

# The Diffusion of National ICT Planning and Policies in Latin America

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# The ICT policy and planning experience in Latin America has undergone three phases

PHASES	DRIVERS	PRIMARY ACTORS
<p>PRIVATIZATION AND LIBERALIZATION (1990-2002)</p>	<ul style="list-style-type: none"> <li>• Reduce the size of government</li> <li>• Increase ICT sector efficiency</li> <li>• Generate funds for public treasuries</li> <li>• Generate static and dynamic efficiencies</li> <li>• Signal foreign capital that Latam was an attractive market</li> </ul>	<ul style="list-style-type: none"> <li>• Limited regulatory technical experience, required outside multilateral (ITU, World Bank) or private advisory (i-banks, consulting and law firms)</li> </ul>
<p>DEVELOPMENT OF ICT PLANS (1999-Current)</p>	<ul style="list-style-type: none"> <li>• Transition to “information societies” (development of broadband, adoption of computers, ICT-literacy)</li> <li>• Promotion of export-led growth sectors (e.g. software industries)</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple state agencies</li> <li>• In some cases, private sector involvement</li> <li>• In some cases, subject to Executive or Parliamentary approval</li> </ul>
<p>EMERGENCE OF SUB-SOVEREIGN PLANNING (2003-Current)</p>	<ul style="list-style-type: none"> <li>• Development of E-government agendas (ciudades digitales)</li> <li>• Promotion of ICT clusters and regional economic development</li> <li>• In some cases, driven by lack of planning capacity of federal governments or in opposition to national agendas</li> </ul>	<ul style="list-style-type: none"> <li>• Municipalities and State governments</li> </ul>

## Each phase has been progressing across processes that can be studied with the help of diffusion theories

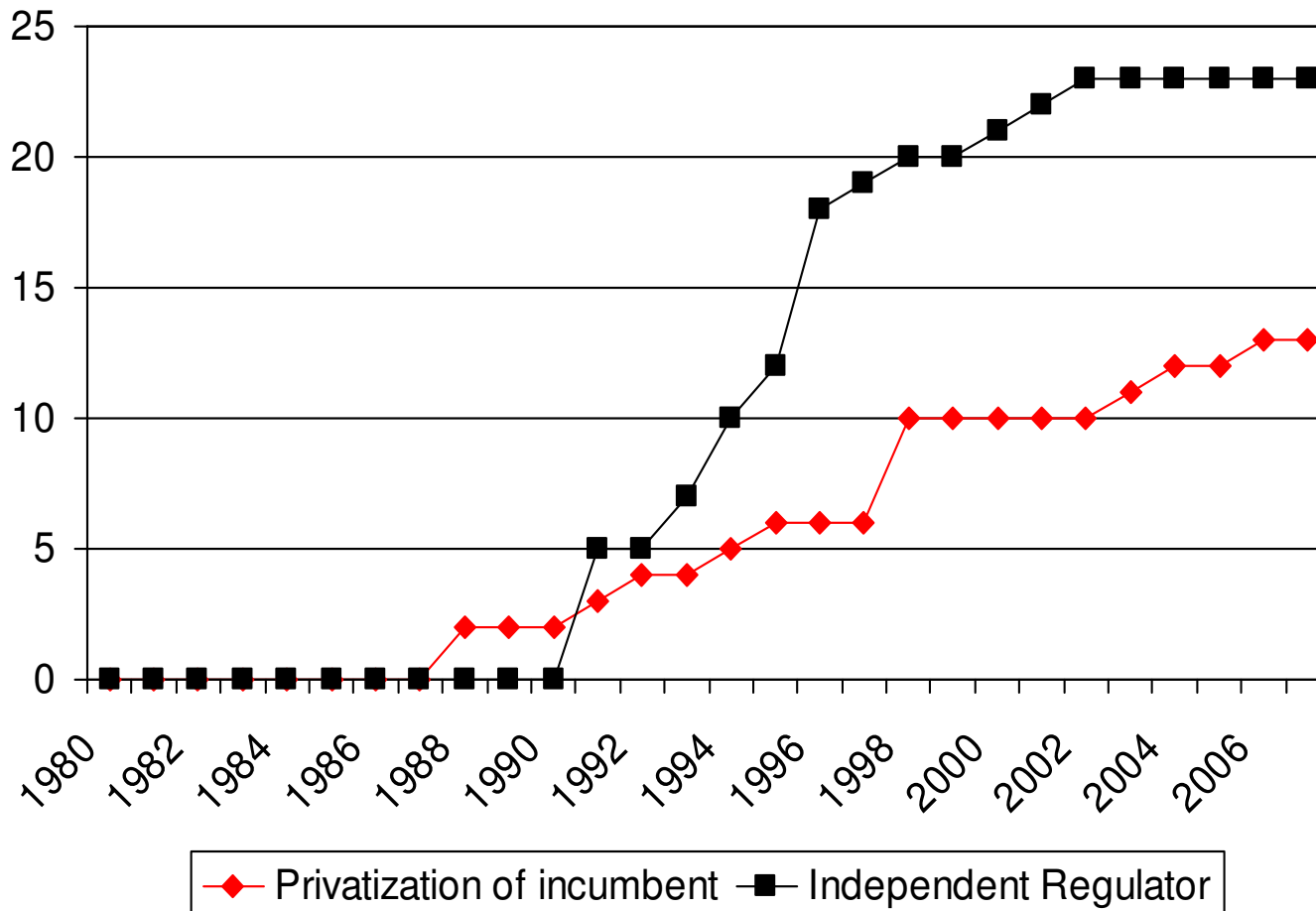
- Is there a pattern in the way telecommunications policies are adopted by different countries in Latin America? Timing? Imitation? Leaders and followers?
- What are the influencing factors driving policy adoption?
- Does the diffusion of planning initiatives across the region follow a pattern similar to that of privatization and competition?
- What can we learn from the first phase of privatization and competition that is relevant to the planning phase?

