

Science meets
Consulting ...

WIK-Characteristic Highlights

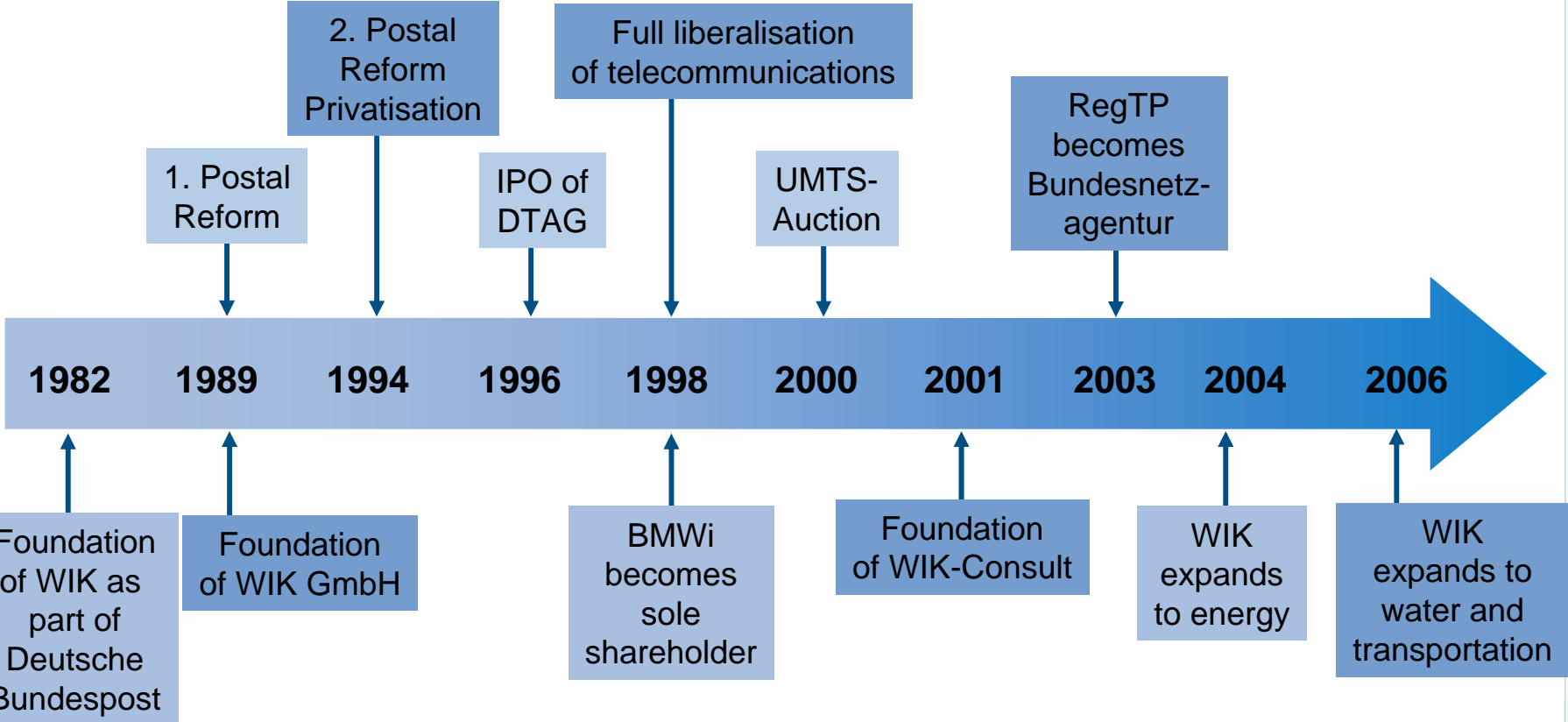
- Independent research and consultancy organisation
- Focus on policy and regulation of network industries
- 25 years of experience
- 35 professionals, mainly economists
- ~ 60 % of consultancy revenues outside of Germany
- Comprehensive network of partners
- Worldwide footprint with a clear focus on Europe
- Major client in 2007: EU Commission

Structure of WIK



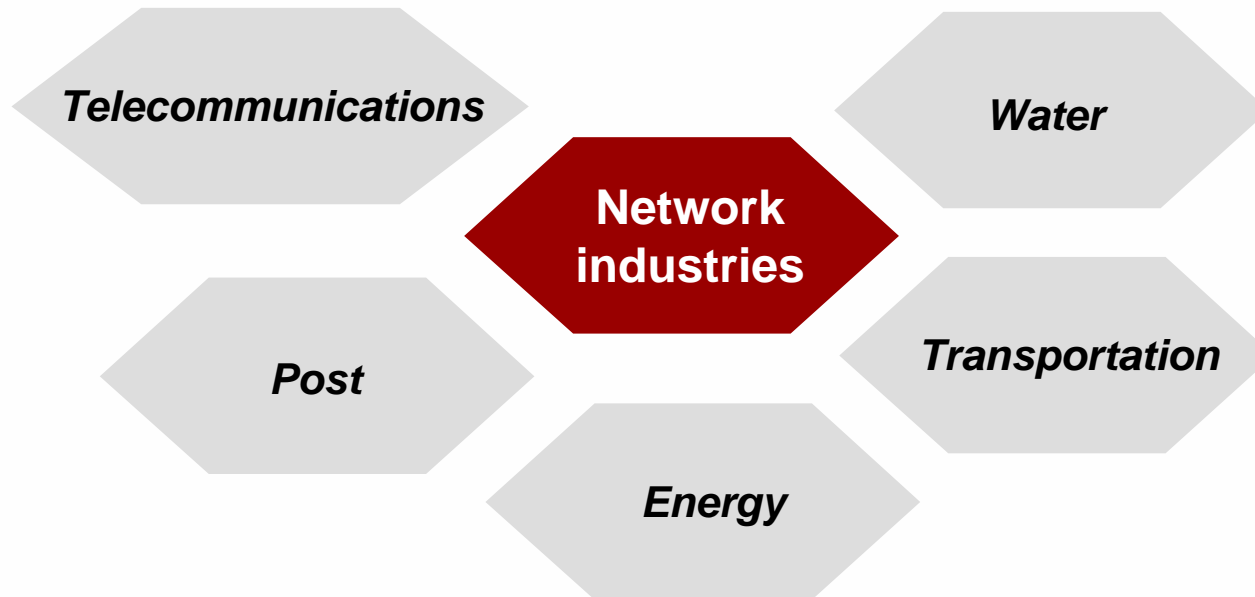
Development of WIK

From public Research Institute to a scientific Research and Consultancy Organisation:
Development of WIK reflects development of telecommunications markets in Germany

