Continental, A*STAR’s Institute for Infocomm Research (I²R) & TUM CREATE collaborate in an Intelligent Transport Systems (ITS) Lab

- MOU to set up first tri-party ITS collaboration to research, study & carry out trials in Singapore
- First ever ITS laboratory involving I²R, Singapore’s largest Infocomm Research Institute, academia and industry player
- ITS Initiative fully supported and endorsed by EDB

Singapore, April 29, 2014 - Continental, a leading international automotive supplier, A*STAR’s Institute for Infocomm Research (I²R) and Technische Universität München (Technical University of Munich, TUM CREATE) today signed a Memorandum of Understanding (MOU) to set up an Intelligent Transport Systems (ITS) Lab which will involve the research, study and test-bedding of a whole range of communications, information and automotive innovations & technologies that improve the safety, efficiency, and performance of transport systems in Singapore.

The partnership will boost Continental’s ITS capabilities in Singapore and other parts of Asia, through a series of innovations by leveraging I²R’s expertise in speech, multimedia, robotics and communication technologies, as well as TUM CREATE’s interdisciplinary research for future transportation.

With travel demand expected to increase exponentially from today’s 12.5 million journeys per day to about 18.8 million journeys per day by 2030, the setting up of an ITS Lab is a timely one as it will contribute significantly to Singapore’s plans for innovative traffic management solutions.

ITS optimises limited road capacity to allow for more efficient and accountable systems made possible through the use of smart technologies that monitor transport network performance and the collection of real-time data that can be used to track and respond to traffic incidents, congestion, road conditions, and emergency situations while providing the public with real-time information to make informed travel decisions. When integrated into Singapore’s roadways, vehicles and public transport network, ITS will help improve overall mobility and maximise use of existing infrastructure.
The ITS Lab, the first of its kind for Continental, I²R and TUM CREATE, will operate out of I²R’s laboratories at Fusionopolis, One-North. The partnership will enable each agency in this tri-party collaboration to tap on the vast amount of knowledge base, research & scientific expertise and engineering prowess of each participating partner. The R&D staff at the ITS Lab can also tap the vast network of more than 700 engineers and designers at Continental Singapore, more than 600 researchers, scientists and engineers at I²R and over 120 academic and research staff at TUM CREATE for related research & scientific data and expertise.

Continental has more than 140 years in the automotive industry and is an expert in networked automobile communication. Continental’s emerging technologies are at the forefront of the connected car experience. The company has strategically identified ITS as key to the future of the automotive industry. Continental’s leading-edge in-car technologies will hold the company in good stead as a major player in adapting to future challenges. Continental is now intensifying its collaboration with like-minded partners in bringing the connected car to life, focusing on Electronic Horizon and ITS. This fits nicely into Continental's roadmap in paving the way for the advent of ITS.

Lo Kien Foh, Managing Director of Continental Automotive Singapore Pte. Ltd said: “Continental has identified ITS as one of the game changers that will have a major impact on the automotive industry and transport systems network not only in Singapore but globally as well. We believe an integrated and well developed ITS infrastructure is key to the future of transportation mobility. At Continental we have one great advantage - know-how in all areas of the connected car and in-vehicle smart technologies. I am confident this ITS Lab collaboration will be an exciting and fruitful one for Singapore as a potential living laboratory for the conceptualisation and test-bedding of new solutions for commercialization of an ITS model for Asia.”

An efficient ITS is important for major cities like Singapore for building and developing physical infrastructure to keep pace with rising demand and usage. Cities must develop and build smarter and innovative technologies to efficiently manage and use existing infrastructure, as well as for planning for future growth. The Whole-of- I²R (WOI) approach is a System Approach that harnesses I²R’s diverse range of scientific capabilities to maximize impact for multiple thrusts, including Autonomous Vehicle and ITS.
Dr. Lee Shiang Long, Executive Director of I²R said: “I²R’s joint laboratory collaboration with Continental and TUM Create is in alignment with I²R’s system approach in contributing to Singapore’s Smart Nation plan. This collaboration also establishes a strong research and innovation ecosystem with TUM Create and creates impact to the industry in partnership with EDB. The combination of the capabilities of the three parties aims to address challenging ITS and Autonomous Vehicle issues in the global automotive industry. This partnership is an excellent platform for the stakeholders to share each others’ scientific expertise, industry experience and competencies in developing a fully functional autonomous vehicle.”

