

# GLOBAL STUDENTCOMPETITION

THEME:

**Door stop for stepless positioning of vehicle doors**

## START DATE

April 8, 2019

## DEADLINE

September 30, 2019

## CONTACT

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## AWARD CEREMONY

November 2019

## QUESTIONS

If you have any questions, please do not hesitate to contact us by mail at [innovace@ace-int.eu](mailto:innovace@ace-int.eu)

## TECHNICAL FRAMEWORK

### Installation space:

H 150mm x W 190mm x D 30mm

### Life cycle:

Min. 50,000 cycles (opening and closing)

### Tensile strength:

8.500N with door open (misuse)

### Connection:

Use existing connection points of a car door

## CALL FOR COMPETITION

A design draft with technical proof of function and feasibility is expected.

The adjusting element to be developed should, in contrast to existing door stops/door catch hinges with pre-defined detents or holding stops, realize an infinitely variable positioning and holding function of a vehicle door. This will provide the operator with greater comfort, e.g. in tight parking situations.

The installation position of the adjustment element and the mounting points are to be adopted from existing door stops, i.e. centrally between the door hinges (see technical framework).

in the field of mechanical engineering/construction/  
mechatronics/electrical engineering for universities,  
technical colleges and universities of applied sciences

# INNOVACE2019

## REGISTRATION

Candidates/applicant teams must register by sending an email to [innovace@ace-int.eu](mailto:innovace@ace-int.eu). The accompanying chair/professor must be named.

## PRIZE

The winning team or individual will receive \$5,000 in prize money. The accompanying chair receives an additional \$2,000.

## EVALUATION CRITERIA

### Design (30 points):

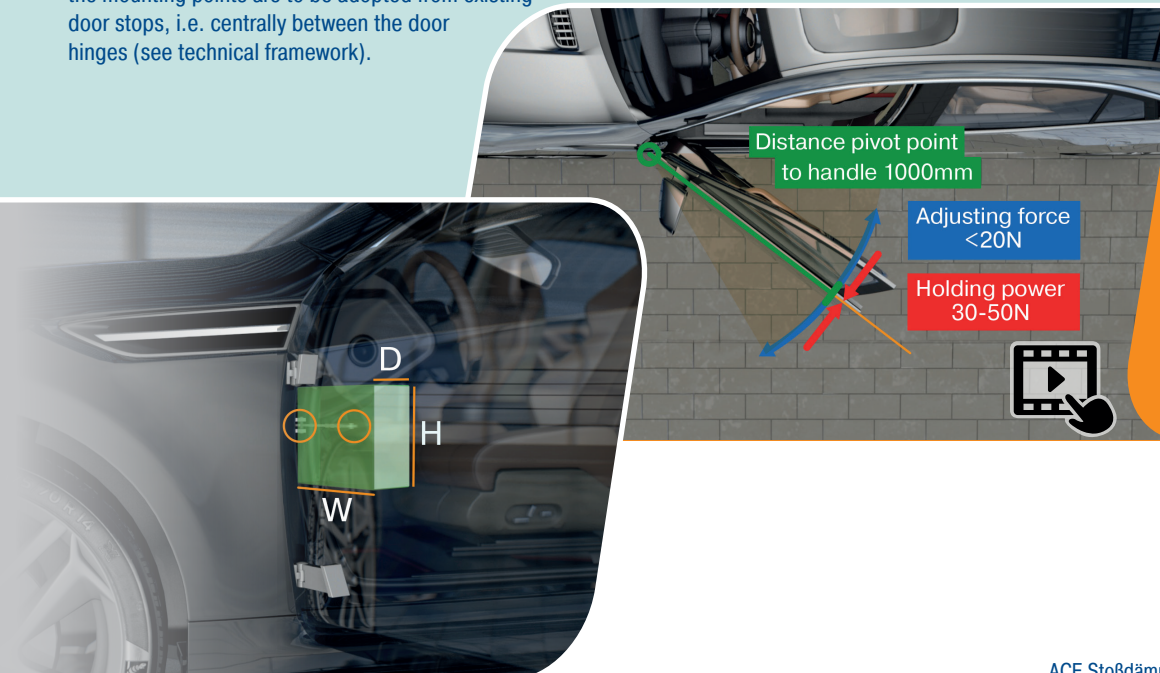
Concept with mounting points/mounting position

### Function (30 points):

Functional verification with corresponding load cases

### Price concept (40 points):

Plausible cost estimate



# ACE