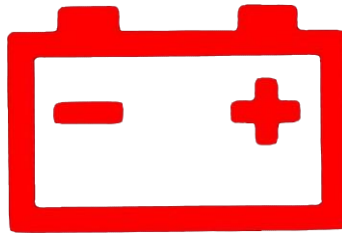


Instruction

The following survey was created to investigate the intelligibility of new patterns of human-machine interfaces (i.e. systems allowing driver-vehicle communication, i.e. buttons, displays, icons, sounds, vibrations, etc.) that may appear in future automated cars. We would like to ask you for help in evaluating the proposed designs. The purpose of the survey is to check whether the formulas provided are understood correctly. The answers provided in this survey will help us determine this.

On the following pages of the survey you will find symbols and information where they can be found, e.g. this icon appears on the dashboard when the battery is not sufficiently charged or used up.



On each subsequent page of the survey, there is a simple instruction to complete the task. If you are ready, click "Next".

You can see this icon on the dashboard when the car is driving in automatic mode (i.e. the vehicle controls its speed and trajectory, the driver observes the surroundings and takes control of the vehicle in case of danger). What do you think this symbol means and what to do or prepare for when you spot it?



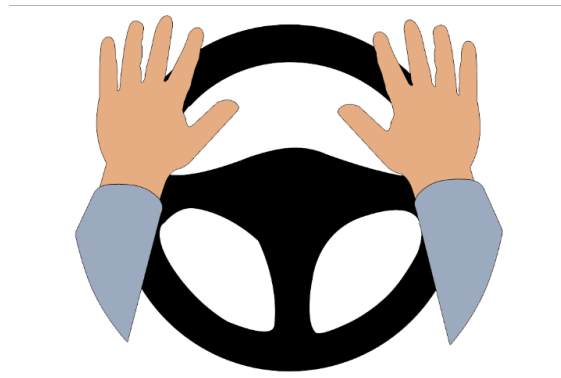
What this icon means? Select the answer that, in your opinion, best describes the meaning of the icon pictogram presented above.

1. It is necessary to take hands off the steering wheel.
2. Necessary intervention by the driver (the driver must take control of the vehicle).
3. The system controls the vehicle.
4. The steering wheel is locked, the driver has no influence on the trajectory.
5. The system detected hands off the steering wheel.
6. I do not know.

What should you do when you see this icon? Select the answer.

1. Put hands on the steering wheel.
2. Don't put hands on the steering wheel.
3. Take hands off the steering wheel.
4. Take control of the vehicle.
5. Take a comfortable position, relax (the system maintains control of the vehicle).
6. I do not know.

You can see this icon on the dashboard when the car is driving in automatic mode (i.e. the vehicle controls its speed and trajectory, the driver observes the surroundings and takes control of the vehicle in case of danger). What do you think this symbol means and what to do or prepare for when you notice it?



What this icon means? Select the answer that, in your opinion, best describes the meaning of the icon pictogram presented above.

1. It is necessary to take hands off the steering wheel.
2. Necessary intervention by the driver (the driver must take control of the vehicle).
3. The system controls the vehicle.
4. The steering wheel is locked, the driver has no influence on the trajectory.
5. The system detected hands off the steering wheel.
6. I do not know.

What should you do when you see this icon? Select the answer.

1. Put hands on the steering wheel.
2. Don't put hands on the steering wheel.
3. Take hands off the steering wheel.
4. Take control of the vehicle.
5. Take a comfortable position, relax (the system maintains control of the vehicle).
6. I do not know.

You can see this icon on the windshield display (HUD - Head Up Display) when the car is in automatic mode (i.e. the vehicle controls its speed and trajectory, the driver observes the surroundings and takes control of the vehicle in case of danger). What do you think this symbol means and what to do or prepare for when you notice it?



What this icon means? Select the answer that, in your opinion, best describes the meaning of the icon pictogram presented above.

1. It is necessary to take hands off the steering wheel.
2. Necessary intervention by the driver (the driver must take control of the vehicle).
3. The system controls the vehicle.
4. The steering wheel is locked, the driver has no influence on the trajectory.
5. The system detected hands off the steering wheel.
6. I do not know.

What should you do when you see this icon? Select the answer.

1. Put hands on the steering wheel.
2. Don't put hands on the steering wheel.
3. Take hands off the steering wheel.
4. Take control of the vehicle.
5. Take a comfortable position, relax (the system maintains control of the vehicle).
6. I do not know.

