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Integrative transport policy - theory and practice

Abstract: The availability of transport services is one of the basic conditions for meeting the living needs and socio-economic activity of the population. The lack of access to such services is called a communication exclusion. Analyzes indicate that in Poland, both the number and the length of bus lines, mainly regional bus lines, are systematically decreasing. There is also little interest of local government units in building a common public transport offer. At the same time, the automotive index is rising. An important condition for shaping an integrated public transport network is cooperation: cooperation of various authorities at different levels, cooperation of authorities with carriers, cooperation with residents, enabling them to obtain their opinions. An important role can and should be played by non-governmental organizations that exist and operate in many places in Poland, pointing to the desired and expected solutions in the area of transport, e.g. the course of bicycle routes or the location of transfer points, or pointing to shortcomings and deficiencies in infrastructure.

Keywords: Transport policy; Availability of transport services

Introduction

For some groups of the population, communication exclusion has serious consequences and a significant deterioration in the quality of life, often resulting in social exclusion. Those groups of the population which, for various reasons, cannot afford the purchase and use of a passenger car, are at risk of exclusion. These groups include mainly women, children, adolescents, sick or disabled people, the unemployed, the poor, single parents, immigrants and in most European Union countries - people living in rural areas. Nor should it be the case that a citizen has to buy a car and bear the costs of its maintenance in order to be able to live with dignity.

Both issues raised, combating social exclusion and creating conditions for sustainable mobility are interrelated and have been the priorities of the European Union's policy for years. Responsibility for the implementation of social goals rests with the authorities of the basic units of the settlement structure, such as cities, communes, districts and regions. The way out of family poverty is to increase income, mainly through work. However, there are many factors that make it difficult for individual groups of the population to take up employment. This often requires access to educational or care services, which in turn is conditional on access to a transport service. The implementation of social goals should therefore take into account the issue of eliminating the areas of communication exclusion. However, the transport aspect is often overlooked in programs aimed at combating social exclusion.

In Poland, the problem of communication in regions and rural areas is not properly resolved, and the situation is even getting worse. As indicated by the Supreme Audit Office in the 2016 report, local governments should look for new solutions to enable residents of towns or estates distant from main communication lines to reach work, school or shop. The article indicates some solutions, the implementation of which would enable the creation of a coherent and attractive system of communication services for the population.

Basic forms of passenger transport and limitations of their use

Individual car communication has the largest share in servicing transport needs in cities and regions, which due to its features allows for meeting very diverse needs:

- it is a convenient means of transport for families, enabling time-efficient handling of the daily transport needs of all family members and the transport of luggage,
- makes it possible to transport small loads to handle small commercial and economic activities,
- allows freely choose your place of residence and work.

The condition for using this mode of transport is obtaining a driving license, depending on age, health and related costs. The use of a car is also associated with expenses, both one-off costs for its purchase, and fixed costs of use (insurance, garage, fuel, parking fees).

Cycling is an increasingly popular form of individual transport. The development of the bicycle infrastructure network in many Polish cities and the mild winter season in recent years mean that the bicycle is more and more often used for purposes related to commuting to work, schools or offices, or for supply purposes. The bike works well for short distances, but as the distance increases, its use significantly decreases. The condition for the usefulness of a bicycle is good health, traffic safety ensured by an extensive infrastructure, as well as appropriate weather.

Public transport is organized when a larger number of people regularly report their transport needs in the same direction and time. It is then possible to ensure adequate regularity and frequency of transport services from early morning to late evening hours, and even at night. Massive demand for public transport services makes it relatively cheap. Much worse conditions for the organization of public transport occur in sparsely populated areas, such as suburbs, suburbs or rural areas, or at times of the day when the demand for transport is low. Servicing low-density suburbs causes high organizational costs and unprofitable public transport. As a result, areas remote from urban centers are poorly, if at all, connected by the public transport network.

The availability of a car and the increase in urbanization in Poland in recent decades have resulted in the development of a car-dependent society and a decline in the number of public transport customers. The consequence of the decrease in the number of passengers is the limitation of the public transport offer by limiting the service range, reducing the number of journeys and shortening the daily service period. As a result, this leads to a significant decrease in the quality of services and the suitability of public transport to meet the vital needs of the inhabitants of these areas.

