



TPEB has joint three consortia applying for H2020 Projects

Following its long-term strategic plan the TPEB has joint three project consortia looking for the support from H2020. Two of the project application aim towards the area of research and innovation while the remaining project intends to establish cooperation among the leading regional research institutions that should further develop into applied research. The first two project applications include not only research sections but in accordance with the current settings of H2020 emphasize the development of marketing and route to market strategies.

The first consortium is called CySmart – **Adaptive Cyber Security for Low Resource Wireless Communications Systems** and is headed by the University of Sheffield. The consortium includes research institutions and enterprises from the UK, Austria, France, and Czech Republic. Apart from TPEB the Czech side is also represented by the Technical University Brno and Monet+, a company focusing on cyber security. The aim of the project is to develop adaptive solution for cyber security of the wireless ICT systems while combining innovative security arrangements on the level of cryptographic security as well as physical security. The project also counts with the verification of the solutions in real environment.

Thanks to its nature connecting the research sphere with the company sector and state administration TPEB will be responsible for exploitation and dissemination activities, which also involve a development of supporting business strategies. Additionally, TPEB will co-organise several public events including the major demonstrative conference taking place in

Prague by the end of the project. Finally, TPEB will also provide expertise in standardisation and certification through the expert basis of the Office for Standards, Metrology, and Testing.

The second project - **OPTIMUS – Bringing Order to Chaos during Massive Victim CBRN Incidents** – focuses on the area of protections against CBRN incidents. While working on the application TPEB started cooperation with the Faculty of Military Health of the University of Defence, Czech Republic, Military Research Institute, Center for Biological Protection in Techonin, and National Institute for Nuclear, Chemical, and Biological Protection. The consortium is headed by EXUS, which is a company with the great experience in innovative research. The aim for the project is to develop UAV/UGV-based technology, which would effectively assist the rescue services in the cases of CBRN incidents.

The project consortium has 27 members coming from Greece, France, Spain, Norway, Italy, Netherlands, Cyprus, and Czech Republic. The higher number of consortium members reflects the fact that it includes research, innovation, development institutions but also structures of the rescue systems. The project also involves demonstration pilots based on simulation of C/B/R/N incidents which will also include the response of complex rescue teams (health and security services) trained to use OPTIMUS. The Czech Republic would host the biological incident scenario taking place in Techonin which provides top infrastructure. On the Czech side the project has been supported by Fire and Rescue Service, Faculty hospital Hradec Kralove, city of Hradec Kralove. The interest for demonstration has been also expressed by EDA which has CBRN among its priorities.

The role of TPEB will rest in exploitation and dissemination role connected with the initiatives linked to final users. TPEB will also organise several workshops in EU institutions and NATO. Similarly to the previous case TPEB also offered experts from the Office for Standards, Metrology, and Testing, however the standardisation activity has been expanded also towards the area of military standards which would be covered by the experts from the Defence Standardisation, Codification, and Government Quality Assurance Authority.

The third project applying for H2020 *WIDESPREAD Teaming* has focused on the international cooperation led by relation between the Center of Sensoric, Information, and Communication Systems (SIX) and Technical University Vienna (TUV). The project is called

Advanced Wireless Technologies for Clever Engineering (ADWICE) and aims for establishing a strong partnership between SIX and TUV, which is meant to become a foundation for wider consortium of companies, public and research institutions focusing on *smart technologies*. TPEB is supposed to utilize its know-how and position to set business plans and partnerships' relations.

The project covers the area of sensoric systems, mobile communication, or cyber security. In a wider sense the project deals with the area of critical infrastructure protection which is the main area of interest for TPEB. Apart from the direct participation of TPEB in the project the activities could be beneficial for its member that could utilise the connections to research sector and potentially join the consortia formed through the enhanced cooperation. The application has been supported by the Czech Minister of Education, Youth and Sports, Rector of the University Technology of Brno, Vice-Rectors of TUV, and more than 20 companies.

All projects closely touch the main interest of TPEB, which is the critical infrastructure protection. They also represent successful cases showing the potential of TPEB as of public-private-partnership platform. TPEB intends to join other consortia applying for upcoming project calls. Generally, major emphasis will be put on the incorporation of the member companies into the consortia, which could essentially benefit from international R&D cooperation.