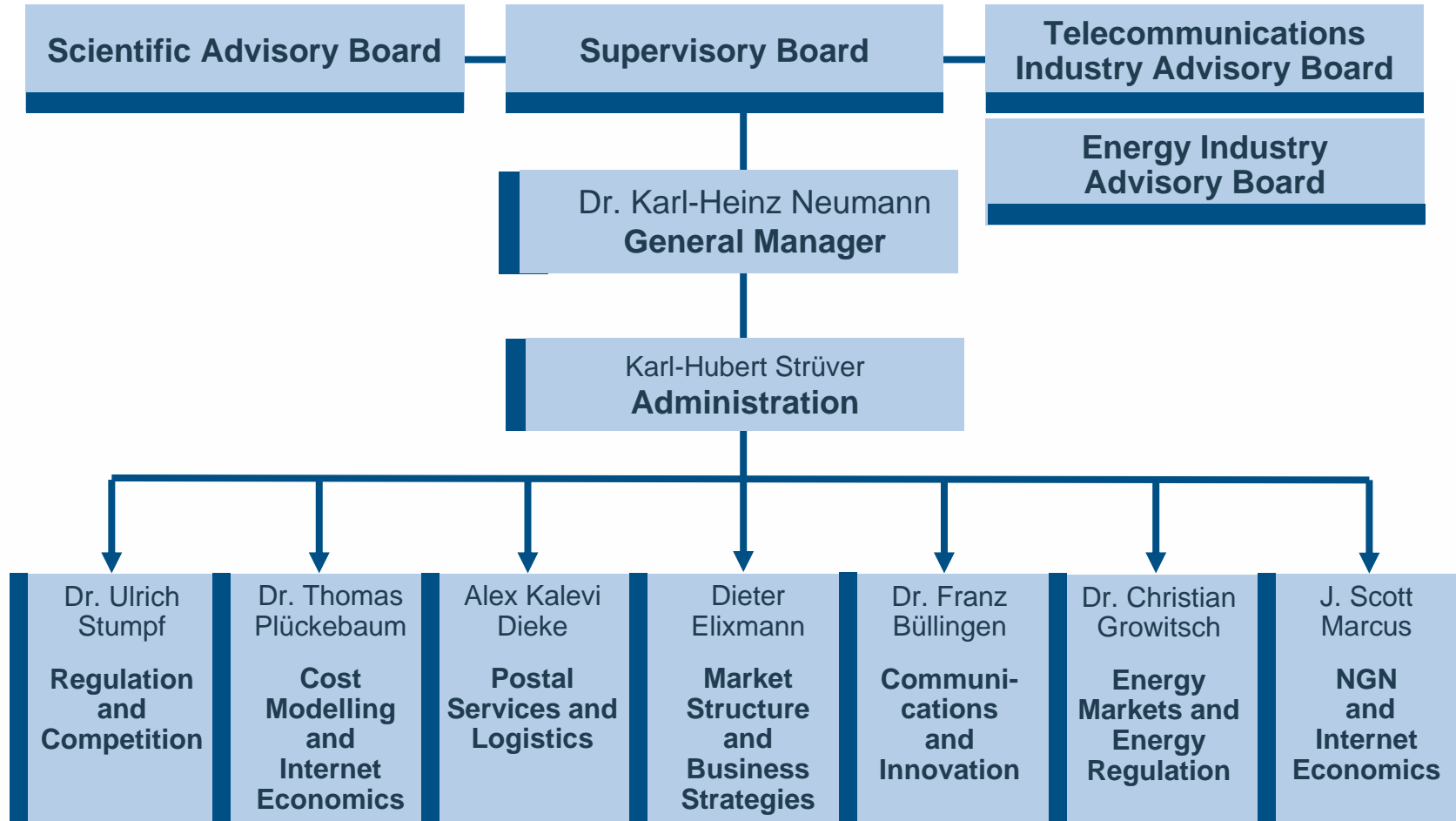


Our Focus: Network Industries

From Telecommunications to Network Industries



Organisation



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Thorsten Dirks
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Officer,
E-Plus Mobilfunk
GmbH & Co. KG

Charles Fränkl
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United Mobile
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Peer Knauer
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Telekommunikation
GmbH

Peter M. Wagner

Christof Wahl
Managing Partner,
MCH Management
Capital Holding AG

Helmut Wörner
President and CEO of
Controlware GmbH

Alf Henryk Wulf
Member of the Board,
Alcatel-Lucent GmbH

Focus: Regulation & Competition

- Support of National Regulatory Authorities in the review of electronic communications markets susceptible to ex ante regulation.
- Implementation of regulatory measures (Reference Offers, non-discrimination, cost accounting and accounting separation, price control).
- International benchmarking and best practice analysis for regulatory parameters, competition intensity and market performance.
- Calculation of the cost of universal service obligations and allocation of contributions to a national universal service fund.
- Design of auction mechanisms for frequencies and licenses.
- Support in reforming spectrum policy (spectrum trading, administrative frequency pricing, liberalisation of spectrum usage).
- Support of firms in merger procedures in the electronic communications sector.
- Extensive training and workshops in all topics mentioned above.

Focus: Market Structures & Business Strategies

- Analyses of market structure and development as well as business strategies.
- Analyses of market regulation and its effects on competition.
- Empirical demand estimation.
- International comparison, development of international benchmarks.
- Macroeconomic analyses for telecommunications and internet markets.
- (Migration strategies towards) “Next Generation Networks”.
- Forecast modelling.

Focus: Cost Modelling & Internet Economics (1)

- Development and implementation of analytical cost models. These can be used to calculate the long run incremental costs of post and telecommunication networks as a basis of regulatory decision making (price regulation and assessment of the proof of costs delivered by the operators).
- Consulting services on interconnection services.
- Consulting services on unbundled network access.
- Analyses of cost structures and telecommunication networks.
- Cost studies of network services.
- Costs of NGN and NGA.

Focus: Cost Modelling & Internet Economics (2)

**Analytical Cost Model
for the Subscriber
Access Network**

**Analytical Cost Model
for the
Core Network**

**Analytical Cost Model
for
Mobile Networks**

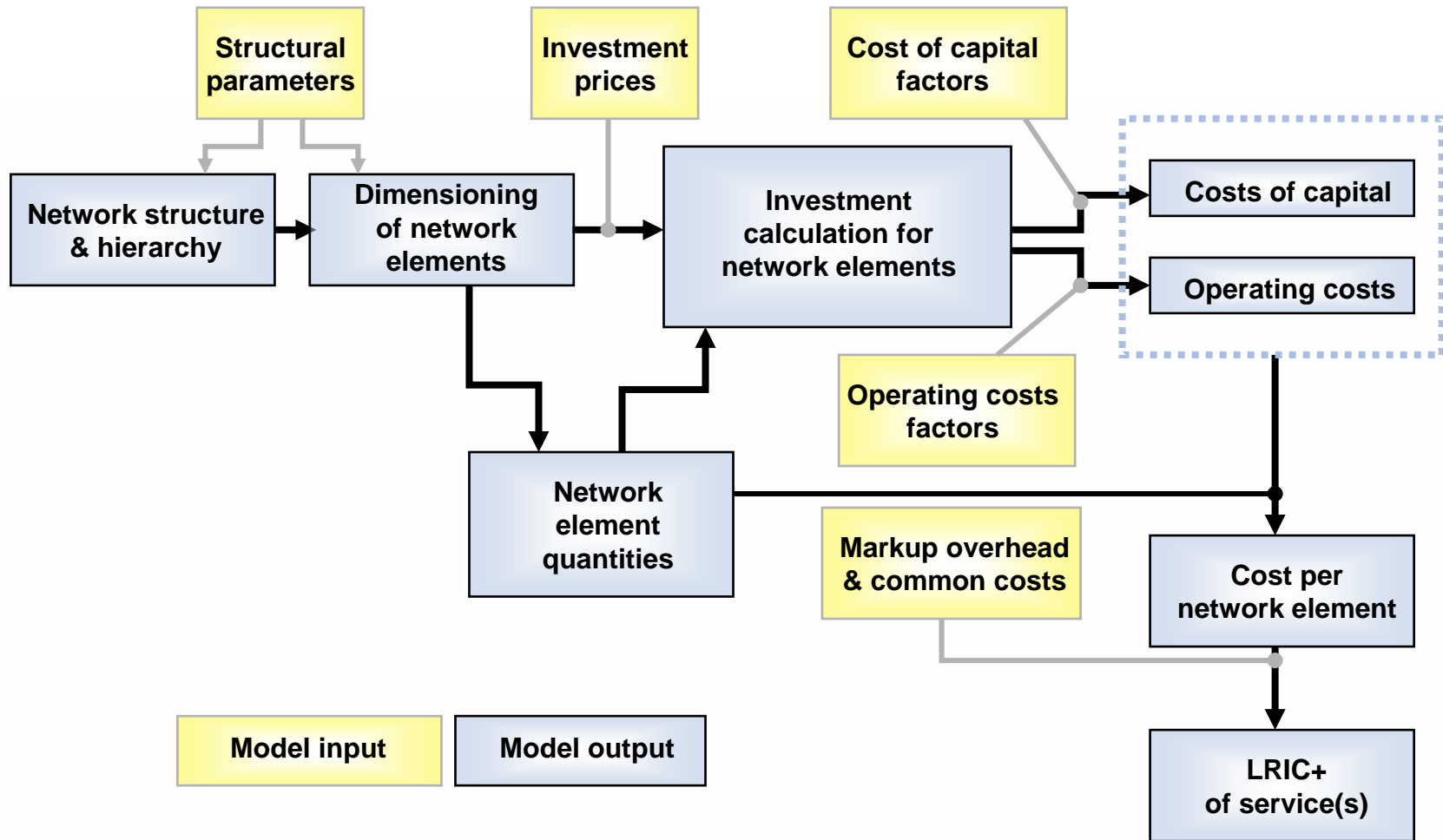
**Analytical Cost Model
for the
Broadband Network**

