Commission will evaluate such vertical agreements and it is fair to assume that the Commission still adheres to its old view since it is explicitly mentioned in the 2000 "Guidelines on Vertical Restraints" at par. 33. Furthermore, it is to be expected (Fejø, 1997, p. 218) that the European Court of Justice in the interest of legal certainty will respect the Notice insofar as no significant opposing considerations take effect. The next two paragraphs define subcontracting agreements and provide the economic rationale for the exemption of the agreement from Art. 81(1):

"The Commission considers that agreements under which one firm, called 'the contractor', ... entrusts to another, called the 'sub-contractor', the manufacture of goods, the supply of services or the performance of work under the contractor's instructions, to be provided to the contractor or performed on his behalf, are not of themselves caught by the prohibition in Article 85(1) [now 81(1)].

To carry out certain subcontracting agreements in accordance with the contractor's instructions, the subcontractor may have to make use of particular technology or equipment which the contractor will have to provide. In order to protect the economic value of such technology or equipment, the contractor may wish to restrict their use by the subcontractor to whatever is necessary for the purpose of the agreement. The question arises whether such restrictions are caught by Article [81(1)]. They are assessed in this notice with due regard to the purpose of such agreements, which distinguishes them from ordinary patent and know-how licensing agreements." (Commission Notice of 18.12.1978 concerning its assessment of certain subcontracting agreements in relation to Article 85(1) of the EEC Treaty (OJ C 1, 3.1.1979, p.2)).

According to the Notice, Art. 81(1) does not apply to provisions

- restricting the use of equipment or technology made available by the contractor for the purposes of the agreement;
- forbidding the subcontractor to make such equipment or technology available to third parties; and
- imposing on the subcontractor the obligation to supply exclusively to the contractor the goods, services or work resulting from the use of the technology or equipment.

Such restrictions are allowed if the equipment or technology are necessary for the subcontractor to carry out the agreement. Equipment or technology are judged necessary if

- a) it is necessary for the subcontractor to use industrial property rights, know-how, studies or plans, dice, patterns, tools or accessory equipment which distinctively belong to the contractor, and
- b) "which permit the manufacture of goods which differ in form, function or composition from other goods manufactured or supplied on the market",
- c) provided the subcontractor does not have easy alternative access to the equipment or technology needed to carry out the job.

The latter "is the case when the contractor provides no more than general information which merely describes the work to be done. In such circumstances the restriction

could deprive the subcontractor of the possibility of developing his own business in the fields covered by the agreement" (Notice on subcontracting; see also Van Bael and Bellis, 1987, pp. 207-8).

Other restrictions that are considered as being outside the scope of Art. 81(1) are secrecy obligations protecting know-how and confidential information; post-term bans on use of manufacturing processes and know-how; non-exclusive grant-backs for improvements and new applications when they cannot be used independently of the contractor's secret know-how or patents; and restrictions on the sub-contractor's use of the contractor's trade marks, trade names or get-up.

In sum, the Notice on Subcontracting applies when the buyer transfers equipment or know-how to the seller in order that the seller can provide the buyer with goods or services that differ from those found already on the market. The buyer may then restrict the use of the equipment or know-how and request that the seller supply the contract goods exclusively to the buyer, provided that the equipment or know-how is necessary.

### **2.1.2 Regulation (EC) No. 240/96 on Technology Transfer**

The 1996 Commission Regulation (EC) 240/96 of 31 January 1996 on the application of Article 81(3) of the treaty to certain categories of technology transfer (OJ L31, 09.02.1996, pp. 2-13) deals with agreements and concerted practices which include restrictions imposed in relation to the acquisition or use of industrial property rights or know-how. It applies to the licensing of patents ('pure' patent licensing agreements), licensing of non-patented technical information ('pure' know-how licensing agreements) and to combined patent and know-how licensing agreements ('mixed' agreements). For a history and critical overview of the regulation, see Robertson (1996).

The objective of the regulation is to facilitate the dissemination of technology and the improvement of manufacturing processes by giving the licensor sufficient incentives to license her technology or know-how, and by giving the licensee sufficient incentives to invest in complementary assets required in order to "manufacture, use and put on the market a new product or to use a new process."

Article 1 thus exempts from Art. 81(1) of the EC Treaty pure patent licensing agreements, pure know-how licensing agreements and mixed agreements to which only two undertakings are party and which include one or more of eight different obligations. These basically amount to exclusive licensing agreements in which the licensor is obliged not to use the licensed technology in the licensed territory himself or not to grant further licences there. The licensor may also restrict the licensee's active or passive sales into other licensees' territories. The exemption "is granted only to the extent that and for as long as the licensed product is protected by parallel patents" or in the case of restrictions on passive sales for a period not exceeding five years. Pure know-how licensing agreements may be exempted for a maximum of ten years.

Article 2 contains a white list of eighteen types of clauses that can safely be put into a licensing agreement: secrecy obligations, post-term use bans, grant-back clauses, minimum quality specifications, specifications of royalties, ‘most-favoured licensee’ clauses etc. White-listed is also an obligation on the licensee to restrict her exploitation of the licensed technology technically or product-wise. Article 3 then contains a black list of seven situations that are not exempted: price fixing, resale price maintenance, and refusals to deal with parallel traders or that otherwise obstruct parallel trade, and other restrictions on manufacturing, sales and innovations.

