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## Models of service systems in the split towns of the Polish-German and Polish-Czech borderlands

**Abstract:** On the basis of an empirical study, this article offers some generalisations concerning service systems characteristic of split towns in East-Central Europe. Three frontier urban complexes were examined, including two in the Polish-German borderland, viz. Słubice (Poland) – Frankfurt on the Oder (Germany) and Gubin (Poland) – Guben (Germany), and one in the Polish-Czech borderland, viz. Cieszyn (Poland) – Český Těšín (Czech Republic). The model approach adopted was intended to ensure an insight into the basic properties of the service system in the form of significant factors and connections holding within it. There are many factors giving shape to a service system, but those primarily responsible for differences between the service systems of the examined frontier urban complexes include: (a) the kinds of services offered, (b) specific forms of retail trade, (c) intensity of transborder traffic, and (d) consumers of services. Their unique combination allowed for distinguishing two service systems: in the Polish-German borderland and in the Polish-Czech one. The research also revealed that each system had a double service practice. One, geared to the service of the local population, is fairly stable, and the other – geared to a transborder customer – is different. In the Polish-Czech borderland it is balanced, equally open to the local customer and one from abroad, while in the Polish-German borderland it displays a marked asymmetry in terms of volume and function.

**Keywords:** Polish-German and Polish-Czech borderlands; service systems; split towns

### Introduction

Split towns in East-Central Europe are units dissected by a state border, which was a strong barrier limiting their residents' movement until the end of the 1980s. Significant changes in their economies only began in the 1990s. They followed primarily from several favourable legal regulations and the signing of new treaties laying the foundations of good neighbourhood.

The opening of the border between Poland and Germany and between Poland and the Czech Republic brought about an increase in the intensity of border traffic, thus becoming one of the chief factors dynamising changes in the service sectors of the split towns. The bigger role of services in their spatial-functional structure has led to the appearance of specific forms of retail trade (marketplaces, large-lot shops) designed to serve consumers from the other side of the border, and to a sharp periodic increase in the number of some service stations (e.g. exchange offices, hairdressers' shops, tobacco shops, etc.).

The aim of this paper is to construct models of service systems in the split towns of the Polish-German borderland, viz. Słubice (Poland) – Frankfurt on the Oder (Germany) and Gubin (Poland) – Guben (Germany), as well as those of Polish-Czech borderland, viz. Cieszyn (Poland) – Český Těšín (Czech Republic). The model approach is intended to identify basic properties of a service system in the form of significant factors and relationships holding within it. The article gives a summary of the author's research conducted in the split towns of the Polish-German and Polish-Czech borderland after 1990.

The frontier urban complexes examined differ fundamentally both in population numbers and areas (cf. Tab. 1). Those measures were used to analyse the level of asymmetry for each pair of towns.

**Tab. 1.** Characteristics of split towns in the Polish borderland

No.	State	Frontier urban complex	Population number	Area in km <sup>2</sup>	Frontier urban complex			
					population		area	
					number	proportion	in km <sup>2</sup>	proportion
1	Poland	Słubice (31 Dec. 2012)	16,902	19.21	75,439	1:3.5	167.21	1:7.7
	Germany	Frankfurt/O (31 Dec. 2012)	58,537	148.00				
2	Poland	Gubin (31 Dec. 2012)	17,019	20.68	34,990	1:1.2	64.48	1:2.1
	Germany	Guben (31 Dec. 2012)	17,971	43.80				
3	Poland	Cieszyn (31 Dec. 2012)	36,119	28.60	60,513	1:1.5	62.40	1:1.2
	Czech Republic	Český Těšín (26 March 2011)	24,394	33.80				

Source: own compilation on the basis of [www.citypopulation.de](http://www.citypopulation.de) (accessed 5–6 May 2014)

The level of asymmetry as measured by the rate of the larger to the smaller town in a pair is determined by the values adopted: (a) low asymmetry – a rate up to 1.4, (b) moderate asymmetry – 1.5 to 2.4, and (c) high asymmetry – 2.5 and more. The frontier urban complex showing the lowest asymmetry both in terms of the number of inhabitants and area is that of Cieszyn/Český Těšín in the Polish-Czech borderland, while the highest asymmetry characterises the Słubice/Frankfurt (Oder) complex in the Polish-German borderland. It is worth observing that the towns exhibit greater asymmetry in their areas than in population numbers.

