

The First European Conference on Telecommunications and Sustainability organized by ETNO (Association of European Telecommunications Network Operators) was hosted by Matáv in Budapest on November 25-26 2004. This major event of telecommunications operators were attended by delegates from some 20 countries, including the representatives of telecommunications companies, EU and Hungarian government agencies, consulting firms, universities, public organizations and United Nations. The event were also followed also by four European universities, for the questions arrived from there the speakers answered in e-mails.

ETNO has 41 telecom operator members from 34 countries. It focuses on the promotion of dialogue among its members and the other players interested in building the European information society. It also provides a forum for the members to discuss common problems. Its sustainability working group focuses on ICT and harmonisation its effect on economic, social and environmental interests.

The aim of the conference was to establish links between the telecommunications services, the various operators and sustainability. At the Budapest conference ETNO joined the UN's Global Compact initiated by UN Secretary-General Kofi Annan, and the ETNO Sustainability Charter, which Matáv has joined along with 16 other European telecommunications operators, was also be made public here.

The conference topics were grouped around the following sections:

- Welcomes and Introductions
- ICT & Sustainability – Expectations and Challenges
- Sustainable Business Management
- Product and Service Impacts and Management
- Resource Management and Climate Change
- ICT as an enabler of improved social & economic growth at global level
- Communication on Sustainability Performance – Panel discussion
- Conference Summary & Future Challenges

## Welcome and Introduction

Welcomes and Introductions	Master of Ceremony: Katalin Szomolányi, Matáv
Welcome by Matáv	Matáv - Mr. Peter Janeck, Chief Technical Officer
Welcome by ETNO	ETNO - Mr. Michael Bartholomew, director
Welcome by the Ministry of Environment and Water	Ministry - Mr. István Pomázi
Keynote address by European Commission – DG Enterprise	DG Enterprise - Mr. Michel Catinat

Peter Janeck, Chief Technical Officer of Matáv defined sustainable development in his opening speech from different aspects, and highlighted that in its operation the three of economy – society – environment has a tight link. This means that if the economy is not healthy it has direct impact on the society and on he environment. In the same way affects environment on society and environment, or society on economy and environment.

Michael Bartholomew, ETNO director underlined the role of telecommunications sector to achieve European Union's Lisbon strategy. The telecommunications industry contributes to the three pillars of sustainable development through concrete actions to limit environmental impact of its operations.

Dr. István Pomázi from the Hungarian Ministry of Environment and Water, highlighted that the Hungarian government had launched its information strategy with a special focus on e-environment. One of the main goals was to publish e-environmental data on public portal.

Michel Catinat, the head of Environmental Unit in European Commission's DG Enterprise presented the valuation of Lisbon strategy (Kok report), which connects to sustainability directly. Europe has always taken leading position in environmental and social protection. He also highlighted that business actors should be take into consideration as a part of solution, not as a part of problem. Telecommunications sector has a special opportunity to help Europe in developing sustainable society.

## ICT and Sustainability – Expectations and Challenges

ICT and Sustainability – Expectations and Challenges	Moderator: Michel Catinat, DG Enterprise
Trends in information society and sustainable development: A European perspective	DG Information Society – Peter Johnston
Sustainable development: market opportunities for ICT	Arthur D. Little – Justin Keeble
ICT & sustainable development - the	WWF – Dennis Pamlin

ICT and Sustainability – Expectations and Challenges	Moderator: Michel Catinat, DG Enterprise
future trends and the role of ICT in Europe and the world	
ETNO Sustainability Charter: example of co-operation on sustainability in a highly competitive market	ETNO SWG – Danilo Riva

Peter Johnston, head of unit at European Commission DG Information Society highlighted that we need a new paradigm of growth to meet both the objectives of Lisbon and those of the sustainability strategy. Information and Communication Technology sector is a key as can make a direct and indirect contribution to growth in competitiveness, decrease in environmental impact while can also help to improve quality of life.

Justin Keeble from Arthur D. Little presented the results of a survey which let us take the consequence as sustainability has market opportunities for companies. For this a shift is needed to understand market, identify opportunities, and deliver environmental and socially beneficial products and services. Sustainability in this meaning is not only responsibility at companies, but also a business opportunity.

Dennis Pamlin from WWF brought an NGO view point to the debate. He underlined that telecommunications has real opportunities to contribute in sustainable development. Among the examples were dematerialization, substitution of transportation, intelligent and increased energy efficient buildings, increased transport efficiency, better information and new urban models. As expectation, he highlighted the information and communication about the environmental effects of telecommunications products and services. He also encouraged the co-operation with other business sectors, NGO-s and politicians.