The Regulation defines patents rather broadly as including patent applications, utility models, applications for registration of utility models, topographies of semiconductor products, (applications for) *certificates d’utilité* and *certificates d’addition* under French law, supplementary protection certificates e.g. for medicinal products and plant breeders’ certificates. Know-how is defined as a body of technical information that is secret, substantial and identified. By secret is meant that it is not generally known or easily accessible, while substantial refers to the significance for the licensee’s competitive situation. That the information is identified means that the know-how should be described or recorded in such a way as to make it possible to verify the criteria of secrecy and substantiality.

In sum, the Regulation on Technology Transfer Agreements applies when a licensor transfers the right to use a patent or know-how to a licensee in order that the licensee can exploit the technology to manufacture, use or “put on the market” new goods or services. The licensor may then restrict the use of the license and promise that the licensee will not face intra-brand competition in her own territory.

### 2.1.3 Block Exemption Regulation Art. 2(3)

Article 2(3) of the BER extends the general exemption of vertical agreements in Art. 2(1) to "vertical agreements containing provisions which relate to the assignment to the buyer or use by the buyer of intellectual property rights, provided that

- a) those provisions do not constitute the primary objective of such agreements and
- b) are directly related to the use, sale or resale of goods or services by the buyer or its customers."

This rule thus applies to technology transfer moving in the opposite direction of that relating to the Notice on Subcontracting. The purpose of the rule is to allow "vertical agreements where the use, sale or resale of goods or services can be performed more effectively because IPRs are assigned to or transferred for use by the buyer" ("Guidelines on vertical restraints", par. 31). To qualify for the exemption, the IPR provisions must satisfy five conditions ("Guidelines", par. 30):

1. They must be part of a genuine vertical agreement;
2. They must be assigned to, or for use by, the **buyer**;
3. They must not constitute the primary objective of the agreement;
4. They must be directly related to the use, sale or resale of goods or services by the buyer or his customers.
5. They must not contain restrictions of competition having the same object or effect as vertical restraints that are not exempted under the BER.

The first condition ensures that the IPRs appear in the context of purchasing or distributing goods rather than in the context of assigning or licensing IPRs. The "Guidelines" for example explicitly mention (par. 32) as an example not covered by the BER, "agreements under which one party provides another party with a mould or a master copy and licenses the other party to produce and distribute copies". The second condition clarifies that the flow of technology is from the supplier to the buyer, and not from the buyer to the supplier (as in the Notice on Subcontracting). The third condition makes clear (much like the first) that the purpose of the agreement must be the purchase or distribution of goods, not the assignment or licensing of IPRs. The fourth condition requires there to be a link between the assignment of the IPR and the facilitation of use, sale or resale of goods or services by the buyer or his customers. The fifth condition ensures that you cannot circumvent the BER by means of introducing IPRs in the vertical agreements.

IPRs which may be "considered to serve the implementation of vertical agreements within the meaning of Art. 2(3)" of the BER generally fall within three areas:

1. Trade marks;
2. Copy rights;
3. Know-how.

The "Guidelines" (par. 42) mention franchise agreements, with the exception of industrial franchise agreements, as "the most obvious example where know-how for marketing purposes is communicated to the buyer." However, the "Guidelines" are silent as to the application of Art. 2(3) of the BER further upstream.

In sum, the BER exempts from Art. 81(1) vertical agreements which transfer IPRs from a supplier to a buyer in order to facilitate use, sale or resale of the contract good or service.

## **2.2 The Europe Agreements**

At the time of writing the European Community has Europe Agreements with ten countries in Central and Eastern Europe: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia. These agreements include competition provisions and establish that a major precondition for the candidate country's economic integration into the EC is the approximation of that country's existing and future legislation to that of the EC. One of the areas into which the approximation of laws "shall extend in particular" is rules on competition.

In addition, the agreements prohibit restrictive agreements and abuse of dominance insofar as they affect trade between the EC and the candidate country:

"The following are incompatible with the proper functioning of the Agreement, in so far as they may affect trade between the Community and [the candidate country]:

- i. all agreements of cooperative or concentrative nature between undertakings, decisions by associations of undertakings and concerted practices between undertakings which have as their object or effect the prevention, restriction or distortion of competition;

- ii. abuse by one or more undertakings of a dominant position in the territories of the Community or of [the candidate country] as a whole or in a substantial part thereof; ...”

Practices are to be assessed on the basis of criteria arising from the application of the rules of Article 81 and 82 of the EC Treaty. The Association Council has three years to implement the competition rules.

Tóth (1998) gives a fascinating account of the effect of the Europe Agreements on the harmonisation of Hungarian competition law. He argues that the Europe Agreements’ provisions regarding restrictive practices and abuse of dominant positions that affect trade between the candidate country and the EU must be seen as “soft law” for a number of reasons and that not even the implementing rules can be seen as giving direct effect of this article of the Europe Agreements, since the implementing rules foresee that both competition authorities should proceed on the basis of their own substantive legislation. Tóth further argues that a candidate country has an obligation to harmonise competition rules while Member States are free to choose a different legislation. This implies that a candidate country might in theory choose to re-optimize its competition policy, once accession has occurred.

In sum, the candidate countries must copy Art. 81(1) and Art. 82 from the EC Treaty. However, it is noteworthy that the Europe Agreements do not mention an equivalent of Art. 81(3) allowing for the exemptions of the agreements (see Van Den Bossche, 1997, p. 32, and Tóth, 1998, p. 361). However, it appears that the candidate countries have copied not only Articles 81 and 82 in their national competition acts but also the various block exemptions.