**Analytical Cost Model
for
Colocation Services**

**Analytical Cost Model
for the
NGN Backbone**

Focus: Cost Modelling & Internet Economics (3)

WIK Analytical Cost Model for the Subscriber Access Network



Focus: NGN & Internet Economics

- Network interconnection (including PSTN, NGN and Internet; Europe and the U.S.).
- Regulation in a converged or NGN environment (including VoIP).
- International comparative analysis of markets and of legal and regulatory institutions (especially Europe and the U.S.).
- Security, trust and privacy for electronic communications networks.
- Spectrum management policy.
- Cable networks: market analysis, evolution to triple play.
- Data network design; capacity planning and performance analysis; and operations and management.
- Network neutrality.

Focus: Communications & Innovation

- Analyses with respect to the diffusion and adaptation of new applications and services of the telecommunication and media industry.
- Benchmarking and country studies.
- Forecasts focusing on telecommunication network infrastructure as well as the development of the demand for services.
- Technology assessment with respect to the implications of the information society.
- Analyses of the market structure and market potential especially focusing on IT security, e-commerce, m-commerce.
- Innovation and evaluation research.
- Empirical social surveys and opinion polls in the telecommunication sector.
- IPTV and broadband developments.

Focus: Energy Markets & Energy Regulation

- Regulation of national and international energy markets.
- Application of benchmarking and analytical cost models.
- Current issues in the context of third party access to energy networks (e.g. unbundling, balancing conditions).
- Investment strategies in regulated industries.
- Options for the measurement of quality and security of supply in energy markets.
- Markets for primary energy.
- ICT in energy markets.

Main areas of research and consulting in water and sewerage

- Analysis of competition concepts for water markets.
- Theory and practice in price and quality regulation for water markets.
- Accounting separation and cost modelling.
- Tariff modelling for water companies.
- Efficiency and productivity analysis.
- International benchmarking for water markets.

Main areas of research and consulting in transport

- Regulatory and competition policy analyses of the transport sector.
- Regulation of rail network access.
- Analysis of transport infrastructure costs and calculation of rail infrastructure charges.
- Vertical integration and competition in railway markets.
- Market analyses of the transport sector with a focus on railway markets.

Regulation and competition policy in the postal sector

- Universal service regulation.
- Accounting separation and cross subsidies.
- Cost modelling in letter markets.
- Mechanisms for price regulation.
- Downstream network access (worksharing).
- Quality of service targets and monitoring.

Market analysis

- International benchmarking for postal and logistics markets.
- Development of demand for postal services.
- Estimations of market size and market potential.

International postal policy

- Postal policy in the European Union.
- Reform of the Universal Postal Union (UPU).
- Review of postal legislation and sector strategies.

Some recent and typical projects (1)

Regulation & Competition

- Regulatory Authority of Romania (ANRCTI): Review of electronic communications markets susceptible to ex ante regulation (2007-2008).
- European Commission: IPTV in the context of e-communications regulation (2007-2008).
- Regulatory Authority of Germany (BNetzA): Auction design for 3,5 GHz Broadband Wireless Access frequencies (2006).
- Regulatory Authority of Turkey (Telekomünikasyon Kurumu): Design of Regulations of Market Entry and Licensing (2004).

Some recent and typical projects (2)

Market Structures & Business Strategies

- Study for the European Commission on the regulation of Voice over IP in Europe (2007--2008).
- Study for the European Commission on the impact of broadband on growth and productivity, in cooperation with MICUS Management Consulting, Düsseldorf (2007--2008).
- Study for the European Commission on the impacts of IST-RTD on key strategic objectives related to growth and jobs, in cooperation with RAND Europe (2007--2008).
- Study for the National Communications Authority Hungary (NCAH) about the regulation of Next Generation Networks (NGN) (2007).
- Study for the German network operator HanseNet on Possibilities and Prerequisites of a FTTx Strategy in Germany (2007).
- Studies for a German carrier on the development of the market volume for wholesale services until 2010 (2004–2006).

Some recent and typical projects (3)

Cost Modelling & Internet Economics

- Regulatory Authority of Switzerland (BAKOM)
 - ULL bottom-up model, 2005
- Group of German operators
 - Price Margin Squeeze and consistency for DSL, IP-Bitstream and LLU products, 2008
- Australian Competition and Consumer Commission (ACCC)/Australia
 - Mobile network cost model for Australia, 2006
- Telefónica/Germany
 - Efficient cost for leased lines in Germany, based on a LRIC bottom up cost model, in comparison with the regulated rates, 2008
- Fastweb/Italy
 - Analysis and improvement of the AGCOM (Italian regulatory authority) costmodel for termination rates in NGN in Italy, 2008

Some recent and typical projects (4)