### Political-administrative and legal-normative determinants of the development of services in frontier areas

What greatly influenced the nature of contacts and the intensity of cooperation of the split towns in the Polish-German and Polish-Czech borderland was the change in the political systems in Poland (elections of 4 June 1989), the German

Democratic Republic (GDR, elections of 18 March 1990) and Czechoslovakia (elections of 24 November 1989), as well as later political changes in Europe (the unification of Germany – 1990, the breakup of Czechoslovakia – 1991, accession of Poland and the Czech Republic to the European Union – 2004, and accession of Poland and the Czech Republic to the Schengen Treaty – 2007). They had a great impact – each in its time – on the intensity of mutual interactions of the split towns, and hence on the development of services in the frontier zone (Bałtowski, Miszewski, 2007).

Once those towns used to be uniform organisms which were then divided by a new state border. The division of towns at the southern border resulted from the ultimate division of Cieszyn Silesia between the two newly created states, viz. Poland and Czechoslovakia, as a result of a decision by the Council of Ambassadors in 1920, which set the border on the Olza river (cf. Nowak, 2008; Gašior, 2008a, b; Kulczyńska, Matykowski, Siwek, 2009). The division of towns at the western border followed from decisions made at the Potsdam Conference in 1945 and was connected with a shift of the Polish-German border to the west.

Thus, towns, earlier interdependent in functional terms, were divided by a state border and, in legal-administrative terms, became independent units lying in different states. After their patterns of socio-economic links had been disrupted, the new urban organisms had to learn to operate on their own (in the organisation of life in the town, e.g. by an expansion of physical infrastructure, setting up industrial plants like bakeries, service stations, etc.). It should be noted that the split was always asymmetric, i.e. one of the states obtained a greater part of the town, usually with its historic district, much easier to adjust to the new conditions of operation. The situation was much worse for those towns that used to be only a district of the parent town before the division, like Słubice, a right-bank district of Frankfurt on the Oder, known then as Dammvorstadt, and featuring, apart from a few streets with a metropolitan type of building, small industrial facilities and service posts of little significance, single-family houses, orchards, allotment gardens, and a stadium built in the years 1914–1927 (East-March Stadium, *Ostmarkstadion*), modelled on the German Stadium (*Deutsches Stadion*) in Berlin. It is also worth emphasising that Słubice, connected with Frankfurt in administrative and economic terms, had not got many historical buildings, institutions and indoor spaces essential for independent operation as a town (Preiss et al., 2003). Hence the post-war years should be regarded as a difficult period in the development of Słubice, turned into a peripheral unit from the moment of the division and described, even as late as the 1950s, as a town with no prospects. It was only a change in the policy of the central authorities towards the borderland that brought Słubice financial means for an arrangement of matters and development in the other half of the 1960s (Romiszewska, 1995; Kulczyńska, 2008).

In the post-war years one can distinguish several periods in the conditions of coexistence of the two parts of frontier towns in which the character of the border changed, although until the end of the 1980s it was usually a strong barrier of little permeability (cf. Ciok, 1992). It was only the late 1980s and early 1990s that initiated significant changes following from several favourable legal regulations and the signing of new treaties that laid the foundations of good neighbourhood. In 1989 significant systemic transformations occurred in Poland and Czechoslovakia, followed in 1990 by the GDR. Fast changes occurred in the conditions of operation of