### **3 Competition policy in the candidate countries**

The broad outlines of competition policy in the candidate countries are very – and increasingly – similar to EU law (for references to candidate country competition laws, see final section of reference list as well as Musil (1996) on the Czech Republic; Tóth (1998) on Hungary; Virtanen (2000) on Lithuania; and Banas (1995) on Slovakia). In this sense at least there is little difference between the candidate countries in the fast lane to EU membership and those that are in for the long haul. All ten countries have a general prohibition on restrictive agreements, often verbatim following Art.81(1), and apply the *de minimis* rule. They also all allow for exemptions from the prohibition of restrictive agreements, again mirroring the letter and the spirit of Art.81(3). Their laws provide for block exemptions much as in EU practice, although this is one of the less harmonised areas of the law. For example, while all candidate countries except Bulgaria and Slovakia have a block exemption specifically on technology transfer agreements, so far only Latvia, Lithuania and Slovenia have adopted a block exemption on vertical restraints. Further, none have issued a notice on subcontracting; however, this does not mean a lack of harmonisation but only that the candidate countries have not found it necessary to clarify their understanding of this particular aspect of inter-firm agreements.

**Table 1.— Share of Vertical Restraints in Total Case Load**

Country	Year	Practice	RA/TCL	VR/TCL
Bulgaria	1999-2000	Decisions	11/132 = 8% <sup>a</sup>	8/156=5% <sup>b</sup>
Czech Republic	2000	Decisions	26/104 = 25%	20/104 = 19%
Estonia	1998-9	Investigations	17/190 = 9%	~ 0
Hungary	1998-2000	Investigations	~ 15%	0
Latvia	1999	Investigations	5/48 = 10%	~ 0
Lithuania	1997-8	Infringements	11/37 = 30%	0
Poland	1996-2000	Decisions	..	25/86 = 29%
Romania	1999	Decisions	312/472=66%	38/472=8% <sup>c</sup>
Slovakia	1999-2000	Investigations	158/493 = 32%	125/493=30%
Slovenia	1999	Investigations	7/54 = 13%	0

Note: RA = restrictive agreements; TCL = total case load; VR = vertical restraints.  
<sup>a</sup>=1999; <sup>b</sup>=2000; <sup>c</sup>=net of franchise agreements.

Source: Antimonopoly Office (Slovakia, 1997, 1998, 1999, 2000)), Commission (2000a-j), Competition Council (Lithuania (1998, 1999, 2000)), Estonian Competition Board (1998, 1999), Office of Economic Competition (Hungary (1998, 1999, 2000)), plus interviews with competition officials.

Candidate competition law differs in terms of notification requirements. The rules are rather restrictive in Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, and Romania. Here all agreements, including those covered by block exemptions, must be notified. Firms in Slovenia need to notify only agreements requiring individual exemptions. For firms in Latvia only agreements that go beyond what is exempted explicitly require notification. Poland and Slovakia have the most liberal regimes; in Slovakia, only mergers need to be notified, and in Poland firms are only expected to self-assess the agreements they are subject to in terms of the antimonopoly law.

Caseloads and case history are good indicators for the general level of activity of the competition authorities and for what the focus of their attention is. Unfortunately, information from candidate country sources, interviews, and the Commission often matches only approximately. What is evident is that while the share of total caseload dedicated to restrictive agreements is not so low, there have been hardly any investigations of vertical restraints (see Table 1). 17 of the 20 Czech cases had to do with exclusive sale or purchasing, and with franchises. In Romania, of the 312 cases 19 dealt with exclusive distribution, 17 with exclusive purchasing, 274 with franchising, and only two referred to technology and/or know-how transfer. In Slovakia, the relative prominence of restrictive agreements fell from 44 per cent to 16 per cent in 1999-2000, and that of VRs from 35 per cent to 13 per cent. Most of these were multiple decisions concerning the retail outlets of the same five cosmetics distributors. Hence exclusive agreements of the type analysed in this paper are not prominent on the competition authorities' agenda. This appears slowly to change. For example, provisions on vertical restraints were inserted into the Lithuanian competition law from 2000; subsequently firms notified 30 VRs all of which qualified under the general exemption. Likewise in Slovenia, 4 out of 52 decisions concerned VRs in 2000. By and large, the competition authorities in candidate countries have

paid most attention to unfair competition, abuse of market dominance, and merger control. In mature market economies competition authorities devote more time and energy to horizontal than to vertical agreements, too. But surely not as little as suggested by the information in Table 1.

In its latest annual progress reports reviewing the candidate countries' readiness for EU accession, the Commission makes little use of this information (Commission 2000a-j). It confirms that in all candidate countries, legislation is largely (fully in the case of Slovenia) in line with the *acquis* although further progress is necessary in view of developments in the *acquis* with respect to vertical restraints (i.e. BER). The Commission identifies the application and enforcement of rules as the principal challenge for competition policy in the candidate countries and admonishes the competition authorities to concentrate on serious breaches of the law instead of on what it interprets as often marginal infringements that are being investigated. But this is not sufficient to prepare the candidate countries for membership. Our analysis in section 4 shows that a harmonised legal apparatus plus a competent and vigilant competition authority by themselves do not make for competitive markets. The missing key ingredient is a sound competition culture by which we mean the understanding of and commitment to the institution of markets by consumers and producers.

