

# 24<sup>th</sup> European Regional International Telecommunication Society Conference

# Technology, Investment and Uncertainty

Badia Fiesolana

Via dei Roccettini, 9 - San Domenico di Fiesole

20-23 October 2013

## **■ Programme**

## Sunday, 20 October

18.00-21.00 Welcome Reception

Hotel Astoria Boscolo Via del Giglio, 9 – Firenze



## Monday, 21 October

08.30-09.00 Registration

09.00-09.30 **Opening Session** 

Erik Bohlin | ITS Chairman

Brigitte Preissl | Conference Co-chair Pier Luigi Parcu | Conference Co-chair

09.30-10.00 Plenary Session

Chair: Pier Luigi Parcu | Florence School of Regulation, EUI

The impact of regulation on operator strategies and investments

Göran Marby | Director-General, Swedish Post and Telecom Authority (PTS)

and chair-elect for 2014 of BEREC

Lucilla Sioli | Head of Unit F4 Knowledge Base, DG Connect Steffen Hoernig | Universidade Nova de Lisboa, Portugal

11.00-11.30 Coffee Break

11.30-12.30 **Parallel Session 1** 

Spectrum auctions: The combinatorial clock auction and its complexities

Knapek & Wambach

Spectrum 1 - Allocation

Spectrum licensing, policy instruments and market entry

Madden, Bohlin, Tran & Morey

Analysis of different authorization approaches for the shared access to radio spectrum

Castrucci, Carciofi, Guiducci, & Barbiroli

### Media

From hybrid TV toward transmedia: Recent marketing advances of the DTV and new media developments

Hsu & Shih

The role of media and ICT in the post-quake restoration and recovery progress: A case of the Great East Japan earthquake

Mitomo, Otsuka, Jeon & Cheng

## European Union 1

Bandwidth requirements in a 2020 perspective

Henten, Falch & Tadayoni

To what extent does network neutrality impact network investment? What are the consequences of this policy and how does it help or hinder reaching the EU's 2020 goals? **Layton** 

Broadband access in the EU: An assessment of future economic benefits **Gruber, Hätönen & Koutroumpis** 

## Digital services 1

Cloud computing. Old and new legal challenges under an IP perspective Falce

An exploratory study of consumer attitudes towards mobile ticketing in Sweden Apanasevic, Markendahl & Arvidsson

Regulation challenges for competition managed services vs. OTT services Maton

12.30-14.00 Lunch

14.00-15.30 Parallel Session 2

#### Spectrum 2

Business models and investment options for use of licensed shared access of spectrum Markendahl, Widaa & Mölleryd

From spectrum management perspective to examine Taiwan's switchover policy **Peng** 

European influence in ITU-R: The end of an era of dominance? El-Moghazi, Whalley & Irvine

Moving from common and control to flexible use and to a spectrum commons

## Privacy 1

Prasad & Sridhar

Do recruiters 'Like' it? Privacy and online social network profile in hiring: A randomized experiment

Manant, Pajak & Soulié

Privacy notice for dummies? Towards European guidelines on how to give 'clear and comprehensive information' on the use of cookies in order to protect the internet users' right to online privacy

Luzak

The law and economics of intermediaries of personal information **Luchetta** 

## Local loop unbundling

The influence of local loop unbundling on investment by incumbent telecommunications operators in the OECD member countries

## **Okamoto & Nakamura**

Investment incentives under local deregulation: Evidence from the United Kingdom Fabritz & Falck

The relation between local loop unbundling and investment in fixed telephony Pachis & Yannelis

How to price the unbundled local loop in the transition from copper to fibre access networks? **Neumann & Vogelsang** 

## **Pricing**

Play It Save: Consumer choice under four-part tariffs with cost caps

Köhler & Krämer

Nonlinear pricing; self-selecting tariffs and regulation

Alleman, Baranes & Rappoport

Price collusion in geographically segmented markets – Empirical evidence and policy implications Horstmann & Krämer

