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## **ARCHITECTURAL AND URBAN CONTEXT OF INTERNATIONAL AUTOMOBILE CHECK POINTS ON THE WESTERN BORDERS OF UKRAINE**

### **ARCHITEKTONICZNY I URBANISTYCZNY KONTEKST MIĘDZYNARODOWYCH PUNKTÓW KONTROLI NA ZACHODNICH GRANICACH UKRAINY**

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#### **ABSTRACT**

The architectural and urban features of the existing system of automobile check points (ACP) on the Ukrainian-Polish transboundary territories have been revealed due to re-thinking of European examples in this field and possibilities of practical application of this experience for Ukraine. New structural models of ACP, which take into consideration the differentiation of spaces for various transit traffics, have been proposed. The model of the customs-transport complex crossing point and its typological features have been formulated.

Key words: international automobile check points, border, architectural and urban features, transboundary territory, avanza infrastructure, customs-transport complex on the border.

#### **STRESZCZENIE**

Artykuł opisuje cechy architektoniczne i urbanistyczne istniejącego systemu samochodowego punktu kontrolnego (SPK) na ukraińsko-polskich terytoriach transgranicznych. Dokonano analizy europejskich i światowych przykładów podobnych rozwiązań oraz zaproponowano możliwość praktycznego zastosowania tego doświadczenia na Ukrainie. Opisano nowe modele strukturalne SPK, konieczność zróżnicowania przestrzeni dla różnych tranzytów. Sformułowano model skrzyżowania kompleksu celno-transportowego i jego cechy typologiczne.

Słowa kluczowe: architektoniczne i urbanistyczne cechy, infrastruktura predstrefy SPK, kompleks celno-transportowy na granicy, międzynarodowe samochodowe punkty kontrolne na granicy, terytorium transgraniczna.

## 1. INTRODUCTION

Favorable conditions of geographic and geopolitical location of Ukraine in the center of continental Europe are not sufficiently taken into account by the Ukrainian state for the development of socio-economic contacts throughout its perimeter. This is a display of the lack of experience in planning of border areas and the creation of a network of international transport corridors that meet European standards, despite the adoption of laws, Government Concepts and Programs [1-5]. International agreements and the current unsatisfied state of transit through the border show the need for further development of programs and projects for urban development of transboundary territories. One of the elements of international transport communications and transboundary territories is the system of automobile check points on the border. This article analyzes the urban features of domestic and foreign border check points (*CP*), which influence the formation of the system of *CP* and the capacity of the border and proposes complex models for the development of the infrastructure of the border objects of Ukraine.

**The purpose of the article** is to reveal the architectural and urban features of the system of checkpoints on the Ukrainian-Polish border and the spaces of their avanzones through rethinking the world trends in this field and substantiating the principles and structural models of the automobile check points (*ACP*) system.

The focus is on:

- the analysis of the experiences of China, Turkey, Germany, Poland and Belarus in the formation of urban planning trends in the functioning of *ACP* complexes;
- identifying links between elements of the system of existing check points of Ukraine and their surroundings on the features, problems and inconsistencies in their organization on the basis of spatial analysis;
- the development of the theoretical and methodological model of the customs-transport complex of border crossing, the formation of extended typological features and the requirements for their architectural and urban solutions based on world trends.

The issue raised in the article is interdisciplinary and causes interest among representatives of various subject areas. The border areas were studied by geographers, historians, geopolitics and political scientists, lawyers, economists, transport scientists, sociologists, urban architects. However, in none of these studies the issue of architectural planning and spatial organization of automobile check points are not the main object.

## 2. PRESENTATION OF THE MATERIAL

### 2.1. Analysis of world experience

In order to find out the features of the functioning of the complexes of automobile check points on the borders, the urban planning conditions of placement and the specifics of the existing *ACP* on the borders of Ukraine, Poland, Belarus, Turkey and China were analyzed. The study was divided into two levels:

- the level of urban structure of the territory and transport links of neighboring countries in the context of the settlement system;
- the level of the functional structure of specific automobile check points and analysis of traffics that pass through these check points and the infrastructure serving them before and after the border.

The attention was accented on the location of the *ACP* in the settlement system: urban connection with the nearest settlements, the border, the type of traffics that pass through the *CP* and the objects of the transport infrastructure at their avanzone. Under the avanzone infrastructure, the author understands the objects of service of transit traffics in

the direct proximity to the *ACP*, which ensure their functioning (for example: parking lots, gas stations, catering establishments, hotels, banking and brokerage offices).