Vertical agreements are a good test how far competition culture is developed, more so than unfair competition, abuse of dominance, or merger control. When someone counterfeits a brand, the affected party is likely to complain. Likewise, given the history of state-owned monopolies, competition authorities in the transition countries obviously look out for abusive monopolistic practices. And firms will notify intended mergers because they cannot be kept out of the limelight anyway. But vertical restraints can be, and are. The reason for this is that in distinguishing between anti-competitive and pro-competitive agreements, the competition authority must rely on a higher measure of cooperation from the market participants involved. Tóth (1998, p. 364), for example, is intrigued by the fact that although the new Hungarian competition act called for notification, the Hungarian Competition Authority "did not have to work itself into the ground by responding to hundreds of notifications. Notwithstanding a few examples, statistics show that things stand now as if the law on vertical restraints had not changed at all. The general ban on vertical competition restrictions neither provoked hostile reactions from the business sphere, nor gave rise to a mass of notifications seeking negative clearance or exemption." Tóth speculates whether this is due to Hungarian firms being unaware of the new rules or because Hungarian firms do not engage in vertical restraints. We answer that question in the next sections.

#### **4 Subcontractor agreements in the car industry in the candidate countries**

We conducted a survey of 413 car component suppliers' exposure to or use of vertical agreements and technology transfer in Poland, the Czech Republic, Hungary, Romania, Slovakia and Slovenia. Among other questions, we asked them what type of exclusivity they faced in their contracts, if any: if customers requested exclusivity of the respondent firm (ECR); whether they requested exclusivity of their customer (ERC); whether suppliers requested exclusivity of the respondent firm (ESR); and

whether they requested exclusivity of their supplier (ERS). We also asked them if they received technology from their customer (TTC) and whether they transferred technology to their own supplier (TTS). For more information on the data, see Lorentzen and Møllgaard (2000). Table 2 summarizes the findings on technology transfer and use of exclusivity.

**Table 2.—Summary of evidence on exclusive agreements and technology transfer**

		<i>Number of different exclusive agreements</i>					
<i>Technology transfer</i>		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	TOTAL
<i>0</i>		56	38	9	10	3	116
<i>1</i>		75	45	17	7	3	147
<i>2</i>		80	32	18	13	5	148
TOTAL		211	115	44	30	11	411

Note: Number of observations reduced from 413 to 411 due to two missing values.

The table shows that 28 per cent (116 of 411) of the firms did not receive technology from their customer nor did they transfer technology to their supplier. Yet out of these 116 firms, only slightly less than half did not engage in exclusivity at all. One third had experience with exactly one kind of exclusive agreements while 19 per cent had experience with two or more kinds of exclusive agreements.

The table also demonstrates that there is no evident relationship between the extent of technology transfer and the use of vertical agreements. Independently of whether the respondent firm has no technology transfer, only one kind of technology transfer (either TTC or TTS) or two kinds of technology transfer (both TTC and TTS), roughly half the firms have no experience with exclusive agreements, 30 per cent have experience with exactly one kind of exclusivity, while 20 per cent have experience with two or more kinds of exclusivity. This result is confirmed in a thorough econometric analysis using logit regressions (Lorentzen and Møllgaard, 2000).

There are country differences. Romanian firms are especially likely to receive and transfer technology with no strings attached (no exclusive agreements). More than half of our Romanian firms thus both receive technology from their customers and transfer it to their suppliers without facing any exclusive agreements. (Refer to Table A.1 of the appendix for country-specific evidence). At the other extreme, Hungarian and Polish firms are more likely to face exclusive agreements without any technology transfer than are firms in the other four countries. A quarter of our Hungarian firms face one or more exclusive agreements without any technology transfer, while this only happens to 15 per cent on average and only to eight per cent of our Slovene firms. Our Polish and Czech firms are most likely to meet exclusivity in vertical agreements, but in the Czech cases it is more easily defended by the simultaneous occurrence of technology transfer. Interestingly, Planavova-Latanowicz and Harding (1999) find that general awareness in relation to issues of competition policy is higher in Poland than in the Czech Republic. This is suggested by country differences in case load, in academic and public debate, and in changes and amendments of competition rules. Our result on vertical restraints – that Polish firms use exclusive agreements

without technology transfer – *could* be explained by the Polish law providing for self-assessments, and the other countries’ provisions requiring notification. It may also show that general awareness of competition policy in "policy circles" is one thing; making firms aware of specific competition rules is something else.

One might expect a customer that transfers technology (TTC) to request exclusivity (ECR) from the receiver of technology in order to protect the transfer. This would be in accordance with the thinking behind the legal framework outlined in Section 2. Table 3 shows that 39 per cent of the firms that did not receive technology from their customers nonetheless have faced requests of exclusivity from their customers. At the same time 65 per cent of the firms that did receive technology from their customers would do so without facing requests of exclusivity. This shows that the very simple hypothesis is only true for at most 45 per cent of the sample. In the rest of the cases, a more complicated explanation for technology transfer or use of exclusivity is called for. This is where our case material fits in.

**Table 3. – Use of ECR and TTC among the firms**

<i>Exclusivity requested by customer?</i>			
<i>TT from customer?</i>	<i>No</i>	<i>Yes</i>	TOTAL
<i>No</i>	99	62	161
<i>Yes</i>	162	88	250
TOTAL	261	150	411

Note: Number of observations reduced from 413 to 411 due to two missing values.

Again we find country differences: On average, 15 per cent of our firms face ECR restraints without receiving technology from their customer, but Polish and Hungarian firms are more likely to experience this (20 per cent) than Romanian (as little as four per cent) or Slovakian firms. (Consult Table A2 of the appendix for more information on country differences in the combined use of ECR and TTC).