NGN & Internet Economics

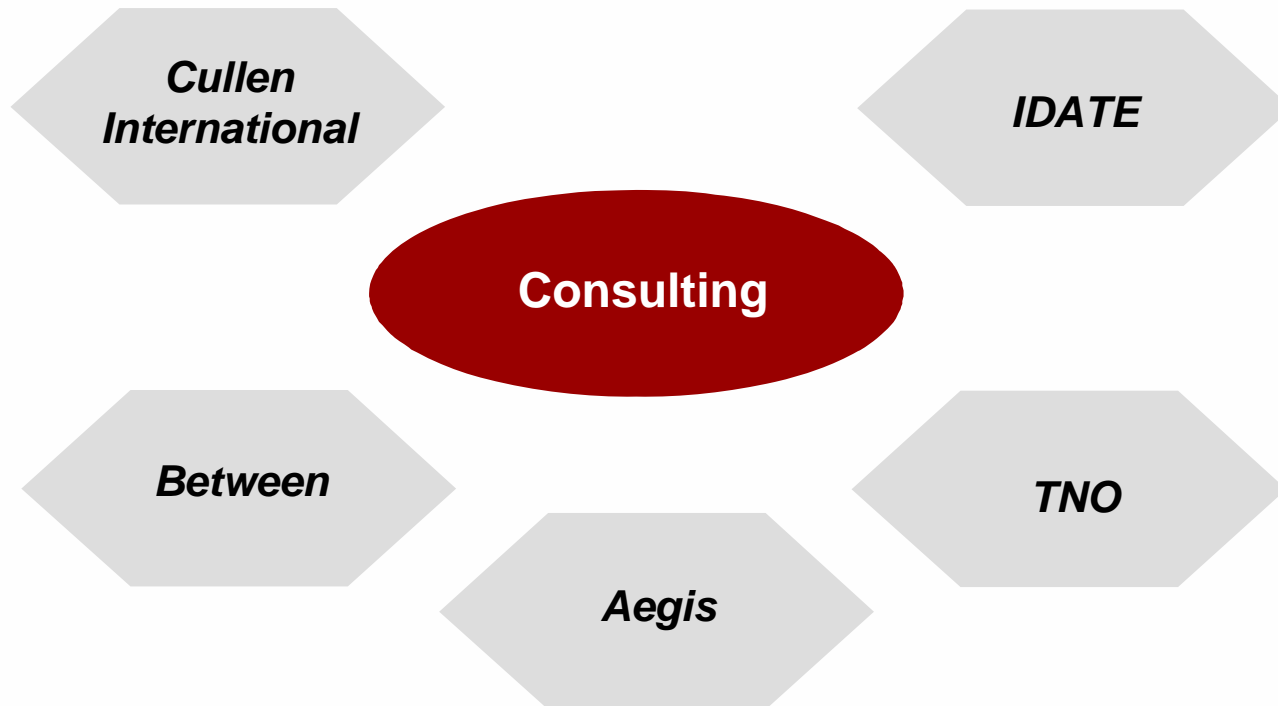
- Study for the European Commission on “Optimising the Use of the Radio Spectrum by the Public Sector in the European Union” (ongoing).
- Study for the European Commission on "The Future of IP Interconnection" (2007/08).
- Study for the Deutscher Kabelverband on "Cable Internet in Germany" (2006).

Some recent and typical projects (5)

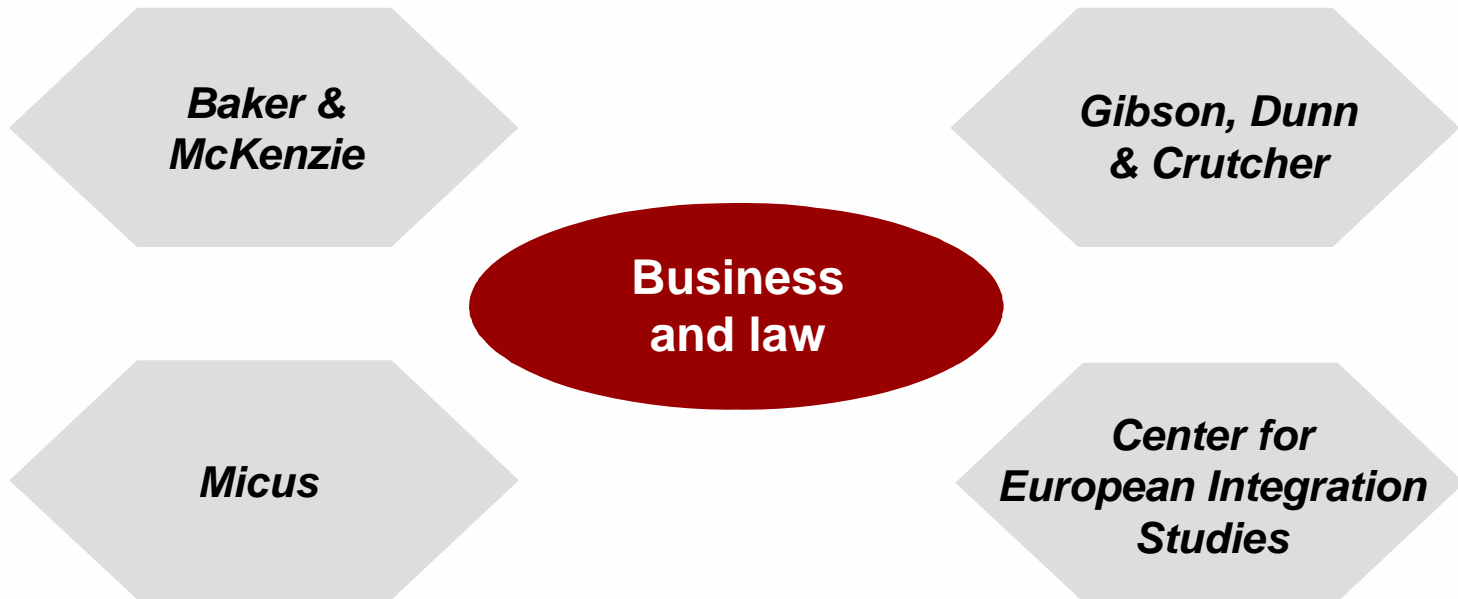
Communications & Innovation

- Evaluation, scientific monitoring and output transfer „SimoBIT - Secure mobile IT applications for adding value in small and medium sized companies and administration“. SimoBIT is a R&D-Competition conducted by BMWi (Federal Ministry of Economics and Technology) (2008–2011).
- Expertise for the Federal Ministry of Economics and Technology: The Digital Dividend (2006).

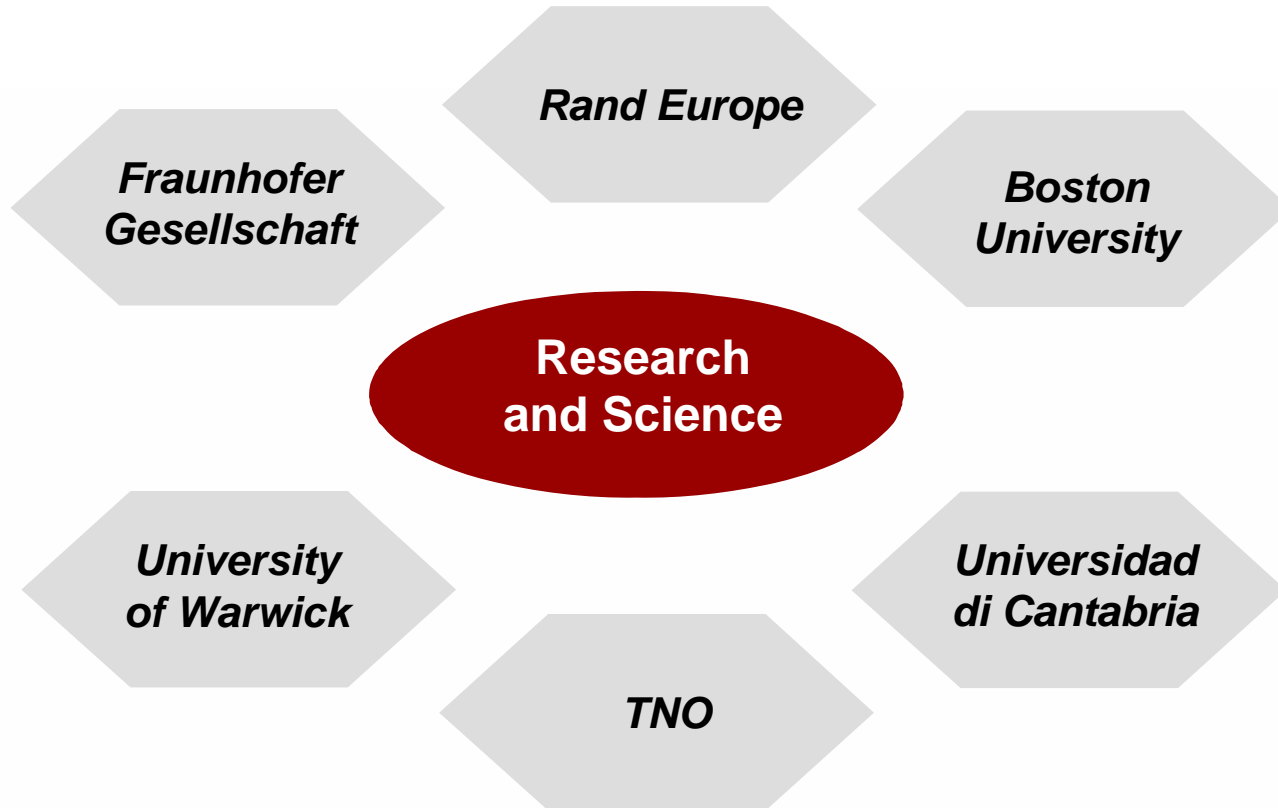
Cooperation and Network Partners (1)