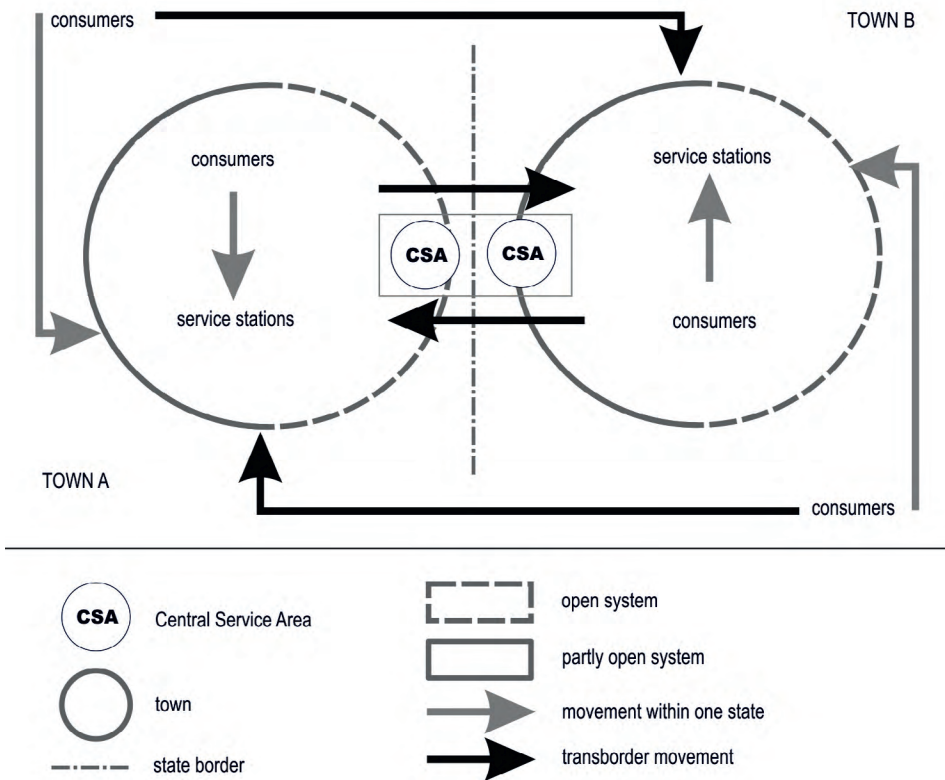
their economies, and from 1 July 1990 the GDR found itself in the mark zone of the Federal Republic of Germany. After the unification of Germany, which took place on 3 October 1990 (its symbol is the fall of the Berlin Wall), Poland almost immediately regulated its relations with the new neighbour by signing a border agreement and a good neighbourhood treaty on 14 November 1990 with the Federal Republic of Germany (Matykowski, Schaefer, 1996). A new agreement about neighbourly relations and friendly cooperation between Poland and Czechoslovakia was signed on 6 October 1991. When Czechoslovakia had split, Poland signed a similar document with the newly established Czech Republic. The agreements between the states, and later also between towns (by way of new agreements), reduced many barriers in frontier traffic and contributed to a rapid increase in cross-border movement (Kulczyńska, Matykowski, 2008).

The economic changes of the late 1980s and early 1990s bore fruit, among other things, in the form of actual freedom of entrepreneurship, which could be observed in the frontier towns as a mushroom increase in the number of newly set-up service firms. Especially significant changes occurred in the structure of the commercial space of those towns. Besides the traditional petty retail trade, urban marketplaces appeared as early as the beginning of the 1990s, being especially popular in the towns of the Polish-Czech borderland. This traditional trading system changed significantly with the appearance of supermarkets at the turn of the century that modernised the shopping system of the split towns (it should be noted that this form of retail trade existed in Germany even before 1990). Today a sign of a new way of management seems to be a diversity of services, both in terms of their kind and quality, that would meet the needs of the modern, increasingly demanding, customer (Kulczyńska, Matykowski, 2008).

The structure of services in the split towns has also been moulded by changes in the customs law resulting from political changes and those in the conditions of economic operation. Today the Czech Republic, Germany and Poland as EU members are in a customs union with other European countries (within the Community, goods brought to and from Poland are duty-free). EU citizens travelling within the European Union can cross borders carrying 800 cigarettes, 10 l of spirits, 20 l of wine of high alcohol content, 90 l of ordinary wine, and 110 l of fuel.

### **Properties of the service systems of towns divided by the state border**

After the transformation period, in the socio-economic systems of Poland and the neighbouring countries (Germany and the Czech Republic) – and especially in the frontier towns – there appeared manifestations of symbiosis on the one hand and rivalry on the other. This also concerned the services sector, which performs an important town-forming function and contributes to the development of frontier traffic. That is why this paper seeks to construct models of service systems in towns divided by the state border. The model approach is intended to capture basic properties of a service system in the form of significant elements occurring in it and correlations holding among them (cf. Fig. 1).



**Fig. 1.** Conception of an urban service system in frontier areas

Source: own compilation

Each service system consists of basically two subsystems, viz. service stations and potential consumers of services. The surroundings that influence the system include primarily: the demand for services, labour resources, the presence of other sectors of the economy, and factors controlling the structure of services and the number of stations offering them.

What seems highly significant is the nature of the components of the service space. Generally, there are two main groups of elements affecting its character. First, it is the consumer of services who is both a subject of the service space displaying specific spatial behaviour, and also its inhabitant. In a way, the consumer organises the service space and also manages it by undertaking steps in it as an entrepreneur. The other element of the service space is service stations of each town designed to serve: (a) residents of the parent town and its vicinity, (b) residents of the parent town and customers from abroad (primarily inhabitants of the neighbouring town), and (c) customers from abroad (primarily inhabitants of the neighbouring town).

The services space is dynamic, i.e. it changes its character over time as a result of the successive appearance of new service stations and disappearance or modernisation of old ones, mostly through a change in the line of business. Besides, the

services space is relational, i.e. it cannot exist without a subject, or the consumer, and internally diversified in terms of the line of business.