From mobile voice to quadruple-play: estimation of willingness to pay for ADSL and FTTH by analyzing consumer choice

Liang

## Digital services 2

Research on user resistance to acceptance of IVI (In-Vehicle Infotainment) System Kim, Nam & Kim

Digital service platforms in the ICT industry – A systematization of strategic archetypes **Kuebel & Zarnekow** 

The dilemma of electronic books in the mobile age in Taiwan

**Tseng** 

Electronic communication services in the world of applications: Challenges for regulation

Ruhle & Freund

15.30-16.00 Coffee Break
16.00-17.30 Parallel Session 3

Panel session 1: European market structures in the long term

Moderator: Paul de Bijl | CBP, The Netherlands

Participants: Johannes Bauer | Michigan State University, USA

Steffen Hoernig | Universidade Nova de Lisboa, Portugal

Scott Marcus | WIK, Germany

Mobile 1

The impact of spectrum licenses on competition. The case of 4G deployment in Spain Ventura, Frías & Pérez

Technological neutrality and standards harmonization: WiMAX spectrum in Taiwan as a case study

Peng

Opportunities and challenges for TV and mobile broadband in 470-790 MHz Shi, Sung & Zander

Strategy scenario selection in the competition of mobile ecosystems Lee & Kim

#### Broadband - speed, quality & bandwidth

Impact of sector-specific regulation on ICT infrastructure quality

Bauer, Zenhäusern & Schneider

The effects of asymmetric regulation on the quality of broadband networks **Kocsis** 

Will broadband pricing support 1Gbps services?

Domingo & Lehr

The impact of broadband speed on the household income

Rohman & Bohlin

## Regulation 1

Reconsider the telecommunication and media regulatory framework in Taiwan: Using the new emerged media as examples

Liu

Regulations for and against cooperation in smallcells - how could regulations stimulate co-opetition by supporting sharing

Ghanbari, Markendahl & Widaa

Regulation to promote competition in the bimodal broadband industry McDonough

# Tuesday, 22 October

09.00-10.30 **Parallel Session 4** 

Mobile regulation

Jurisdictional competition and the regulation of wireless service in Canada

Schmidt & Hamilton

New European developments in international mobile roaming: Where are we headed?

Marcus & Philbeck

Regulatory fallacies in global telecommunications: The case of international mobile roaming Knieps & Zenhäusern

Privacy 2 - Personal information

The value of personal information in e-commerce transactions: the impact of socio-economic characteristics in the UK

Palacios, Gijón, Gómez-Barroso & Feijóo

The value of personal information in the e-commerce market

Jitsuzumi & Koguchi

Control privacy information explosion with data apotosis eco-system

Shinohara & Kunishi

National experiences

Policymaking for the PSTN-to-IP ransition within federalism: Lessons from U.S. v. Canadian experimentation

Cherry

Overview of the issues relating to the enforcement and review of regulatory decisions in a small Member State such as Malta

Micallef

Russia's information and communication technologies and innovative economy infrastructure formation

Petukhova & Strepetova

Online & Innovation

Assessing access problems in online media platforms

Valcke, Wahyuningtyas & Graef

Competition in and for digital markets: The impact of new entrant's strategic investments in a dynamic duopoly

Kuchinke & Vidal

Covariance structural analysis of innovation and ICT use among Japanese innovative SMEs Idota, Bunno & Tsuji

Structure of technology evolution: The way in which ICT industry emerged in Korea Kim, Jung, Lee & Hwang

Environmental & ethical aspects of ICT

ICT and efficiency of transport infrastructure

Yoon & Na

Toward a capacity efficient, cost efficient and power efficient deployment strategy for indoor mobile broadband

Widaa, Markendahl & Ghanbari

10.30-11.00 Coffee Break

11.00-12.30 **Parallel Session 5** 

Spectrum 3

Introduction of dynamic spectrum management technologies: the role of market structure and spectrum policy