In this part of the survey there will be information and the assumed importance of the icon or the signal (i.e. a set of incentives used by the interface). Your task will be to express your opinion by marking the appropriate number to what extent this meaning corresponds to the presented pictogram.

This icon informs you about the need to take control of your vehicle.

This icon appears on the dashboard or in the windshield display when the vehicle is not able to continue driving by itself and driver intervention is required.



Using the scale below, determine the degree to which this meaning is expressed by the icon pictogram shown above.

1

to a very small
extent

2

to a small
extent

3

to an average
extent

4

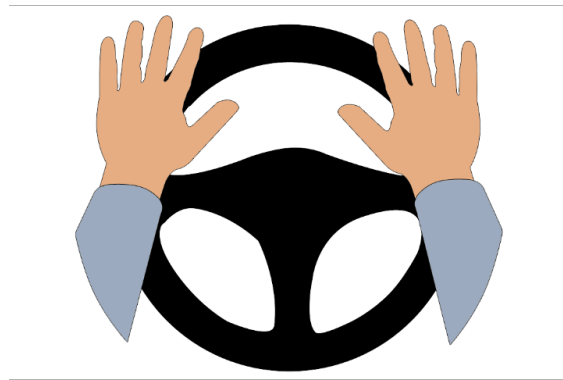
to a large
extent

5

to a very large
extent

This icon informs you about the need to take control of your vehicle.

This icon appears on the dashboard or in the windshield display when the vehicle is not able to continue driving by itself and driver intervention is required.



Using the scale below, determine the degree to which this meaning is expressed by the icon pictogram shown above.

1

to a very small
extent

2

to a small
extent

3

to an average
extent

4

to a large
extent

5

to a very large
extent

This icon informs you about the need to take control of your vehicle.

This icon appears on the dashboard or in the windscreen display when the vehicle is not able to continue driving by itself and driver intervention is required.



Using the scale below, determine the degree to which this meaning is expressed by the icon pictogram shown above.

1

to a very small
extent

2

to a small
extent

3

to an average
extent

4

to a large
extent

5

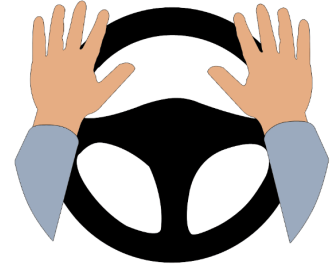
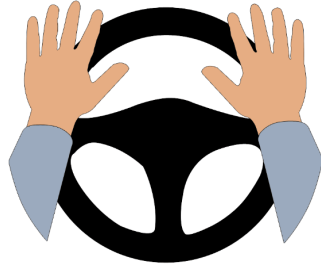
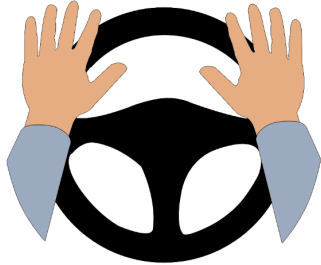
to a very large
extent

In this part of the survey 3 different alternatives that can inform about the need to take control will be presented (symbols, patterns notifications). Your task is to express an opinion, by selecting the numbers, or by rank, which alternative express it best.

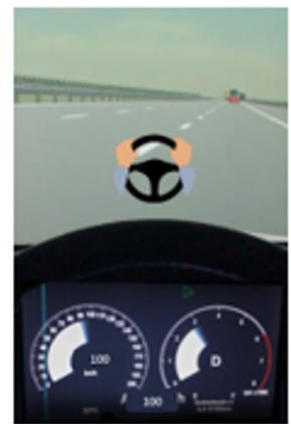
Below are three different notification patterns that can alert you to the need to regain control.

Notifications can appear as icons on the dashboard or on the windscreen when the vehicle is in the automated mode and is not able to continue driving itself, therefore driver intervention is necessary.

SAMPLE ICON



CONTEXT



A

Icon of hands on the steering wheel in natural colours displayed in the centre of the dashboard.

B

Icon of hands on the steering wheel in natural colours displayed on the top of the dashboard.

C

Icon of hands on the steering wheel in natural colours displayed on the Head Up display.

Prioritize which of these notification patterns in your opinion illustrate the information best (the information described above), and which alternative describes it in the worst way. Enter the variant code in each box.

Best

Average

Worst