# Agenda

- Public policy diffusion among Latin American countries
- ICT planning experience in the region
- Prescriptive planning models

# Phase 1 (Privatization and Liberalization) adoption followed a conventional diffusion process

## DIFFUSION OF REGULATORY INITIATIVES IN LATIN AMERICA



Despite the (re) nationalization of CANTV (Venezuela) and Entel (Bolivia), and the reluctance of Uruguay and Ecuador to privatize their incumbent

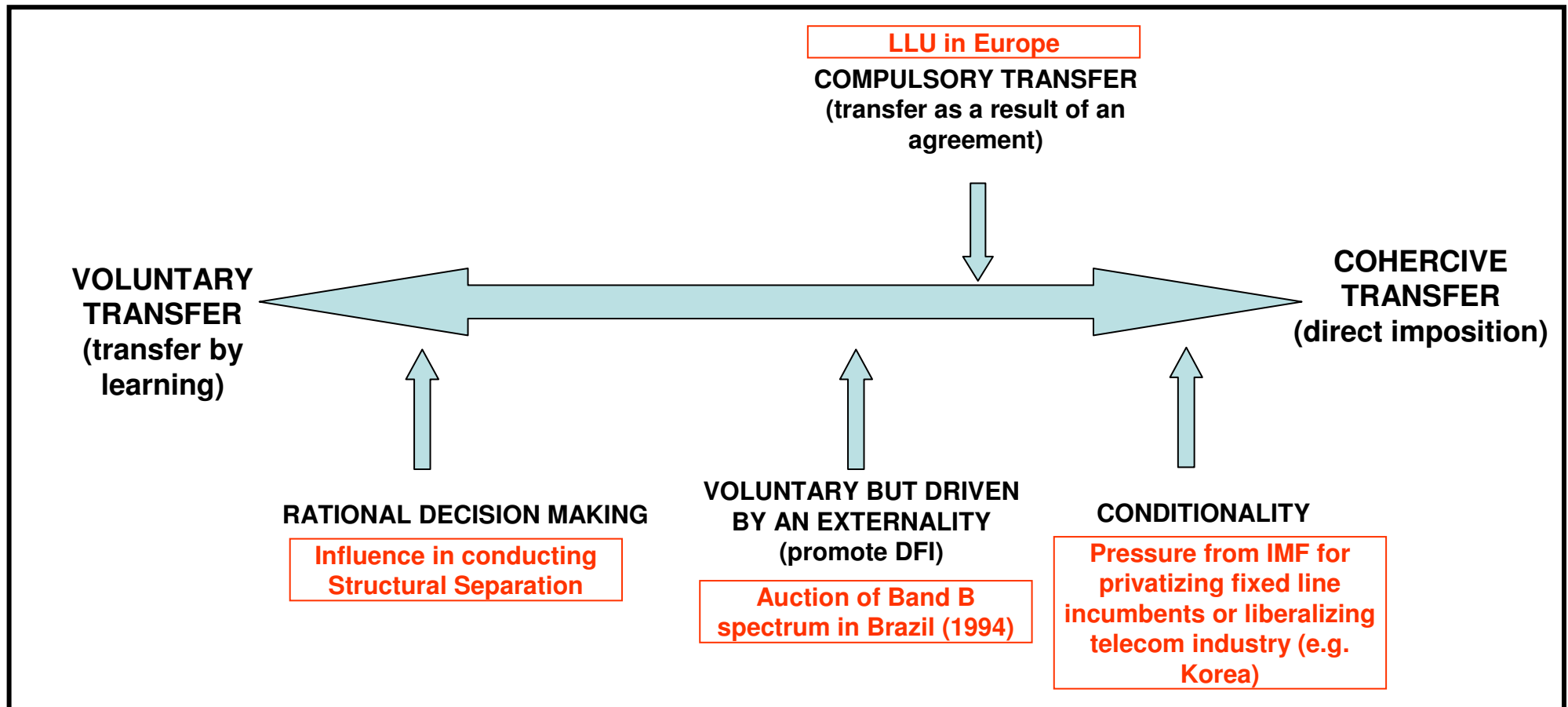
Source: Katz (2009)

