

## **Mark H. Goldberg & Associates Inc.**

*Telecommunications Consulting*

91 Forest Lane Drive

Thornhill, Ontario, Canada L4J 3P2

Phone: +1 905 882-0417

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mark@mhgoldberg.com

www.mhgoldberg.com

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## **Mark H. Goldberg & Associates, Inc.**

a telecommunications consulting practice.

**Mark H. Goldberg & Associates** provides a full range of consulting services including business planning, strategic planning, carrier relations, regulatory and government relations, network design, RFP development, management and evaluations, due diligence assessments, project management and operations reviews. For more than 15 years, we have helped companies and governments around the world understand and leverage opportunities created by competitive telecom markets.

**Mark H. Goldberg** offers more than 30 years of international experience in strategic planning, managing, designing and implementing carrier and corporate telecommunications networks. He is frequently quoted in the major financial press in Canada and he is a regular commentator on telecom industry issues for ROB-TV, Canada's business information television channel. He is the co-founder of GST Conferences Inc., a training and conference organizing company, focusing on telecom. GST Conferences is the host of The Canadian Telecom Summit, the largest annual gathering of senior telecommunications leaders, attracting more than 500 key decision makers. It also produces a 4-day training course for professionals and commissioners at a government regulator.

His career history includes heading the Network Services organization for one of Canada's largest long distance companies, developing the network architecture for competition in Canada, design of the US Government voice network, creating the business plan for Canada's Information Highway initiative, helping new international entrepreneurs launch traditional and enhanced telecommunications services.

In naming **Mark H. Goldberg** as one of Canada's top 10 technology bloggers in April 2008, itWorld Canada wrote: "No one does a better job of exploring, interpreting or criticizing telecommunications policy in Canada. Period." For daily insights on telecom issues, visit **[www.mhgoldberg.com/blog](http://www.mhgoldberg.com/blog)**

Please contact **Mark H. Goldberg & Associates** to discuss how we can help you exceed your business objectives.

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### **Sample Project List**

*Integrated Carriers:* Acting for both new entrants and former monopoly carriers, examine the ongoing changes caused by long distance and local competition. Describe opportunities and challenges created by ongoing regulatory changes. Lead workshops for competitive analysis. Present "A Competitor's Perspective" of government policy changes and explore opportunities created by newly competitive regimes. Develop strategies and plans to address new competitive threats. Prepare RFP responses for new ventures. Prepare strategic operational reviews and develop new corporate business plans. Prepare expert testimony.

*Major Corporate Clients:* For large business consumers of telecommunications services, provide strategic advice in business planning for global networking, carrier relations, technology evaluation and partner selection. Advise on regulatory issues and technology strategies. Prepare Requests for Proposals ("RFP"), manage RFP process including evaluation and carrier selection. Provide overviews of market trends and opportunities. Produce network architectures, identify initial points of presence and establish carrier partnerships for service expansion. Develop business plans and represent companies to potential investors and capital managers.

*Enhanced Service Providers:* For a new Canadian wireless spectrum holder, developed auction strategy. Serve as advisory member of executive steering board. Develop business plans, budgets, network plans, establish carrier partners, and recruit executive management.

*Government Regulators:* Examine opportunities and challenges facing an integrated competitive local exchange carrier. Develop pro-forma business case for market entry by new carrier. Prepare and deliver 4-day training course on a complete range of regulatory, legal, technical and policy issues.

*Property Management Companies:* For a large property manager, develop long term telecom strategy and negotiate carrier access agreements. Deliver multi-million dollar strategic agreement for improved tenant service, carrier access and joint marketing. Prepared business plan and strategic advice to a new venture establishing a global network of telecom carrier hotels. Advise a collocation firm on opportunities for business development and expansion.

*Equipment Manufacturers:* Work with global market managers to develop new entry strategies. Identify target customers. Jointly develop marketing programs and facilitate customer meetings. Includes business strategy work with world leading wireless network manufacturer.

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### **Partial Client List**

#### **International Carriers/Service Providers**

AT&T Canada Long Distance Services  
Cable & Wireless Communications  
Destia Communications (Econophone)  
LDI - Long Distance International Inc.  
Level 3 Communications, Inc.  
Mobilexchange Ltd.  
North American Gateway Inc.  
Qwest Communications  
RSL Communications  
SkySurf  
Teleglobe Inc.  
Teleglobe Canada Inc.  
Telehop Communications  
TerraRoute Ltd.  
UniLink Communications Inc.