Similar to the TTC/ECR hypothesis, one might expect a respondent firm that transfers technology to a supplier (TTS) to request that this supplier not sell the products produced with this technology to the competitors of the respondent (ERS). This would again be in line with the thinking behind the subcontractor notice we discussed in Section 2. Table 4 shows that a little less than half of the firms transfer technology to their suppliers and of these only nine per cent protect their technology transfer using exclusive agreements. Six per cent of the firms request exclusivity of their suppliers although no technology transfer has taken place. The simple hypothesis only appears to be true for at most 55 per cent of the cases. For the rest of the cases, a more complicated analysis is again called for, and we need the detailed cases for that.

**Table 4.—Use of ERS and TTS among the firms**

<i>Exclusivity requested from supplier?</i>			
<i>TT to supplier?</i>	<i>No</i>	<i>Yes</i>	TOTAL
<i>No</i>	207	13	220
<i>Yes</i>	175	18	193
TOTAL	382	31	413

Again we find country differences: Polish and Hungarian firms are twice as likely to request exclusivity without transferring technology than the average firm. And this never happens in Romania or Slovakia and only rarely in the Czech Republic. (See Table A3 of the Appendix for more country-specific information on this).

To throw light on the many situations where these two simple hypotheses about the relationship between vertical restraints and technology transfer do not hold, we contacted firms that had reported to use or to be exposed to exclusive agreements in the Czech Republic, Hungary, Poland and Slovenia. We assembled more than 30 case studies. Semi-structured interviews in the four countries were held primarily in the local language. They focused on

- the way in which technology transfer and vertical restraints are related;
- how firms bargain about exclusive agreements and how their bargaining position is determined;
- the firm's knowledge of competition policy at the local and EU level.

The interviewed firms broadly fall into three categories. In the first group, firms impose VRs to protect TT, thus confirming the hypotheses. In the second group, firms transfer technology to their supplier. This requires the recipient firm to undertake relationship-specific investment to be able to use the transferred technology. To ensure itself against hold-up by the transferring firm, the supplier then imposes exclusivity on the transferring firm. Thus, we experience TTS and ESR at the same time, but this – as our simple hypotheses – is consistent with traditional economic theory (Williamson, 1985, and Klein *et al.*, 1978).

In the third group, firms do *not* transfer technology but demand exclusivity all the same. We focus on these, potentially problematic cases in Section 4.2 below. Before doing so, we briefly discuss the cases that fit our hypotheses in Section 4.1.

#### **4.1 Vertical restraints with technology transfer**

A Czech company of a "very complex and technologically intensive product" that received technology from a final assembler confirms our hypothesis that exclusivity may be used to protect intellectual property rights in the following way:

"... we cannot use the transferred technology to produce products for any other firm except the one which gave us the technology – and the same holds for our suppliers. The problem is that the current patent law is not sufficient to protect the transferred technology."

The firm extends the same exclusivity clause to all its own suppliers. Thus it seems that firms transfer not only technology upstream but also exclusive agreements. This firm did not bargain about the exclusivity terms but did negotiate the penalty from breaking it. The firm claims to be aware of national and EU rules on vertical restrictions but does not think it violates these. For this reason it did not notify any authorities about the VR although in our reading of the Czech rules on notification it has to notify the authority (see Section 3). However, the firm added, "even if we would feel like violating some regulation rules, we would never do it [notify], because we would be immediately out of business."

Another Czech producer of a "complex and technologically intensive product" has agreed with its customers that it should not sell to their competitors (i.e. ECR). In exchange the manufacturer receives technology and finds that this technology helps improve what they are doing and how they are doing it. The technology could not have been acquired on the open market "because the technology is very special". In addition, the firm has negotiated that its customers do not buy rivals' products (i.e. ERC). Thus the exclusivity seems to be reciprocal in this case. The firm has invested in own research capacity. So, while the ECR can be perceived as protecting technology transfer, the ERC can be perceived as protecting relation-specific investment. This company is familiar with rules regarding vertical restraints but did not find it necessary to notify the authorities.

#### **4.2 Vertical restraints without technology transfer: *de minimis*?**

A small Hungarian producer of brake hoses, a very simple product that is easily copied from original equipment samples or acquired on the market, entered a contract with a Danish trading company. The latter requested the Hungarian firm not to sell outside Hungary except through the Danish company and that they not be present at foreign trade fairs. The business with the Danish firm amounted to roughly 30 per cent of their total turnover and as such was something the Hungarian firm could not afford to lose. There was no technology transfer in the sense of the subcontractor notice. The Danish firm would send the Hungarian firm original equipment samples and request it to produce small runs of these products for the European aftermarket. The Hungarian company is not familiar with competition rules concerning vertical restraints and did not consider notifying competition authorities about the exclusivity, although it found the agreement strange. In fact, it probably did not have to notify as it probably would benefit from the *de minimis* rule. Their annual sales are about USD 500.000 which is likely less than one per cent of total turnover in the (after-)market for brake hoses. However, since this is an exclusive supply obligation, under EU rules (see Section 2) the market share of the buyer, i.e. of the Danish firm, would be the relevant indicator. We have no information on this but think that it is unlikely that this could be the Hungarian firm's problem.

#### **4.3 Vertical restraints without technology transfer**

A Czech producer of among other things central door locking systems, a simple product, faces vertical restraints imposed by some of the suppliers of raw materials (wires or connectors) not to buy from their competitors. How this should be treated depends on the market share of these suppliers in their markets.

