

First COST ACROSS Industry Day

Warsaw University of Technology

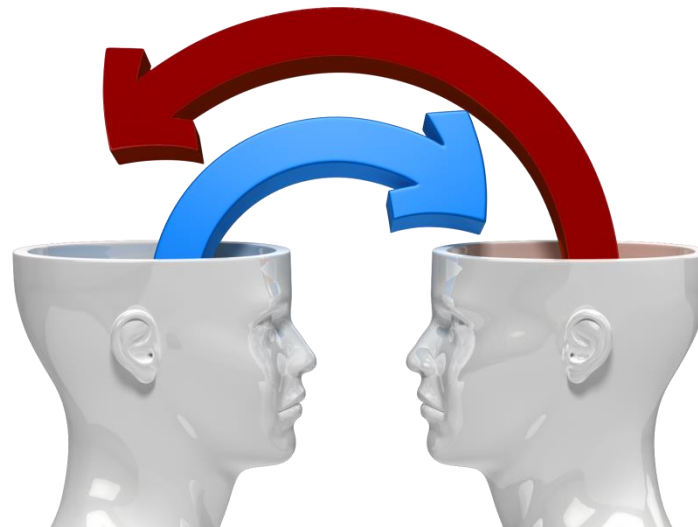
Warsaw, Poland, 13 May 2016



Goals of this day

Increase interaction with industry

Increase visibility of COST ACROSS



Program COST ACROSS Industry Day, Warsaw, 13 May 2016

09.00 - 09.15 Registration, Coffee

09.15 - 09.30 Hans van den Berg – *Welcome and Introduction*

09.30 - 10.45 Technical Session 1

- Pierre-Yves Plaza Tron (Telefonica / GSMA, Spain) – *Are networks prepared to withstand the “Internet of Things paradigm”, aiming to connect by 2020 50 billion devices?*
- Kurt Tutschku (Blekinge Institute of Technology, Sweden) - *On-Board Tools for Resource Management in Cloud Networking and NFV Infrastructures*

10.45 - 11.15 Coffee break

11.15 - 12.30 Technical Session 2

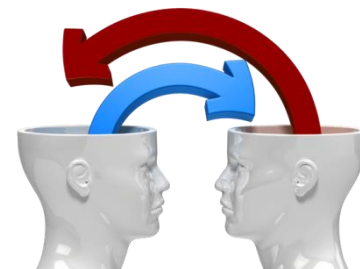
- Emil Kowalczyk (Orange Poland, Poland) – *Inter-cloud computing challenges from telecommunication’s perspective*
- Javier Sainz Guerra (Innovati, Spain) – *Business of selling quality on-demand and dynamically for future Internet services*

12.30 - 13.30 Lunch

13.30 - 14.45 Technical session 3

- Gerhard Hasslinger (Deutsche Telekom, Germany) – *Challenges in IP Traffic & Service Management Across Clouds, CDNs & ISP Networks*
- Spiros Spirou (Intracom Telecom, Greece) – *Reliability at the edge: Elastic resources for the 5G access network*