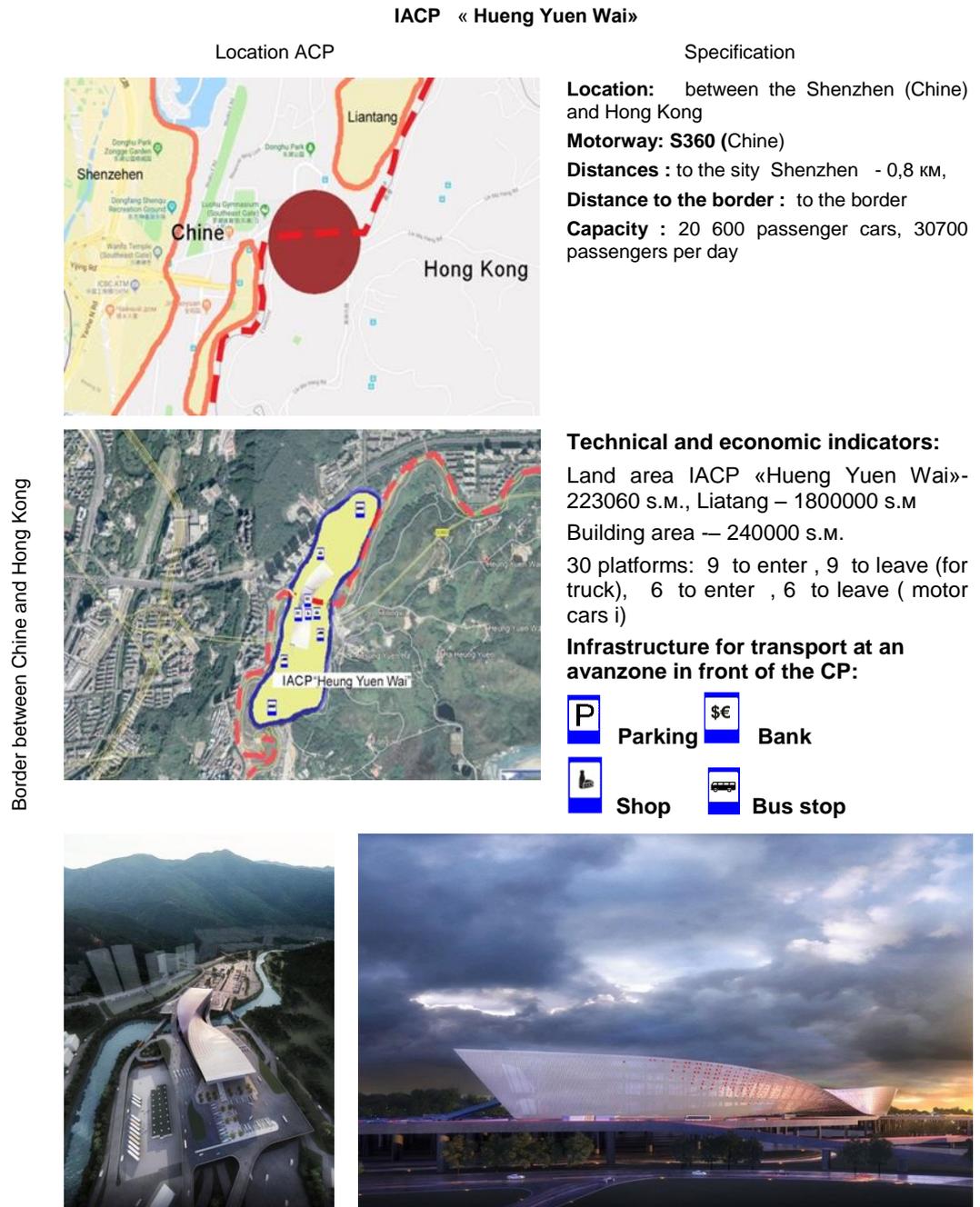


Fig.1 IACP «Hueng Yuen Wai»  
 Ryc. 1 Międzynarodowy samochodowy punkt kontrolny na granicy «Hueng Yuen Wai»

An analysis of the urban situation of the Chinese automobile check points on the border with Hong Kong made it possible to identify several basic principles of their formation («Lok Ma Chau» international automobile check point (*IACP*), «Heung Yuen Wai» *IACP*): (Fig.1):

- separation (vertically or horizontally) of transport truck, bus and car-passenger traffics, which made it possible to create various spaces for control;
- saturation with the diverse infrastructure of each type of traffics, with their deep differentiation in the territory of the *CP* and in front of it;
- the principle of combining the space of personal review of travelers both on foot and from bus transportation and organizing it following the example of control at airports.

