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BUS STATIONS CATEGORISATION CRITERIA

1. INTRODUCTION

In conformance with the contracted scope of work, bus stations must have a corresponding number of roofed platforms, illuminated and heated waiting rooms for passengers, rooms for luggage, public telephone booths, toilet facilities, traffic offices, ticketing counters, information counters and posted timetables.

Meeting these minimum legal requirements is not sufficient for a successful operation of the complex passenger, luggage and bus services. The Croatian Chamber of Commerce in co-operation with the Grouping of Croatian Bus Stations initiated the elaboration of the Croatian Bus Stations Categorisation Act.

In order to find the appropriate solutions the existing conditions in the world and in our country have been analysed. Up to the present no criteria have been determined worldwide, neither have the bus stations been categorised. In some West-European countries the technical literature mentions terms such as big, medium and small stations, on the basis of the criterion regarding daily arrivals and departures. The study also included the passenger terminals of railway, air and sea transport in the country and in the world. None of the presented systems could serve as an example so that then the existing condition at the bus stations in Croatia have started to be monitored.

The empirical method and the method of logical and methodological decomposition were used to establish the categorisation hypotheses yielding the criteria for each category separately.

2. CATEGORISATION CRITERIA

In order to get a complete picture of the characteristics of the existing conditions at bus stations in Croatia and to obtain maximally accurate results, the survey was launched at all 64 bus stations. The questionnaire included the following information:

BUS STATION

Name of the bus station:
 City:
 Bus station status:
 Number of employees:
 Working hours:
 Traffic Dept. employees:
 Booking-clerks:
 Information:
 Traffic office:
 Booking-office:
 Exchange office:
 Left luggage office:

A. BASIC FACILITIES

1. BUS STATION BUILDING

1.1. Waiting room

- heating:
 - air conditioning:
 - number of sitting accommodation:
 - space in square meters:

1.2. Number of ticketing counters:

- for domestic traffic:
 - for international traffic:

1.3. Selling of bus tickets

- for all carriers:
 - solely for the station owner:
 - universal selling system (for all destinations -
 - all counters):
 - regional selling (per destinations):
 - manual selling:
 - mechanical selling:
 - computerised selling:

1.4. Provision of information:

- information boards:
 - public address system:
 - communication (Information counter):
 - video monitors:
 - telephone:

1.5. *Separate information per categories of bus station users:*

- first level for passengers, accompanying persons, and visitors (central hall, waiting lounge, catering facilities, shops, toilets):
- second level for traffic department employees and bus crews (traffic office, agencies and bus crews):
- third level for all members of personnel at the bus station (intense sound wiring for communication of administration personnel and bus crews):

1.6. *Traffic office:*

1.7. *Left luggage office:*

1.8. *Sanitary facilities:*

2. TRAFFIC AREA

2.1. *Number of platforms:*

- roofed:
- non-roofed:
- auxiliary:
- arrival platforms:
- departure platforms:
- platforms for non-liner transport:

2.2. *Platform design:*

- frontal:
- transit:
- mixed:

3. STATIONARY TRAFFIC:

3.1. *Number of bus parking places:*

3.2. *Number of automobile parking lots:*

3.3. *Taxi stations:*

B. CHARACTERISTICS OF DAILY TRAFFIC

1. TOTAL NUMBER OF LINER BUS DEPARTURES:

- domestic traffic:
- international traffic:
- non-liner transport:

2. TOTAL NUMBER OF BUS ARRIVALS:

- domestic traffic:
- international traffic:
- non-liner transport:

3. TOTAL NUMBER OF TRANSIT BUS LINES:

- international traffic:
- domestic traffic:

C. ACCOMPANYING FACILITIES:

1. CATERING FACILITIES:

- restaurants:
- cafes:
- pastry shops:
- other:

2. SHOPPING FACILITIES:

- shops selling foodstuff:
- shops selling textile products:
- shops selling tools:
- boutiques:

