

European funded project assists decision makers in increasing public transportation and critical infrastructures security

9 December 2013 - SECONOMICS, a project partially funded under the Seventh Framework Programme by the European Commission, is bringing together a team of security practitioners, economists, sociologists and engineers to produce a generalized policy “toolkit” that will assist decision makers in identifying and reacting to public transportation and critical infrastructures threats. The project, which will finish in 2014, is being carried out by an international consortium operating with 11 partners from 7 different countries.

Transportation is a complex interdependent system that moves millions of passengers and millions of tons of goods around the whole world each year. Every day the transportation network connects citizens, workers, students, manufacturers, retailers and many others through a complex set of train stations, bridges, tunnels, sea ports, pipelines and public airports plus thousands of kilometers of roads, airways and railway lines. Public transportation systems are the backbone of our daily lives. But, by their nature, public transport systems are open and fully accessible and, therefore, vulnerable. The large geographical spread of public transport networks is difficult to monitor, providing potential spots for criminal activity. Acts of terrorism such as the attacks on the World Trade Center and the Pentagon in September 11, 2001, the 2005 London bombings and the coordinated attack on four commuter trains in Madrid in 2004 remind us that the transportation system is still an attractive target for terrorists. Special events in a city like the celebration of the Olympic Games or important football matches can also affect the risk level of a city and the security perception of citizens.

Securing and protecting critical infrastructures such as power grids or water plants is also a growing concern to governments. Hurricanes, earthquakes, tsunamis and other disasters – both natural and industrial - like the Fukushima nuclear disaster in 2011 remind us that the risks are not only related to terrorism. Hacker-initiated cyber-attacks on critical infrastructures can also cause economic and physical harm.

Because 100% protection of public transportation systems and critical infrastructures is neither realistic nor sustainable, a practical plan which simultaneously minimizes breaches and spending in security is necessary. The effectiveness of responders can make the difference in limiting the severity of damages. Delayed or wrong decisions can have serious consequences and lead to severe disruptions. Policy-makers must decide on security policies, regulations and laws for regional transport, aviation and critical infrastructure. This issue demands a harmonised approach involving all sector stakeholders. With that objective in mind, the European Commission launched the Security Research Call 4 (FP7-SEC-2011-1).

SECONOMICS (www.seconomicsproject.eu) was one of the projects selected to be funded by the EC during this call. SECONOMICS deals with the identification and mitigation of security threats in transport - air and urban and super urban metro - and power grids. The project seeks to explore the coordinated implementation of coordination solutions that will be valid at European level. SECONOMICS is bringing together security-practitioners, economists, sociologists and engineers to produce a set of modelling tools - the policy “toolkit” - that will assist decision makers in identifying threats and reacting to them coherently, taking into account complex organizational issues in crisis decision making and other aspects such as the human side of risk perception.

Research will investigate the economic causes and consequences of insecurity and the impact on the perception of citizens and the direct and indirect costs of implementation. Cost calculations will place specific emphasis on increased hidden costs, decreased efficiency and trans-boundary impacts such as the interaction between security behaviour and economic growth over time.