An accurate differentiation of truck and passenger traffics can be seen in large Turkish check points with EU countries («Kapikule- Kapitan-Andreevo» IACP). It should be noted that large parking terminals for large-size vehicles that are directly adjacent to the territory of CP with transport representative departments of territorial carriers, motels, catering establishments, banking and brokerage offices, trade, service stations, gas stations, in some cases, logistic centers and even religious objects necessarily included in avansone infrastructure in both countries. Foreign experience of designing of ACP distinguishes traffics into separate zones with the entire set of control operations and separate entry through the terminal-parking

At the check points of Belarusian-Polish border there is a trend of the allocation of truck traffics into separate terminals («Kozlovichi-Kukuryki» IACP) the capacity is 2000 cars per day. For the latter there is a characteristic common area for all types of control in the territory of Belarus. (Fig. 2).

A detailed analysis of the location of check points on the Polish-German border before Poland joined the European Union made it possible to summarize the experience of our neighbors, whose path we are following now. On this section of the state border of Poland (about 470 km), 68 check points were located (approximate interval of 5-10 km between them). A network of transboundary communication axes was identified in the form of perspective urban development lanes. The main lanes are Berlin - Frankfurt (Oder) - Poznan, and Berlin - Wroclaw, Berlin - Szczecin and lane of prevailing urbanization that connects such cities as Szczecin, Gorzow Wielkopolska, Zielona Gora and Letnitsa.

This system of lanes created the planning framework of the Polish-German transboundary region. The important feature was the organization of control of two countries at the joint *CP* and the presence of parking lots with the appropriate infrastructure for transport at an avansone in front of the CP.

## **2.2. Architectural and urban analysis of the ACP system at the Ukrainian-Polish border**

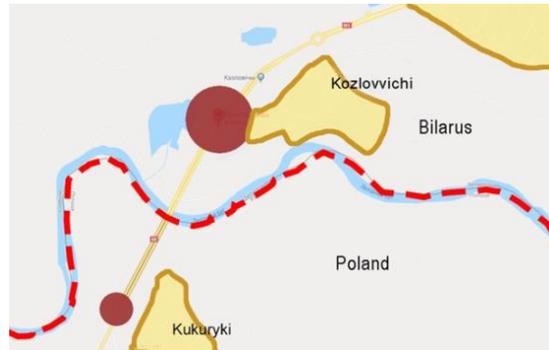
The planning framework of the Lviv and Volyn regions bordering Poland has a characteristic linear-nodal urbanized structure, which is formed as a result of the intersection of two main directions of increased urbanization and transit traffic: East-West and North-South. The main planning axes coincide with the main transport links crossing the region from east to west - *the Krytskyi Corridor №3* (Berlin-Krakow-Krakivets-Lviv-Rivne-Zhytomyr-Kyiv); and from the north to the south of *the Krytskyi Corridor № 5* (Kosyny - Chop - Stryi - Lviv - Rivne - Sarny - Minsk) and the international transport corridor *the Baltic Sea - Black Sea* (Warsaw - Yahodyn - Kovel - Lutsk - Ternopil - Odesa). The dominant urban element of the planning frame is the planning axis East - West, for making an international transport corridor Kyiv - Berlin (motorway A-4). The important component of the urban planning frame is also the transboundary meridional communication axis with adjacent settlements and urbanization nodes. The Western Bug River is a factor of influence on the crossing of the borders of Ukraine, the Republic of Belarus and Poland.

The existing check points on the Ukrainian-Polish border, despite their constant development, are not able to provide the current transit between the East and the West. Nowadays there are fourteen check points on the border with Poland, including 8 automobile and 6 railways (the average distance between *CP* - 40 km.).

