

# CURRICULUM VITAE

(VERSION OF JANUARY 24, 2007)

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## Key Qualifications:

- Mr. Edgardo Sepúlveda has more than sixteen years of practical experience in telecommunications policy, economic, legal and regulatory issues, including universal access/service, interconnection, sector liberalization, price regulation, licensing, unbundling, dispute resolution, competition (antitrust) and costing. Mr. Sepúlveda has advised more than forty Governments and telecommunications national regulatory authorities (NRAs) including in North, Central and South America, the Caribbean, Eastern Europe, Africa, the Middle East and Asia. Mr. Sepúlveda is Canadian citizen, fluent in English and Spanish and has a good working knowledge of French. He is President of Sepulveda Consulting Inc.
- Recently, Mr. Sepúlveda is/has: assisted the Government of **Costa Rica** to design its liberalization strategy and fair competition framework; assisting the Government of **Sierra Leone** with respect to liberalization strategy; assisting the CCK of **Kenya** in the design and implementation of new retail tariff and interconnection frameworks; assisting the Government of **Pakistan** in the design and licensing of rural operator(s) based on a minimum-subsidy (OBA) auctions; assisting the CRC of **Mongolia** with institutional restructuring and capacity building; assisting the CITC of **Saudi Arabia** in the policy design and regulatory framework for universal service and in the process to review the incumbent's proposed reference unbundling offer; assisted the NCC of **Nigeria** in the preparation of universal service regulations; assisted the ANRT of **Morocco** in the design of the universal service regime; advised ECTEL to establish the tariff regulatory framework in the ECTEL Member-States (**Dominica, Grenada, St. Kitts and Nevis, St. Vincent and St. Lucia**); assisted the Universal Service Obligation Fund of **India** in the on-going design and implementation of the universal service programme; advised ICASA of **South Africa** in preparing proposed amendments to the Interconnection and Facilities-Sharing Guidelines; assisted the BTA of **Botswana** in preparing the decision to resolve an interconnection dispute; advised the OUR of **Jamaica** in the design of a universal service regime and in relation to competitive safeguards; assisted INDOTEL of the **Dominican Republic** in the preparation of a competition policy (antitrust) regulation and the related Guidelines; prepared the interconnection and licensing decrees and statutes for the INCM of **Mozambique**; advised the NTA of **Nepal** and the Government of **Sri Lanka** and in the design and licensing of rural operator(s) based on a minimum-subsidy (OBA) auctions; assisted the Government of **Pakistan** and the Government of **Algeria** in the design of a liberalisation strategy and its implementation by the licensing of \new entrants.

- Mr. Sepúlveda is the principal author of the Universal Service and Price Regulation chapters of the *Telecommunications Regulation Handbook* (2000). In 2002 he prepared a report for the Commonwealth Telecommunications Organization (CTO) and the ITU in relation to OBA mechanisms for the extension of public telecoms services. Subsequently, this report was rewritten and included as Chapter 5 *Minimum Subsidy Auctions for Public Telecommunication Access in Rural Areas* of the ITU's 2003 Trends in Telecommunication Reform book. He co-wrote OBA Approach Note 2 *Output-based aid in Nepal: Expanding telecommunications service to rural areas*, which was published in December, 2004.
- Mr. Sepúlveda has been a lecturer or presenter in a number of regulatory conferences, workshops and seminars. He prepared/delivered 5 of the 7 presentations at an intensive regulatory seminar in **Nigeria** in January, 2005; prepared/delivered two presentations at a regional conference in **India** in December, 2004; he was a keynote presenter at the ITU's Global Symposium for Regulators (GSR) in Geneva, **Switzerland** in December 2003 and in the GSR in **Hong Kong** in December 2002; jointly prepared and delivered two 5-day seminars on competition policy (**Botswana** and **Ghana**); was a keynote presenter at the ITU Africa Regulatory Forum in **Ghana** in November 2003; jointly prepared/delivered a 2-day universal access policy seminar in **Saudi Arabia** in February 2004; prepared and jointly-delivered two 5-day workshops on universal access (**Tanzania** and **The Gambia**); jointly prepared and delivered two three-day seminars in **India** on universal service and interconnection issues; jointly prepared/delivered two 5-day seminars on interconnection (**Nigeria** and **Tanzania**).
- Prior to forming Sepulveda Consulting Inc. and becoming an independent consultant in March 2006, Mr. Sepúlveda was: Senior Telecommunications Economist in the Toronto (Canada) office of McCarthy Tetrault LLP; Senior Economist at Bell Canada in Gatineau (Canada); Consulting Economist at the Canadian International Development Agency (CIDA) and Economic Programme Officer with the United Nations Development Programme (UNDP) in Santo Domingo (Dominican Republic).