As a result of the described processes, society's dependence on transport self-service increases, and at the same time, there is a phenomenon of isolation of many people from important life functions and devices. In such a situation, people do not have the possibility to take up a job, continue education or take advantage of forms of institutional care. In addition to limiting access to jobs for people of working age, isolation caused by a transport barrier is particularly acute for the elderly, resulting in their exclusion from social life and inactivity, and thus deterioration of their mental and physical condition. It is in the best interest of society as a whole (also in terms of cost) that elderly people remain active and independent as long as possible. However, they must be allowed to do so.

Other barriers to using public transport, apart from accessibility, are the information and cost barrier. Despite the relative cheapness of public transport compared to individual transport, for many, especially the unemployed, the cost of travel is difficult to bear. On the other hand, the lack of information about available transport options and timetables is often the reason why the trip is abandoned. As a result of the described situations, areas of "communication exclusion" appear.

The issue of transport exclusion in areas further away from cities and in rural areas is becoming particularly clear in the last frames in Poland. While in most Polish cities there is public transport at a more or less satisfactory level, the organization of passenger transport in the regions shows many deficiencies. A coherent system of regional passenger communication should cover the entire area of the region, both urban centers, concentrating places of employment and education, as well as rural areas. The system should take into account the travel destinations of the region's inhabitants, especially those important for groups at risk of social exclusion. Lack of communication service or poor quality of this service, not adjusted to the needs of the population, also has its consequences in the form of a systematic increase in the motorisation index, with all its consequences in the form of congestion on an increasing part of the road network, growing air pollution, and a constantly high number of road accident victims.

EU guidelines for the integration of passenger transport systems

Comprehensive integration of transport services is an integral part of the concept of sustainable transport. One of the first and still valid documents containing the pattern of sustainable movement of people in the EU is the 1996 Green Book entitled "Citizen Network. Using the potential of public passenger transport in Europe ". The purpose of this document was to develop guidelines on how to influence the preferences of people in local, national and international transport in order to encourage them to use public transport services and thus change the structure of passenger transport, and ultimately reduce the share of private motorization. Many of the activities indicated in the document, concerning mainly security and technical solutions, have been completed. However, the recommendations with regard to the integration of passenger transport remain valid.

The guidelines set out in the concept of "Civic Network" emphasize what is most important to potential users - the transport utility and convenience of a network of interconnected passenger transport systems. Useful and convenient transportation networks should:

- be connected with each other so that passengers can easily change between different modes of transport and from private transport (car or bicycle) to public transport,
- connect local and long-distance transport systems,
- be attractive enough to limit the use of private vehicles only to journeys where flexibility and independence are important,
- offer an accessible service, understood as the availability of infrastructure and vehicles, an appropriate range of services, as well as an affordable price level.

The document identifies ways to increase the attractiveness and usefulness of public passenger transport, key to reducing car dependence. Transforming existing collective transport systems into a coherent civic network will benefit all citizens, but requires concerted action in many areas and at all levels of governance, local, regional and national. These actions are listed in the table **1**.

Tab. 1. Areas and scopes of activities related to creating a civic network

Area	Actions
1. Access to the system	- connecting areas generating demand - to the public transport network, - connecting rural and peripheral regions, - designing passenger communication points taking into account intermodality,
2. Tariffs Adjustment	- differentiation of tariffs, - lower tariffs for socially desirable services,
3. Security improvement	- establishing common security standards, - personnel qualifications, - number of personnel on duty / in the supervisory system,
4. Ensuring the comfort of traveling:	- short travel time, - appropriate frequency, cleanliness, comfort, - high reliability, - shared ticket, - correct information, system flexibility.
5. Reducing the negative impact on the environment	- reducing the emission of pollutants and noise, - environmentally friendly solution in terms of infrastructure

Source: *The Citizen's Network, op.cit.*

The main idea behind the integration of passenger transport is to create a chain of services "from door to door". The key to the creation of an attractive public transport network is the integration of the entire system, where the main areas of integration are:

- integration of various forms of public transport,
- integration of individual and public transport,
- integration of transport policy with other policies (e.g. spatial planning).