A Hungarian producer of components for buses and lorries entered an agreement with a customer that has a very large market share. After the contract for delivery had been signed, the customer wrote to the producer: "We inform you of the fact that the supplied product is our own product and you are not allowed to sell it but through us." The producer opines that this product cannot be protected as it is generally available on the world market and it is not covered by a patent. The customer, however, has proprietary feelings towards it. Thus this is an interesting case

in which the customer could claim (rightly or wrongly) that the agreement can be interpreted positively in terms of the subcontractor notice while the producer would contend that it cannot. The companies (both Hungarian) did not notify the competition authority about the agreement.

A Slovenian producer of washers is subject to a vertical restraint by a Romanian customer. In general these restraints appear in cases "where the customer is important enough for" the firm. Interestingly the company has a fairly advanced (if erroneous) view on the nature of these restraints:

"[The] vertical restraints are in principle not formalised in some formal agreement but is informal as a kind of gentlemen's agreement. This is eased by the fact that [the Company's] sales are relatively concentrated on a smaller number of customers with whom the company has long established business relations. Although the gentlemen's agreements make the practical imposition of restraints less sure, on the other hand it eliminates any potential problems of being accused of using restrictive business practices."

## **5 Harmonisation and competition culture**

Our analyses illustrate a number of insights. First, violations of EU and candidate country competition rules on vertical restraints do take place. Our survey suggests that a substantial number (15 per cent) of exclusive agreements are not easily defended on efficiency grounds (by technology transfer). We do not imply that all of these would be deemed illegal if they were investigated: they might fall below the threshold of *de minimis* rules or be innocent for reasons that the statistics do not reveal. Furthermore, it may well be that the car component industry is not representative for the business environment as a whole. However, the case studies reveal that not all are innocent.

Second, they go undetected. Whether this is rare or frequent is anyone's guess. What is important is that no-one seems to be aware of these infringements. This obviously makes it rational for the firms involved not to care about the competition rules regarding vertical restraints. Fingleton *et al.* (1996, chap.6) reported that competition authorities in Central Europe were swamped by complaints about unfair bargains in contract relationships. We do not wish to re-instate such a regime but note that to the extent that the competition authorities of the candidate countries wish to take anti-competitive effects of vertical restraints seriously, their notification provisions make a lot of sense: unlike with abuse of dominance, merger control, and state aid, effective supervision of vertical restraints is not going to work if it relies exclusively on ex-officio monitoring and investigations of complaints. In other words, a minimum of cooperation from market participants is required. It may be that the European Union can make do without notification of such agreements because firms in the EU have a long experience based on the Commission's and the Court's practice of determining notified cases. But many firms in the candidate countries clearly lack this experience.

Third, firms in Central Europe are either ignorant or suspicious of competition law, at least as far as vertical restraints are concerned. Ignorant, because they often simply do not know what the rules are. And suspicious, because our interviews

indicate that firms regard notification – let alone complaints – much like a gang of street smarts views ratting to the police.

This has two consequences. To judge the candidate countries' readiness for accession, more must be done than simply look at their body of law and at their administrative capacities. The European Commission's Progress Reports generally profess confidence that the harmonisation of procedures in antitrust policy – namely, *what do you do?* – is complete (Commission, 2000a-j). But our analysis shows that the harmonisation of processes – *how do you do it?* – is at this stage of legal alignment perhaps more important. The Commission's focus on procedures rather than on processes goes counter to its attempt to upgrade economic analysis in judging vertical restraints. This is because one can analyse only what one knows. If firms do not inform authorities about vertical restraints, competition offices in principle can beef up policing. But this is neither desirable nor likely feasible.

The larger point is that institutions and rules alone do not make a market work well (see also Dutz and Vagliasindi, 2000). In addition this takes knowledge of the rules as well as incentives to comply with them. Rules that are neglected because firms do not know them and rules that are not enforced do not matter! De-emphasising the legalistic character of competition law in favour of an approach that focuses on the economic effects of inter-firm practices is still only half way to a modern anti-trust policy. The other half requires an active competition culture. This suggests that both the EU and the candidate countries may prepare accession more effectively if they add a third pillar to legal alignment and practical enforcement of competition policy, namely business involvement in the sense of managers that are educated about and perceive a stake in competitive markets. This, in turn, means that for the candidate countries merely to copy the BER (Block Exemption Regulation) makes little sense. Much more importantly, they should think about how to make firms aware of the rules. Otherwise harmonisation won't work.

## 6 References:

Antimonopoly Office (Slovakia), 1997-2000, Annual Reports 1996-1999, [www.antimon.gov.sk/default\\_a.htm](http://www.antimon.gov.sk/default_a.htm).

Banas, Milan, 1995, "The New Anti-monopoly Law in Slovakia", *European Competition Law Review* 16(7): 441-445.

Competition Council (Lithuania), 1998, Annual Report 1997, [www.konkuren.lt/english/annual/1997.htm](http://www.konkuren.lt/english/annual/1997.htm).

\_\_\_\_\_, 1999, Annual Report 1998, [www.konkuren.lt/english/annual/1998.htm](http://www.konkuren.lt/english/annual/1998.htm).

\_\_\_\_\_, 2000, Annual Report 1999, [www.konkuren.lt/english/annual/1999.htm](http://www.konkuren.lt/english/annual/1999.htm).