## **Employment Record:**

**President,**

**Sepulveda Consulting Inc. Toronto, Canada**

**March 2006 to present**

- Under a contract to Sepulveda Consulting Inc, assisting the Government of **Costa Rica** in the design of its liberalization strategy (including with respect to the mobile sector) and its fair competition framework, (including with respect to institutional arrangements). (2006)
- Under a contract to Sepulveda Consulting Inc, assisting the Government of **Sierra Leone** in an assessment of liberalization options and strategies (2007)
- As a sub-consultant to McCarthy Tetrault LLP of Toronto (Canada), advising the Government of **Pakistan** on Universal Service Policy, Universal Service Funding practices and the design and implementation of lowest subsidy bid auction processes for the competitive tendering of specific universal service projects. (2006-2007)

- As a sub-consultant to McCarthy Tétrault LLP of Toronto (Canada), continue to assist the CITC of **Saudi Arabia** in the design of the regulatory and other measures to provide the necessary guidelines and methodology for the implementation of the Policy for universal service. (2006-2007)
- As a sub-consultant to McCarthy Tétrault LLP of Toronto (Canada), assisted the NCC of **Nigeria** in the preparation of regulations related to universal access and service. (2006)
- As a sub-consultant to McCarthy Tétrault LLP of Toronto (Canada), assisting the Communications Commission of **Kenya** (CCK) in relation to cost-based retail and interconnection rates for fixed and mobile telecommunications networks in a project led by Analysys Consulting Limited of Cambridge (UK). (2006-2007)
- As a sub-consultant to Intelcon Research and Consultancy Ltd. of Vancouver (Canada), assisting the Communications Regulatory Commission (CRC) of **Mongolia** in relation to institutional restructuring and capacity building and the formulation of a new policy and regulatory framework (2006-2007)
- As a sub-consultant to McCarthy Tétrault LLP of Toronto (Canada), continue to assist the CITC of **Saudi Arabia** in the regulatory process to review the incumbent operator's proposed draft reference unbundling offer (RUO). (2006-2007)
- As a sub-consultant to Analysys Consulting Limited of Cambridge (UK), undertook research and prepared analysis in relation to current price regulations and the future regulatory framework for OSIPTEL of **Peru**. (2006)
- As a sub-consultant to McCarthy Tétrault LLP of Toronto (Canada), assisted the OUR of **Jamaica** in the consultation process to establish competitive safeguards (2006)
- As a sub-consultant to McCarthy Tétrault LLP of Toronto (Canada), assisting the **Eastern Caribbean** Telecommunications Authority (ECTEL) with respect to the alternative dispute resolution (ADR) framework in the Member-States (2006-2007)

**Senior Telecommunications Economist,  
McCarthy Tétrault LLP; Toronto, Canada  
January 1997 to February 2006**

- Assisted the Communications and Information Technology Commissions (CITC) of **Saudi Arabia** in the regulatory process to review the incumbent operator's proposed draft reference unbundling offer (RUO). (2006)
- Advised the **Nigeria** Communications Commission (NCC) in the design and preparation of regulations related to universal access and service. (2005-2006)
- Assisted the Communications and Information Technology Commissions (CITC) of **Saudi Arabia** in the preparation of the Policy for universal service and then in the design of the regulatory and other measures to provide the necessary guidelines and methodology for the implementation of the Policy. (2005-2006).