Basaure & Sridhar

A new institutional perspective on share spectrum access issues

**Bunel & Lescop** 

Secondary access to the radar spectrum bands: regulatory and business implications

Obregon, Sung & Zander

Using the lower UHF bands for commons & events

Elsner & Weber

The validity of unlicensed spectrum for future local high-capacity services

Kang, Sung & Zander

Next generation access

Geographically differentiated NGA deployment

Tselekounis, Xylogianni, Varoutas & Martakos

Economic aspects of hybrid fiber and copper-based access networks

Rendon Schneir & Xiong

Economic replicability tests for next generation access network

Jaunaux & Lebourges

Access regulation and geographic deployment of a new generation infrastructure

Flacher & Jennequin

Traffic - Trends & management

On the weal and woe of internet traffic management in Europe

Stocker

Institutions, regulation and governance of the internet; A European perspective on traffic, uses and business practices in the digital economy

Liebenau, Elaluf-Calderwood & Karrberg

Reporting policies of ISPs: do general terms and conditions (GTCs) match with the reality? Grove, Agic & Sedlmeir

The profitability of internet user tiering: an analysis of consumers' willingness-to-pay for quality of service tiering

Krämer & Wiewiorra

Consumer issues

Residential mobile phone users' complaints in Spain

Pérez-Amaral, Gijón, Garín-Muñoz & López

Consumer protection in mobile telecommunications across countries: A comparative study López, Pérez-Amaral, Garín-Muñoz & Gijón

Mixed method research: Combining mobile logdata and questionnaires

Bouwman & de Reuver

Mobile 2

The analysis of mobile network switching determinants and policy implications in a developing country: A case study of Thailand

Keesookpun & Mitomo

Empirical analysis of the current Japanese mobile phone market: Focusing on the diffusion of smartphones

Shinohara, Akematsu, Morikawa & Tsuji

Complementing macrocell deficits with either smallcells or Wi-Fi - willingness to choose based on the cost-capacity analysis

Popescu, Ghanbari & Markendahl

Mobile resource sharing trends in developing and developed mobile markets (regulations and market forces)

Lasso, Widaa & Markendahl

12.30-14.00 Lunch

**14.00-15.30 Parallel Session 6** 

Schools, kids and libraries

Are classroom internet use and academic performance higher after government broadband subsidies to primary schools?

Hyland, Layte, Lyons, McCoya & Sillesc

Public Internet access in areas of deprivation: The case of Glasgow

Anderson & Whalley

Role of the public ICT networks in facilitating innovation: Lessons from India and UK **Jain** 

Encouraging the development of telecommunication markets

Chirico & Gaal The role of public funding in telecommunications markets

PPP as a policy tool for generating rural access to broadband services Falch

Broadband regulation efficacy in the presence of nationwide government network subsidies: Evidence from New Zealand

Howell

Sustainable broadband: A monitoring framework for broadband policy in rural areas in the Netherlands

Sadowski & Kirchholtes

Mobile applications

Analyzing the business model for m-payment from banks' perspective: An empirical study Guo, Nikou & Bouwman

Driver's intention to use smartphone-car connectivity

Park, Kim, Nam & Kim

Who is investing in Machine-to-Machine communications?

Laya, Bratu & Markendahl

Mobile broadband infrastructure and the usage of local online services

Mang

Fixed - mobile

Comparing and combining value network configurations for fixed and mobile access networks Van der Wee, Evenepoel, Verbrugge, Lannoo & Pickavet

Mobile off-load and fixed-mobile competition

Marcus

Analyzing competitive effects between fixed and mobile broadband

Wulf & Brenner

Dynamics of broadband demand: substitution or complementarity between fixed and mobile

technologies? An application to the Portuguese case

Silva, Proença & Vareda

15.30-16.00 Coffee Break 16.00-17.30 **Parallel Session 7** 

Panel session 2: Machine-to-machine communications

Moderator: Jan Markendahl | KTH, Sweden

Participants: Harry Bouwman | Delft University of Technical, The Netherlands &

Åbo Åkademi University, Turku, Finland

Roberto Saracco | EIT ICT LABS

Staffan Movin | Marketing Technology Centre

### Regulation 2

Reduction in unit prices in the telecommunication industry

Jeanjean

Can optimal mechanisms for policy decisions be designed?