There is therefore a need for well-thought-out and regular cooperation between authorities - local, regional and national - with carriers and passengers. Concepts of creating integrated public transport networks, ensuring sustainable mobility for citizens, appeared many times also in other, later EU documents. Programs and funds have been developed to support the implementation of such systems. However, the analysis of the situation in Poland indicates rather a lack of progress in this respect, especially when it comes to intra-regional movements.

Changes in the range of regular bus transport in Poland

The data contained in the tables show the phenomenon of systematic reduction of the collective transport offer in regional transport in Poland. Tables **2 - 5** include data on bus transport due to its greater spatial availability and the greater number of carriers offering bus services.

Tab. 2. Number of domestic lines of regular bus communication in Poland

Provinces	2012	2016	2018	2018/2012
Poland in total	17930	14 205	11 644	0,65
Małopolskie	432	218	174	0,40
Świętokrzyskie	673	346	292	0,43
Mazowieckie	2521	2318	1 335	0,53
Lubelskie	1519	984	865	0,57
Śląskie	820	619	481	0,59
Kujawsko-pomorskie	2538	1687	1 535	0,60
Lubuskie	880	706	548	0,62
Dolnośląskie	1450	1049	911	0,63
Wielkopolskie	1362	1107	927	0,68
Warmińsko-mazurskie	842	782	592	0,70
Podlaskie	760	608	549	0,72
Zachodniopomorskie	1102	900	793	0,72
Łódzkie	890	911	667	0,75
Pomorskie	802	731	694	0,87
Podkarpackie	911	793	848	0,93
Opolskie	428	446	433	1,01

Source: own study based on: *Transport - activity results*, for the years 2012, 2016, 2018. GUS, Warsaw 2013, 2017, 2019.

In the period of 6 years, all provinces, except one (Opolskie), noticed a decrease in the number of regular bus lines. The size of the decline varies widely, from 60% to 7%. The largest decrease took place in the following voivodships: Małopolskie (by 60%) and Świętokrzyskie (by 57%), in the provinces where the lowest total number of regular bus lines operated in 2012 was in operation anyway. In 2012, there were 432 lines in the Małopolskie province, and in 2018 only 174 lines were operated. In the two-year period 2016-2018, 46 lines were closed.

A slight increase in the number of lines occurred only in the Opolskie province, but if you take into account the year 2016, there was actually a decrease in the number of lines by 13. It is worth noting that in 2012 the Opolskie had the lowest total number of lines - 428, while in 2018 the lowest number of lines was served in the Świętokrzyskie - only 292. It should be emphasized, however, that these provinces are the smallest ones in Poland, the Opolskie has an area of 9 412 km^2, and Świętokrzyskie 11 711 km^2.

Tab. 3. The length of the national line of regular bus communication in Poland (in km)

	2012	2018	2018/2012
Poland in total	910 267	559 322	0,61
Świętokrzyskie	35 580	13 559	0,38
Małopolskie	15 728	7 372	0,47
Śląskie	38 988	19 361	0,50
Dolnośląskie	75 451	40 633	0,54
Mazowieckie	144 176	78 718	0,55
Lubelskie	81 160	45 714	0,56
Lubuskie	34 496	19 873	0,58
Zachodniopomorskie	67 435	39 583	0,59
Wielkopolskie	58 555	36 547	0,62
Łódzkie	48 314	30 335	0,63
Warmińsko-mazurskie	51 741	32 569	0,63
Kujawsko-pomorskie	113 133	76 975	0,68
Pomorskie	43 204	32 380	0,75
Podlaskie	46 281	35 536	0,77
Opolskie	13 905	12 373	0,89
Podkarpackie	42 120	37 794	0,90

Source: own study based on: *Transport - activity results* for the years 2012, 2018. GUS, Warsaw 2013, 2019.