Danilo Riva, the chairman of ETNO Sustainability Working Group introduced the Sustainability Charter, signed by 17 telecommunications companies. This replaced the Environmental Charter published in 1996. He also pointed that in spite of economic difficulties, telecommunications companies have reached further positive results in environmental protection. According to the new charter's guidelines, new key-indicators have been defined for continuous measurement of improvement, which will be published as a report.

## Sustainable Business Management

Sustainable business management	Moderator: Michel Huet, Chair ETNO EB
Sustainable business management and financial indexes: focus on ICT	SAM – Edoardo Gai
The intangibles: a bridge between financial and non financial performance in the Telecommunication sector	Telecom Italia – Paolo Nazzaro Bocconi University – Prof. Mauro Bini
Sustainability & Employment: the experience of Sectoral Social Dialogue	ETNO EH&S WG – Marco Buatier de Mongeot
Sustainable strategy and goals in DT	DT – Reiner Lemke
CSR: Increasing the value of a Company	Telefónica – Rafael Fernández de Alarcón

Edoardo Gai, from Sustainable Asset Management presented his experiences gained in analyses in ICT sector for Dow Jones Sustainability Index. Among key sustainability challenges he listed the reduce of environmental footprint, the continuous improvement of workforce skills, the stakeholder engagement, the transparency, the recognised excellence by customers, the good governance and risk management, and the integration of sustainability into traditional business processes.

Paolo Nazzaro from Telecom Italia and Prof. Mauro Bini from Bocconi University talked about intangibles in their presentation. In addition to the value creating affect of sustainability, introduced the key indicators of Telecom Italia, the process of developing Sustainability Report, which includes the Financial report, and some of the key actions.

Marco Buatier de Mongeot, from ETNO Employment, Health & Safety Working Group introduced sustainability from employment point of view. Sustainability, as responsibility, should be integrated into human resource management. He also presented the social dialogue of telecommunications sector, and its results.

Reiner Lemke, from Deutsche Telekom talked about the company's Sustainability Strategy and Goals. He also talked about some basic questions, as the depth of management involvement, corporate governance, risk management and business approaches, etc. The eight guidelines of sustainability strategy reach „our bas aim“ through „for the people“, „for the environment“, „for the future“. Among examples he mentioned the Social Charter, the climate protection principles, the sustainability action wall, etc.

Rafael Fernández de Alarcón, from Telefónica gave a presentation about corporate responsibility and its additional value. In the process the company can reach long term value increase from risk management, through financial, responsible risks and less costs.

## Product and Service Impacts and Management

Product and Service impacts and management	Moderator: Danilo Riva, Chair ETNO WG Sustainability
GSM in Society - delivering sustainable mobile communications	GSM Association – Jack Rowley
Impact of ICT products	Bitkom – Dr. Mario Tobias
Life Cycle Assessment of the Mobile Communication System UMTS	ESU-services – Rolf Frischknecht
Preparing for the WEEE Directive	BT – Mark Dowling

Jack Rowley, the research and sustainability director of GSM Association in his presentation talked about sustainable mobile communication. In addition to health researches of electromagnetic radiation, he presented some results of different queries in different countries. Also showed examples on field of visual effect, energy consumption and recycling.

Mario Tobias, from Bitkom analysed the impact of information and communication technology's products, if it is a part of problem or solution from sustainability point of view. He listed up among the examples the automation and control, the transportation and mobility, the personal and health care, the education, and the economic growth.

Rolf Frischknecht from ESU-services presented the results of life-cycle analyses of UMTS, where it was compared with GSM system. Based on this in data transmission point of view the environmental impact will be decreased, in customer point of view increases the impact. As strategic goals he highlighted to reduce the energy consumption of base stations, to increase the using time of mobile phones, and to use the renewable resources in the system operation.

Mark Dowling from British Telecom detailed the application problems of EU directive on electric and electronic equipment. The directive covers all the telecommunications and IT equipment, household applications and other electric and electronic equipment. He presented the cost increasing factors, and also some point, which should be stepped by telecommunications companies in time, e.g. involving suppliers, avoiding hazardous materials, etc.