TUM CREATE research is interdisciplinary on the cutting edge of natural sciences, engineering and information & communication technologies. The institution aims to support the integration of e-vehicles into Singapore’s transportation system by improving energy storage systems needed for electro mobility, designing new e-vehicle concepts for test-bedding innovative technologies and developing models for optimisation towards efficient future transportation systems. TUM CREATE’s research will help to improve Singapore’s roadways, vehicles and public transport network.

Prof Maria-Elisabeth Michel-Beyerle, Chief Executive Officer of TUM CREATE said: “The joint ITS lab will enhance Singapore R&D ecosystem for future mobility by the complementary expertise of the three parties.”
About Continental

With sales of around €33.3 billion in 2013, Continental is one of the world’s leading automotive suppliers. As a provider of brake systems, systems and components for powertrains and chassis, instrumentation, infotainment solutions, vehicle electronics, tires, and technical elastomers, Continental contributes to enhanced driving safety and global climate protection. Continental is also an expert partner in networked automobile communication. Continental currently employs around 182,000 people in 49 countries.

The Automotive Group with its three divisions Chassis & Safety (sales of approx. €7.3 billion in 2013, roughly 36,500 employees), Powertrain (sales of approx. €6.3 billion in 2013, roughly 32,400 employees) and Interior (sales of approx. €6.6 billion in 2013, roughly 34,400 employees) achieved sales of approximately €20 billion in 2013. The Automotive Group is present in more than 170 locations worldwide. As a partner to the automotive and commercial vehicle industry, it develops and produces innovative products and systems for a modern automotive future in which cars provide individual mobility and driving pleasure consistent with driving safety, environmental responsibility, and cost-efficiency.

The Chassis & Safety division develops and produces electronic and hydraulic brake and chassis control systems, sensors, driver assistance systems, air bag electronics and sensors, washer systems, and electronic air suspension systems. Its core competence is the integration of active and passive driving safety into ContiGuard. The Powertrain division integrates innovative and efficient system solutions for vehicle powertrains. The comprehensive range of products includes gasoline and diesel injection systems, engine management and transmission control, including sensors and actuators, as well as fuel supply systems, and components and systems for hybrid and electric drives. Information management is at the very heart of the Interior division, which provides a range of products that includes instrument clusters and multifunctional displays, control units, electronic car-entry systems, tire-monitoring systems, radios, multimedia and navigation systems, climate control systems, telematics solutions and cockpits.

About Institute for Infocomm Research (I2R)

Singapore’s largest ICT research institute, I²R (pronounced as i-squared-r) is a member of the Agency for Science, Technology and Research (A*STAR) family. Established in 2002, our vision is to power a vibrant and strong infocomm ecosystem in Singapore. I²R focuses on conducting mission oriented research to address key challenges faced locally. At I²R, intelligence, communications and media (ICM) form our 3 strategic thrusts. Our research capabilities are in information technology, wireless and optical communication networks, interactive and digital media, sensors, signal processing and computing. We perform R&D in ICM technologies to develop holistic solutions across the ICM value chain and we believe that the greatest impact is created when research outcomes are translated into technologies our partners can readily deploy at a competitive advantage. For more information about I²R, please visit www.i2r.a-star.edu.sg.

About TUM CREATE (TUM)
TUM CREATE is an electromobility research project undertaken by two world-leading universities, Germany’s Technische Universität München (TUM) and Singapore’s Nanyang Technological University (NTU), funded by the National Research Foundation of Singapore. TUM CREATE is part of NRF’s Campus for Research Excellence And Technological Enterprise.

At TUM CREATE over 120 scientists, researchers and engineers from more than 20 countries are working on cutting-edge research that covers topics ranging from the molecule to the megacity including areas such as: electrochemistry, electric vehicle batteries, embedded systems, air conditioning, simulation and modelling, and infrastructure.

**Contact for journalists**

Sim Toon Cheng  
Head of Communications  
Continental Automotive Singapore Pte Ltd  
Tel: +65 6580 0662  
E-mail: sim.toon.cheng@continental-corporation.com  
**Online Media Database:** [www.mediacenter.continental-corporation.com](http://www.mediacenter.continental-corporation.com)  
[www.continental-automotive.de](http://www.continental-automotive.de)

Ms Doris Yang  
Senior Officer, Corporate Communications for Institute for Infocomm Research  
DID: (65) 6419 6525  
Email: yangscd@scei.a-star.edu.sg

Ms Wendy Tham  
Assistant Communications Manager  
TUM CREATE Limited  
DID: (65) 6601 4027  
Email: wendy.tham@tum-create.edu.sg