The analysis of changes in the length of regular bus lines shows that in the analyzed period in all provinces, including Opolskie, there was a decrease in the length of regular bus lines, as well as a decrease in the number of lines, ranging from 62% to 10%. The largest decrease in the length of lines operated, by 62%, took place in the Świętokrzyskie and Małopolskie provinces, in correlation with the decrease in the number of lines. Referring to the general data for Poland, it should be noted that the decrease in the number of lines and their length are of similar magnitudes: by 35% and by 39% - summing up, in six years by nearly 40%.

Table **4** presents analogous data on the number of regional lines of regular bus communication in Poland. It can be seen that the trends of changes with regard to both types of bus lines are similar. Both the number of lines and their length decreased significantly, but with regard to the length of regional lines, the decrease is much deeper (Table 5). For Poland as a whole, the decrease in the number and length of regional bus lines was 49% and 51% respectively (Tables **4** and **5**), i.e. nearly 10% more than in the case of the total number and length of bus lines. The largest decrease in the number of lines and the length of regular communication lines, amounting to 71%, took place in Mazowieckie. Świętokrzyskie came second in terms of the decrease in the length of regional communication lines, by 70%.

On the other hand, in two provinces there was a slight increase in the number of regional regular bus lines, the highest in Pomorskie - by 12% and a slight increase in the Podkarpackie by 9%. At the same time, however, there was a decrease in the length of lines served in these provinces, by 13% and 3%, respectively.

Tab. 4. Number of regional regular bus lines in Poland in the years 2012 - 2018

		Number of lines		
		2012	2018	2012=100
	Poland in total	3039	1562	0,51
1	Mazowieckie	402	118	0,29
2	Śląskie	106	36	0,34
3	Świętokrzyskie	82	31	0,38
4	Lubelskie	408	164	0,40
5	Lubuskie	113	46	0,41
6	Małopolskie	36	15	0,42
7	Warmińsko-mazurskie	242	102	0,42
8	Kujawsko-pomorskie	385	184	0,48
9	Łódzkie	170	81	0,48
10	Opolskie	25	13	0,52
11	Wielkopolskie	228	125	0,55
12	Zachodniopomorskie	262	165	0,63
13	Dolnośląskie	183	117	0,64
14	Podlaskie	185	131	0,71
15	Podkarpackie	91	99	1,09
16	Pomorskie	121	135	1,12

Source: own study based on: *Transport - activity results*, for 2012, 2018. GUS, Warsaw 2013, 2019.

Tab. 5. Length of regional lines of regular bus communication in Poland in 2012 - 2018

		2012	2018	2012=100
	Poland in total	235756	114 365	0,49
1	Mazowieckie	33116	9 630	0,29
2	Świętokrzyskie	7643	2 326	0,30
3	Małopolskie	3482	1 198	0,34
4	Śląskie	8317	2 804	0,34
5	Lubuskie	8163	3 106	0,38
6	Warmińsko-mazurskie	18395	7 681	0,42
7	Lubelskie	26900	12 130	0,45
8	Kujawsko-pomorskie	27254	12 824	0,47
9	Łódzkie	15168	7 610	0,50
10	Wielkopolskie	17930	9 095	0,51
11	Zachodniopomorskie	22928	12 100	0,53
12	Opolskie	1918	1 053	0,55
13	Dolnośląskie	13010	7 594	0,58
14	Podlaskie	14452	9 635	0,67

15	Pomorskie	9686	8 432	0,87
16	Podkarpackie	7394	7 147	0,97

Source: own study based on: *Transport - activity results*, for 2012, 2018. GUS, Warsaw 2013, 2019.

Parallel to the decline in the availability of regular bus transport, the development of individual motorization is taking place, as evidenced by the increase in the number of motor vehicles by nearly 3 million units over six years, from approximately 18.74 million to 21.68 million units. This means an increase in the automotive index from 486 units per 1,000 people in 2012 to 610 units per 1,000 inhabitants in 2018. It is a motorization index comparable to the most developed European countries. The share of passenger cars in the transport performance of passenger transport in Poland in 2017 was 77.2%, more than the EU average (70.8%). In 2012 it was 76.7%.