### **Models of service systems in the split towns**

The service systems that have developed in the Polish-German and Polish-Czech borderlands are different owing to the operation of both, country-specific and frontier mechanisms. The former include a Christallerian mechanism that introduces order into a service system. Its basic elements are: (a) the state's service system, (b) the regional service system, (c) the subregional service system, and (d) the local service system. The other country-specific mechanism is a modernising one which partly concerns frontier towns and disturbs the Christallerian mechanism by introducing some disorder. It manifests itself primarily in new forms of the spatial concentration of trade (shopping galleries, large-lot shopping centres, bazaars) and the appearance of new kinds of services, e.g. those of the business environment. Both the Christallerian and the modernising mechanisms mould the service systems of the split towns in each of the analysed countries. But in their case there are also such frontier mechanisms as transborder competitiveness and transborder complementarity. It should be noted that competitiveness and complementarity are not fully exclusive because, e.g., price or assortment competition often results from complementarity.

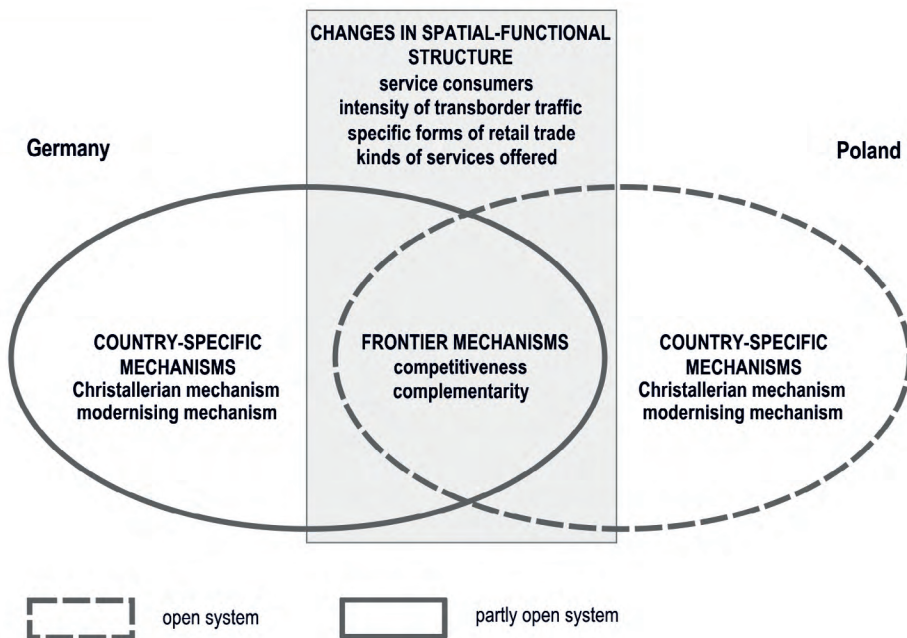
The two mechanisms produce specific changes in the spatial-functional structure of the split frontier towns, thus creating their unique service systems. Their uniqueness can be defined in as many as four basic fields: (a) kinds of services offered, (b) specific forms of retail trade, (c) intensity of transborder traffic, and (d) service consumers. Those are the chief factors moulding the number and structure of services and influencing consumer behaviour, thus shaping the service systems of the split towns (Kulczyńska, 2013).

### **Service systems of the split towns of the Polish-German borderland**

Generally, there are two types of service practice in the examined towns of the Polish-German borderland. One, fairly stable – both on the Polish and the German side – is geared to the service of the local population, while the other – geared to the transborder customer – is different. On the Polish side, this system responds to changes very dynamically and adjusts to the expectations of the consumer from the German side. The German system, in turn, shows only a measure of openness to the Polish consumer (Kulczyńska, 2010a) (Fig. 2).

The Polish-German service system is characterised by high selectivity of services controlled by prices and the needs of demographic groups. Both Germans and Poles – treated as consumers in the respective neighbouring country – pay close attention to differences in the prices of services offered and products sold. The services and products arousing interest are those that the neighbour sells cheaper. The services that enjoy great popularity with German customers on the Polish side are medical ones (e.g. plastic surgery or dentistry), and those connected with body

aesthetics, e.g. cosmetic or hairdresser's services. The great interest in this type of services has caused a substantial increase in the number of stations offering them on the Polish side and their marginalisation on the German side. What is equally popular with German customers in Poland is doing shopping at urban marketplaces and in supermarkets. Those are the places most frequently visited by German consumers. In turn, what customers from Poland usually seek on the German side are not services but the commercial offer. Here they mostly buy those goods that are more expensive in Poland (e.g. alcohol), but primarily they rely on seasonal sales, which can offer substantial rebates in Germany (even up to -70% of the original price). Hence the most important places of penetration of the Polish consumer are supermarkets or shopping centres (Kulczyńska, 2010b).