#### **Enhanced & Local Service Providers**

Barrett Xplore  
Bell Intrigna  
Burlington Hydro  
Conexys Corp.  
Edmonton Power Corporation (EPCOR)  
Fax Forward Limited  
Kayote Networks  
Minto Enhanced Services  
Optel Communications Inc. (Axxent)

#### **Real Estate and Corporate Clients**

Brascan Group of Companies  
Canadian National Railway Properties  
Canadian Residential Consortium  
Greenwin Property Management Inc.  
Minto Development Corporation  
Minto Management Limited  
Royal LePage Commercial Inc.  
TelecomHotels.com  
University of Waterloo  
Yonge Eglinton Centre

#### **Telecommunications Outsourcing Firms**

Bechtel Enterprises, Inc.  
Contour Telecom Management Inc.  
Pacer International Inc.  
RACO Remote Access Company

#### **Integrated Carriers**

Bell Canada  
Cogeco  
Manitoba Telecom (MTS)  
Rogers Communications Inc.  
TELUS

#### **Manufacturers**

BATM / Telco Systems  
ECI Telecom Inc.  
Ericsson Communications Canada  
Ericsson Inc.  
Ericsson Telecom AB  
Lightscape Networks Inc.  
Nokia Siemens Networks  
Paradigm Advanced Technologies, Inc.  
Sun Microsystems of Canada Inc.  
Telco Systems Inc.

#### **Advisory, Research and Financial**

CDP Capital  
CPP Investment Board  
Guggenheim Corporate Funding  
NBI/Michael Sone Associates  
PriceWaterhouseCoopers  
Yankee Group of Canada

#### **Government Bodies and Regulators**

Canadian Radio-television and  
Telecommunications Commission  
Environment Canada  
Intelligent Transportation Systems Canada  
Government of Israel:  
Ministry of Communications

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### **MARK H. GOLDBERG SUMMARY**

Executive consultant in telecommunications industry with international experience in strategic planning, network technology, business planning, regulatory and governmental affairs. Recognized for developing and articulating technology direction, and successfully building and operating cost-effective advanced communications networks. Strong leadership, entrepreneurial, team building and inter-personal skills. Dual citizen (U.S. and Canada).

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### **CORPORATE EXPERIENCE**

*SPRINT CANADA INC., Toronto, ON*

1994 - 1996

*Major Canadian Long Distance Company*

#### **Vice President - Network Optimization and Carrier Relations (1996)**

Managed network costs, provisioning and all aspects of domestic and global interconnection arrangements.

- ◆ Reduced annual carrier costs by \$100 million by conceiving, negotiating and implementing innovative leases and interconnection agreements.
- ◆ Negotiated national and international agreements to preserve quality while reducing costs.
- ◆ Improved operating efficiencies and customer service by consolidating national voice and data networks, and operating staff, more than doubling corporate gross margins to 35%.

#### **Vice President - Network Services (1994-1995)**

Managed network planning, engineering, operations and administration for Sprint Canada's public voice and data network.

- ◆ Recruited/supervised team of 100 to accommodate 165% growth in network traffic.
- ◆ Built a \$35 million fibre optic network linking Toronto, Montreal and Ottawa - on-time and under budget.
- ◆ Negotiated fibre swaps to extend the network to other major Canadian centres.
- ◆ Built and launched operation of two \$10 million switching centres in Vancouver and Calgary.
- ◆ Planned and directed the integration of an acquired competitor's network enabling the elimination of redundant facilities.

*TELROUTE COMMUNICATIONS INC., Toronto, ON*

1994

*Regional Long Distance Provider*

#### **Vice President - Network Services**

Managed all aspects of network technology for this start-up regional voice and data carrier.

- ◆ Implemented regional digital microwave system.
- ◆ Recruited and built team to operate network.
- ◆ Managed regulatory and governmental affairs during period of initial implementation of Equal Access in Canada.

UNITEL COMMUNICATIONS INC., Toronto, ON  
Major Canadian Telecommunication Company (now AT&T Canada)

1989 - 1994

**Executive Director - Regulatory**

Held positions of increasing responsibility, culminating in creating plans for Unitel's Information Highway initiatives and strategic Research and Development.

- ◆ Created network interconnection architecture and developed technology plans to permit long distance competition in Canada.
- ◆ Authored and defended (including oral testimony) technology and R&D evidence in the landmark CRTC long distance proceedings.
- ◆ Acted as primary press and public affairs liaison for technology issues related to the long distance project.
- ◆ Recruited and headed technology review team for the RFI and RFP process leading to the partnering between Unitel and AT&T.
- ◆ Created the Canadian Interconnection Liaison Committee, a national forum to resolve issues affecting long distance competition.
- ◆ Conceived and introduced 800 number portability in Canada.

BNR INC., Denver, CO and Raleigh, NC  
The Research and Development Arm of Northern Telecom (Nortel Networks)

1987 - 1989

**Western Regional Manager**

R&D liaison between BNR and its primary western customer - US WEST (now Qwest).

- ◆ Researched market and technology requirements for new services in order to support Northern Telecom's sales efforts.
- ◆ Established Fast Feature development project to enable BNR to improve delivery of new services to Bell South and Eastern Airlines, reducing software delivery from cycle from more than 24 months to 6 months.

AT&T BELL LABORATORIES, Holmdel, NJ  
The Research and Development Arm of AT&T

1986 - 1987

**Member of Technical Staff**

Led systems engineering team and created custom solutions for unique telecom needs of all branches of the U.S. Government, including national security requirements.

- ◆ Authored Switch Voice Services proposal for AT&T's bid to replace the US federal government network.
- ◆ Produced specifications for many of the initial Intelligent Network (advanced toll-free and virtual network) products for the AT&T public communications network.