Tab. 6. Automotive index in Poland in 2012 - 2018

Automotive index - number of cars per person / 1000 inhabitants				
		2012	2018	2018/2012
	Poland	**486**	**610**	125%
1	Dolnośląskie	495	629	127%
2	Kujawsko-pomorskie	477	598	125%
3	Lubelskie	455	593	130%
4	Lubuskie	507	648	128%
5	Łódzkie	488	616	126%
6	Małopolskie	467	576	123%
7	Mazowieckie	537	678	126%
8	Opolskie	529	649	123%
9	Podkarpackie	431	555	129%
10	Podlaskie	420	525	125%
11	Pomorskie	485	598	123%
12	Śląskie	477	585	123%
13	Świętokrzyskie	453	569	126%
14	Warmińsko-mazurskie	433	546	126%
15	Wielkopolskie	547	671	123%
16	Zachodniopomorskie	454	579	128%

Source: own study based on*: Transport - activity results*, for 2012, 2018. GUS, Warsaw 2013, 2019.

The data in Table **6** show that there was an increase in the automotive index in the analyzed period in all provinces by 23% to 30%. According to Eurostat data, in 2017 the automotive index in Poland was 593 alone. people / 1000 inhabitants and was higher than the EU average - 516 people / 1000 inhabitants). Poland was fifth in the European Union, behind Luxembourg (670 per person / 1,000), Italy (637), Finland (621), Malta (613), and Cyprus (609). The automotive index in Germany in 2017 was 561, and in France - 478. A detailed study of the relationship between the offer of public transport services and the level of the automotive index, taking into account the specificity of the country, region, and its geographic and spatial conditions, is undoubtedly worth analyzing, but it exceeds the framework of this article.

Table **7** presents changes in the number and length of regular regional bus lines with changes in the automotive index.

Tab. 7. Changes in the number and length of regular regional bus lines and changes in the automotive index in Poland in 2012 - 2018

Regional bus lines and the automotive index - change 2018/2012				
		Number of lines	Line length	Automotive indicator
	Poland	**0,51**	**0,49**	**1,25**
1	Dolnośląskie	0,64	0,58	1,27
2	Kujawsko-pomorskie	0,48	0,47	1,25
3	Lubelskie	0,40	0,45	1,30
4	Lubuskie	0,41	0,38	1,28
5	Łódzkie	0,48	0,50	1,26
6	Małopolskie	0,42	0,34	1,23
7	Mazowieckie	0,29	0,29	1,26
8	Opolskie	0,52	0,55	1,23
9	Podkarpackie	1,09	0,97	1,29
10	Podlaskie	0,71	0,67	1,25
11	Pomorskie	1,12	0,87	1,23
12	Śląskie	0,34	0,34	1,23
13	Świętokrzyskie	0,38	0,30	1,26
14	Warmińsko-mazurskie	0,42	0,42	1,26
15	Wielkopolskie	0,55	0,51	1,23
16	Zachodniopomorskie	0,63	0,53	1,28

Source: own study based on: *Transport - activity results* for 2012, 2018. GUS, Warsaw 2013, 2019.

Of course, changes taking place in individual provinces may have various and complex reasons, which also require in-depth research. The highest increase in the motorisation index took place in Lubelskie, with a simultaneous deep decrease in the number and length of lines by 60%, which seems to indicate a clear link. At the same time, a slightly smaller increase in the motorisation index, by 29%, took place in Podkarpackie, where the number of lines increased and their length decreased slightly, which may indicate a mismatch between the existing offer and the needs and expectations of the inhabitants. The case of Śląskie province is an interesting case, where there was a significant decrease in both the number and length of lines by over 60%, and at the same time, there was a relatively smaller increase in the automotive index, by 23%. However, it should be remembered that this province is dominated by urbanized areas covered by a dense network of railway lines.
Table **8** summarizes changes to regular bus lines in Poland in 2017 and 2018.