**IACP «Kozlovichi-Kukuryki»**

Location ACP

Specification



**Location:** Between the Belarusian village and the Polish village Kukuryki near the Western Bug River

**Motorway :**

**M1** ( Belarus ) and the route **68** ( Poland )

**Distances :**

IACP « Kozlovichi» on the border village , to the border – 0.5 км. IACP «Kukuryki» to Kukuryki- 0.2 км, to the border –0.6км

**Capacity :** 2000 trucks for a day

**Technical and economic indicators :**

land area IACP « Kozlovichi» 194000 s.m, building area-7420 s.m;

IACP «Kukuryki»- 32000 s.m, building area-1020 s.m

9 platforms for truck loads : 4 to enter , 5 to leave ;

**Infrastructure for transport at an avanzone in front of the CP. :**



Parking



Gas station



Service station



Bank



Hotel



Restaurant

Belarusian-Polish border

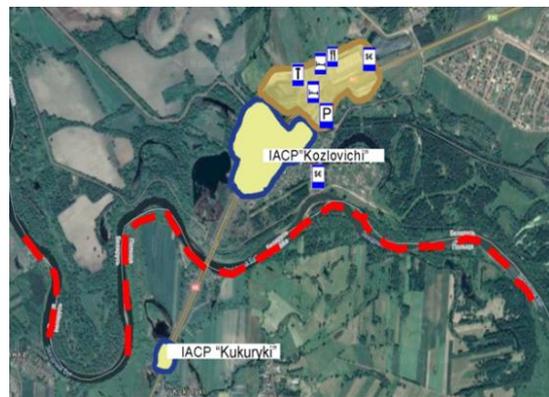


Fig.2 IACP «Kozlovichi-Kukuryki»

Ryc.2. Międzynarodowe samochodowe punkty kontrolne na granicze «Kozlovichi-Kukuryki»

International automobile check points (IACP): «Yahodyn» (Volynsk region, Liubomlskiy district), «Ustyluh» (Volynsk region, Volodymyr-Volynskiy district), «Dolhobychuv – Uhryniv» joint Polish-Ukrainian customs control on the Polish territory Lublin province, «Rava-Ruska» (Lvivsk region, Zhovkivskiy district), «Hrushiv – Budomezkh» joint with Poland check points on the Polish territory Lublin province, «Krakivets» (Lvivsk region, Yavorivskiy district), «Shehyni» (Lvivsk region, Mostyskiy district), «Krostsenko – Smilnytsia» Customs and border control takes place in one place in Poland Pidkarpatske

province. Railway check points: «Dorohusk – Yahodyn», «Khrubeshuv - Volodymyr-Volynskyi», «Hrebenne – Rava-Ruska», «Verkhvata – Rava-Ruska», «Peremysli – Mostyska», «Krostsienko – Khyriv». (Fig. 3)



Fig. 3 Existing control points on the Ukrainian-Polish border  
Ryc. 3 Istniejące punkty kontrolne na granicy ukraińsko-polskiej

The existing automobile check points on the Ukrainian-Polish border accumulate in their territories the transit of all types of transport (truck, motor-car and bus, except for pedestrian-bicycle) without sufficient differentiation and necessary infrastructure before entering the territory of ACP. Therefore, even large check points such as: «Shehyni-Medyka», «Krakivets-Korchova», «Rava-Ruska-Khrebenne», «Yahodyn-Dorohusk» IACP do not guarantee fast border crossings. The reasons are insufficient consideration of architectural and urban planning requirements and features of traffics, as well as organizational problems of border and customs services. The following territorial levels of consistent plan detailing have been identified: conceptual level of transport corridors and international transit, the level of territorial forecasts and regional planning, detailed planning of service complexes of the border check points based on foreign urban planning experience and the research of Yu. Bilokon, I. Fomin and the Institute «Dipromisto». [6-8].

It has been established that the efficiency of ACP depends not only on the clear functional and planning solution of the ACP, but also on the clear formation of the space of the avanszone infrastructure of check points, which is oriented to the needs of certain traffics

and located directly near the CP. The received data of the infrastructure transport filling of the existing check points is structured in the form of a table (Tab. 1).