BELL CANADA and BELL CANADA INTERNATIONAL, London, ON, Southfield, MI 1980 - 1986  
Major Telephone Company and Affiliated International Consulting Practice

Held a variety of network services positions leading to a consulting position assisting General Motors and EDS during the planning and construction of their world-wide communications network.

- ◆ Planned and developed software requirements for data collection, billing, trouble-tracking and reporting systems.
- ◆ Introduced telecommunications capital budget processes and system of accounting.

UNIVERSITY OF WESTERN ONTARIO, London, ON

1983 - 1984

**University Lecturer**

- ◆ Lectured evening course session in Statistics. Concurrent to employment with Bell Canada.

## EDUCATION

Master of Science (Applied Statistics) - Carleton University, Ottawa, ON, 1980

Awarded Graduate Scholarship

Bachelor of Science (Mathematical Statistics) - University of Western Ontario, London, ON, 1979

Awarded Dean of Science Award for Contribution to Life at Western (1979)

Continuing Industry and Professional Training including:

Hill & Knowlton Press and Media Training

## INDUSTRY ACTIVITIES

Co-chair – Advisory Board and Lecturer – M.Eng'g in Telecom, University of Toronto, 2003 - date

Advisory Board Member – KINSA – Kids Internet Safety Alliance, 2005 - date

CANARIE - Canadian Network for Advancement of Research, Industry and Education - A joint federal government/industry initiative, 1992-1994

- Co-Chair, Program Advisory Committee, 1993-1994

- Experimental Test Network Committee, 1993-1994

- Business Plan Chair, Procurement Policy Committee, 1992

Extern Career Counseling Host, University of Toronto, 1993-1994

## PUBLICATIONS

From Intelligent to Irrelevant Networks, July 2002.

Guerilla Telecom versus Gorilla Telecom, September 2003.

Regulating Voice over IP, a solution for the CRTC, March 2005.

Lagging or Leading: The state of Canada's broadband infrastructure, October 2009.

## SPEECHES and CONFERENCES

Co-chair and Sponsor – The 2011 Canadian Telecom Summit

- GST Conferences, Toronto, May - June 2011

Co-chair and Sponsor – The 2010 Canadian Telecom Summit

- GST Conferences, Toronto, June 2010

Co-chair and Sponsor – The 2009 Canadian Telecom Summit

- GST Conferences, Toronto, June 2009

Co-chair and Sponsor – The 2008 Canadian Telecom Summit

- GST Conferences, Toronto, June 2008

Co-chair and Sponsor – The 2007 Canadian Telecom Summit

- GST Conferences, Toronto, June 2007

Co-chair and Sponsor – The 2006 Canadian Telecom Summit

- GST Conferences, Toronto, June 2006

Co-chair and Sponsor – The 2005 Canadian Telecom Summit

- GST Conferences, Toronto, May 2005

Co-chair and Sponsor – The 2004 Canadian Telecom Summit

- GST Conferences, Toronto, June 2004

Co-chair and Sponsor – The 2003 Canadian Telecom Summit

- GST Conferences, Toronto, June 2003

Keynote - Canadian Wireless Industry Landscape

- 2002 Messaging Forum, Toronto, October 2002

Co-chair and Sponsor – Celebrating 10 Years of Telecom Competition in Canada

- GST Conferences, Toronto, June 2002

Co-chair – Competition and Access in the Local Loop Conference

- The Canadian Institute, Toronto, January 2002

Co-chair – Optical Metropolitan Area Networks

- The Canadian Institute, Toronto, May 2001

Keynote Address: High Tech & Telecom Turmoil

- IBC Congress for Latin America, Orlando, May 2001

Moderator – Real Estate & Technology

- Institute for International Research, Toronto, May 2001

Moderator – Real Estate & Technology

- Institute for International Research, Toronto, May 2001

Co-chair – Competition in Local Services Conference

- The Canadian Institute, Toronto, January 2001

Keynote Address – Wireless Internet Conference:

Mobile Virtual Network Operators

- The Canadian Institute, Toronto, September 2000

Co-chair – Access Technologies Conference

- The Canadian Institute, Toronto, June 2000

Moderator – Competition in Local Services

- The Canadian Institute, Toronto, January 2000

Co-chair – Competition in International Services

Conference

- The Canadian Institute, Toronto, November 1998

Keynote Address – The 1998 Telecom, Cable, Broadcasting and Wireless Summit:

Global Developments in Communications

- Insight Information, Toronto, April 1998

Alliances in Local Services Competition

- The Canadian Institute, Toronto, Feb. 1996

Unitel's Views on Information Highways

- From Information Superhighways to Your Desktop, Toronto, March 1994

Canadian Information Highways: Collaboration Between Unitel and Stentor

- Internet '93, San Francisco, Aug. 1993

Implementing Long Distance Competition

- Canadian Independent Telephone Association, Toronto, Feb. 1993

Unitel's Long Distance Application

- Canadian Independent Telephone Association, Toronto, Feb. 1991