Dutz, Mark A. and Maria Vagliasindi, 2000, "Competition Policy Implementation in Transition Economies: An Empirical Assessment", *European Economic Review* 44: 762-772.

Estonian Competition Board, 1998, Annual Report, [www.konkurentsiamet.ee/gb/ar/1998.htm](http://www.konkurentsiamet.ee/gb/ar/1998.htm).

\_\_\_\_\_, 1999, Annual Report, [www.konkurentsiamet.ee/gb/ar/1999.htm](http://www.konkurentsiamet.ee/gb/ar/1999.htm).

European Commission, 2000a, "2000 Regular Report from the Commission on Bulgaria's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000b, "2000 Regular Report from the Commission on the Czech Republic's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000c, "2000 Regular Report from the Commission on Estonia's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000d, "2000 Regular Report from the Commission on Hungary's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000e, "2000 Regular Report from the Commission on Latvia's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000f, "2000 Regular Report from the Commission on Lithuania's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000g, "2000 Regular Report from the Commission on Poland's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000h, "2000 Regular Report from the Commission on Romania's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000i, "2000 Regular Report from the Commission on Slovakia's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000j, "2000 Regular Report from the Commission on Slovenia's Progress towards Accession," 8 November, Brussels.

\_\_\_\_\_, 2000k, "Report on the Evaluation of Regulation (EC) No 1475/95 on the Application of Article 85(3) of the Treaty to Certain Categories of Motor Vehicle Distribution and Servicing Agreements," 15 November, Brussels.

Fejø, Jens, 1997, *EU-konkurrenceret*, 2<sup>nd</sup> ed., Copenhagen: Jurist- og Økonomforbundets Forlag.

Fingleton, John, Eleanor Fox, Damien Neven and Paul Seabright, 1996, *Competition Policy and the Transformation of Central Europe*, London: CEPR.

Hoekman, Bernard and Simeon Djankov, 2000, "Competition Law in Post-Central-Planning Bulgaria", *The Antitrust Bulletin*, 227-248.

Klein, B.; R. Crawford and A. Alchian, 1978, "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process", *Journal of Law and Economics* 21(2): 297-326.

Lorentzen, Jochen and Peter Møllgaard, 2000, "Vertical Restraints and Technology Transfer: Inter-Firm Agreements in Eastern Europe's Car Component Industry", *working paper* 9-2000, Department of International Economics and Management, [http://www.cbs.dk/departments/int/publications/wp\\_2000/wp9-2000-jl.pdf](http://www.cbs.dk/departments/int/publications/wp_2000/wp9-2000-jl.pdf)

Musil, Ales, 1996, "Protection of Economic Competition in the Czech Republic", *European Competition Law Review* 17(8): 476-479.

Office of Economic Competition (Hungary), 1998, Annual Report 1996/97, [www.gvh.hu/angol/ineto6cd.htm](http://www.gvh.hu/angol/ineto6cd.htm).

\_\_\_\_\_, 1999, Annual Report 1997/98, [www.gvh.hu/angol/ineto6cd1.htm](http://www.gvh.hu/angol/ineto6cd1.htm).

\_\_\_\_\_, 2000, Annual Report 1999, [www.gvh.hu/angol/ineto6cd2.htm](http://www.gvh.hu/angol/ineto6cd2.htm).

Planavova-Latanowicz, Jana and Christopher Harding, 1999, "The Control of Concentrations in the Czech Republic and Poland", *European Competition Law Review* 20(5): 265-274.

Robertson, Aidan, 1996, "Technology Transfer Agreements: An Overview of how Regulation 240/96 Changes the Law", *European Competition Law Review* 17(3): 157-162.

Tóth, Tihamér, 1998, "Competition Law in Hungary: Harmonisation Towards E.U. Membership", *European Competition Law Review* 19(6): 358-369.

Van Bael, Ivo and Jean-Francois Bellis, 1987, *Competition Law of the EEC*, Bicester: CCH Editions

Van Den Bossche, A.M., 1997, "The International Dimension of E.C. Competition Law: The Case of the Europe Agreement", *European Competition Law Review* 18(1): 24-37.

Virtanen, Dalia, 2000, "The New Competition Act in Lithuania" *European Competition Law Review* 21(1): 30-36.

Williamson, Oliver, 1985, *The Economic Institutions of Capitalism*, New York: Free Press.

## **6.1 Candidate country competition legislation**

Bulgaria: "Law on the Protection of Competition", [www.cpc.bg/englaw.htm](http://www.cpc.bg/englaw.htm).

Czech Republic: "Act on the Protection of Economic Competition", [www.compet.cz/Zakony/zakonHseng.htm](http://www.compet.cz/Zakony/zakonHseng.htm).

Estonia: "Competition Act", [www.konkurentsiamet.ee/gb/eng-law.rtf](http://www.konkurentsiamet.ee/gb/eng-law.rtf).

Hungary: "Act on Prohibition of Unfair and Restrictive Market Practices", [www.gvh.hu/angol/ineto6aa.htm](http://www.gvh.hu/angol/ineto6aa.htm).

Latvia: not available on the web.

Lithuania: "Law on Competition", [www.konkuren.lt/english/antitrust/legal.htm](http://www.konkuren.lt/english/antitrust/legal.htm).

Poland: not available on the web.

Romania: "Competition Law", [www.oficiulconcurrentei.ro/legea2\\_english.htm](http://www.oficiulconcurrentei.ro/legea2_english.htm).

Slovakia: "Act on Protection of Economic Competition", [www.antimon.gov.sk/default\\_a.htm](http://www.antimon.gov.sk/default_a.htm).