Cooperation and Network Partners (2)



Cooperation and Network Partners (3)



Our Clients (1)

**International
Organisations**

Governments

Companies

**Industry
Associations**

**Regulatory
Authorities**

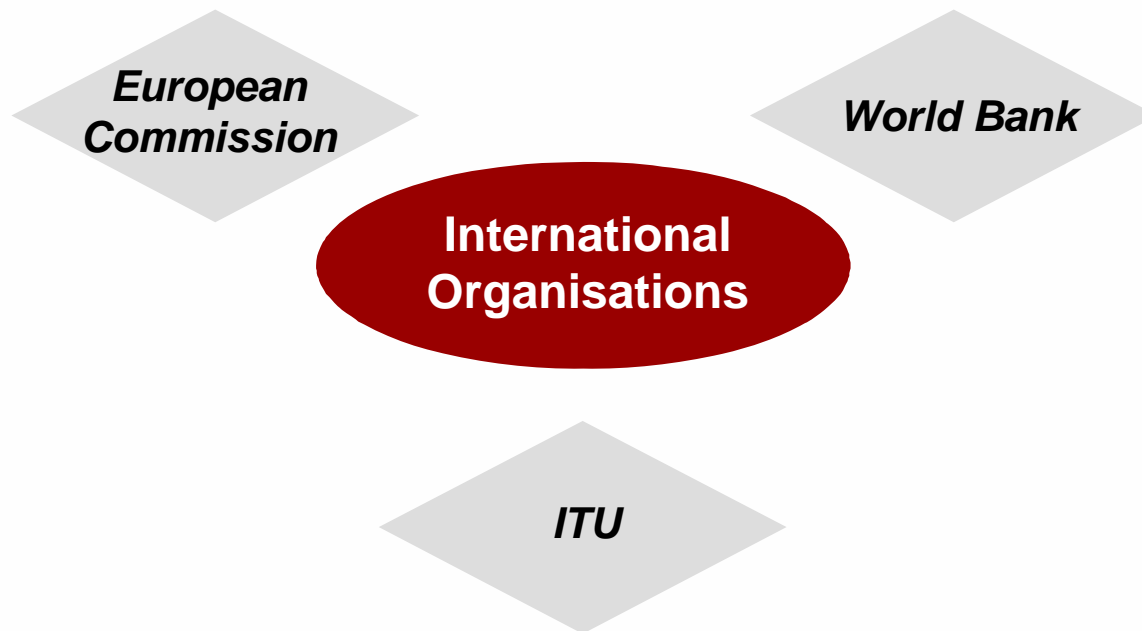
Our Clients (2)

**„In regulated Industries
there is a lot of incumbent's
economics and a lot of new
entrants' economics. WIK stands
for public interest economics.“**