Tab. 8. Changes in the number and length of regular bus lines in Poland in 2017 - 2018

Lines		2017	2018	2017=100
Overall	number	13 026	11 644	0,89
	length [km]	627 528	559 322	0,89
Long-distance	number	357	356	1,00
	length [km]	134 109	130 868	0,98
Regional	number	1 877	1 562	0,83
	length [km]	140 982	114 365	0,81
Suburban	number	10 643	9 557	0,90
	length [km]	351 004	312 600	0,89
Urban	number	149	169	1,13
	length [km]	1 433	1 489	1,04

Source: *Transport - 2018 activity results*. GUS, Warsaw 2018.

The numbers in the table confirm the unfavorable phenomenon of limiting the spatial range of the public transport bus offer in regional and suburban areas. Only the number and, to a small extent, the length of public transport lines are growing. With the simultaneous increase in the motorisation index, this means increasing congestion of entry roads to cities and the cities themselves, which is contrary to the principles of sustainable development, worsens the quality of life in cities and reduces the quality of life for non-motorized people living outside cities.

Examples of transport solutions for servicing regional transport

Solving the problem of insufficient public transport service in less urbanized areas requires the preparation of new forms of this service. Large vehicles, rigid timetables, and line routes generate high costs, and do not carry the necessary minimum number of passengers to cover them, and do not meet the important needs and expectations of residents. It is a topical issue and important also because areas with low demand for collective transport may expand as a result of demographic changes, mainly consisting of aging populations. This means a decrease in the number of students for whom public transport currently performs a significant part of the transport work, and as a consequence, a lack of customers and no grounds for launching transport.

New forms of transport services in the regions should be based on flexible solutions, the most important of which are individualized passenger transport systems, the so-called transport on "demand" - demand responsive transport. In flexible systems, the route may be constant or irregular, there may be both permanent stops and stops established on the basis of prior notification, vehicles should be adjusted in size to the needs. Timetables can also be fixed or variable, they can include special trips and service on request only at certain times. Such a solution called "Tele-bus" has been operating since 2014 in Krakow. Thanks to the Tele-bus service, the passenger has the opportunity to agree with the carrier the start and end time of the journey and does not have to adapt to the timetables. He can also choose the start and end stop of the journey in the area served by Tele-bus. The types and prices of tickets are the same as in regular city transport.

A similar solution was implemented by the local government of Szczecin, introducing a transport system on demand for the Podjuchy estate without public transport. Passengers can order a bus for a specific hour by phone, which will take them to the nearest bus terminus or a selected stop.

Many interesting solutions have been tested under various pilot programs financed by European funds under the EU's Fifth Framework Program, carried out in 1998–2002. The aim of the 5th framework program of the EU, in which also Polish scientists took part, was, inter alia, improvement of living conditions through the development of the labor market. One of such programs was the ARTS program. The main aim of the ARTS program was to provide basic mobility services for people living in rural areas at a reasonable cost. Freight models have been developed for rural regions in different countries using the following innovations:

- for services: flexible routes introduced, "on demand" services, volunteers involved;
- in terms of organization: integration of existing dedicated services, cooperation of various administrative units,
- in the field of technology: telematics, dispatch centers, real-time information.

On-demand services are characterized by the fact that the customer has to book a trip in advance. The ordered vehicle picks up the passenger at the agreed time and place and brings them to the desired point. It is, therefore, necessary to organize a dispatch center that will collect orders, organize travel routes in the event of a larger number of orders and transfer orders to drivers. The most convenient way would be to place an order for travel via the Internet, however, the condition is access to the Internet in a given area and the possession of a computer or mobile devices by interested persons. In the case of people at risk of poverty and social exclusion, it may be difficult to meet this condition, although the widespread availability of smartphones makes it much easier. However, it is necessary to know how to use a computer and the Internet, which may eliminate the elderly from this form of service, not only in transport.

Volunteer involvement is that the transportation is organized and carried out by local residents or local non-profit organizations and the vehicles are driven by volunteers who are not professional drivers.

