



ORGANIZACION DE LOS ESTADOS AMERICANOS  
ORGANIZATION OF AMERICAN STATES

Comisión Interamericana de Telecomunicaciones  
Inter-American Telecommunication Commission

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**XIV REUNIÓN DEL COMITÉ CONSULTIVO  
PERMANENTE II:  
RADIOCOMUNICACIONES  
INCLUYENDO RADIODIFUSIÓN  
10 al 13 de noviembre de 2009  
Washington, DC, Estados Unidos de América**

**OEA/Ser.L/XVII.4.2  
CCP.II-RADIO/doc. 2040/09 rev.3  
4 de noviembre de 2009  
Original: Inglés**

### **AGENDA**

#### **SEMINARIO SOBRE LAS NECESIDADES DE ESPECTRO PARA LA IMPLANTACIÓN DE BANDA ANCHA**

**(9 DE NOVIEMBRE DE 2009)**

**(Punto del temario: 4.2)**

**(Documento presentado por el Coordinador, Sr. Erasmo Rojas)**



Organization of  
American States



## SEMINARIO SOBRE LAS NECESIDADES DE ESPECTRO PARA LA IMPLANTACIÓN DE BANDA ANCHA

9 de noviembre de 2009

Edificio MNB  
Organización de los Estados Americanos (OEA)  
17<sup>th</sup> St. y Constitution Avenue, N.W.  
Washington, D.C. 20006  
Estados Unidos de América

### ORDEN DEL DÍA

8:30 am – 10:00 am

**Inscripción**

10:00 am – 10:30 am

**Palabras de bienvenida**

*Mikhail Marsiglia  
Presidente Alterno  
del CCP.II CITEL*



Mr. Baptista holds an Engineering Degree in Telecommunications (1972) from the Pontifical Catholic University of Rio de Janeiro, with advanced studies in Software Engineering and Data Communication Networks.

*Clovis Baptista  
Secretario  
Ejecutivo de  
CITEL*

He began his career as a microwave radio engineer at Furnas Centrais Elétricas S.A. and then went on to work for 21 years for

EMBRATEL, a major telecommunications operator in Brazil, where he held important managerial posts.

Prior to becoming Executive Secretary of the Inter-American Telecommunication Commission (CITEL) in March 2000, Mr. Baptista was Special Advisor to the Minister of Communications of Brazil and, subsequently, Head of the Office of International Affairs of ANATEL, Brazil's telecommunications regulatory agency.

He has been an active participant in international conferences and meetings, having represented Brazil on the Council of the International Telecommunication Union (ITU) and in the WTO negotiations on basic telecommunications services, which led to the Fourth Protocol to the General Agreement on Trade in Services (GATS) in 1997.

Mr. Baptista also served as the OAS representative on the Hemispheric Advisory Board of the Institute for Connectivity in the Americas (ICA), established in the framework of the Third Summit of the Americas, held in Quebec City in 2001 with the aim to promote the use of information and communication technologies (ICTs) to help overcome barriers to socioeconomic development in Latin American and the Caribbean.

He was recently invited and accepted to join the Joint Steering Committee of the Latin American and Caribbean Collaborative ICT Research Federation (LACCIR), which oversees and directs the LACCIR's long term development and objectives, geared towards providing LAC Universities with a sustainable virtual collaborative environment to promote cross-country research and education solutions.



Erasmo Rojas is the Director of Latin America and the Caribbean for 3G Americas and is responsible for providing information to mobile operators, vendors, regulators, telecommunications organizations and the media and analysts regarding the GSM family of technologies in Latin America and the Caribbean and its evolution to 3G including LTE. He informs these key audiences on the wireless industry's latest developments to facilitate the successful development of the GSM family of technologies and next-generation advanced mobile services throughout the region.