Tab.1. Infrastructure for transport at an avanzeone in front of the CP

Object	Infrastructure for transport at an avanzeone in front of the CP.										
	Parking	Banking and insurance services	Sanitary hygienic unit	Gas station	Catering establishments	Service station	recreation area	trading zone	health care facilities	Hotel (motel)	customs and logistics center
1	2	3	4	5	6	7	8	9	10	11	12
IACP «Smilnuca-Kroscienko» joint control in Poland		•	•	•	•			•		•	
IACP «Shegini» Ukraine	•	•			•			•			
IACP «Meduka» Poland	•	•	•	•	•			•		•	
IACP «Krakivets» Ukraint	•	•	•	•	•			•	•	•	•
IACP «Korchova» Poland	•		•		•			•		•	
IACP «Grushiv – Budomierz» joint control in Poland											
IACP «Rava-Ruska» Ukraine	•	•		•	•			•		•	
IACP «Hrebenne» Poland	•				•					•	
IACP «Ugrinov-Dolgobychuv» joint control in Poland											
IACP «Ustylug» Ukraine	•	•			•			•		•	
IACP «Zosin» Poland											
IACP «Yagodin» Ukraine	•	•		•	•			•		•	
IACP «Dorogusk» Poland	•							•			
IACP Lok Ma Chau Hong Kong	•	•	•	•	•	•	•	•	•	•	•
IACP Hueng Yuen Wai Chine- Hong Kong	•	•	•		•			•			
IACP «Kapikule-Kapitan Andrewo» Turkey-Bulgaria	•	•	•	•	•	•	•	•	•	•	•
IACP «Козловічі-Kukuryki» joint control in Byelorussia	•	•	•	•	•	•	•	•	•	•	
IACP «Brest» Belarus	•	•		•	•			•			
IACP «Terespol» Poland	•			•	•			•			
IACP «Domanovo» Ukraine	•	•		•	•			•		•	
IACP «Dykovo» Ukraine	•	•		•	•	•					•
IACP «Maluy Berezny» Ukraine		•		•	•			•		•	
IACP «Luzhanka» Ukraine				•	•			•			
IACP «Zakhon» Угорщина											
IACP «YagodinChop» Ukraine	•	•		•	•			•			

The first urgent and obvious need for the effective functioning of all check points is to provide them with access motorways and the presence of a sufficient amount of communicative information (pointers, information stands, a running informational tape on the state of the *ACP*). The existing automobile access roads to *CP* perform the functions of local roads and at the same time transit traffic. Such network was formed historically. The main requirement for transport access roads should be their tracing outside settlements, so as not to create environmental and emergency problems. And the planning basis of the international transport corridor should be the first technical category motorways, designed exclusively for traffics, that is to be multi-lane and have protective means to prevent the entrance to the carriageway with congresses to a parallel regional or local road network.

The second necessity is the separation of truck traffic. According to the requirements of the monitoring commission of the borders of the European Union [12] and the author's vision, it is necessary to distinguish truck transit into separate *CP*. Such transit has the specifics of passing customs procedures, requiring large areas for large-size vehicles, special scanners, in-depth inspection boxes and large areas for maneuvering and various types of control, in accordance with a larger number of customs personnel. For efficient operation of *CP* it is necessary to create parking terminals for this type of transit in the avansone, in close proximity to the *CP* and international transport corridors with a full range of services. Parking lots can be supplemented with the function of customs and logistics centers or wholesale regional trade with banking and brokerage institutions. Such truck *CP* can be created in *IACP* «Yahodyn», «Rava-Ruska», «Krakivets» and «Shehyni» after appropriate reconstruction and because they are on the main international corridors.

The third problem is bus transit. This type of transit is becoming widespread in connection with the labor migration of Ukrainians to Poland and further to Europe and the increase in the tourist attractiveness of Ukraine for Europeans. The disorganization of this traffic pushes Europeans away. At the moment, on all Ukrainian-Polish *CP*, one control point for this type of transport is organized. It is not enough. The organization of a separate bus terminal or special zone with a large number of platforms in the main directions would solve this problem. The separation of bus transit to individual *CP* and organization of their work on the principle of bus stations with joint control of both countries will allow them to work well and reduce the time to pass the border. The most expedient is the creation of such *CP* in the most relevant directions near the *IACP* «Yahodyn», «Krakivets» and «Shehyni».