## Three variables help understand the privatization and liberalization policy diffusion process

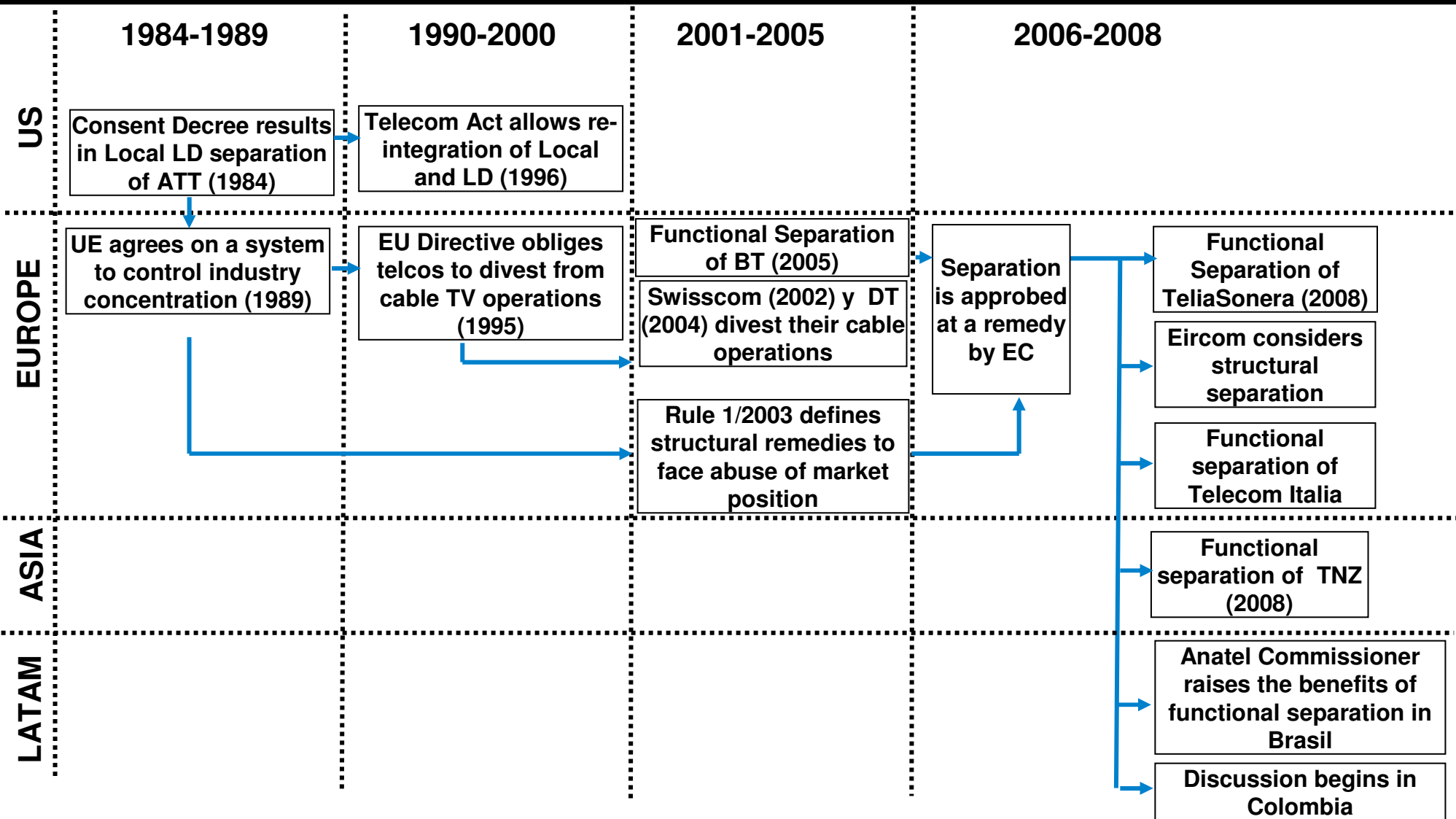
VARIABLES	TYPOLOGY
DIFFUSION PATTERN	<ul style="list-style-type: none"> <li>•Geographic proximity (similar problems and conditions, “copy your neighbor”)</li> <li>•Lateral diffusion (among countries sharing common socio-economic and cultural circumstances)</li> <li>•Hierarchical diffusion (from advanced countries to developing ones)</li> </ul>
ROLE OF COUNTRIES	<ul style="list-style-type: none"> <li>•Instigators (leaders and radicals)</li> <li>•Followers (moderates and indecisive)</li> <li>•Laggards (conservatives, “snobs”)</li> </ul>
ROLE OF INSTITUTIONS	<ul style="list-style-type: none"> <li>•Supra-national (ITU, World Bank)</li> <li>•Policy entrepreneurs (consulting and law firms, academics, i-banks)</li> <li>•Community networks (ERG, Regulatel, etc.)</li> </ul>