14.45 - 15.00 Wrap up and closing





COST



Autonomous Control for a Reliable Internet of Services IC1304

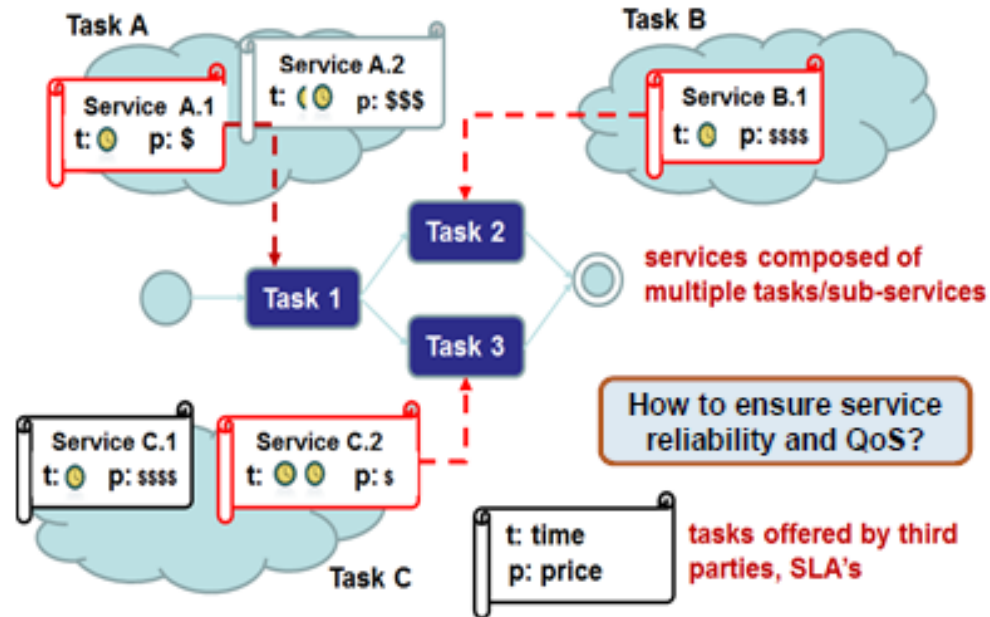
Start date: 14/11/2013

End date: 13/11/2017

MC Chair: Rob van der Mei (CWI / VU Amsterdam)

MC Vice-Chair: Hans van den Berg (TNO / UT)

“Everything-as-a-Service”



Service creation:
'anyone, anytime and anywhere'

Drivers:

- increase innovation power
- flexibility
- higher diversity
- cheaper services

- **Paradigm:** Today, there is a lack of models and control methods to make the Internet of Services (IoS) reliable
- **MoU objective:** Develop quantitative models and methods to design and optimize quality-control mechanisms for the IoS

Overall aim:

Create European network of experts on the development of autonomous control methods for a reliable and quality-aware Internet of Services (IoS)

31 countries involved

2 MC members per country

Networking objective:

Establish a platform to fuel and coordinate research on reliable IoS

Technical objectives:

1. Algorithms for autonomous decisions and QoS control
2. Scalable methods for monitoring to support QoS control
3. Rules for smart pricing schemes in many-domain environments

Working group 1:

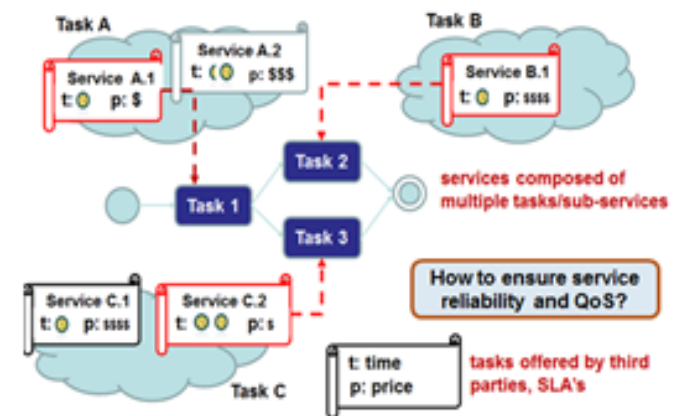
Methods for autonomous management and real-time control

Working group 2:

Methods and tools for monitoring and service prediction

Working group 3:

Smart pricing and competition in many-domain systems

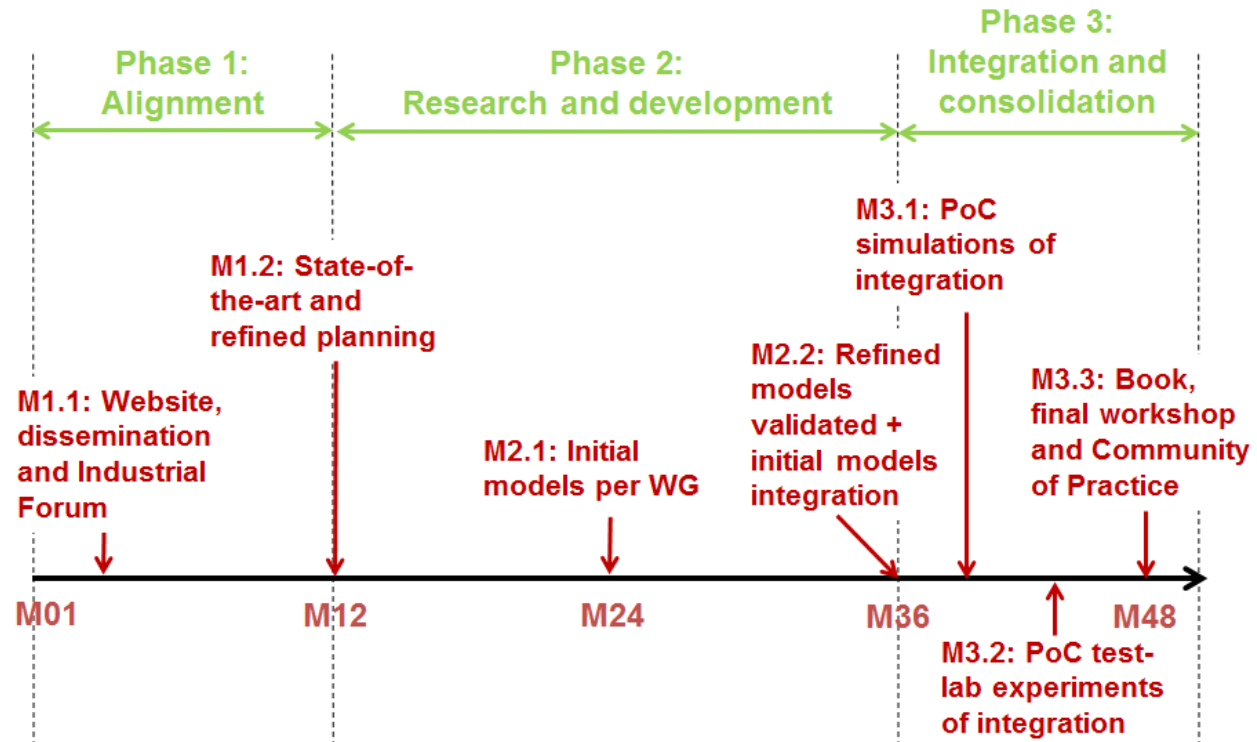




Task Forces

- Softwarization of networks
- Cross-layer QoE-management
- QoS-aware service composition
- Cloud federations
- Energy/cost-aware management & control
- New transport protocols
- Quality/cost management
- QoS/QoE modelling
- QoS/QoE monitoring
- **Autonomic and reliable control of wireless networks (incl. 5G)**
- Prediction and modelling of service composition performance, quality & reliability
- Provisioning of context-dependent pricing, charging and billing
- QoS and price-aware selection of cloud service providers

Future Plan and Challenges



Important 'tools'

- Short Term Scientific Missions (STSMs)
- Summer schools
- State-of-the-art and challenges document
- Industrial Forum
- Workshops

Events 2015

1st Open Workshop on Autonomous Control for the Internet of Services

Univ. Würzburg, Germany, 15 April 2015

Joint CLEEN and ACROSS workshop on Cloud Technology and Energy Efficiency in Mobile Communications

co-located to EUCNC 2015, Paris, 29 June 2015

Special session on “QoS/QoE Monitoring and Management with SDN”

EUCNC 2015, Paris, June/July 2015

Workshop on "Engineering and Control for Reliable Cloud Services"

co-located to ITC27, Ghent, Belgium September 2015

Events 2015 / 2016

Summer School “Autonomous Control for Reliable Future Networks and Services”

Co-located to MIPRO 2016, Opatija, Croatia, 27-31 May 2016

COST ACROSS Industry day

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Summer School “Autonomous Control for Reliable Future Networks and Services”

Co-located to MIPRO 2016, Opatija, Croatia, 27-31 May 2016

Workshop on “Big Data for reliable 5G Networking”

Co-located to EUCNC 2016, Athens, 27 June 2016

Workshop on “Quality Engineering for a Reliable IoS”

co-located to ITC28, Wurzburg, Germany, 16 September 2016

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