TUHH
Technische Universität Hamburg-Harburg

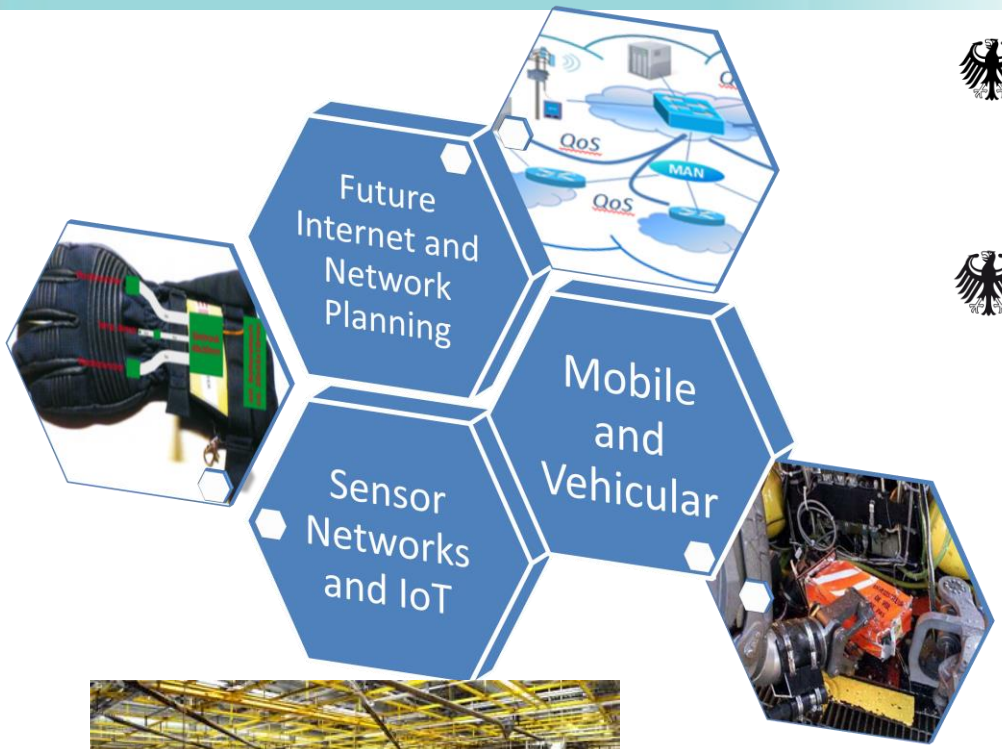
Research on Reliable 5G Systems for Vehicles and Industry at Hamburg University of Technology, ComNets

Maciej Mühleisen, Andreas Timm-Giel

5G-PPP Phase 2 - Stakeholders and Information Day
30. June 2016, Athens

ComNets-Hamburg – About us

ComNets
Institute of Communication Networks
TUHH



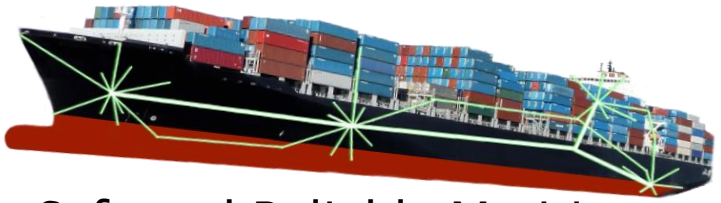
Bundesministerium für Bildung und Forschung

Bundesministerium für Wirtschaft und Energie

REKOTRANS:
Online Flight Data Recorder
(Airbus, SMEs)

INDUSTRIE 4.0

Wireless, Reliable and Robust Industrial Transmission Systems (SMEs)

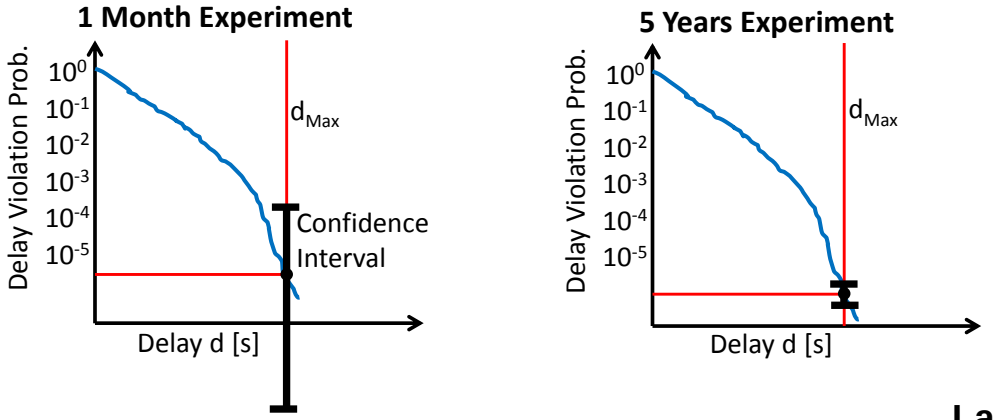


Safe and Reliable Maritime Communication
(DNV-GL, SAM Electronics)