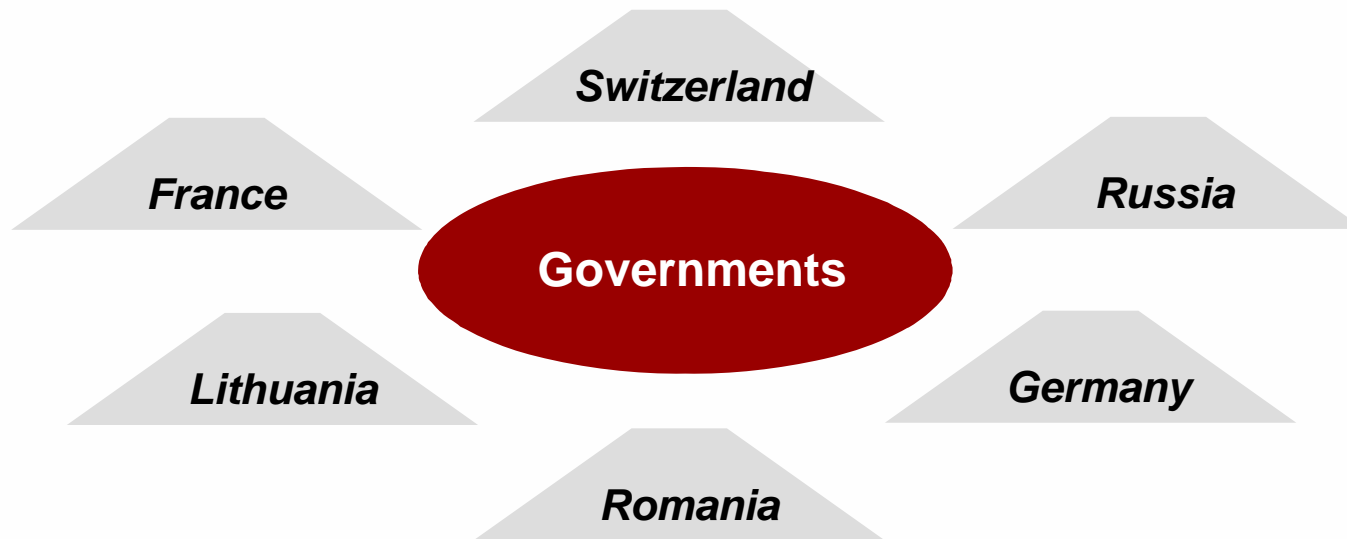


Prof. Eli Noam

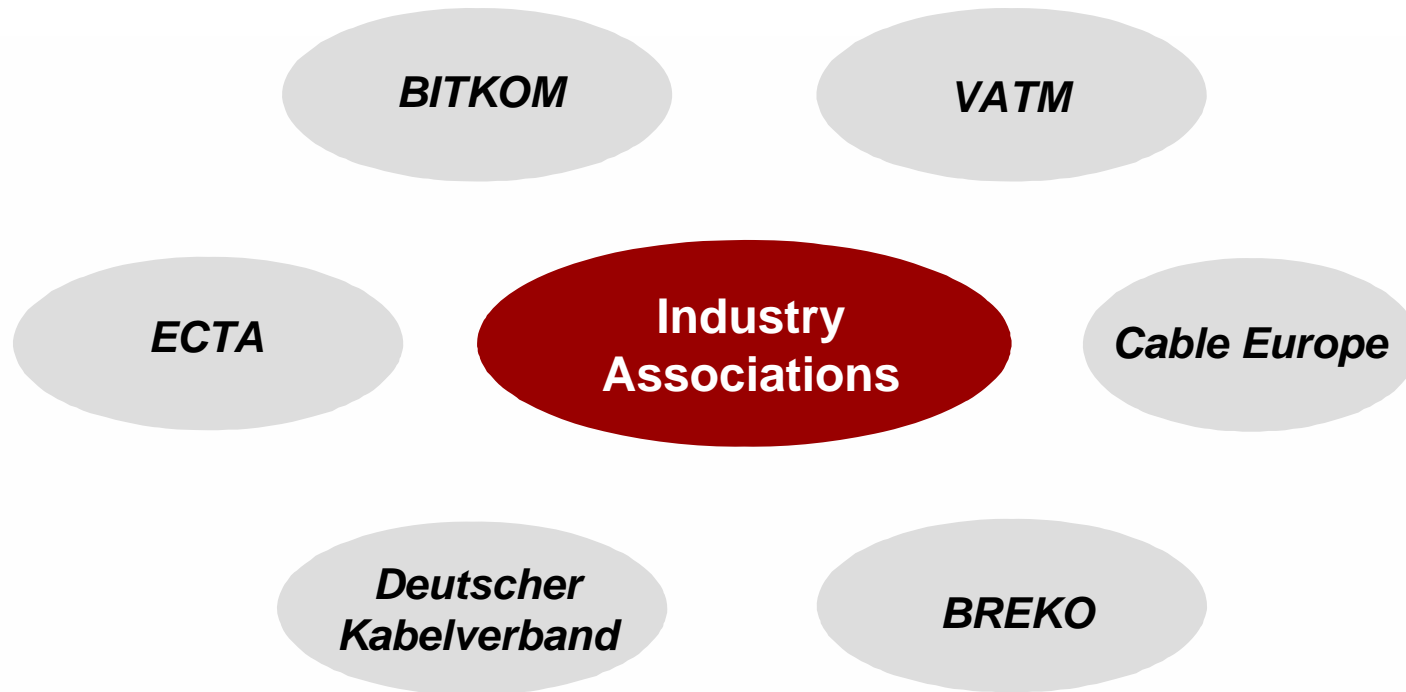
Director of Columbia Institute
for Tele-Information, New York



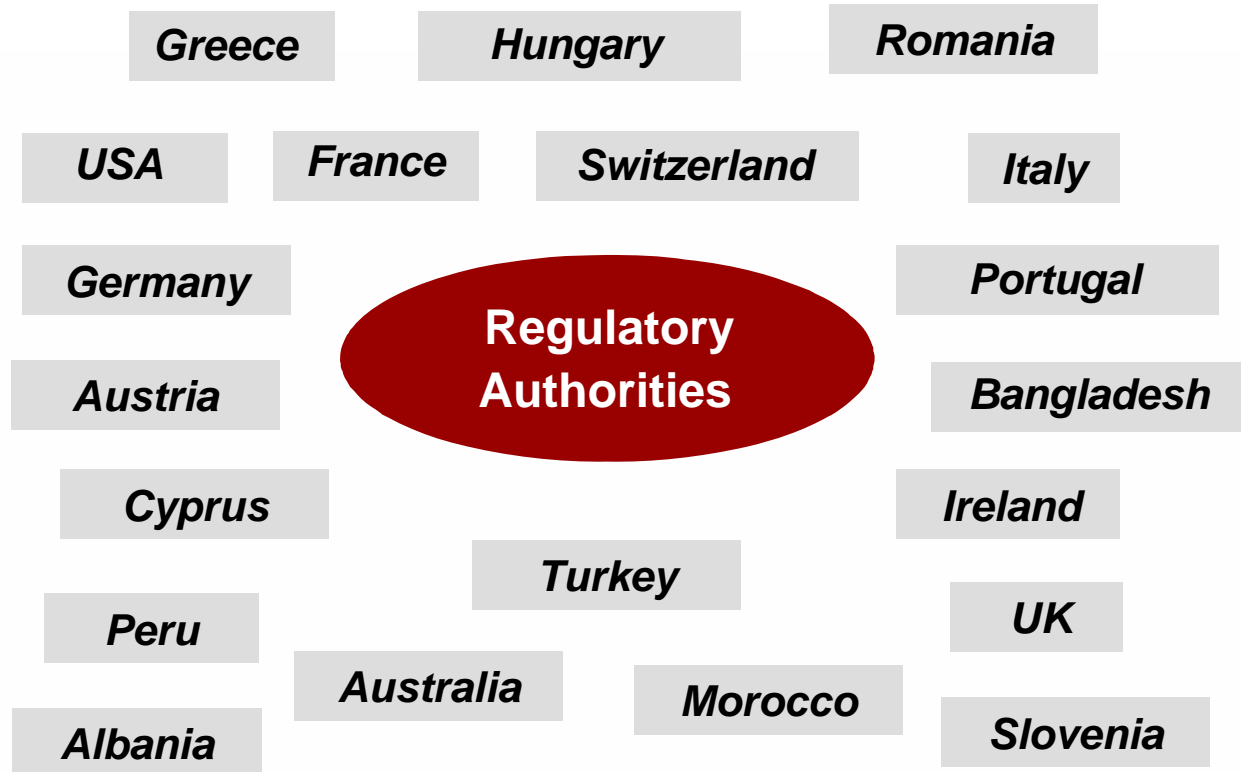
Our Clients (4)



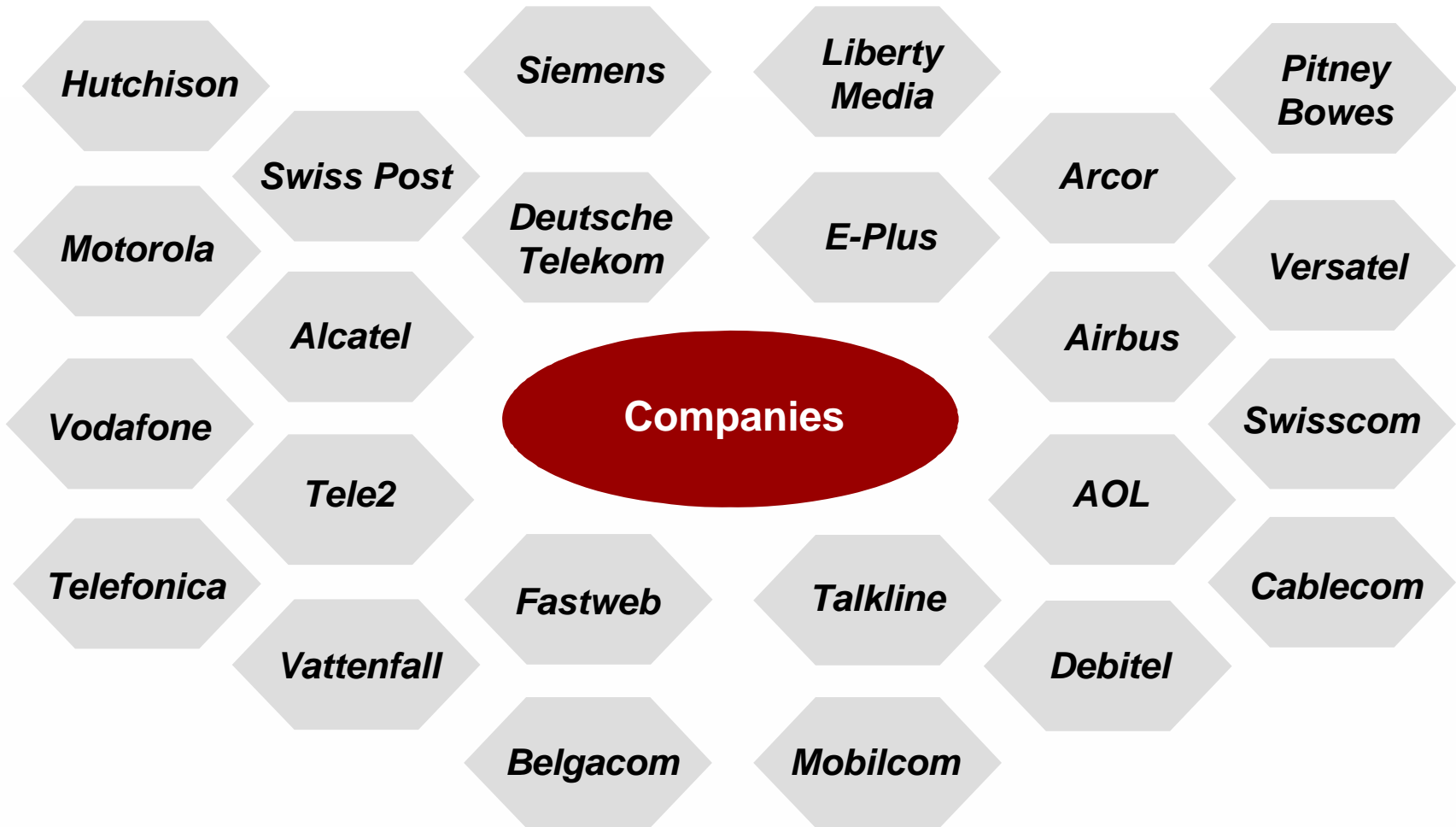
Our Clients (5)