In order to create comfortable conditions for tourists in private cars or tourist buses, it is advisable to expand the avansone infrastructure of parking lots with motels or hotels, trade centers and entertainment establishments, recreation areas with toilets and drinking water, and organization of full rest. In this situation, much attention should be paid to the creation of complex architectural environment focused on rest (short-term or long-term). The experience of designing and operating on the borders of various countries shows that in some cases, in fact, modern hotel and tourist complexes are created, where recreational opportunities of the landscape, architectural monuments, history and culture, and the balneological potential of the region are used. These complexes can be located at a distance of 1-5 km from *ACP*.

The difference in the economic development of Poland and Ukraine contributes to a significant traffic of passenger cars in the border area, crossing the border very often. To solve this problem, it is proposed to create a number of new small automobile check points with joint control of two countries located between existing large *CP*, such as backup points, which would be provided with the necessary infrastructure (insurance sales objects, public toilets, catering establishments, shopping centers) and high-quality road cover on the entire length of the access road. They can be located on regional or local roads, which later merge into the main motorways or connect with certain recrea-

tional areas. The creation of such small additional *CP* with joint control of both countries would be less expensive and would substantially increase the capacity of the border as a whole. These ideas were discussed between the Polish and Ukrainian sides. There were agreements on the opening of new check points on the Ukrainian-Polish border, in particular: Nyzhankovychi-Melkhovitse, Boberka-Smolnyk, Lopushanka-Mikhnovets in Lviv region, Adamchuky-Zberezha in Volyn and Lubnia-Volosate in Zakarpattia.

Current issue is pedestrian and bicycle transit. At the moment, there is only one pedestrian check point on the Ukrainian-Polish border – «Shehyni» and a pilot transformation of one automobile crossing check point under pedestrian on «Dolhobychuv-Uhryniv» *IACP*. The issue of increasing the number of pedestrian check points is actively promoted by the Polish public.

The insufficient number of points in the existing territories of the *IACP* does not allow the allocation of a separate lane for the passage of school buses, disabled people and cars with children.

The analysis of the urban planning context of the placement of the functional and planning organization of the territory of check point on the Ukrainian-Polish border allows for some generalizations.

The main urban planning disadvantages of the *ACP* on the Ukrainian-Polish border are:

- absence of high-quality access transit transport motorway (bypassing settlements) of I-II categories; («Rava-Ruska – Khrebenne», «Shehyni-Medyka», especially «Uhryniv-Dolhobychuv», «Hrushiv–Budomezh», «Smilnytsia»);
- insufficiently developed avanszone infrastructure: lack of sufficiently large parking areas (or lack of them at all (spontaneous parking areas), catering establishments, toilets, first-aid institutions, («Ustyluh», «Uhryniv-Dolhobychuv», «Hrushiv–Budomezh», «Smilnytsia», all others have these problems);
- the dispersion of infrastructure elements in space at a substantial distance, which does not contribute to the creation of an integrated system (for example, «Smilnytsia» - 1,7 km);
- absence of differentiation of traffics at the entrance to the *CP* and at the entrance to the territory (all *CP* have this problem);
- urban planning constraints for development (bridges' capacity - «Yahodyn», «Ustyluh», archaeological sites - «Ustyluh», forests of the first category, location in the boundary of the settlement) are not taken into account;
- inefficient logistics of travel and tourist buses (excluding the organization of bus trips due to schedule);
- insufficient, in relation to the need, number of pedestrian-bicycle crossing (only «Shehyni» in the interval 535 km);
- insufficient number of platforms (lanes) for control of transport and maintenance staff;
- the existing infrastructure on the territory of the *ACP* does not take into account the different types of traffics of travelers.

### **2.3. Proposals for the development of the *ACP* and adjacent territories**

Taking into consideration the experience of Poland, China and Belarus, the complex approach to the designing of check points, as components of the customs and transport complexes *ACP*, which include spaces with auxiliary avanszone infrastructure, is proposed, depending on the type of traffics, passing through the *ACP* and the network of access roads. In the current conditions on the western border of Ukraine, it is necessary to take into account availability of various types of traffic of people and vehicles at the border, which require appropriate infrastructure and service.

On the basis of foreign experience of differentiation of traffics and the principles of the space formation in front of the border with a set of infrastructure objects for each type of

transit, a model of a customs-transport complex of border crossings is substantiated, which includes various types of *ACP*.

It is proposed to expand the existing CP classification by type of transit and the infrastructure of the *avanzone* (types A, B, C, D) depending on the traffics passing through the border in this *CP*. The author's proposal to consider the *CP* in conjunction with the *avanzone* infrastructure completes these types. (Fig. 4).