3. OTHER SERVICES:

- tourist agency:
- post office:
- bank:
- public telephone:
- tobacconist:
- different service shops (watchmaker, florist, shoemaker, optician, etc.):

D. GEOTRAFFIC BUS STATION LOCATION:

- in town:
- outside town:
- linkage with terminals of other transport aspects in km:
 - public urban transport:
 - railway transport:
 - air transport:
 - sea transport:
 - river transport:

Based upon the respective insight, theoretical analysis and survey-based data processing, individual category criteria for bus stations in Croatia have been established.

Bus stations are categorised based upon the respective elements following

- the basic, and
 - additional criteria
- into four categories: A, B, C and D.

I. BASIC CRITERIA

1. BUS STATION BUILDING INFRASTRUCTURE EQUIPMENT:

- 1.1. Waiting lounge
 - 1.1.1. heating
 - 1.1.2. air conditioning
 - 1.1.3. sitting accommodation
- 1.2. Ticket selling system
 - 1.2.1. computerised
 - 1.2.2. universal
 - 1.2.3. mechanical
 - 1.2.4. manual

- 1.3. Information system
 - 1.3.1. boards
 - 1.3.2. public address system
 - 1.3.3. video monitor
 - 1.3.4. telephone
 - 1.3.5. personal communication
- 1.4. Information level
 - 1.4.1. first level (passengers, accompanying persons and visitors only)
 - 1.4.2. second level (traffic personnel only)
 - 1.4.3. third level (bus station personnel only)

2. STATIONARY TRAFFIC AT BUS STATIONS

- 2.1. Parking area
 - 2.1.1. bus parking
 - 2.1.2. car parking

3. BUS STATION WORKING HOURS

- 3.1. 0.00 - 24.00 hrs
- 3.2. 5.00 - 22.00 hrs
- 3.3. 6.00 - 20.00 hrs

II. ADDITIONAL CRITERIA

1. ACCOMPANYING FACILITIES

- 1.1. Catering
 - 1.1.1. restaurant
 - 1.1.2. café
 - 1.1.3. pastry shop
 - 1.1.4. other types of catering services
- 1.2. Services
 - 1.2.1. tourist agency
 - 1.2.2. exchange office
 - 1.2.3. first-aid station
 - 1.2.4. post office
 - 1.2.5. bank
 - 1.2.6. newspapers/tobacconist
 - 1.2.7. different services (watchmaker, optician, shoemaker, florist, etc.)
- 1.3. Shopping area
 - 1.3.1. foodstuffs
 - 1.3.2. other shops

2. GEOTRAFFIC BUS STATION LOCATION

- 2.1. Linkage with other traffic terminals
 - 2.1.1. public urban transport (bus or tram stops)
 - 2.1.2. taxi stations
 - 2.1.3. railway station, airport, sea port or river port

In order to furnish easy-to-survey information, Table 1 gives under the heading of basic criteria the obligatory aspects or facilities resulting in the minimum number of assigned points. The additional criteria provide the review of the accompanying aspects of optional nature, being in the long run conditioned by the minimum number of points for each category separately. For reasons of simplification, the value of individual aspects is assigned one point.

