DANGEROUS SITUATIONS DURING TAKING IRREGULAR MENAUVERS IN TRAFFIC

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INTRODUCTION

Many causes of accidents could be classified into two comprehensive categories:

- **subjective factors** - those who are descended from the man, his behavior and characteristics
- **objective factors** - technical, natural and social factors
**ACTIONS IN THE TRAFFIC AND DANGEROUS SITUATIONS**

**Basic traffic operation**
- Departure and inclusion of vehicle in traffic
- Change in direction (evading)
- Change lanes (realignment)
- Stopping and parking

**Movement of vehicle**
- Drive-forward (safe distance)
- Reverse
- Bypass (safety distance)
- Changing modes of motion (Sudden braking)

**Overtaking and passing**
- The general case
- With constant speeds of both vehicles
- With constant acceleration and deceleration
- With constant acceleration, deceleration and speed limit

**Adjusting the speed of movement to**
- Traffic situation and road conditions
- Weather and light conditions
- Safe stopping in the front of barrier
- Safe passage through the curve

**Filtering, give way or other action**
- Filtering of other road users **
- Give way of priority passes
- Use of the deceleration lane / acceleration lane
DANGEROUS SITUATIONS WHEN PERFORMING ACTIONS

- Basic operations in traffic
- Movement of vehicles on the road
- The process of adjusting the speed
- Turning and turning over
- Give way
- Overtaking
BASIC OPERATIONS IN TRAFFIC

- Change of direction – evading

time of side evading - \( t_{iz} = t_{ru} + t_{ei} = t_{ru} + 2,51 \sqrt{\frac{B_p}{\mu_s g}} \) [s]

path of evading - \( S_{iz} = 1,91 \cdot V_0 \cdot \sqrt{\frac{B_p}{b_s}} \)
MOVEMENT OF VEHICLES ON THE ROAD

- Movement - Driving forward

A safe distance of the vehicle at the front of the first vehicle braking can be determined:

\[ S_r = \frac{V_0 \cdot t_r}{3.6} + \frac{(b_1 - b_2) \cdot V_0^2}{26 \cdot b_1 \cdot b_2} + S_{n0} \]
THE PROCESS OF ADJUSTING THE SPEED

In the process of adjusting the speed the driver is required to elect and determine the speed according to:

• Traffic situation and road conditions
• Weather and light conditions
• Safely stop before the barrier which see / can predict
• The need to stop and give way at the intersection
• Management that does not compromise road safety
• Safe passage through the curve.

Also, the driver is required to adjust the speed of the to the vehicles to certain conditions, so he can be able to stop:

a) before every barrier which can see or has reason to anticipate,
b) to give way to the vehicles at the intersection
TURNING AND TURNING OVER

\[ t_{sk} = \sqrt{\frac{2S_1}{a}} \text{[s]} \]

\[ S_2 = V_2 \sqrt{\frac{2S_1}{a}} \text{[m]} \]
# GIVE WAY

<table>
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<tr>
<th>Way of crossing</th>
<th>Distance</th>
<th>To the lane</th>
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<td>normal walking</td>
<td>to less than 0.7 m</td>
<td>to entering on the traffic lane</td>
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<tr>
<td>run across</td>
<td>at least 0.7 m</td>
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<td>crosses behind the</td>
<td>crosses up to 0.7 m</td>
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<td>barrier</td>
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<td>when he stops</td>
<td>when the driver</td>
<td>pedestrian’s intention to change direction</td>
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<tr>
<td></td>
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</tbody>
</table>
OVERTAKING

\[ S_{pr} = L = V_1 \cdot t_{pr} + V_2 \cdot t_{pr} + l + D \]
CONCLUSION

Numerous causes of accidents that are classified into three broad groups:

a) *the conditions and circumstances* - that indirectly contribute to the development of dangerous situations and provide logistical support

b) *the causes of traffic accidents* - as a second stage in the development of accident

c) *errors of participants* - which directly lead to an accident.

Taking actions in traffic, or to act according to the rules of traffic drivers often make serious mistakes that lead to the creation of dangerous situation, and remains inadequate response to the accident.

Suppression of errors of participants, which in dangerous situations immediately lead to accidents, requires much more complex and longer engagement of community.