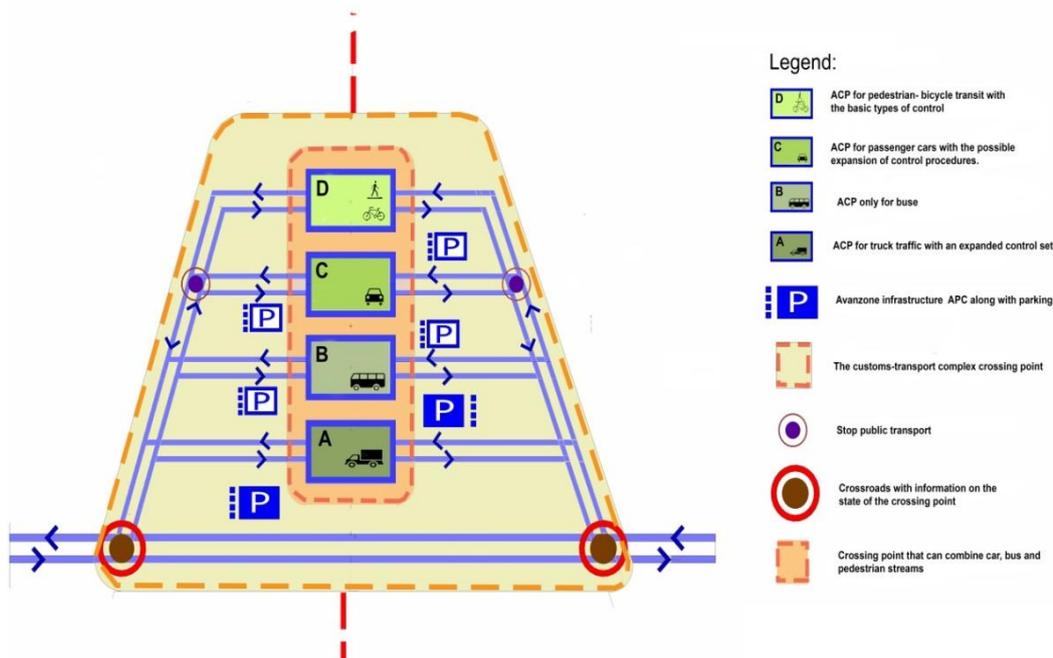


Fig. 4. Model of a customs-transport complex of border crossings is substantiated  
Ryc.4. Model kompleksu celno-transportowego przejść granicznych

**Type A.** *ACP* for **truck** traffic with an expanded control set, with separate parking places for transit large-size vehicle and other transport under carports, inspection boxes for transport of various sizes, expanded confiscation warehouse with refrigeration units, scanners for inspection of closed volumes. Such *ACP* should be located on international transport corridors, have appropriate maneuvering areas before entering the *ACP*.

This type of *ACP* should be complemented by a parking terminal, which plays a role of *avanzone* of the territory of the *CP* and has in its territory public toilets with showers, motels, catering establishments, service stations, gas stations, medical centers. Additional customs, brokerage and banking services could be provided on this territory. Parking can be blocked with logistics complexes and truck departments of railway checkpoints and representative offices of regional and international carriers. This would avoid traffic jams and environmental problems, which would increase the transit truck traffics through Ukraine.

**Type B.** *ACP* only for **buses**. The specific of bus transportation requires the allocation of a separate building for control passengers with the necessary set of premises and equipment (similar to bus stations). The dimensions of buses require the organization of

special platforms, which allow at one time controlling of passengers of several buses. Technologically, it is necessary to organize the accumulation halls of passengers with the necessary places of control of passengers and baggage, which would allow for a short time to examine the number of passengers when the bus is fully loaded. Such an organization will create favorable conditions for passengers and for controlling services. This zone can have a joint control of the two countries, an exact agreed timetable for the passage of regular buses and additional platforms for serving tourist routes. We can take the experience of the Chinese *ACP*, where separate platforms are organized for children's buses and people with disabilities. It will significantly reduce the time of crossing the border.