**Fig. 2.** Service system in the split towns of the Polish-German borderland

Source: own compilation

The other factor responsible for the selectivity of services is catering to the needs of demographic groups. The group of services targeted at the oldest – and growing – segment of society in German towns is especially significant. Services in the field of, e.g., rehabilitation are offered by stations located in Germany, but also – though to a much smaller extent – by those in Polish towns.

Service consumers in the Polish-German borderland can be divided – by the criterion of frequency of consumer contacts – into daily customers who live in the two towns, and visiting consumers coming from outside the border towns, doing shopping here once or a few times a month, or several times a year. When observing consumer behaviour, one can state that German consumers pursue success understood

as the purchase of a specified product at the lowest possible price. Those are chiefly foodstuffs, which are much cheaper in Poland. Polish consumers, in turn, are primarily occasion hunters seeking maximum advantages at seasonal sales in Germany, i.e. when the price of a product is at its lowest.

Another factor shaping the service system is the intensity of traffic at border crossings located in the split towns (cf. Tab. 2, 3). The analysis of border traffic covered the years 1994–2007, although the 2007 statistics are incomplete because of the inclusion of Poland and the Czech Republic to the Schengen Zone (21 Dec. 2007). This event meant the abandonment of control on internal borders in accordance with the Ordinance (WE) No. 562/2006 of the European Parliament and Council of 15 March 2006 (Official Gazette no. L 105 of 13 April 2006), establishing the Community code of rules regulating the flow of people across borders (the Schengen Border Code).

When analysing cross-border movement using the general statistical data of the Border Guard Headquarters, one can note that in the years 1994–2007 its intensity differed in each of the frontier urban complexes, although in all of them this intensity declined. In the Gubin-Guben complex both pedestrian and car traffic dropped by as much as two-thirds, and at the Słubice-Frankfurt border crossing, by a half and a third, respectively (cf. Tab. 2, 3).

The next level of analysis is a comparison of the intensity of cross-border movement in two directions, viz. from and to Poland. Readily visible at the Polish-German border is a clear asymmetry in the intensity of border traffic: decidedly more Germans crossed the state border to Poland than Poles to Germany, with the exception of 1994 (pedestrian traffic) and 2006 (car traffic), when the situation was reversed. At the Słubice-Frankfurt (O) border crossing the numerical advantage of Germans moving to Poland was substantial: in pedestrian traffic, by 2.0–3.7 million in the years 1995–1999, 0.5–0.8 million in the years 2000–2003, and 1.2–1.7 million after 2004; and in motorcar traffic, by 0.2–1.0 million in the years 1995–2007, with the exception of 2006 when more cars came to Słubice than left it (0.3 million). The situation was similar at the Gubin-Guben border crossing where Germans going to Poland also predominated. In pedestrian movement, there are two clear sub-periods differing in intensity, namely the years 1995–1999 when foreigners going to Poland predominated by 2.0–2.7 million, and the period from 2000, characterised by a surplus of pedestrian traffic of 0.9–1.2 million. Generally, in 2007 the number of Germans going to Poland via the Słubice-Frankfurt (O) border crossing was twice as high, both in pedestrian and vehicular traffic. At the Gubin-Guben crossing this number was four times higher for pedestrian traffic and as many as five times higher for vehicular traffic (cf. Tab. 2, 3).

The clear disproportion in the intensity of border traffic at the Polish-German border, with decidedly more Germans crossing the border to Poland than Poles to Germany, affects the development of services on the Polish side. The inflow of German consumers stimulates the development of entrepreneurship in towns on the Polish side, which manifests itself in a clear asymmetry in the number of some services on the two sides of the border (e.g. in 2009, in Słubice with its population of 16.5 thousand there were some 40 hairdressers' shops; Graff 2006).