*Erasmo Rojas  
Coordinador del  
Seminario*

Mr. Rojas comes to 3G Americas with more than 34 years of international experience in the telecommunications industry working in different management assignments in several regions of the world including Europe, Latin America and North America. Prior to joining 3G Americas, Mr. Rojas worked for Ericsson for a lengthy tenure where he held several senior level positions: Director of Sales and Market Development for Wireless Systems; Director of Business Development for Latin America; and Vice President of Wireless Systems, Colombia in addition to various managerial roles. While at Ericsson, he launched mobile networks in Colombia and participated in the development of mobile services in twenty countries throughout the Latin region. Mr. Rojas facilitated the migration of operators from analog to digital and third-generation services in South America, Mexico and the Caribbean.

Originally from Colombia, Mr. Rojas is now based in Dallas, Texas, in the 3G Americas regional office for Latin America and the Caribbean. He holds a BSEE in Electronics Engineering from the Distrital University in Bogotá, Colombia, a Master of Science in Telecommunications from the University of Colorado in Boulder and an MBA in International Management and Marketing from the Southern Methodist University in Dallas, Texas.

## ESTADO DE IMPLANTACIÓN DE LA BANDA ANCHA MÓVIL

10:30 am – 10:55 am

### Actualización del mercado inalámbrico para las Américas

- o Estadísticas de abonados
- o Implantaciones actuales de banda ancha móvil
- o Necesidades del mercado
- o Tendencias

(documento CCP.II-RADIO/doc. 2122/09)

*Chris Pearson  
Presidente  
3G Americas*



Chris Pearson is the President of 3G Americas, LLC. In his role as the spokesperson and senior operating officer of the corporation, he is responsible for the strategic planning of the organization and providing executive management for the integration of strategy and operations in the areas of technology, marketing, public relations, finance as well as public and regulatory affairs. As President of 3G Americas, Mr. Pearson represents 3G Americas' Market Representation interests within the 3GPP organization.

Mr. Pearson came to 3G Americas from the Universal Wireless Communications Consortium (UWCC) where he served as Executive Vice President in charge of the strategic management of the technology consortium. Prior to joining the UWCC, Mr. Pearson held the position of Strategic Alliance Manager for the Advanced Network Services Provider Program (ANSPP) at AT&T Wireless Services in Kirkland, Washington.

Additionally, prior to AT&T Wireless, Mr. Pearson held several senior account management and technical marketing positions at GTE Telephone Operations. Throughout his 22-year career in telecommunications, Mr. Pearson has provided lectures, technical marketing training and speeches for technology audiences throughout the world.

Mr. Pearson holds a Masters of Business Administration from The Albers School of Business and Economics at Seattle University and a Bachelor of Arts with emphasis in Marketing and Finance from The Foster School of Business at the University of Washington.

10:55 am – 11:15 am

#### Actualización del mercado inalámbrico para el resto del mundo

- o Estadísticas de abonados
- o Implantaciones actuales de banda ancha móvil
- o Necesidades del mercado
- o Tendencias

(documento CCP.II-RADIO/doc. 2121/09)

*Wladimir  
Bocquet, Vicedirect  
or Espectro,  
Orange - France  
Telecom Group*



Wladimir Bocquet currently holds the position of Deputy Director, inside Orange – FT Group Spectrum Office, in charge of the strategy and the international planning.

He received his diploma degree in telecommunications from Telecom Bretagne (Ecole Nationale Supérieure des Télécommunications de Bretagne, France) and his PhD degree from the University of Kyoto, Japan. He joined, in 2000, Fujitsu Laboratories Ltd., Japan and worked in the field mobile broadband communication. Then, in 2004, he moved to Orange Labs Tokyo, Japan (former France Telecom R&D) and worked as a manager of the Broadband Access Technologies team.

11:15 am - 11:40 am

#### DEMANDA DE ANCHO DE BANDA

(documento CCP.II-RADIO/doc. 2123/09)

*Andres Maz  
Director Ejecutivo  
de Políticas de  
Telecomunicacione  
s, Cisco*



Andres is Executive Director of Advanced Technology Policy at Cisco's Global Policy group. As a ten-year veteran of the telecommunications industry, he has an outstanding track record in the industry advising business and policy leaders worldwide in the intersection between technology and policy. Andres also has a very broad range of experience, including international business, corporate and business development, M&A and regulatory strategy.