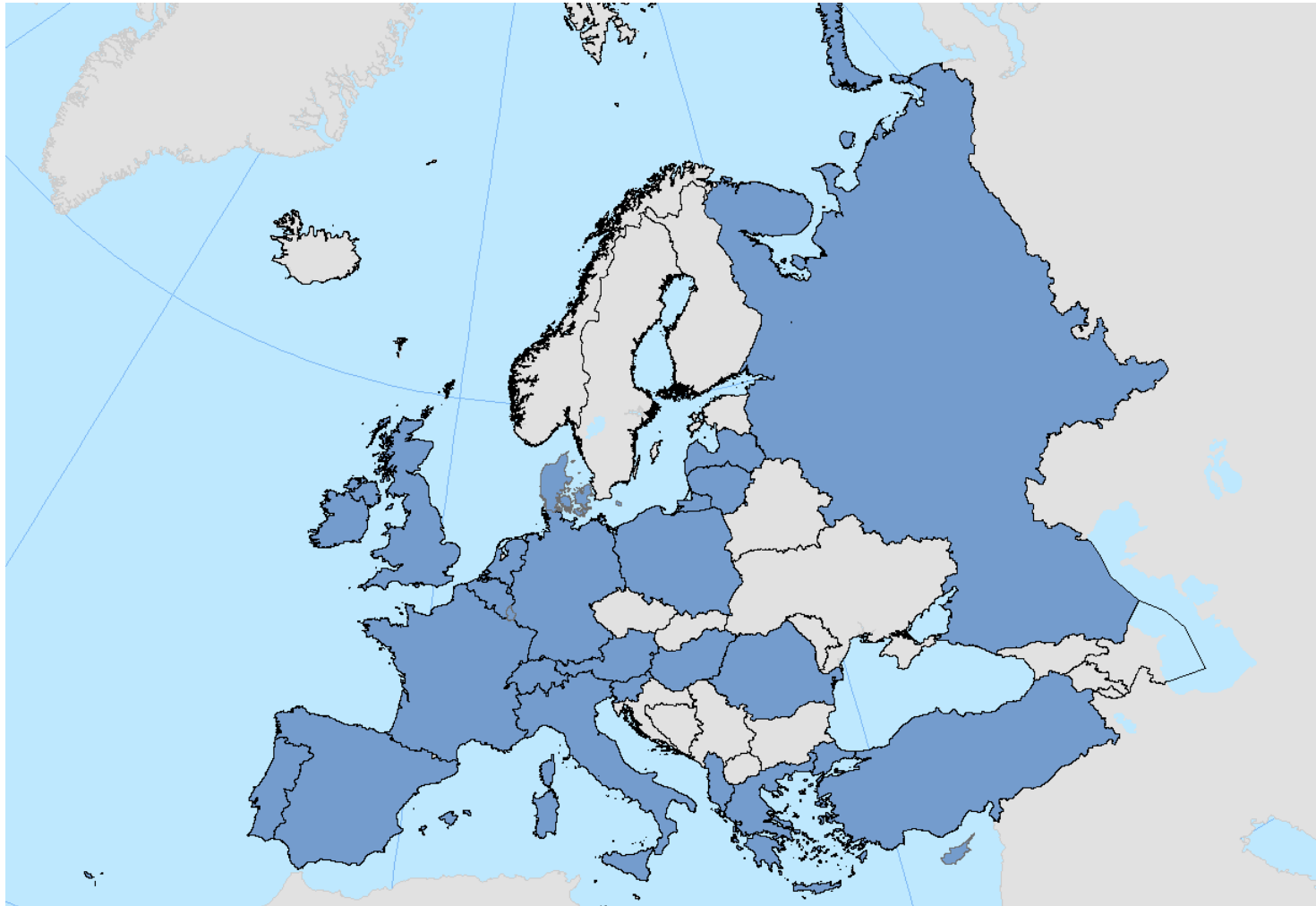
Our Clients (6)



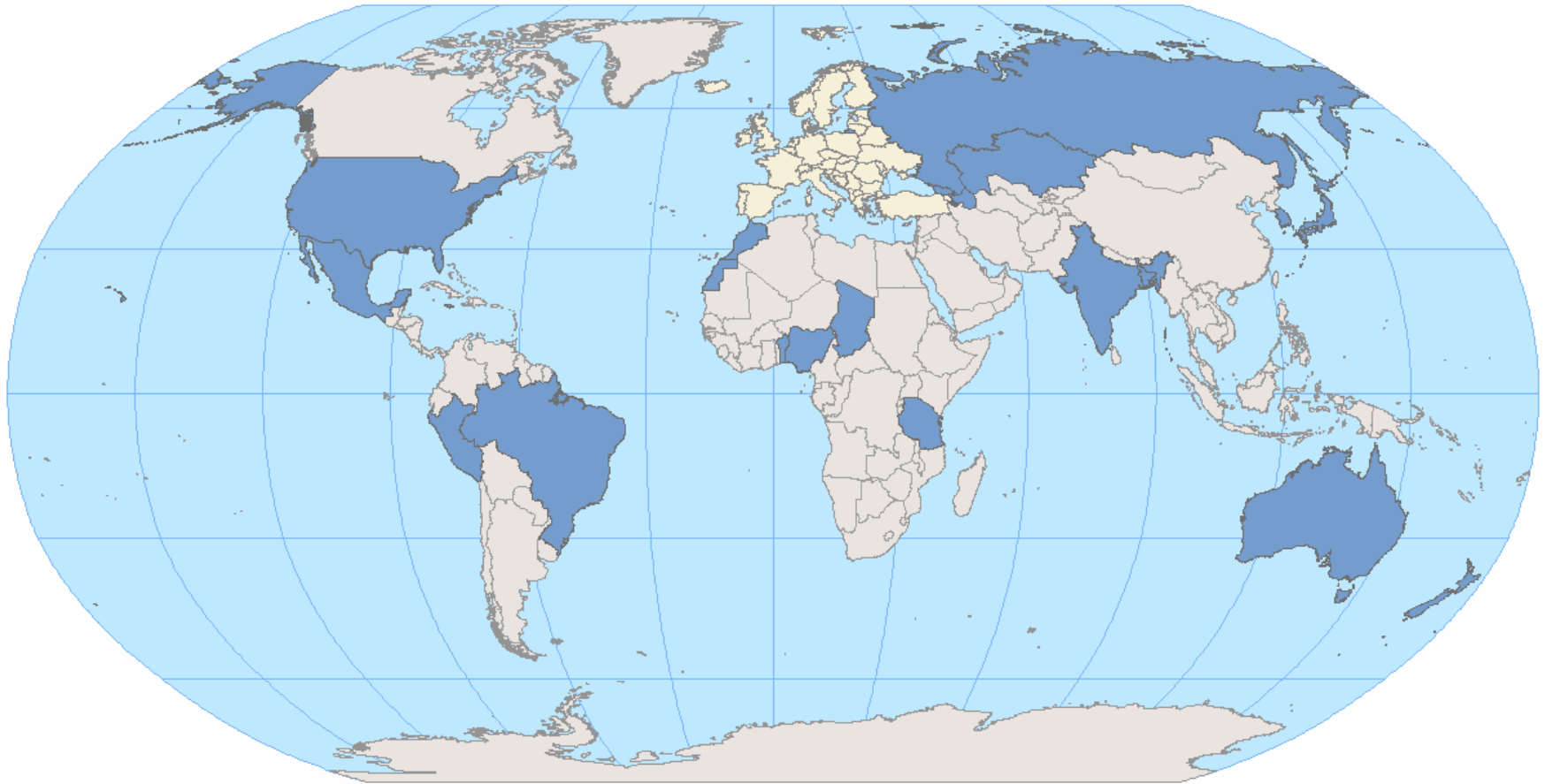
Our Clients (7)