Tab. 2. Pedestrian and vehicular border traffic at the Stubice-Frankfurt (Oder) border crossing in the years 1994–2007

Year	Pedestrians				Motorcars			
	total		foreigners crossing the border to Stubice		total		foreigners crossing the border to Stubice	
	in absolute numbers	1994=100	in absolute numbers	foreigners crossing the border to Frankfurt (O)	in absolute numbers	1994=100	in absolute numbers	foreigners crossing the border to Frankfurt (O)
1994	15,058,584	100.00	5,950,337	1,831,791	4,261,845	100.00	562,229	1,560,729
1995	16,492,387	109.52	2,235,014	5,962,583	4,727,690	110.93	755,788	1,671,803
1996	12,528,247	83.20	1,970,565	4,337,852	4,029,031	94.54	672,190	1,357,553
1997	11,011,203	73.12	1,793,028	3,777,573	3,508,621	82.33	536,911	1,235,853
1998	10,877,956	72.24	1,867,876	3,633,641	3,622,064	84.99	575,044	1,230,629
1999	9,862,876	65.50	1,495,991	3,489,976	3,356,797	78.76	477,684	1,221,890
2000	5,523,554	36.68	1,136,069	1,625,662	2,839,323	66.62	477,495	957,951
2001	7,052,453	46.83	1,391,841,	2,162,743	1,889,171	44.33	357,688	603,203
2002	5,671,978	37.67	1,105,668	1,749,748	1,456,601	33.44	286,116	447,226
2003	5,861,840	38.93	1,144,364	1,800,616	1,425,053	33.44	282,253	432,885
2004	6,091,308	40.45	914,114	2,118,539	1,587,123	37.24	261,226	531,157
2005	6,480,477	43.03	788,672	2,457,646	1,841,194	43.20	265,654	657,307
2006	7,118,634	47.27	916,617	2,637,551	2,242,434	52.62	700,753	436,100
2007 <sup>1</sup>	7,815,951	51.90	1,216,397	2,704,724	2,915,321	68.41	469,784	988,962

<sup>1</sup> statistical data cover the period from 1 January to 21 December

Source: own compilation on the basis of statistical data of the Border Guard Headquarters

Tab. 3. Pedestrian and vehicular border traffic at the Gubin-Guben border crossing in the years 1994–2007

Year	Pedestrians				Motorcars			
	total		Poles crossing the border to Guben	foreigners crossing the border to Gubin	total		Poles crossing the border to Guben	foreigners crossing the border to Gubin
	in absolute numbers	1994=100	in absolute numbers	in absolute numbers	in absolute numbers	1994=100	in absolute numbers	in absolute numbers
1994	10,771,541	100.00	3,649,125	1,646,649	4,775,941	100.00	674,468	1,754,070
1995	10,521,731	97.68	1,642,352	3,677,755	4,595,903	96.23	723,272	1,610,274
1996	11,062,669	102.70	1,624,974	4,006,449	5,211,314	109.12	733,198	1,944,590
1997	11,896,004	110.44	1,814,971	4,208,516	5,478,491	114.71	807,937	1,971,487
1998	10,929,048	101.46	1,524,831	3,982,885	4,736,702	99.18	615,902	1,786,368
1999	11,486,824	106.64	1,559,851	4,222,696	4,870,139	101.97	584,190	1,843,900
2000	4,198,764	38.98	468,484	1,652,113	3,672,000	76.89	385,305	1,447,739
2001	3,359,514	31.19	270,318	1,461,139	1,270,714	26.61	86,820	565,381
2002	3,476,020	32.27	374,188	1,399,903	940,616	19.69	95,295	391,224
2003	3,685,037	34.21	332,353	1,561,084	595,375	12.47	58,019	251,422
2004	3,055,919	28.37	285,321	1,266,574	1,026,503	21.49	97,539	424,276
2005	2,666,719	24.76	241,350	1,103,099	1,184,068	24.79	100,737	492,690
2006	3,194,467	29.66	356,950	1,247,311	1,405,267	29.42	471,387	229,079
2007 <sup>1</sup>	3,596,442	33.39	350,411	1,453,436	1,567,381	32.82	128,602	646,676

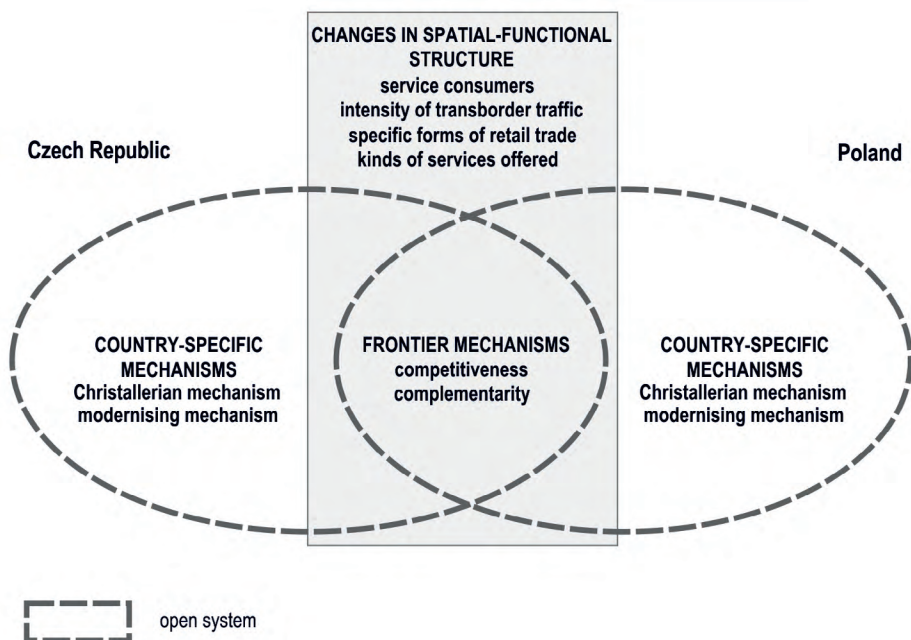
<sup>1</sup> statistical data cover the period from 1 January to 21 December