Previously Andres worked for Verizon Business, focusing on a variety of corporate strategy and business development initiatives. Prior to the Verizon-MCI merger, he was responsible for MCI's corporate and regulatory subsidiaries in emerging markets. Over the course of his career, he has worked in Asia-Pacific, Eastern Europe and Latin America.

Andres holds a B.A. in Economics, an M.A. in Telecommunications and an MBA from Columbia and London Business School.

11:40 pm – 12: 00 pm  
12:00 pm – 01:40 pm  
01:40 pm – 01:45 pm

#### **Preguntas y respuestas**

*Pausa*

*Reinicio del seminario*

#### **NECESIDADES DE ESPECTRO DE BANDA ANCHA MÓVIL**

01:45 pm – 02:10 pm

##### **La ecuación de la demanda**

- o La creciente demanda de aplicaciones por banda ancha móvil
- o El crecimiento sostenido de servicios y aplicaciones inalámbricas
- o La utilización de la banda ancha móvil al servicio de la sociedad (acceso desde áreas rurales, salud, educación y seguridad pública)
- o Oportunidades de red fija vs. red móvil  
(documento CCP.II-RADIO/doc. 2120/09)

*Javier Camargo,  
Director  
Regional  
Latinoamérica  
Relaciones de  
Gobierno e  
Industria,  
Ericsson México*



Egresado del Instituto Politécnico Nacional en 1972 con el Título de: Ingeniero en Comunicaciones y Electrónica con especialidad en Computación con 35 años de experiencia en el campo de las telecomunicaciones.

A partir de 1974 inició su carrera en el campo de las telecomunicaciones al ser becado por los Gobiernos de México y Japón para especialización en telecomunicaciones en Tokio

Japón, dentro de diferentes organismos y empresas Japonesas.

En 1974 continua su carrera profesional en Teléfonos de México donde ocupó diferentes cargos, destacando su asignación a Radio Móvil DIPSA mejor conocida hoy en día como TELCEL, donde desarrolló los primeros sistemas celulares de esta empresa.

De 1989 a 1994 trabajó para Motorola de México en donde tuvo a su cargo la apertura en México de la División Celular y la venta de sus sistemas, logrando contratos para las regiones 1, 3, 5 y 9 (Tijuana, Monterrey, Guadalajara y Sureste) así como su instalación y soporte técnico.

De 1994 a la fecha labora para la Empresa Ericsson, actualmente tiene el cargo de Director Región Latino América de Relaciones Gobierno e Industria

Ha participado en diferentes foros Nacionales e Internacionales tales como la Comisión Interamericana de Telecomunicaciones (CITEL), el Comité Consultivo de Telecomunicaciones (CCT) del NAFTA, Conferencias Mundiales de Radiocomunicaciones y el grupo de trabajo de la UIT-R , donde se discuten los temas de sistemas móviles de tercera generación y sistemas posteriores, teniendo actualmente la presidencia del Grupo de Aspectos de Desarrollo cuyo objetivo es ver que las necesidades de los países en desarrollo estén contenidas en las especificaciones de las tecnologías IMT.

En el campo normativo, en 1991 coordino los trabajos para la elaboración de la Norma Oficial Mexicana para los sistemas celulares y desde 1998 preside el Comité Técnico Nacional de Normalización de Telecomunicaciones del NYCE.