One of the tested solutions was the organization of services dedicated to mixed groups of recipients. A typical example of such a service is the extension of the entitlement to use organized school transport also to other people, mainly the elderly or the disabled. In addition, it is possible to extend the travel routes so that they include points important for additional passengers, e.g. shops, offices, health centers, and not only schools. It is worth emphasizing that all the projects tested under the ARTS program were developed on the basis of precisely identified transport needs. From the point of view of social policy goals, it is important that the transport service of weak and dispersed demand is perceived as a significant factor increasing the quality of life, for many a basic condition of social inclusion.

An important element of the policy aimed at integrating passenger transport should be the involvement of many service providers with a diverse fleet: larger and smaller bus companies, rail carriers, bus carriers, taxi drivers, and volunteer drivers.

A proven solution that enables efficient cooperation of many different entities, ensuring the proper distribution of income and financing, is the communication link. Communication links have been successfully operating in Germany since the 1970s. The benefits of a communication link for passengers are one ticket for many different means of transport, good connections, intermodal transfer points - that is, integrated transport service, ensuring what is most important for the customer: speed, reliability, and comfort. In 16 federal states of Germany, there are 63 tariff and communication unions, in various forms and with various ranges. There are unions of principals, carriers, and mixed unions, with the participation of both groups, there can only be a tariff union. There are unions that operate

only within the urban area, or throughout the entire federal state, with or without the integration of rail transport.

A good example of an inclusive transport policy is the VVS.de tariff and communication association (Verkehrs- und tarifverbund), serving the agglomeration of Stuttgart, the capital of Baden Württemberg. The union was founded in 1978, its task is to coordinate public transport in Stuttgart and the four counties surrounding the city, covering an area of 3,000 km^2, with a total population of almost 2.4 million. The union coordinates urban and suburban transport, including trams and buses, S-Bahn, regional rail, and regional buses, a total of 462 lines and 3,952 stops. Since 1997, there has been a Passenger Council within the union, which meets regularly three times a year. Since its inception, the number of passengers has almost doubled, increased by 97 percent, and, according to VVS, now stands at 382 million per year.

The Central-German transport union is of a slightly different nature: Mitteldeutsche Verkehrsverbund MDV, established in 1998 to provide public transport services to the cities of Leipzig and Halle, together with the neighboring counties. The activities of the union cover an area of over 11,300 km2. This relationship is inter-national, as it covers cities from three federal states. The total number of inhabitants living in this area is approximately 2.1 million. The union integrates railways, suburban and high-speed trains, as well as tram and bus connections. The basic tasks of the union include the division of transport tasks between individual partners of the union and the development and implementation of a common transport tariff, as well as planning a transport network in the area of the union, development of communication systems, and running a ticket sales network. The role of partners forming a relationship is reduced to ordering and financing connections made in their area. In addition, they are responsible for planning timetables, running passenger information points, and selling tickets.

The backbone of the MDV communication network is the regional rail network, the Mitteldeutschland S-Bahn with 10 lines, operated by DBRegio, and the network of 35 PlusBusNetz lines. PlusBus lines are designed to transport passengers to the S-Bahn network or another rail network. The network is complemented by regional rail and bus connections. Connections are carried out as part of a cyclical timetable:

- from Monday to Friday, the clock cycle is one hour,
- always the same time on working days, even during school holidays,
- regular, usually two-hour cycle, also on weekends and non-working days.

Good connections at points connecting the rail network with the bus network ensure minimal waiting times for connections. The union works to involve passengers in consultations in the field of its tasks and to popularize sustainable urban mobility.

In Poland, it is also possible to establish associations with local government units in order to perform various tasks. As of June 30, 2020, the register of unions included 13 district and commune unions, 6 districts unions and 314 inter-commune unions, of which 200 were active, and the rest were deregistered or transformed. In total, this gives nearly 220 operating associations of local government units. Unions are established for a variety of tasks, unfortunately, little is intended to implement tasks in the field of public transport organization. Most, i.e. 10 out of 13, unions focused on public transport are among district and commune unions. Among the six existing associations of districts, none is responsible for the organization of public transport. Out of 200 active inter-municipal associations, only 19 mention tasks related to public transport for their purposes, most often local public transport is explicitly mentioned.