Source: own compilation on the basis of statistical data of the Border Guard Headquarters

An analysis of the intensity of border traffic can also be conducted in relation to the year and week. During the year the greatest number of consumers were recorded from April to August and in December, and during the week, decidedly at weekends. The towns on the Polish side experience then a real rush of consumers from abroad. A study of the intensity of traffic at the Słubice-Frankfurt (O) border crossing conducted by this author on 18 June 2011 showed that between 6:00 and 18:00 the Polish-German border to Poland was crossed by 6,914 cars and 2,338 pedestrians. Such a great proportion of motorised consumers causes the Słubice infrastructure to fail, with a permanent traffic jam on the border bridge, queues at petrol stations, scarcity of parking places near bazaars and supermarkets, etc.

### The service system of the Cieszyn-Český Těšín urban complex

Like the split towns in the Polish-German borderland, the Cieszyn-Český Těšín frontier urban complex has two service systems. One, fairly stable and operating on both the Polish and the Czech side, is targeted at the local population. The other is balanced and shows a similar degree of openness to the customers from abroad (Kulczyńska, 2010a) (Fig. 3).



**Fig. 3.** Service system of the Cieszyn-Český Těšín frontier urban complex

Source: own compilation

The Polish-Czech service system is also characterised by selectivity of services, but mostly in the range of services offered. Generalising, one can say that the

assortment of services on the two sides of the border differs to some extent, which means that Český Těšín offers services that can be found only on the Czech side (e.g. casinos) and the other way round. This selectivity has little to do with differences in the prices of goods. In Poland consumers from the Czech Republic buy goods at similar prices as at home, but which they think are better.

The places in Cieszyn visited most frequently by customers from the Czech Republic are two urban marketplaces offering a wide range of goods. The diversified offer encourages them to buy articles both available and not available on the Czech side. What Czechs seek at Polish bazaars are, for example, wickerwork, a commodity in scarce supply in the Czech Republic, or strawberries that appear in the summer season. Poles, in turn, go to Czech shops mainly for alcohol and some sweets (e.g. the Studencka chocolate).

An important, though hardly measurable, feature is the openness of traders or merchants on the two sides of the border to the customer from abroad. It manifests itself – especially on the Polish side – in their use of the Czech language to establish contact with the customer, and in running advertisements also in Czech. Those and other elements certainly facilitate communication in the purchase of goods or in the use of other kinds of service.

There are two basic groups of consumers, viz.: (a) residents of Cieszyn and Český Těšín who cross the border to buy several goods at similar prices as in the home country, but which they think are better (e.g. Czech consumers buy in Polish meat shops, while Polish consumers buy in Czech shops with alcoholic goods), and (b) consumers from outside Cieszyn and Český Těšín who usually come to do weekend shopping and seek standard goods at the lowest prices in order to obtain as large a profit as possible, and also to provide themselves with goods unavailable on the Czech side. An especially high intensity of visitors can be observed on Wednesdays and Saturdays when both bazaars on the Polish side are open (Kulczyńska, Matykowski, 2008).

Among Polish customers there are groups of pensioners from Silesia coming to Český Těšín to do shopping. They get to Cieszyn by coach, leave it at a car park there, and walk to the Czech side in search of services. Also Czech customers from outside Český Těšín make organised group trips to Cieszyn in order to do shopping at the Polish frontier bazaars.

When analysing consumer movement at the Cieszyn-Český Těšín border crossing, a fall was observed in the intensity of pedestrian traffic by about one-third, but an increase in motorcar traffic by about one-eighth (cf. Table 4). Unlike at the Polish-German border, there are no significant differences in the number of people crossing the border in a given year in both directions: there are as many Poles going to the Czech Republic as there are Czechs coming to Poland.