Slovenia: "Prevention of the Restriction of Competition Act", [www.sigov.si/uvk/ang/2legal/1basis.html](http://www.sigov.si/uvk/ang/2legal/1basis.html).

**Table A1.— Country-specific evidence on exclusive agreements and technology transfer**

Pct. of country total		<i>Number of different exclusive agreements</i>					TOTAL
<i>Technology transfer</i>		0	1	2	3	4	
0	Poland	12.6%	12.6%	1.8%	2.7%	1.8%	31.5%
	Czech R.	9.2%	4.6%	2.3%	4.6%	-	20.7%
	Hungary	18.6%	16.3%	4.7%	2.3%	1.2%	43.0%
	Romania	7.1%	-	-	-	-	7.1%
	Slovakia	16.4%	6.8%	-	1.4%	-	24.7%
	Slovenia	15.4%	3.8%	3.8%	-	-	23.1%
	ALL	13.6%	9.2%	2.2%	2.4%	0.7%	28.2%
1	Poland	16.2%	12.6%	8.1%	0.9%	-	37.8%
	Czech R.	10.3%	9.2%	3.4%	1.1%	3.4%	27.6%
	Hungary	26.7%	9.3%	2.3%	2.3%	-	40.7%
	Romania	17.9%	3.6%	-	-	-	21.4%
	Slovakia	23.3%	4.1%	4.1%	1.4%	-	46.6%
	Slovenia	11.5%	3.8%	-	7.7%	-	23.1%
	ALL	18.2%	10.9%	4.1%	1.7%	0.7%	35.8%
2	Poland	15.3%	7.2%	3.6%	3.6%	0.9%	30.6%
	Czech R.	24.1%	13.8%	8.0%	4.6%	1.1%	51.7%
	Hungary	8.1%	5.8%	-	2.3%	-	16.3%
	Romania	57.1%	7.1%	3.6%	-	3.6%	71.4%
	Slovakia	15.1%	4.1%	4.1%	2.7%	2.7%	28.8%
	Slovenia	30.8%	7.7%	11.5%	3.8%	-	53.8%
	ALL	19.5%	7.8%	4.4%	3.2%	1.2%	36.0%
TOTAL	Poland	44.1%	32.4%	13.5%	7.2%	2.7%	111
	Czech R.	43.8%	27.6%	13.8%	10.3%	4.6%	87
	Hungary	53.5%	31.4%	7.0%	7.0%	1.2%	86
	Romania	82.1%	10.7%	3.6%	-	3.6%	28
	Slovakia	54.8%	28.8%	8.2%	5.5%	2.7%	73
	Slovenia	57.7%	15.4%	15.4%	11.5%	-	26
	ALL	51.3%	28.0%	10.7%	7.3%	2.7%	411

**Table A2. – Country-specific use of ECR and TTC among the firms**

Per cent of country total		<i>Exclusivity requested by customer?</i>		TOTAL
<i>TT from customer?</i>		<i>No</i>	<i>Yes</i>	
<i>No</i>				
	Poland	18.0%	19.8%	37.8%
	Czech R.	16.1%	16.1%	32.2%
	Hungary	34.9%	18.6%	53.5%
	Romania	17.9%	3.6%	21.4%
	Slovakia	31.5%	6.8%	38.4%
	Slovenia	26.9%	15.4%	42.3%
	ALL	24.1%	15.1%	39.2%
<i>Yes</i>				
	Poland	35.1%	27.0%	62.2%
	Czech R.	16.1%	23.0%	67.8%
	Hungary	37.2%	9.3%	46.5%
	Romania	67.9%	10.7%	78.6%
	Slovakia	30.1%	31.5%	61.6%
	Slovenia	42.3%	15.4%	57.7%
	ALL	39.4%	21.4%	60.8%
TOTAL				
	Poland	53.2%	46.8%	111
	Czech R.	60.9%	39.1%	87
	Hungary	72.1%	27.9%	86
	Romania	85.7%	14.3%	28
	Slovakia	61.6%	38.4%	73
	Slovenia	69.2%	30.8%	26
	ALL	63.5%	36.5%	411

**Table A3. – Country-specific use of ERS and TTS among the firms**

Per cent of country total		<i>Exclusivity requested from supplier?</i>		
<i>TT to supplier?</i>		<i>No</i>	<i>Yes</i>	TOTAL
<i>No</i>				
	Poland	57.7%	5.4%	63.1%
	Czech R.	36.4%	1.1%	37.5%
	Hungary	67.4%	5.8%	73.3%
	Romania	14.3%	-	14.3%
	Slovakia	58.1%	-	58.1%
	Slovenia	23.1%	3.8%	26.9%
	ALL	50.1%	3.1%	53.3%
<i>Yes</i>				
	Poland	31.5%	5.4%	36.9%
	Czech R.	55.7%	6.8%	62.5%
	Hungary	26.7%	-	26.7%
	Romania	82.1%	3.6%	85.7%
	Slovakia	36.5%	5.4%	41.9%
	Slovenia	69.2%	3.8%	73.1%
	ALL	42.4%	4.4%	46.7%
TOTAL				
	Poland	89.2%	10.8%	111
	Czech R.	92.0%	8.0%	88
	Hungary	94.2%	5.8%	86
	Romania	96.4%	3.6%	28
	Slovakia	94.6%	5.4%	74
	Slovenia	92.3%	7.7%	26
	ALL	92.5%	7.5%	413