## Resource Management and Climate Change

Resource management and climate change	Moderator: Peter Johnston, DG Information Society
GHG emissions and business	Carbon Disclosure Project – Paul Dickinson
ICT and GHG Emissions	Matáv – Katalin Szomolányi
Alternative Energy Solutions	BT – Neil Winfield
Energy efficiency and CO <sub>2</sub> -emissions at Swisscom	Swisscom – Dominique Singy

Paul Dickinson, coordinator of Carbon Disclosure Project called his colleague in Netherlands by a video-phone to introduce the project. Eckart Wintzen talked about the telecommunications' travel substituting potential.

Katalin Szomolányi, manager of ETNO Sustainability Working Group's „ICT's effect on green-house gases“ project presented the results achieved by the work started in 2002. They analysed the total impact of telecommunications actors based on their energy consumption, converted to CO<sub>2</sub> – equivalent, summarising the best practices, and the CO<sub>2</sub> replacing opportunities of some services globally.

Neil Winfield, energy commercial manager at British Telecom introduced the emission reducing efforts of the company, reflecting to CO<sub>2</sub> emission. He also talked about BT's new „green“ electricity contract, and about some new solution opportunities.

Dr. Dominique Singy from Swisscom presented the company's opportunities to achieve the goals until 2010 regarding CO<sub>2</sub> emission. Regarding the three highest energy consumption types – as electricity, heating, fuel – he listed up the different solutions taken into consideration.

## ICT as an Enabler of Improved Social & Economic Growth at Global Level

ICT as an enabler of improved social & economic growth at global level	Moderator: Dennis Pamlin, WWF
Globalisation: opportunity or threat?	Global Compact – Ellen Kallinowsky
The GeSI: how to organise the ICT industry's contribution to sustainability	GeSI – Chris Tuppen
Campaign for Digital Inclusion	BT - Mike Hughes
ICT services eliminate distances: examples of applications	FT - Jean-Marc Temerson
Flexible working - win-win	TeliaSonera - Kari Vaihia

Ellen Kallinowsky from UN Global Compact Office shared the view that globalization was an opportunity for all provided it was managed in a proper way. "Economies need to be embedded in a set of values and principles".

Chris Tuppen, the chairman of Global e-Sustainability Initiative introduced the members of the association, as the following: Bell Canada, BT, DT, Ericsson, ETNO, Motorola, O<sub>2</sub>, Panasonic Mobile and Vodafone. He listed the results achieved and highlighted the importance of supply chain management.

Mike Hughes, the head of environment and digital inclusion at BT Group presented the digital inclusion campaign. The project focuses on three topics, as connectivity, capacity and content. Analysing the social aspects it became clear that digitally excluded people needs to contact the government ten times more than averages. The project includes actions like everybody-online, e-well being awards, free community web site build tool, BT community connections, etc.

Jean-Marc Temerson, from France Telecom detailed the distance eliminating opportunities provided by information and communication technology services. Defining distance it is not enough to take mathematic, physical approach into consideration, but also social approach should be defined. In this point of view the distance eliminating opportunities of services can be found in health care, educational culture, work, tourism, citizenship, transportation, etc.

Kari Vaihia, CSR director of TeliaSonera underlined the opportunities of flexi-work. Finn parliament intends to replace 20% of total working time 2010-re with flex-work, which would reduce the total CO<sub>2</sub> emission with 0.12 % in Finland.

## Conference Summary, Future Challenges

Conference summary and future challenges	Moderator: Katalin Szomolányi, Matáv
Duet on expectations, challenges, experiences: a look into the future	Matáv & DT – Katalin Szomolányi, Ignacio Campino
Concluding remarks	ETNO EB Chair – Michel Huet

Katalin Szomolányi (Matáv) and Ignacio Campino (DT) in their summary presentation remembered 1996, when First European Conference on Telecommunications and Environment was hosted by DT. Since then the view increased with sustainability responsibility. Among the experiences of the conference the focus was mentioned which is shifting from direct effect towards indirect and systematic effect. We do not live in a sustainable society at the present, but we are building it together. Innovation is a key, which should focus rather on sustainability than technology. On the way towards we should be able to find our allies.

Michel Huet, chairman of ETNO Executive Board closing the conference summarised the presentations. „All signatories of the ETNO Charter on sustainable development have shown the exemplarity of the electronic communications sector in terms of a responsible management of resources, environment protection, economic growth and social dialogue. They also demonstrated that they are committed to a fruitful and efficient dialogue with all stakeholders for a positive contribution to Society. Our ambition is clearly to be part of the solution, rather than part of the problem.”