Annual Report 2022

Welcome to Fraunhofer AISEC

Prof. Claudia Eckert, Managing director



Prof. Georg Sigl, Director

Welcome to Fraunhofer AISEC!

Dear Reader.

When it came to cybersecurity, 2022 was anything but a good year. The war in Ukraine made us see the fragility of ideals that we had believed to be unshakable, namely peace in Europe. The suffering of those affected is immeasurable. Fraunhofer AISEC has declared its solidarity with Ukraine and condemned Russia's acts of aggression in the strongest terms. The incidence of large-scale, targeted cyberattacks has increased significantly since the war broke out. It was not for nothing that the German Federal Office for Information Security (BSI) described "the threat level in cyberspace [as] higher than ever" in its report on The State of IT Security in Germany in 2022, released in the latter half of the year. Ransomware attacks and IT supply chain disruptions in particular represent the greatest threats to social, state and industrial security. However, some rays of hope did break through the gloom in 2022: In September's European Cyber Resilience Act, the EU presented a long-awaited proposal for a law on cyber resilience.

In 2022, we at Fraunhofer AISEC continued our intensive work to stay one step ahead of the attacks, by systematically tackling future-oriented issues. For example, we have launched the Competence Center for Post-Quantum Cryptography, contributed to the 6G-ANNA lighthouse project with our cybersecurity expertise and worked with our partners to develop the Zentrum für vertrauenswürdige Künstliche Intelligenz (center for trusted artificial intelligence, ZVKI). In the area of secure digital identities, we are participating in all major national-level projects and playing an essential role in creating secure data spaces. In the Zentrum Trusted Electronic Bayern (Bavarian center for trusted electronics, TrEB) and the Bavarian Chip-Design-Center, we are driving research and development activities in secure, trusted, integrated electronic systems. What is more, we are also promoting international dialogue in the world of cybersecurity research, for example, through our collaborations with our new partner, Fraunhofer Singapore.

However, Fraunhofer AISEC is far more than just these activities: It has more than 220 highly qualified employees who work every day to analyze, shape and safeguard IT security through applied research. Our ability to methodically evaluate the security of solutions and designs or even architectures, to identify the risks associated with using them in a verifiable, tool-supported way and to develop suitable solutions proposals is in particularly high demand. We bring our knowledge into practice and to people in research projects with companies, public authorities and facilities and through the services we offer via the Cybersecurity Training Lab. Each and every one of us must live the reality of security culture if we are to overcome the digital threats we are facing. We hope that our Annual Report for 2022 will give you the inspiration you need to do this, along with useful information and interesting insights into our work.

Best regards,

Prof. Dr. Claudia Eckert

Prof. Dr. Georg Sigl