This type of *ACP* will require parking with public toilets, designed for the number of bus passengers, public catering establishments, trade centers and a medical post. If this *ACP* is located on tourist routes, in order to create comfortable conditions for tourists, it is advisable to expand the infrastructure with hotels or motels, trade centers and entertaining establishments, places of rest, recreation areas, and organization of full rest. In this situation, much attention should be paid to the creation of complex architectural environment focused on rest (short-term or long-term). The experience of designing and operating on the borders of various countries shows that in some cases, in fact, modern hotel and tourist complexes are created, where recreational opportunities of the landscape, architectural monuments, history and culture are used. These tourist-rest complexes can be located at a distance of 1-5 km from *ACP*.

**Type C.** *ACP* for **passenger** cars with the possible expansion of control procedures. This type of *ACP* is common to most the Ukrainian borders. In order to increase the efficiency of this type of work, it is necessary to design *avanzone* space - parking with toilets, catering establishments, gas stations and insurance sales centers and the possibility of banking services before entering the *ACP*. This type can be located on regional or local roads with adequate road surface and have a connection with the main transit motorways. It can be combined with pedestrian-bicycle *CP*. It is advisable to build them on the Ukrainian-Polish border at one check point with the joint control of the two countries and to be located between the existing large *ACP*.

**Type D.** *ACP* for **pedestrian- bicycle** transit with the basic types of control. This type of *CP* should be blocked with compulsory public space - a pedestrian square with a transfer station of public transport with toilets, trade centers before entering the *ACP*. The organization of public space should minimize the intersection of transport and pedestrian traffics create spaces for mass events without harm to transit. This type of *ACP* can cooperate with bus or passenger cars transit and be organized following the example of control at airports. This principle of control exists in Chinese *IACP*.

The main architectural and urban possibilities of improving the system of international *ACP* consist in the well-founded combination and effective interrelations of the selected types of check points and the formation of *avanzone* spaces. It was proposed to create *avanzone* spaces with the necessary infrastructure in accordance with certain traffics.

Based on the proposed typology of the *ACP* and plans for the development of border regions, the proposal for the organization of the system of customs-transport complexes on the Ukrainian-Polish border has been advanced.

### 3. CONCLUSIONS

- 1) The result of the research is a proposal on differentiation of the *ACP* depending on the transport traffics for trucks, buses, cars and pedestrian and cycling in the territories and the creation of appropriate customs-transport complexes, which consist of objects of the *ACP* and *avanzone* with infrastructure objects in front of them.

- 2) It is recommended to create a system of new small automobile-pedestrian-bicycle CP as doubles of large ACP located between them. This will reduce the interval between the points of transition to 15-20km. Such CP is proposed to be located in the Volyn region: Adamchuky (Shatskyi district), Zabuzhzhia (Liuboml'skyi district), Kladniv (Volodymyr-Volyn'skyi district), Korytnytsia (Lopushanskyi district), Poromiv, Krechiv (Ivanychiv'skyi district); in the Lviv region: Variazh, Belz, Uhniv (Sokalskyi district), Smolychi (Zhovkiv'skyi district), Svydnytsia, Hlynets (Yavoriv'skyi district), Nyzhankovychi, Stariava, Mihovo, Mshanets (Starosambir'skyi district), Lopushanka, Boberka (Turkiv'skyi district); in the Zakarpatskyi region: Lubnia (Velykoberezhnianskyi district)



Fig. 5. The new system of check points on the Ukrainian-Polish border  
 Ryc. 5. Nowy system punktów kontrolnych na granicy ukraińsko-polskiej

- 3) To allocate the transit of large-size vehicles to separate *ACP* and to combine them with railway crossings and customs-logistics centers, which will increase truck transit across the border (*IACP* «Yahodyn», «Rava-Ruska», «Krakivets», «Shehyni»).
- 4) To recommend designing new check points with joint control of the two neighboring countries, which will economize the state funds and territories and the for passing the border for travelers.
- 5) In the design of the *ACP* to make legally compulsory infrastructure objects in the avanzone: parking (or parking terminal for truck traffics), motel (hotel or recreation center for tourist traffics), catering establishment, banking and brokerage services offices, mini market, public toilets + public showers (for truck transits), stations for all types of fuel, a service station, offices of representative of local and international carriers, open recreation areas, customs and logistics centers (for truck transit), shopping areas, stopping public transport of regional and all-Ukrainian communication.
- 6) To create a separate terminal for bus transit on international transit Warsaw- Kyiv and Lviv-Drezden.

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