Unfortunately, the aspect of communicating with customers and passengers is often neglected; it often takes effort and time to obtain up-to-date information on public transport options, especially to non-urban locations. As indicated by the findings of the Supreme Audit

Office of 2016, more than half of local governments did not comply with the obligation to provide passengers with information on available public collective transport. The websites of the offices do not contain data on the route of communication lines, timetables, or information about carriers.

The solutions described in the article are focused on activities aimed at improving the offer of collective public transport. However, there is another, very important side, namely the decisions of residents and the choice of how to meet the transport needs. These elections can and should also be influenced, also by applying restrictions on car transport, e.g. fees for entering the city. An example of activities that can also play an educational role is the introduction of restrictions on the access of cars to roads with schools, and at the same time ensuring a comfortable and safe route for children and adolescents.

Summary

Ensuring a good quality of life for residents of areas remote from regional centers requires many complementary actions, including providing jobs, education, health care, and access to culture. A factor outside the scope of strict social policy, but a key factor for the implementation of the above-mentioned measures, and insufficiently taken into account in social programs, is transport.

The analyzes show that in Poland, both the number and the length of bus lines, mainly regional bus lines, are systematically decreasing. There is also little interest of local government units in building a joint offer of public transport. At the same time, the automotive index is rising. However, own a car is not available to young, sick, elderly or poorer people. Therefore, it becomes necessary to introduce forms of public transport that will ensure the availability of services to the population in less urbanized, rural areas. The lack of accessible, attractive communication also contributes to the fact that people move to larger centers, providing access to education, attractive work, or social contacts. And small towns and villages are emptying, as exemplified by Italy, where houses are sold for 1 euro just to attract residents.

The social programs implemented in Poland focus on fiscal, family, sickness, and housing issues. At the same time, however, they do not mention transport conditions. The National Strategy for Social Integration, adopted in 2004 as a document of the Ministry of Family, Labor and Social Policy, devotes 6 lines of text to transport, and the authors consider the lack of a system of reduced tickets and safety standards to be the main problem. Newer Ministry programs, for example for the elderly, also overlook the problem. Thus, living in areas remote from the main economic and administrative centers in Poland is increasingly becoming a factor contributing to social exclusion.

It is obvious that the use of new forms of transport for low passenger flows in less urbanized areas will generate costs. It is, therefore, necessary to carefully examine the actual and potential demand for various forms of transport and to extend the cost accounting of the costs of the deterioration of the quality of life and the necessary additional health care resulting from the negative effects of increased motorization.

In the case of other population groups, the factor that may convince people to use public transport more often is ensuring high utility, time, and space availability, as well as the shortest possible travel time, convenience, and quality of services. A good, integrated, comfortable passenger transport network is the only way to sustainable transport and a clean environment. Cheap tickets, events and festivities will not convince users to drop off their own car, as you can see when looking at the annual European "Car Free Day". The idea of that day was to close the streets of cities for cars for one day and to provide public transport so that motorists "had" to find out about the usefulness of public transport. And this is how it is organized in European cities. Our cities focus on free transport, which misses the point

because costs are not the main barrier discouraging public transport. It seems, however, that, unfortunately, no one asks potential customers for their opinion on this matter. As indicated by the Supreme Audit Office in the 2016 report, local governments were generally not interested in organizing public collective transport for residents. They also did not examine the local transport needs, although they are obliged to do so. Of course, NIK also pointed to barriers such as lack of money and contradictory legal solutions.

An important condition for shaping an integrated public transport network is cooperation: cooperation of various government centers at various levels, cooperation of authorities with carriers, cooperation with residents, enabling them to obtain their opinions. An important role can and should be played by non-governmental organizations that exist and operate in many places in Poland, indicating the desired and expected by people solutions in the field of transport, e.g. the course of bicycle routes or the location of transfer points, or pointing to the shortcomings and deficiencies of infrastructure. Thus, they ensure the cost-free acquisition of valuable information. The lack of such broad and effective cooperation aimed at common goals and social good is, in my opinion, one of the most important reasons for the fact that the practice in our country differs so much from the theoretical principles of integrated transport policy.

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