

# Bandwidth Analysis of Smart Meter Network Infrastructure

Kartheepan Balachandran\*, Rasmuns L. Olsen\*, Jens M. Pedersen\*

*\* Department of Electronic Systems, Aalborg University,  
Fredrik Bajers Vej 7, DK-9220 Aalborg Oest, Denmark  
[kba@es.aau.dk](mailto:kba@es.aau.dk), [rlo@es.aau.dk](mailto:rlo@es.aau.dk), [jens@es.aau.dk](mailto:jens@es.aau.dk)*



**Kartheepan Balachandran** received his master degree in Electronic Engineering from Aalborg University in 2010 and is currently a Ph.D. student in the Department of Electronic Systems at Aalborg University, Denmark. His research interests are in the areas of communication network in smart grid, security and distributed systems.



Rasmus Løvenstein Olsen is an Associate Professor at Aalborg University working in the Network and security group. Rasmus received his master degree from Aalborg University in 2003 and has received his PhD degree on the topic of Context Sensitive Service Discovery and Context Management with focus on access to dynamic information in 2008. Since, Rasmus have been teaching, supervising and working in various European projects and have more than 40 publications in papers for international conferences, journals and book chapters. Rasmus' current research focus is on service migration based on context information, context quality metrics and quality of service in context management systems, as well as usage of dynamic information elements in smart grid scenarios. Previous Rasmus has previous been guest visitor at National Institute of Communication Technology in Yokosuka Research Park in Japan, cooperating with a team of researchers on next generation network technology. He is currently engaged in European research projects doing research and leader of work packages.



Jens Myrup Pedersen is Associate Professor and head of the Networking and Security Section, Department of Electronic Systems, Aalborg University. His current research interests include network planning, traffic monitoring, and network security. He obtained his MSc in Mathematics and Computer Science from Aalborg University in 2002, and his PhD in Electrical Engineering also from Aalborg University in 2005. He is author/co-author of more than 70 publications in international conferences and journals, and has participated in Danish, Nordic and European funded research projects. He is also board member of a number of companies within technology and innovation.