# The institutional role in the diffusion process has followed several models

## INSTITUTIONAL ROLES IN THE TRANSFER OF PUBLIC POLICIES



# Right now, the region is embarking in a process of consideration of incumbent's functional separation models





# Through diffusion processes, policy convergence is emerging within the region although some differences exist with other continents

	Europe	Latam	Asia	North America
Unbundling	<ul style="list-style-type: none"> <li>Convergencia de un modelo de desagregación para todos los estados de la UE</li> </ul>	<ul style="list-style-type: none"> <li>No hay un modelo de desagregación o reventa en la región</li> </ul>	<ul style="list-style-type: none"> <li>Convergencia de un modelo de desagregación para Corea, Malasia, Taiwán y Singapur</li> </ul>	<ul style="list-style-type: none"> <li>No desagregación tanto en Canadá o USA</li> </ul>
Spectrum management	<ul style="list-style-type: none"> <li>Dividendo digital, asignación de 2.6 GHz</li> <li>Reformulación de 2G</li> <li>Diferentes términos legales, procesos y condiciones</li> </ul>	<ul style="list-style-type: none"> <li>Siguen políticas y principios de la ITU WARC</li> </ul>	<ul style="list-style-type: none"> <li>En la mayoría de países se otorga en conjunto con la licencia, excepto en PRC</li> <li>Algunos países se distribuye confiando en el mercado</li> </ul>	<ul style="list-style-type: none"> <li>Dividendo digital, asignación de 2.6 GHz</li> <li>Distribución de acuerdo al mercado</li> </ul>
Universal Service	<ul style="list-style-type: none"> <li>La carga es repartida entre todos los operadores según beneficios</li> </ul>	<ul style="list-style-type: none"> <li>La carga es repartida entre todos los operadores según beneficios</li> </ul>	<ul style="list-style-type: none"> <li>La carga es repartida entre todos los operadores según beneficios</li> </ul>	<ul style="list-style-type: none"> <li>La carga es repartida entre todos los operadores según beneficios</li> </ul>
NGN regulation	<ul style="list-style-type: none"> <li>Desagregación del bucle del abonado</li> <li>Regulación de las NGN en proceso de definición</li> </ul>	<ul style="list-style-type: none"> <li>No desagregación</li> <li>NGN - Ámbito sin definir</li> </ul>		<ul style="list-style-type: none"> <li>Sin restricción para el acceso al por mayor</li> <li>No desagregación</li> </ul>
Foreign ownership restrictions		<ul style="list-style-type: none"> <li>Restringido a participación minoritario en México y Brasil</li> <li>Sin restricciones en Chile, Argentina</li> </ul>	<ul style="list-style-type: none"> <li>Generalmente restringida a participaciones minoritarias en Corea, Las Filipinas, China, Malasia, Taiwán y Tailandia</li> </ul>	<ul style="list-style-type: none"> <li>Sin restricciones</li> </ul>
VoIP	<ul style="list-style-type: none"> <li>En general , VoIP no está regulado</li> </ul>	<ul style="list-style-type: none"> <li>Con la excepción de Chile, VoIP no está regulado</li> </ul>	<ul style="list-style-type: none"> <li>Variedad de modelos basados en la incertidumbre del impacto</li> </ul>	<ul style="list-style-type: none"> <li>En general , VoIP no está regulado</li> </ul>
Tariff controls	<ul style="list-style-type: none"> <li>Control para operadores con poder significativo de mercado (SMP)</li> </ul>		<ul style="list-style-type: none"> <li>Variedad de modelos, desde estrictos (PRC), price cap (Corea) , basados en índices de productividad (Australia and Taiwán) hasta control para SMP (Singapur)</li> </ul>	<ul style="list-style-type: none"> <li>No hay price cap</li> </ul>