A detailed analysis of pedestrian traffic reveals that in the years 1995–2000 and 2003–2007 more Czechs came to Cieszyn, while in 1994 and 2001–2002 more Poles crossed the border to the Czech Republic. This predominance of foreigners coming to Poland amounted to 0.1–3.2 million, while the predominance of Poles going in the other direction is not as great, the minimum and the maximum values amounting to 1.0 and 1.6 million. The situation was quite different in the case of cars: with the exception of the years 2001–2002 and 2006, motorised foreigners coming to Cieszyn predominated, at 0.03–0.2 million.

Tab. 4. Pedestrian and vehicular border traffic at the Cieszyn-Český Těšín border crossing in the years 1994–2007

Year	Pedestrians				Motorcars			
	total		Poles crossing the border to Český Těšín	foreigners crossing the border to Cieszyn	total		Poles crossing the border to Český Těšín	foreigners crossing the border to Cieszyn
	in absolute numbers	1994=100 1997=100	in absolute numbers		in absolute numbers	1994=100 1997=100	in absolute numbers	
1994	16,694,615	100.00	4,906,221	3,282,701	2,208,733	100.00	498,209	647,966
1995	24,045,157	144.03	4,527,791	7,664,766	3,291,460	149.02	731,720	942,510
1996	30,289,062	181.43	6,068,593	9,289,081	4,686,485	212.18	1,112,813	1,294,245
1997 <sup>1</sup>	11,662,320	100.00	2,022,300	3,884,999	820,249	100.00	152,047	266,916
1998	11,874,836	101.82	2,168,951	3,825,564	681,120	83.04	130,844	212,537
1999	15,561,523	133.43	3,492,664	4,376,550	801,691	97.74	165,584	245,264
2000	15,616,076	133.90	3,871,964	4,006,259	880,986	107.40	208,053	241,487
2001	16,845,130	144.44	4,884,004	3,579,159	1,003,543	122.35	277,519	232,446
2002	14,781,503	126.75	4,198,070	3,245,200	1,002,075	122.17	270,893	237,708
2003	13,471,216	115.51	3,162,402	3,611,908	1,001,357	122.08	237,621	272,677
2004	13,126,878	112.56	2,798,971	3,814,012	998,500	121.73	209,205	297,751
2005	11,491,155	98.53	2,610,723	3,149,907	988,115	120.47	223,937	277,341
2006	8,850,227	75.89	1,974,363	2,445,682	937,693	114.32	250,156	219,524
2007 <sup>2</sup>	7,452,675	63.90	1,706,242	2,039,629	925,171	112.79	198,781	262,181

<sup>1</sup> establishment of the Cieszyn-Boguszowice border crossing<sup>2</sup> statistical data cover the period from 1 January to 21 December

Source: own compilation on the basis of statistical data of the Border Guard Headquarters

## Summing up

The patterns of the service systems in the split towns of the Polish-German and Polish-Czech borderlands are not the same. There are many factors shaping a service system, but those primarily responsible for differences between those of the examined frontier urban complexes include: (a) the kinds of services offered, (b) specific forms of retail trade, (c) intensity of transborder traffic, and (d) consumers of services. Their unique combinations allowed distinguishing two service systems: in the Polish-German borderland and in the Polish-Czech one.

In each of the split towns there are two service systems. One, geared to the service of the local population – on all sides, Polish, German and Czech – is fairly stable. The other, in the Polish-German borderland, shows a marked asymmetry in terms of volume and function. On the Polish side, this system responds to changes very dynamically and adjusts to the expectations of the consumer from the German side. The German system, in turn, shows only a measure of openness to the Polish consumer. In the Polish-Czech borderland the system is balanced, equally open to the local customer and one from abroad.

The degree of openness of the service system largely results from the intensity of transborder traffic. Readily visible at the Polish-German border is its disproportion: there are decidedly more Germans crossing the state border to Poland than Poles to Germany. There has been a general decline in movement figures, both in pedestrian and car traffic. In the Polish-Czech borderland, border traffic maintained a similar level over the study period with reference to pedestrian traffic, and even grew slightly with reference to cars. Unlike at the Polish-German border, there were no significant differences in the number of people crossing the border in a given year in both directions.

It seems that the service system of the Cieszyn-Český Těšín urban complex is more compact in territorial terms than those of the split towns in the Polish-German borderland, which follows from similar initial conditions of the economies in both countries and going through individual stages of European integration at the same time. That is why it is possible to state that the service system in the Polish-Czech borderland is more complementary, while that in the Polish-German borderland shows signs of competitiveness.

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