

# Newly published cyber security report identifies key research priorities

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Newly published cyber security report identifies key research priorities for safeguarding the Internet of tomorrow.

Outcome of CSIT's Belfast 2011 Cyber Summit represents a global collective strategy for world's leading research institutes

Developing self-learning, self aware cyber security technologies, protecting smart utility grids and enhancing the security of mobile networks are among the top research priorities needed to safeguard the internet of tomorrow, according to a report released today.

Published by the UK's National Centre for Secure Information Technologies (CSIT), the report represents the outcome of discussions held during the inaugural World Cyber Security Technology Research Summit hosted by CSIT earlier this year.

The Belfast 2011 event attracted international cyber security experts from leading research institutes, government bodies and industry who gathered to discuss current cyber security threats, predict future threats and the necessary mitigation techniques, and to develop a collective strategy for next generation research.

The collective research strategy contained in the report identifies four research themes critical to the ongoing creation of cyber security defences:

1. Adaptive cyber security technologies - research objectives in this area will include the development of self-learning cyber security technologies; self-awareness in cyber systems; the establishment of feedback in cyber systems to learn from cyber attacks.
2. Protection of smart utility grids - research aims in this field will comprise: smart grid requirements gathering methodology; protection technologies for smart grid components; secure technologies for smart grid communications; smart grid and home area network integration that provides privacy and security of collected information; development of [smart grid](#) standards.
3. Security of the [mobile platform](#) and applications - research in this space will target not only malicious applications but also mobile cyber security problems introduced by the configuration and use of mobile networks, including network availability, mobile web browsers and caller authentication.
4. Multi-faceted approach to cyber security research - research will take into account social behavioural norms and societal desires in cyber space, cyber space policies, the impact of cyber and other legislation and the economics of cyber space and cyber security.

"Belfast 2011 brought together a diverse range of talent and knowledge in the cyber security field from which we have developed this strategy for next generation research," says Prof John McCanny CSIT's Principal Investigator.

"Our ambition is that this strategy will help to inform global cyber security research and act as a driver for cyber security roadmap definition over the coming year. We will hold future summits at which changes in cyber [security](#) will be discussed and the proposed collective research strategies will be reviewed and developed."

**More information:** Copies of the World Cyber Security Technology Research Summit Report – Belfast 2011 - are available from

[www.csit.qub.ac.uk](http://www.csit.qub.ac.uk)

Provided by Queen's University Belfast

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