Convergencia within one region
  Convergencia across regions

## There is a need to start breaking with the imitation cycle and assume policies that reflect the region's realities

- Build a solid understanding of economic and social needs of our regions
- Leverage the expertise that has been built in the region within the last fifteen years (academia, regulatory, policy makers)
- Assess foreign experience in light of the regional requirements (which means shying away from mechanical benchmarks)

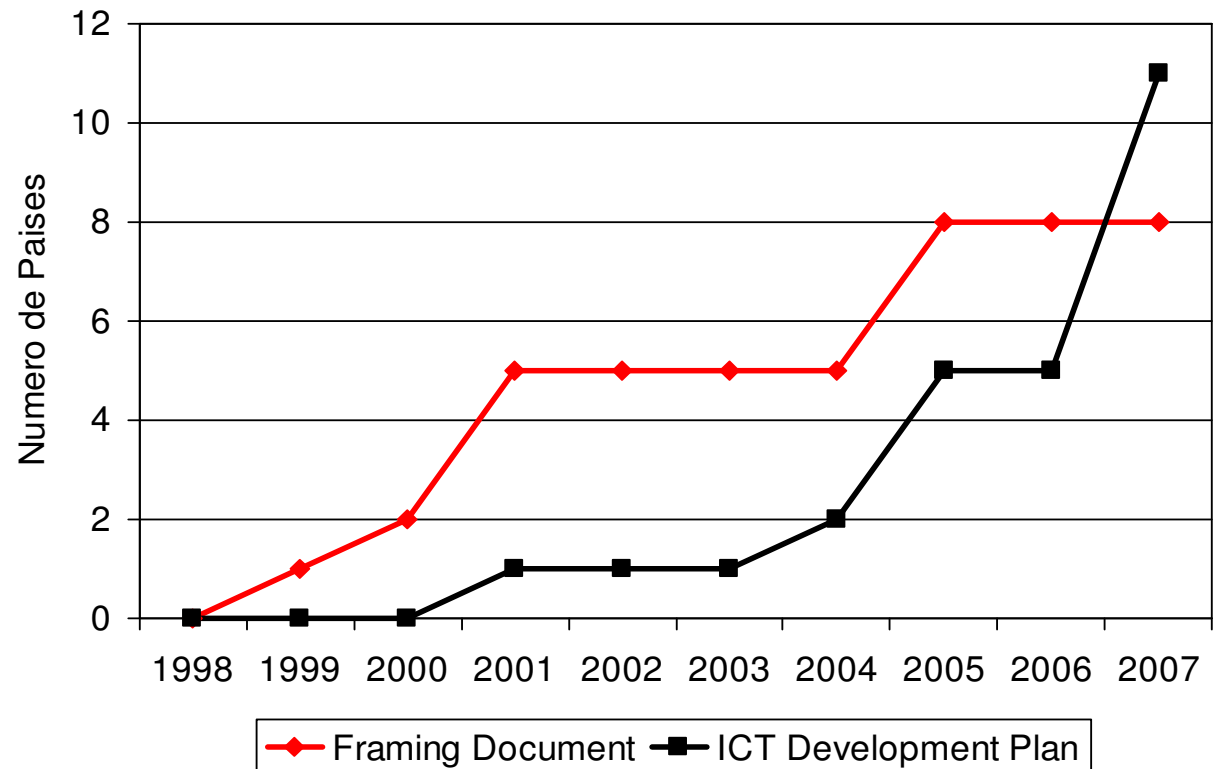
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## The second policy phase – Development of ICT Plans – comprises two parallel processes

- **Framing document:** diagnostic of ICT situation in country, general objectives for sector development
- **ICT Development Plan:** specific sector plans with focus on education, industry development, economic impact, etc.