02:10 pm – 02:35 pm

##### **La ecuación de la oferta**

- o El calendario y los procesos de la UIT para IMT Advanced (4G)

*Eduardo*

- Definición de 4G
- Los requisitos de IMT Advanced (4G)
- Estándares esperados para las IMT Advanced (documento CCP.II-RADIO/doc. 2114/09)

*Nascimento Lima,  
Gerente de  
Asuntos  
Corporativos  
América Latina,  
Nokia Siemens  
Networks*



Manager of Corporate Affairs at Nokia Siemens Networks for Latin America, Bachelor of Science in Electrical Engineering, with emphasis in Electronic Systems, at Universidade do Estado do Rio de Janeiro in 1989; Specialization in Business Administration, with Marketing extension at Fundação Getúlio Vargas in 2003. Currently responsible by regulatory issues, represents the Company at several institutions on subjects related

to terrestrial mobile communications and has acted in different functions and companies

02:35 pm – 03:30 pm

#### **Panel Regulatorio**

- ¿De qué modo están enfrentando las necesidades de espectro para la banda ancha los reguladores?
- Equilibrando los aportes regulatorios de la competencia, las necesidades societarias y los requisitos de los operadores

*Moderador:  
Erasmio Rojas  
Coordinador del  
Seminario*



**Marcos de Souza Oliveira:** Graduated in electrical engineering with specialization in telecommunications from the University of Brasilia - UnB, in 1979.

Worked for Centrais Elétricas do Norte do Brasil – Eletronorte (a regional electric power company) until 1995, where he was engaged in the development of telecom systems projects and

developed many telecommunications systems for the Brazilian government and private companies.

Worked at the Brazilian Ministry of Communications, from 1995 to 1997, as head of the frequency planning division responsible for developing radio frequency regulations in accordance with the guidelines for the privatization of Brazil's telecom sector.

Acted as certification manager for the National Telecommunications Agency - Anatel where he was actively involved in designing and implementing the model for certification of telecom products. He was also the rapporteur for themes related to certification processes and mutual recognition agreements within Citel/OAS PCC.I and Mercosul SGT.1.

Has been manager of spectrum engineering since 2007 where he is involved in regulatory aspects related to spectrum management.

Currently he is the Chairman of Terrestrial Fixed and Mobile Working Group within Citel/OAS PCC.II and represents Anatel within Working Party 5D/ITU-R

**Juan Manuel Roldan:** Profesional en Ingeniería Eléctrica, Maestría en Economía, con profundización en el área de telecomunicaciones y regulación, opción en física y en administración financiera con énfasis en evaluación de proyectos de inversión. Experiencia en docencia e investigación económica, principalmente en el área financiera y de regulación. Realización de estudios de mercado y de demanda en la industria de telecomunicaciones. Experiencia en el área técnica relacionada

*Marcos Oliveira  
(ANATEL,  
Brasil),  
Juan Manuel  
Roldán (MINTIC,  
Colômbia)  
Allan Ruiz  
(MINAET, Costa  
Rica)  
Reynaldo  
González  
(COFETEL,  
México)  
Luis Ames (MTC,  
Perú)*

con sistemas IMT, televisión digital y asuntos relativos a la planeación y gestión del espectro radioeléctrico.

03:30 pm – 04:00 pm

*Pausa*

## **ANÁLISIS DE MERCADO**

04:00 pm – 04:30 pm

### **Licenciamiento del espectro para el nuevo mundo**

- El impacto económico de las políticas y regulaciones del espectro
  - Opciones para regular el espectro
  - Mejores prácticas para la gestión del espectro
- (documento CCP.II-RADIO/doc. 2115/09)

*Wayne Leighton,  
Partner, Empiris,  
LLC*



Wayne A. Leighton is a partner at Empiris, LLC, a Washington, DC-based consulting firm with expertise in litigation, regulatory proceedings, public policy debates, and strategic planning.

He joined Empiris in January 2009, after ten years of service in senior advisory positions at the Federal Communications Commission and in Congress. From July 2004 to July 2005, Wayne was on leave from the FCC and served as a visiting professor at Francisco Marroquín University in Guatemala, where he researched the highly competitive and lightly regulated wireless communications markets in Guatemala and El Salvador while also teaching courses in public finance and political economy. He remains an adjunct professor with Francisco Marroquín University and also serves as its liaison in the United States.

Earlier in his career, Wayne held senior positions with the U.S. Senate Committee on Banking, Housing, and Urban Affairs, as well as the Charles G. Koch Charitable Foundation. He earned a B.B.A. in marketing and B.S. in economics from Texas A&M University, and an M.A. and Ph.D. in economics from George Mason University.