- Assisted the Office of Utility Regulation (OUR) of **Jamaica** in the consultation process to establish competitive safeguards rules for the telecoms sector. (2004-2006)
- Advised the *Agence Nationale de Réglementation des Télécommunications* (ANRT) of **Morocco** in the design and putting into effect that country's universal service regime, including with respect to policy, regulatory and economic matters. (2005-2006)
- Assisted the Government of **Costa Rica** in the preparation of that country's first sector policy document. This assistance included a review and analysis of the legal, regulatory and institutional context and proposals for a new regulatory and institutional framework to facilitate the introduction of competition pursuant to Costa Rica's regional trade commitments. (2005)
- Advised ECTEL in a project to design and establish the tariff regulatory framework in the five ECTEL Member-States (**Dominica, Grenada, St. Kitts and Nevis, St. Vincent and St. Lucia**). This included detailed policy, legal, regulatory and economic advice with respect to tariff rebalancing, initial going-in rates and price caps. (2003-2004)
- Advised the Independent Communications Authority of **South Africa** (ICASA) in the review and proposed amendments of the Interconnection Guidelines and Facilities-Sharing Guidelines to facilitate the Government's liberalization objectives. (2005)
- In two different projects, advised the Universal Service Obligation Fund (USOF) of **India** with respect to the design and implementation of the universal service obligation (USO) regime. In the first project, was one of two consultants that assisted the USOF in the initial scoping and design of the USO regime, including with respect to the tender process. In the second project, Mr. Sepúlveda provided strategic advice to the USOF in respect of the remaining aspects of the USO regime. (2002, 2004)
- Advised the *Instituto Dominicano de las Telecomunicaciones* (INDOTEL) of the **Dominican Republic** in the preparation of a competition policy (antitrust) regulation. As a separate but related project, advised INDOTEL in the preparation of the Guidelines document for the application of the competition regulation. (2002-2004)
- Assisted the **Botswana** Telecommunications Authority (BTA) in the in the design and implementation of retail and interconnection price regulation. (2004-2005)
- In two different projects, advised the Office of Utility Regulation (OUR) of **Jamaica** with respect to the design and administration of a universal service (USO) regime. In the first project, assisted in the preparation of the First USO Consultation Document issued in December 2002. In the second project, Mr. Sepúlveda assisted in the preparation of the Second USO Consultation Document in October 2003 and in the corresponding OUR recommendation to the Minister in 2004. (2002-2004)
- Advised the CITC of **Saudi Arabia** in interconnection and tariff matters. (2003-2005)
- Advising the *Autorité Nationale de Régulation des Télécommunications* (ARTEL) of **Burkina Faso** in the design and licensing of a rural universal access/universal operator using a competitive minimum subsidy auction mechanism. (2005)