Our European Footprint



Our Worldwide Footprint

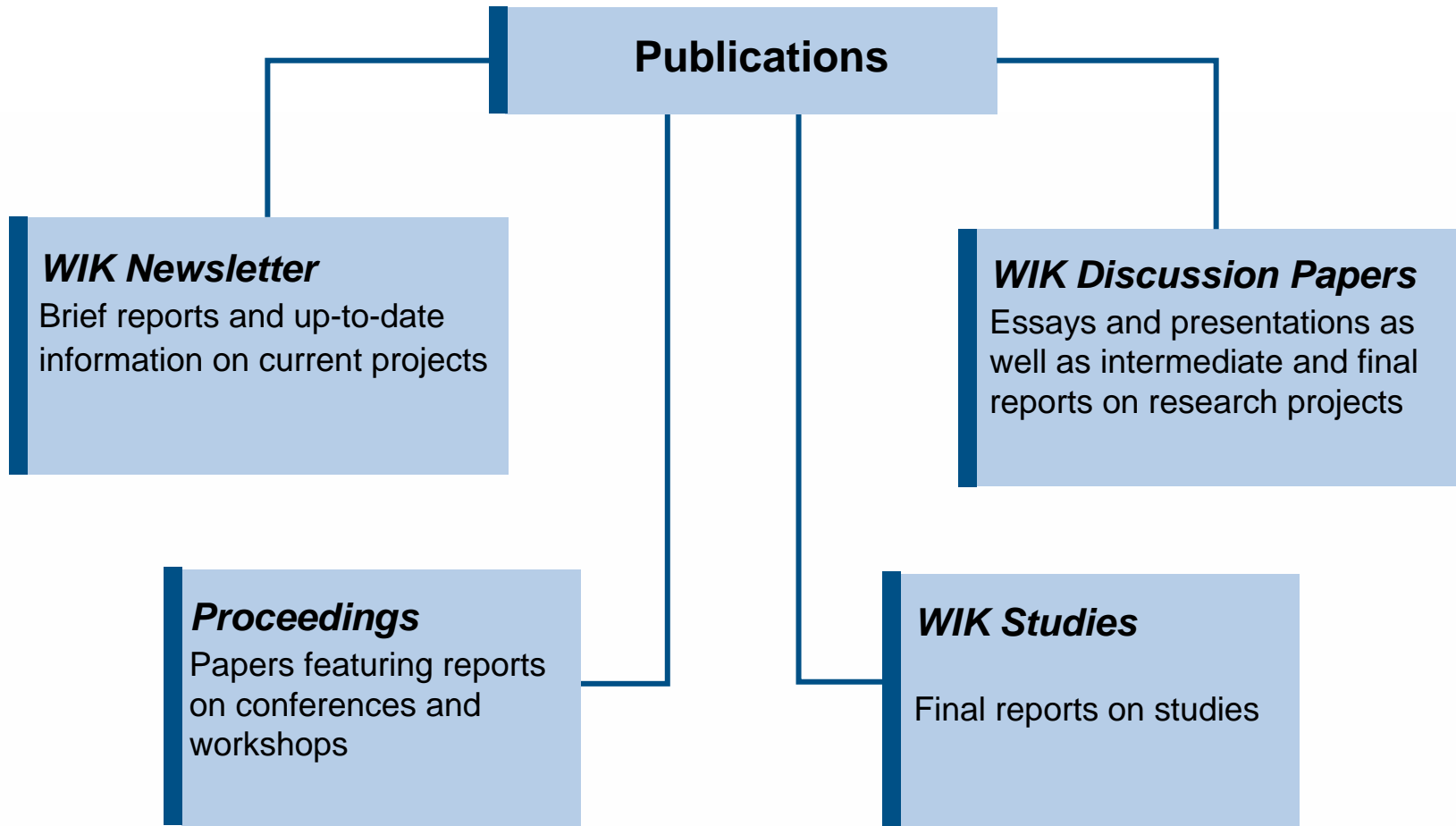


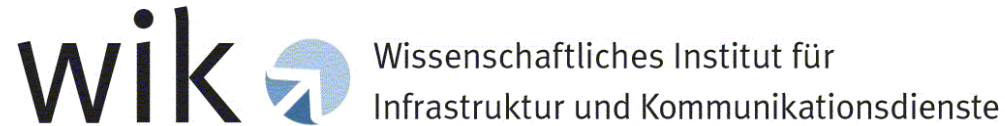
WIK & WIK-Consult Turnover

	2001	2002	2003	2004	2005	2006	2007
Turnover (€)	2.927.450	3.077.150	3.742.150	3.855.478	4.069.970	4.363.940	4.245.436
Growth rate	22,0 %	5,1 %	21,6 %	3,0 %	5,6 %	7,2 %	-2,7 %
Employees Professionals	22	22	24	27	27	27	33
Total	32	33	35	38	39	39	46

Conferences 2006 - 2008

- Conference "**Review of the European Framework for Electronic Communications**", Bonn, April 24 – 25, 2008
- Conference "**Network Neutrality - Implications for Europe**", Bonn, December 3 – 4, 2007
- 2nd Black Sea and Caspian Regulatory Conference: "**Advancing in Telecommunications Regulation**", Istanbul, June 22 – 23, 2007
- VDSL Conference: "**The Way to Next Generation Access Networks**", Bonn, March 21 – 22, 2007
- Conference "**Improving the Regulatory Framework for Electronic Communications: Challenges for the Next Decade**", Breslau, October 18 – 20, 2006
- 1st Black Sea and Caspian Regulatory Conference: "**Advancing in Telecommunications Regulation**", Istanbul, May 25 – 27, 2006
- **Bill and Keep** Workshop, Bonn, April 4 – 5, 2006
- Conference "**NGN and Emerging Markets – Investment, Infrastructure and Innovation**", Königswinter, December 5, 2005





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