04:30 pm – 04:55 pm

### **El efecto de las regulaciones sobre la innovación y eficiencia técnicas de las redes**

- Ingeniería de redes con espectro limitado
  - Construcción eficaz de redes de banda ancha inalámbrica
  - Comprender el equilibrio entre el espectro y los sitios de células
- (documento CCP.II-RADIO/doc. 2116/09)

*Angel Alvarado  
Morales,  
Director México,  
Caribe y América  
Central Alcatel-  
Lucent, Wireless  
Competence  
Center*



Graduado del Tecnológico de Monterrey de la carrera de Ingeniería en Electrónica y Comunicaciones. Posteriormente obtuvo el grado de Maestría en Administración con especialidad en Finanzas.

Ha trabajado en la industria de las Telecomunicaciones por más de 12 años cubriendo diferentes posiciones como Gerente de Mercadotecnia y Planeación Estratégica, Gerente de la División de Aplicaciones para Redes Móviles, Gerente de Cuenta para Telcel y Responsable de Desarrollo de Negocios para WiMAX en América Latina.

Durante los últimos 7 años se ha dedicado a diferentes áreas dentro del entorno de redes inalámbricas trabajando en proyectos de aplicaciones específicas para redes móviles, dimensionamiento de redes de transporte,



diseño de estrategias de introducción de nuevas tecnologías, definición y coordinación de pruebas de concepto así como servicios de consultoría para operadores móviles.

Actualmente se desempeña como Director del Centro de Competencia para Tecnologías Inalámbricas de Alcatel-Lucent para México, Centro América y el Caribe.

04:55 pm – 05:20 pm

#### Política y regulaciones del espectro

- o Planificación del espectro fuera de las Américas
  - o Comprender la oportunidad para una política efectiva del espectro
  - o Bandas de espectro comunes para las Américas
  - o La importancia del inventario de espectro
  - o Utilización del espectro fragmentado
- (documento CCP.II-RADIO/doc. 2118/09)

*Bob Calaff,  
Director de  
Espectro y  
Estrategia de  
tecnologías,  
T-Mobile USA*



Bob Calaff is Director of Spectrum & Technology Strategy for T-Mobile USA. In his role, Bob assists the SVP/CTO to establish and implement strategies permitting T-Mobile to meet its objectives, mindful of spectrum utilization trends and ongoing technology developments. Prior to joining T-Mobile (then VoiceStream Wireless) in May 2000, Bob served for 6 years in various capacities at the FCC, including senior positions in the Wireless Telecommunications Bureau, the International Bureau, and the Office of Engineering & Technology, as well as interim legal advisor to several FCC Commissioners. Prior to that, Bob was a member of the international trade practice group in the Washington, D.C. office of Powell, Goldstein, Frazer & Murphy LLP.

Bob earned his Bachelor of Arts degree with honors from Harvard University in 1985. He received his Master of Public Administration degree in 1990 from the Columbia University School of International and Public Affairs, and his Juris Doctor degree from Columbia University School of Law in 1992.

Bob is a member of the IEEE-Seattle Section. He currently serves on the Board of Directors of 3G Americas, and the Executive Council of TechNet Northwest. Previously, Bob has served as Co-chairperson of the Federal Communications Bar Association's Wireless Practice Committee, and as President of the Hispanic Bar Association of the District of Columbia.

Bob currently resides in Seattle, WA with his wife, Kristin, and kids, Lucas (age 7) and Marisa (age 4).

05:20 pm – 05:50 pm

#### Preguntas y Respuestas

05:50 pm – 06:00 pm

#### CONCLUSIONES FINALES

06:00 pm – 07:00 pm

*Recepción (Auspiciado por 3G Americas)*

*Erasmus Rojas  
Coordinador del  
Seminario  
Art Museum of  
the Americas  
201 18<sup>th</sup> Street  
N.W.*