- Assisted the Public Interest Program Unit (PIPU) of the Government of **Sri Lanka** in the economic analysis, public consultation and design and licensing of two rural universal access operators. The successful applicants in this competitive bidding process will receive a universal access subsidy. (2003-2005)
- Advised the Ministry of Science and Technology (MOST) of **Pakistan** in the design and implementation of the sector opening strategy for the introduction of competition in the international, national, and local markets in Pakistan. (2002-2004)
- Advised the **Nigeria** Communications Commission (NCC) in the design and licensing of a rural universal access/universal operator using a competitive minimum subsidy auction mechanism. (2003-2005)
- Advised the Government of **Uzbekistan** in the design and implementation of a pro-competitive legal/regulatory regime and corresponding institutional structure (2004)
- Assisted the Telecom Regulatory Authority of **India** (TRAI) in the design and implementation of a new interconnection regime as it pertains to access deficit (2003)
- Advised the Government of **Algeria** in the design and implementation of the sector opening strategy for the introduction of competition in the international, national long distance and rural local markets in Algeria. (2003-2004)
- Advised the Botswana Telecommunications Authority (BTA) of **Botswana** in the design and preparation of BTA Ruling No. 1 of 2003 (February, 2003) which resolved the interconnection charges dispute between the fixed wireline operator and one of the mobile wireless operators. (2003)
- Advised the **Uganda** Communications Commission (UCC) in the design and licensing of a rural universal access/universal operator using a competitive minimum subsidy auction mechanism. (2003-2005)
- Assisted the **Botswana** Telecommunications Authority (BTA) in its review of the tariff application by the wireline operator in that country. (2003)
- Advised the *Comisión de Regulación de Telecomunicaciones* (CRT) of **Colombia** on establishing a competitive regulatory framework to facilitate the development of competition. During this 6-year project, Mr. Sepúlveda assisted the CRT in interconnection, tariff, competition (antitrust) issues. (1997-2001)
- Mr. Sepúlveda authored the modules on Universal Service and on Price Regulation in the *Telecommunications Regulation Handbook*, published in November, 2000. The Handbook was published by the Information for Development program (*infoDev*) of the World Bank and sponsored by the ITU. The Handbook has been translated to Chinese, Spanish, French, Arabic and Russian. (1998-2000)
- Advised the Communications Regulatory Commission (CRC) of **Mongolia** in the design and development of a pro-competitive regulatory regime. This included the

preparation of policy and regulatory documents in relation to interconnection framework, a concession/licensing framework and the Charter of the CRC. (2002)

- Advised the *Instituto Dominicano de las Telecomunicaciones* (INDOTEL) of the **Dominican Republic** in the resolution of a series of interconnection disputes. (2003)
- Advised the National Telecommunications Authority (NTA) of **Nepal** with in the design of the licensing framework and in the licensing of a rural telephony operator. (2002-2004)
- Advised the telecommunications regulator of **Mozambique**, the INCM, in the development of the regulatory framework and the licensing of a new GSM operator including in the preparation and approval of three key decrees: licensing, interconnection; the INCM (structure, governance, powers, etc.). (2001-2001)
- Provided quality of service regulation and tariff advice to the Telecommunications Regulatory Commission (TRC) in **Jordan**. (1997-1999)
- Advised the *Superintendencia de Telecomunicaciones* (SITTEL) of **Bolivia** on the design of the sector liberalisation plan, including the new concession/licensing regime and the preparation of a new telecommunications law and regulations. (2001-2002)
- Advised the Government of **Guyana** in the formulation of a national sector policy to introduce competition to the telecommunications sector in Guyana. (2001-2003)
- Assisted one of **Canada's mobile cellular operators** in the CRTC proceeding to determine the costing and contribution regime for universal service. (1999-2000)
- Advised an **international telecommunications carrier** in obtaining licences and ensuring compliance in various countries. (1997-1998)
- Advised the Government of **Cameroon** on the development of licences and related regulatory conditions for GSM cellular operators. (1998-1999)
- Provided interconnection pricing advice to the Telecommunications Regulatory Commission of **Sri Lanka** (TRCSL). (1998-1999)

**Consultant Economist,**

**Canadian International Development Agency (CIDA); Gatineau, Canada**

**August 1996 to December 1996**

- Co-ordinated the preparation of CIDA's Infrastructure Services Policy discussion paper. This paper called for a refocusing of Canada's bilateral aid in telecommunications and other sectors towards upstream, policy and regulatory-related interventions. Co-authored the section dealing with telecommunications.

