Road accidents and traffic congestion are causing serious problems for global transport systems. More than 1.2 million people die each year due to road accidents. Connected vehicles and autonomous vehicles are two promising technologies that can improve road transport safe and efficiency, but they both have inherent shortcomings. This project proposes an innovative solution of cooperative connected intelligent vehicles, where vehicular communications technology and resource sharing and cooperation are exploited, to tackle the road transport challenges, and deliver enhanced road safety and efficiency. An international cross-sector and cross-disciplinary consortium consisting of world leading academic institutions, prominent industry and policymaker partners is created to collaborate on developing innovative CIV technologies and applications, with the support of novel vehicle communications and cooperative resource sharing. Advanced research technologies in vehicle communication, vehicle edge computing, machine learning, data fusion, advanced driving systems, and cellular network resource management will be applied to tackle the associated challenges. The resulting CIV technologies and applications will help reduce road accidents, improve transportation efficiency and reduce traffic congestion. They hold great potential for technology innovation, and are directly applicable to autonomous driving, smart cities, and the wider scientific community. With competent and complementary expertise of the partners and their extensive international research collaboration experience, COSAFE will promote knowledge sharing, foster research innovation, enhance the potentials of participating researchers, and contribute to the European competitiveness and leadership in the automotive and ICT sectors. Existing research links among the...
partners will be strengthened. New and sustainable collaborations will be developed to build up world-class research in road safe systems.

Field of Science

/engineering and technology/mechanical engineering/vehicle engineering/automotive engineering/autonomous vehicle

/natural sciences/computer and information sciences/artificial intelligence/machine learning

/social sciences/social and economic geography/transport

/engineering and technology/civil engineering/architecture engineering/smart city

/social sciences/psychology/cognitive psychology/mental processes/learning

Programme(s)

H2020-EU.1.3.3. - Stimulating innovation by means of cross-fertilisation of knowledge

Topic(s)

MSCA-RISE-2018 - Research and Innovation Staff Exchange

Call for proposal

H2020-MSCA-RISE-2018

See other projects for this call

Funding Scheme

MSCA-RISE - Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE)

Coordinator

ASTON UNIVERSITY

Address
Aston Triangle
B4 7et Birmingham
United Kingdom

Activity type
Higher or Secondary Education Establishments

EU Contribution
€ 266 800

Website
Contact the organisation

Participants (4)
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<th>Organisation Name</th>
<th>Country</th>
<th>EU Contribution</th>
<th>Address</th>
<th>Activity type</th>
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<td>GEORG-AUGUST-UNIVERSITAT GOTTINGENSTIFTUNG</td>
<td>Germany</td>
<td>€ 202 400</td>
<td>Wilhelmsplatz 1, 37073 Gottingen</td>
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<td>UNIVERSITETET I OSLO</td>
<td>Norway</td>
<td>€ 184 000</td>
<td>Problemveien 5-7, 0313 Oslo</td>
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<tr>
<td>RANPLAN WIRELESS NETWORK DESIGN LTD</td>
<td>United Kingdom</td>
<td>€ 161 000</td>
<td>Upper Pendrill Court Ermine Street North Papworth Everard, CB23 3UY Cambridge</td>
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<tr>
<td>BIRMINGHAM CITY COUNCIL</td>
<td>United Kingdom</td>
<td>€ 13 800</td>
<td>Council House, Victoria Square, B1 1bb Birmingham</td>
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Website | Contact the organisation |
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<td>SHENZHEN FORWARD INNOVATION CO. LTD</td>
<td>406 Tower A Haisong Building Tairan 9 Road 518000 Shenzhen</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
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<tr>
<td>UNIVERSITY OF ELECTRONIC SCIENCE AND TECHNOLOGY OF CHINA</td>
<td>Xiyuan Avenue 2006 West Hi Tech Zone 610054 Chengdu</td>
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<td>TSINGHUA UNIVERSITY</td>
<td>Qing Hua Yuan 100084 Beijing</td>
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