Table 1. Total minimum number of points per bus station category

Criteria	A	B	C	D
I. BASIC CRITERIA				
1. BUS STATION BUILDING INFRASTRUCTURE EQUIPMENT				
1.1. Waiting lounge				
1.1.1. heating	x	x	x	x
1.1.2. air conditioning	x	x		
1.1.3. sitting accomodation	x	x	x	x
1.2. Ticket selling system				
1.2.1. computerised	x	x		
1.2.2. universal	x			
1.2.3. mechanical			x	
1.2.4. manual				x
1.3. Information system				
1.3.1. boards	x	x	x	x
1.3.2. public address system	x	x	x	
1.3.3. video monitor	x			
1.3.4. telephone	x	x	x	x
1.3.5. personal communication	x	x	x	
1.4. Information level				
1.4.1. first level	x	x	x	
1.4.2. second level	x			
1.4.3. third level	x	x		
2. STATIONARY TRAFFIC				
2.1. Parking area				
2.1.1. bus parking	x	x	x	x
2.1.2. car parking	x	x		
3. WORKING HOURS				
3.1. 0.00 - 24.00 hrs	x			
3.2. 0.00 - 22.00 hrs		x		
3.3. 6.00 - 20.00 hrs			x	x
TOTAL OBLIGATORY NUMBER OF POINTS PER CATEGORY	16	13	10	7
II. ADDITIONAL CRITERIA				
1. ACCOMPANYING FACILITIES				
1.1. Catering				
1.1.1. restaurant				
1.1.2. café				
1.1.3. pastry shop				
1.1.4. other				
1.2. Services				
1.2.1. tourist agency				
1.2.2. exchange office				
1.2.3. first-aid station				

Criteria	A	B	C	D
1.2.4. post office				
1.2.5. bank				
1.2.6. newspaper stand				
1.2.7. diff. services				
1.3. Shopping area				
1.3.1. foodstuffs				
1.3.2. other shops				
2. GEOTRAFFIC LOCATION				
2.1. Degree of linkage				
2.1.1. tram/bus stops				
2.1.2. taxi stations				
2.1.3. other transport aspects				
TOTAL NUMBER OF OPTIONAL POINTS	15	11	7	3
GRAND TOTAL	31	24	17	10

Table 1 shows the minimum total number of points per categories. This provides a clear picture of the necessary number of points for each category resulting from basic and additional criteria.

Table 2. Total minimum number of points per criteria and bus station categories

Number of points	Bus station category			
	A	B	C	D
I. Basic criteria	16	13	10	7
II. Additional criteria	15	11	7	3
Total minimum number of points	31	24	17	10

Such exact defining of criteria provides the bus stations with information as to the aspects or facilities calling for investments for their shifting into a higher category, thus raising the level and price of their services.

In table 3 four bus stations are categorised.

Table 3. Example of categorisation of four bus stations in Croatia in 1996.

Bus Stations	Zagreb	Sl. Brod	Rijeka	Split
Criteria	A	B	C	D
I. BASIC CRITERIA				
1. BUS STATION BUILDING INFRASTRUCTURE EQUIPMENT				
1.1. Waiting lounge				
1.1.1. heating	⊗	⊗	⊗	⊗
1.1.2. air conditioning	⊗	⊗		
1.1.3. sitting accomodation	⊗	⊗	⊗	×

Bus Stations	Zagreb	Sl. Brod	Rijeka	Split
Criteria	A	B	C	D
1.2. Ticket selling system				
1.2.1. computerised	⊗	×		
1.2.2. universal	⊗	⊗		⊗
1.2.3. mechanical		⊗	⊗	⊗
1.2.4. manual				×
1.3. Information system				
1.3.1. boards	⊗	⊗	⊗	×
1.3.2. public address system	⊗	⊗	⊗	⊗
1.3.3. video monitor	×			
1.3.4. telephone	⊗	⊗	⊗	⊗
1.3.5. personal communication	⊗	⊗	⊗	⊗
1.4. Information level				
1.4.1. first level	⊗	⊗	⊗	⊗
1.4.2. second level	⊗			
1.4.3. third level	⊗	⊗		
2. STATIONARY TRAFFIC				
2.1. Parking area				
2.1.1. bus parking	⊗	⊗	×	×
2.1.2. car parking	⊗	⊗		
3. WORKING HOURS				
3.1. 0.00 - 24.00 hrs	⊗		⊗	⊗
3.2. 0.00 - 22.00 hrs		⊗		
3.3. 6.00 - 20.00 hrs			×	×
TOTAL OBLIGATORY NUMBER OF POINTS PER CATEGORY	16	13	10	7
THE ACTUAL NUMBER OF POINTS	15	14	9	8
THE DIFFERENCE	-1	+1	-1	+1
II. ADDITIONAL CRITERIA				
1. ACCOMPANYING FACILITIES				
1.1. Catering				
1.1.1. restaurant	⊗	⊗	⊗	
1.1.2. café	⊗		⊗	⊗
1.1.3. pastry shop	⊗	⊗	⊗	
1.1.4. other	⊗	⊗	⊗	
1.2. Services				
1.2.1. tourist agency	⊗	⊗	⊗	⊗
1.2.2. exchange office	⊗	⊗	⊗	⊗
1.2.3. first-aid station				
1.2.4. post office	⊗	⊗		
1.2.5. bank				
1.2.6. newspaper stand	⊗	⊗	⊗	⊗