**Programme Officer – Economic Reform,**

**United Nations Development Programme (UNDP); Santo Domingo, Dominican**

**Republic; January 1994 to June 1996**

- Formulated, monitored and co-ordinated national economic and sector reform projects. Contribute substantive input into project execution. Advised the UNDP Resident Representative on all aspects of economic programme. Negotiated with Government authorities and UN agencies on project design and funding. Projects included Tax and Customs modernization, WTO implementation and Telecommunications Reform. As part of this latter project: co-ordinated the ITU missions to provide policy recommendations; participated in consultation process to approve the Project Document to prepare a new sector law and to establish a new regulatory body.

**Consultant Economist,  
Canadian International Development Agency (CIDA); Gatineau, Canada  
September 1993 to December 1993**

- Performed policy analysis and undertook research on economic development issues pertaining to the relationship between the economy and the environment. Assisted in the administration of CIDA's foreign debt strategy, including co-ordination of data compilation for Paris Club reschedulings, and bilateral debt conversion.

**Senior Economist,  
Bell Canada; Hull, Canada  
August 1989 to August 1993**

- Analyzed economic and policy issues, specializing in regulatory and telecommunications economics. Researched, wrote and presented policy recommendations. Researched the effects of competition on prices and productivity. Participated in the telecommunications regulatory proceeding before the CRTC to allow facilities-based long-distance competition. Studied the policy and regulatory trends in other telecommunications and utilities markets.
- Managed and executed total factor productivity study and impact simulations computer models. Managed and executed company computer models for local revenue simulations in support of tariff planning and filing. Participated intensively in the CRTC regulatory process to determine Bell Canada's local telephone rates, including design and execution of interrogatory responses.

**Other selected presentations, seminars and papers:**

- Prepared and delivered the presentations "Universal Service", "Interconnection", "Consumer Tariff Regulation", "Competition (Antitrust) Policy" and "Trends and Economics" at the two-day "Telecommunications Regulation" seminar (delivered with Curt Howard) sponsored by the NCC and held at the Digital Bridge Institute (DBI) (Abuja, Nigeria – January, 2005)
- Prepared and delivered the presentations "Output-based aid in Nepal: Expanding telecommunications service to rural areas" and at the TERI Regional Conference on the Universality of Infrastructure Services (New Delhi, India - December, 2004)

- Co-wrote the Global Partnership for Output-Based Aid (GPOBA) OBA Approach Note 2 titled “Output-based aid in Nepal: Expanding telecommunications service to rural areas”, published in December, 2004.
- Co-prepared and co-delivered a WB-sponsored two day “Universal Access Policy” conference (Riyadh, Saudi Arabia – February, 2004)
- Prepared and delivered one of the keynote presentations at the ITU’s Global Symposium for Regulators (GSR) (Geneva, Switzerland – December, 2003)
- Co-prepared and co-delivered CTO-sponsored five-day “*Interconnection*” workshop to representatives from WATRA-member countries of western Africa (Abuja, Nigeria – November, 2003) and to representatives from TRASA-member countries of southern Africa (Dar-es-Salaam, Tanzania – February, 2004)
- Was a keynote presenter at the ITU Africa Regulatory Forum, preparing and delivering two presentations: “UA/US Funds: Collection and Distribution” and “Interconnection, Access Deficits and Universal Access” (Accra, Ghana - November, 2003)
- Authored Chapter 5 “Minimum Subsidy Auctions for Public Telecommunication Access in Rural Areas” of the ITU’s 2003 Trends in Telecommunication Reform book. (2003)
- Prepared a report to the CTO on the policy and regulatory implications that can be derived from a detailed household questionnaire on ICT use in Botswana, Ghana and Uganda. (2003)
- Co-prepared and co-delivered the CTO-sponsored five-day “Competition Policy” workshop to representatives from WATRA-member countries of western Africa (Accra, Ghana – May, 2003) and to representatives from TRASA-member countries of southern Africa (Gaborone, Botswana – February, 2003)
- Delivered the presentation “Minimum Subsidy Auctions for the Provision of Public Access Telecommunications in Rural Areas” at the five-day WATRA/ITU/CTO Universal Access models Workshop for Western Africa (Banjul, The Gambia – March, 2003) at the five-day TRASA/ITU/CTO Universal Access and Rural Connectivity Regional Workshop for Southern Africa (Dar-Es-Salaam, Tanzania – July, 2002)
- Prepared and delivered one of the keynote presentations at the ITU’s Global Symposium for Regulators” (GSR) (Hong Kong, China – December, 2002)
- Led the team that prepared a benchmark report on certain aspects of price caps regulation in different jurisdictions around the world to a telecommunications operator. (November, 2002)
- Prepared a report for the CTO and sponsored by the ITU to develop a model mechanism and procedures for the extension of public telecommunications services in rural areas of developing countries. (2002)