Major

Estimation of monetary value of switching costs and network effects in mobile telecommunications. A stated preference approach

Sobolewski & Czajkowski

#### **Broadband**

The impact of regulation and competition on the adoption of fibre-based broadband services: Recent evidence from the European Union Member States

Briglauer

Regulation, investment and efficiency in the transition to next generation networks: Evidence from the European Union

Rajabiun & Middleton

A unified framework for open access to telecommunications infrastructure

Krämer & Schnurr

Cooperation patterns in small cell networks - risks and opportunities to distinguish the win-win model

Ghanbari, Markendahl & Widaa

#### Internet

Net neutrality at international backbone provider level

Baglioni, Calabrese, Forcina, Levialdi & Lucarini

Measuring the Internet convergence: A comparative study for Thailand and Norway Hallingby, Hartvikse, Elaluf Calderwood & Sørensen

Governing network neutrality: Public perception and policy capacity Shin

The evolution of the generalized differentiated services architecture and the changing role of the Internet Engineering Task Force

Knieps

18.00-21.00 Drinks and Conference dinner – Villa Viviani, via Gabriele D'Annunzio 230 Firenze

# Wednesday, 23 October

09.00-10.15 **Parallel Session 8** 

European Union 2

Electronic communications regulation in Europe: The past and the future 20 years Parcu & Silvestri

Single market considerations in the practice of BEREC: study of BEREC opinions in Article 7/7a cases

Batura

#### **Operators 1**

The determinants of European telecommunication operators' systematic risk Chalmeau

Does the number of mobile operators really matter for prices? A comprehensive ex-post evaluation of entries and mergers in European mobile telecommunication markets Csorba & Pápai

### **Standards**

The formation of China's mobile TV standards /regulations for future sustainable development – Socio-technical translation process study for the China's Mobile TV standard

Chao & Fu-Cheng

A research on ICT standards management based on standards reusability analysis Lee, Cha, Ha & Park

A comparison of regional standards collaboration activities of ETSI and ASTAP Cha, Park & Lee

#### Swedish broadband

What makes people adopt an ultra-high speed (100 Mbit/s) broadband? An empirical study of the Swedish broadband market

**Kongaut & Bohlin** 

How liberalised is the optical fibre broadband market? The case of Sweden Sandgren & Mölleryd

10.14-10.45 Coffee Break

**10.45-12.00 Parallel Session 9** 

#### Investment

An economic cost model for network deployment and spectrum in wireless networks Han, Sung & Zander

Investment strategies for different actors in the indoor mobile market in view of the emerging spectrum authorization schemes

Widaa, Markendahl & Ghanbari

# **Operators 2**

Corporate governance, investment strategies, and reactions to unbundling regulation of broadband operators: Empirical analysis on Japan, Europe and the U.S.

Mitsuyama & Mitomo

The role of network sharing and M&A in improving operators' profitability and moving towards a new industry structure

Mölleryd & Markendahl

From global aspirations to regional dominance: the changing international focus of Deutsche Telekom

Whalley & Curwen

#### **Content**

VOD (video on demand): a business perspective

Collico Savio

The digitisation of media and content industries: what happened to EU public content? Feijoo, Lindmark, Passel & Tarín

# Ecosystems and complex systems

Managing the new normal: how we will learn to love uncertainty Longstaff

The interaction of ICT networks structure and downstream trade flows: Bhutan and India Giovannetti & Fennell

12.00-12.30 **Summaries – Closing Session** 

Closing Summaries

Closing Remarks

Brigitte Preissl | International Telecommunications Society

Jason Whalley | Conference Organiser