Bus Stations	Zagreb	Sl. Brod	Rijeka	Split
Criteria	A	B	C	D
1.2.7. diff. services	⊗		⊗	
1.3. Shopping area				
1.3.1. foodstuffs	⊗	⊗	⊗	⊗
1.3.2. other shops	⊗	⊗	⊗	
2. GEOTRAFFIC LOCATION				
2.1. Degree of linkage				
2.1.1. tram/bus stops	⊗		⊗	⊗
2.1.2. taxi stations	⊗		⊗	
2.1.3. other transport aspects	⊗	⊗	⊗	
TOTAL NUMBER OF OPTIONAL POINTS	15	11	7	3
GRAND TOTAL	31	24	17	10
THE ACTUAL NUMBER OF POINTS	14	10	13	6
THE DIFFERENCE	-1	-1	+6	+3
THE TOTAL OBTAINED POINTS	29	24	22	14
THE DIFFERENCE	-2	0	+5	+4

Application of criteria to bus stations in Croatia results in the knowledge that only the bus station in Zagreb with the offered basic and accompanying facilities can be classified as "A" category bus station provided that the informing system for passengers be modernised through video monitors and that a first-aid station be added. The closest according to the existing facilities comes the bus station in Slavonski Brod.

The bus stations in Rijeka and Split should provide a parking lot for buses and passenger vehicles.

3. CONCLUSIONS

The criteria for categorisation have been quantified in conformance with the international classification and categorisation of airports known as Annex 14, Instructions for the classification of railway passenger terminals of the Union of European Railways (UEEIV) and the Convention on passenger and luggage transport adopted by the International Maritime Organization (IMO).

All these passenger terminals have been categorised in conformance with the available infrastructure

facilities and basic and accompanying facilities which are specific for them and cannot be applied to road traffic passenger terminals.

This information after the study has been carried out, has precisely defined the structure of the basic and accompanying facilities at bus stations, being obligatory for each category separately and expressed by way of total obligatory and optional number of points. The classes between individual categories involve a 7-point clearance.

Categorisation is aimed at stimulating the bus stations to raise the level of their services, being the legal instrument for establishing the level of the fee for use of bus station services for which the carriers, passengers and other bus station users are charged.

SUMMARY

In order to establish the respective criteria for categorisation of bus stations, since no criteria have been determined yet based on the world experience, the existing conditions have been analysed in all 64 bus stations in Croatia by use of questionnaires. Based upon the basic and additional facilities, bus stations fall into four categories: A, B, C and D, and these are then called basic and additional criteria.

The basic criteria involve specific aspects obligatory for every category. The number and type of aspects refer at the same time to the minimum number of points assigned per category. There exists a 3-point discriminating difference between individual categories.

The additional criteria involve the accompanying aspects required for the functioning of the system; they are optional within the frame of a given number of points per category, and there exists a 4-point discriminating difference between individual categories.

Categorisation makes the basis for establishing the price list at bus stations, in turn imposing the requirement of provision of a given level of bus stations services.

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