- Mr. Sepúlveda was one of three Canadian experts that prepared and delivered a four-day seminar on Interconnection to the Telecom Regulatory Authority of India (TRAI) (New Delhi, India – March, 2002)
- Prepared and delivered the presentations “*Políticas de Telecomunicaciones*” (Telecommunication Policies) and “*Estimación de Costos con Modelos Económicos en el Dominio Público*” (Cost Estimation using Public Domain Models) at the ITU Regional Seminar for Central America (Managua, Nicaragua – November, 2001)
- Mr. Sepúlveda was one of four Canadian experts that prepared and delivered a four-day seminar on Universal Service to TRAI (New Delhi, India - April, 2001)
- Prepared and delivered a one-day course to senior CRTC telecommunications staff on the Hybrid Cost Proxy Model (HCPM) and the federal high-cost universal service support program in the U.S.A. (Ottawa, Canada - 2001)
- Prepared and delivered the paper “Setting the Productivity Factor in Price Caps” at ITU Americas Telecom (Rio de Janeiro, Brazil – August, 2000)
- Prepared and delivered the presentation “*Voz sobre IP: Retos y Opciones Reglamentarias*” (Voice over IP: Regulatory Challenges and Options) at international conference sponsored by OSIPTEL of Peru (Lima, Peru – February, 2000)
- Prepared and delivered the presentation “Telecommunications Sector Reform: Achieving Universal Access and Connectivity” at the Africa Direct conference sponsored by CIDA (Ottawa, Canada – May, 2000)
- Co-prepared and co-delivered an intensive one-week seminar on price regulation and price caps to the TRC of Jordan (Amman, Jordan – October, 1998)
- Prepared and delivered the presentation “*La Nueva Regulación en Colombia y el Acuerdo de la OMC sobre Telecomunicaciones Básicas*” (The New Regulatory Regime in Colombia and the WTO Agreement on Basic Telecommunications) at a seminar sponsored by the CRT (Cartagena, Colombia – December, 1997)
- Prepared and delivered the presentation “*La Interconexión de Servicios y Redes Convergentes*” (Interconnection of Convergent Networks and Services) at an international conference sponsored by the CRT (Bogotá, Colombia – May, 1997)
- Co-authored the academic and policy article “Industry Structure, Productivity and International Competitiveness: The Case of Telecommunications” in *Information Economics and Policy*, Vol. 6, No. 2 (1994)

## **Education:**

- Master of Arts (M.A.) Economics, Queen's University (Kingston, Canada – 1989)
- Bachelor of Arts (B.A.) Economics, University of British Columbia (Vancouver, Canada – 1988)

## **Membership in Professional Associations:**

- Canadian Economics Association (CEA)
- American Economics Association (AEA)
- Canadian Telecommunications Consultants Association (CTCA)
- Canadian Association of Management Consultants (CAMC)
- Toronto Association of Business Economics (TABE)

## **Language Skills:**

	<b>Reading</b>	<b>Speaking</b>	<b>Comprehension</b>	<b>Writing</b>
<b>English</b>	Excellent	Excellent	Excellent	Excellent
<b>Spanish</b>	Excellent	Excellent	Excellent	Excellent
<b>French</b>	Very Good	Good	Good	Elementary
<b>Portuguese</b>	Good	Elementary	Good	None