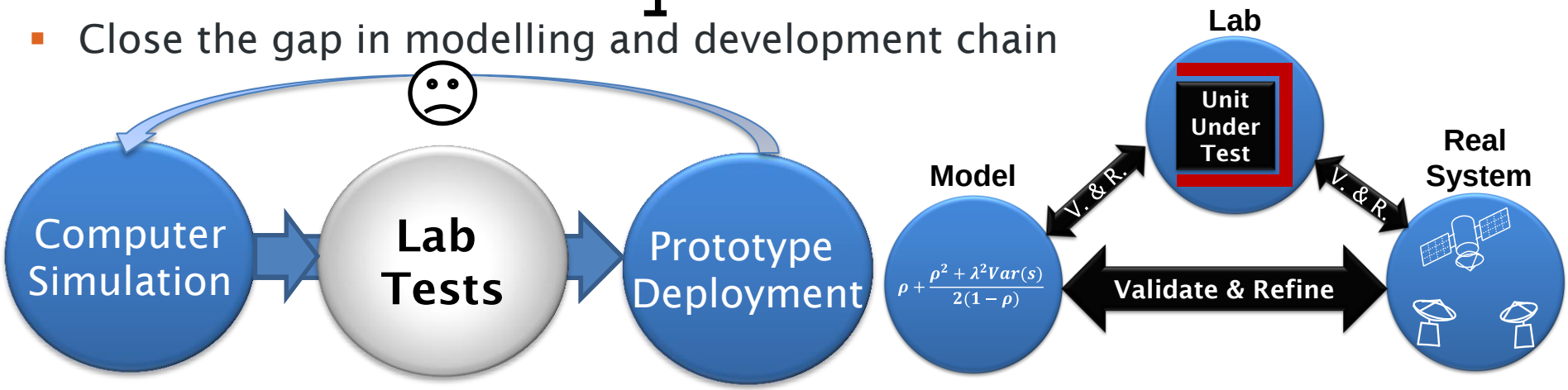
ComNets Hamburg – Our Fields of Research

ComNets
Institute of Communication Networks
TUHH

- Reach and **prove** 99.999…% reliability
- Evaluate result confidence (e.g. Limited Relative Error (LRE) Algorithm)



- Close the gap in modelling and development chain

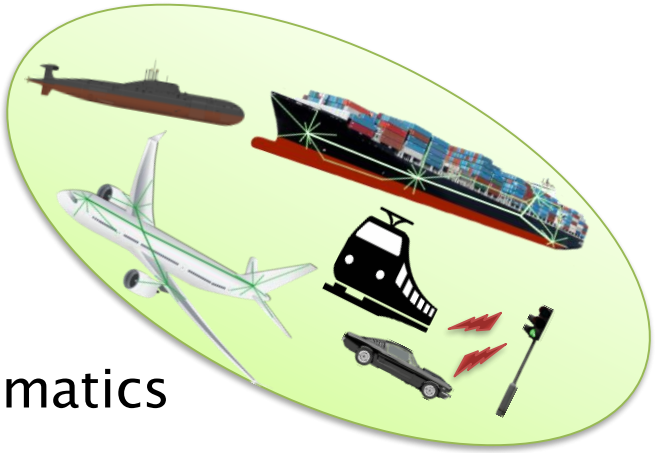


- **Looking for projects and partners in Targeting Action (TA) 13 “Security, Privacy, Resilience, and High Availability”**

Project Idea

Design Principles and Performance Evaluation of Highly-Available and Ultra-Reliable Vehicular Communication Systems (ComNets Hamburg & MassM2M Aalborg)

- Project goal: Define methods to systematically **design, model, evaluate, certify and deploy safety critical vehicular communication systems**
- Domains: Automotive, aviation, railway, (sub)maritime
- Use-Cases (least to most challenging):
  1) Operations (e.g. control center) & telematics
  2) Cooperation & swarm
  3) Remote control (Tactile Internet)



TUHH
Technische Universität Hamburg-Harburg

Thank you! Questions?

www.tuhh.de/comnets