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Dear Sir or Madam,

As software-intense systems are increasingly affecting our living environment and the Internet of Things (IoT) connects more and more devices of our everyday life, Fraunhofer FOKUS' competence center SQC has started an IoT-T project in order to assure quality and security. Therefore, testing and certifying of IoT solutions are the key issues.

Moreover, as entire cities are getting smarter and more and more connected, SQC participates in different projects such as triangulum or gives lectures on topics such as "Urban ICT platforms and models".

The whole world of embedded systems, be it security for electronic systems or the Internet of Things, can be experienced at the embedded world trade fair in Nuremberg. Feel free to visit us at the embedded world from March 14-16 in Nuremberg!

At the System Quality Center (SQC) of Fraunhofer FOKUS, nearly 100 dedicated experts provide you with methods, processes and tools for the development and quality assurance of software-intense systems that often perform business-critical or security- and safety-relevant functions in urban infrastructures, cars, trains, planes or factories.

If you have questions or feedback, or if you want to learn more about how to achieve higher product quality, you are very welcome to contact us.
 Enjoy reading!

Best regards

Dr. Tom Ritter & Friedrich Schön (Directors SQC) and the Fraunhofer FOKUS SQC-Team

Projects & Activities

Member of DIN Group "Open Urban Platforms"



In February 2017, Fraunhofer has been invited as a full-fledged member of the DIN Group for "Open Urban Platforms". According to the work of the EU "Memorandum of Understanding Smart Cities and Communities" (SCC MoU), a standardization of an ICT (Information and Communication Technology) reference architecture in smart cities is the goal.

oneM2M Interop #3



Around 50 participants carried out interoperability and conformity tests on the oneM2M Service Layer at the oneM2M Interoperability Event in Kobe, Japan from 29th November till 2nd December 2016. The TTCN-3 Tests required for this were jointly developed by ETSI together with Fraunhofer FOKUS and other oneM2M-Partners.

→ [more info](#)

RISK Workshop 2016



Fraunhofer FOKUS has successfully carried out the 4th International Workshop on Risk Assessment and Risk-driven Quality Assurance (RISK 2016). Researchers from different European countries discussed innovative techniques, tools, languages and methods that make systematic use of risk assessment.

→ [more info](#)

Project start of IoT-T



In September 2016, a project funded by the German Federal Ministry for Economic Affairs and Energy (BMWi) was launched to provide manufacturers with a ready-to-use test equipment dedicated to IoT-testing. Fraunhofer FOKUS develops the IoT-Testware and will host an IoT-Testlab.

→ [more info](#)

→ [Project website](#)

Events & Presentations

embedded world 2017



More than 900 exhibitors will showcase their offerings at the embedded world 2017 from March 14-16, 2017 in Nuremberg. The competence center SQC will also be represented at the event. Methods for modeling and verifying complex and networked systems as well as the Internet of Things (IoT) will play a central role.

→ [more info](#)

→ [website](#)

Presentation on Urban ICT platforms



Nikolay Tcholtchev, a senior researcher of SQC, hold a presentation about "Urban ICT platforms and models with application in the energy sector". In that frame, Open Data projects such as WindNODE or Triangulum will be mentioned as well as activities for standardization such as the EU Memorandum of Understanding of Fraunhofer FOKUS.

→ [more info](#)

The Business of IoT



On Tuesday, January 17, 2017, the project partner relayr of SQC organized "The Business of IoT" at Factory Berlin. The focus was on the Internet of Things and how and which opportunities it offers for entrepreneurs, start-ups, medium-sized companies and multinational corporations.

Eclipse DemoCamp 2016



On Monday, December 5, the Eclipse DemoCamp 2016 took place in Berlin. In the frame of this, projects based on the Eclipse software were presented and demonstrated.

sps ipc drives



The 27th International exhibition sps ipc drives Electric Automation – System and Components in Nuremberg took place from November 22-24, 2016, where SQC showcased Quality by Design.

InnoTrans 2016



From September 20-23, 2016, the InnoTrans 2016 trade fair took place. Fraunhofer FOKUS' competence center SQC showcased the provision of quality assurance services for railway systems. Services at the booth included advice on certification, operation and analyzing requirements.

→ [more info](#)

Publications & Awards

CeDEM17: Paper accepted



For the "International Conference for E-Democracy and Open Government 2017" (CeDEM17), a paper called "Towards an Open Data based ICT Reference Architecture for Smart Cities" by researchers of SQC and other competence centers of Fraunhofer FOKUS has been accepted.

Patent successfully registered



The European Patent Office has accepted an innovative invention by researches of the competence center SQC which is about a bottom bracket construction for bicycles. With that, it will be possible to locate a bike and to block out the pedals so that it cannot be stolen anymore and even if it was, there is an easy possibility to relocate the bike.

Publication



Ina Schieferdecker, Nikolay Tcholtchev, Philipp Lämmel:
 "Urban Data Platforms: An Overview",
 OpenSym '16 Proceedings of the 12th International Symposium on Open Collaboration Companion, on Open Collaboration Companion