### DIFFUSION OF PLANNING INITIATIVES IN LATIN AMERICA



Source: Katz (2009)

# The state of ICT planning varies substantially by country

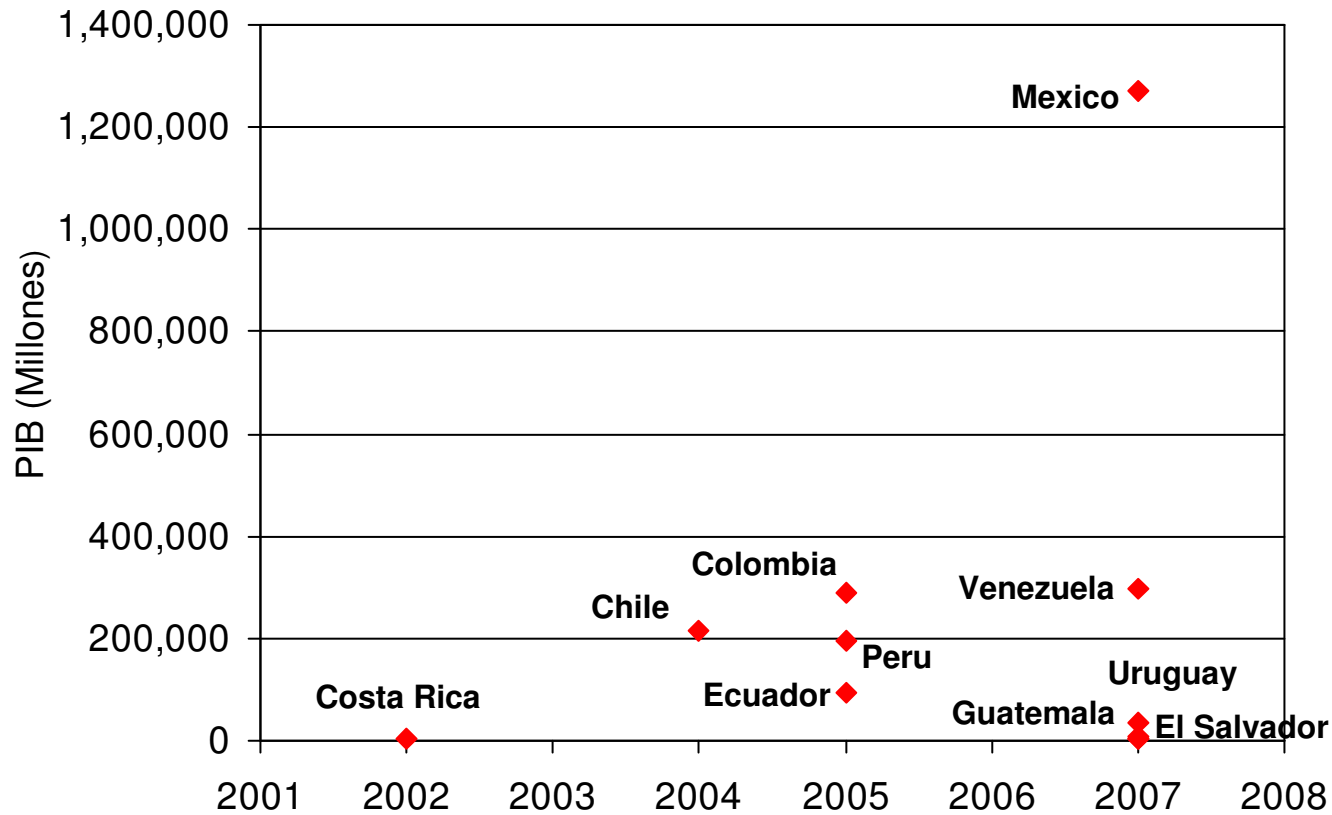
Country	State of ICT Planning		Responsibility for Preparation			Responsibility for Follow-up			Private Sector participation
	First Phase	Second Phase	First Level (1)	Second Level (2)	Third Level (3)	First Level (4)	Second level (5)	Third Level (6)	
Argentina	1		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Bolivia	2		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	X
Brazil	1		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	X
Chile	1	1	X			X			X
Costa Rica		2	X			X			
Colombia		1	X			X			X
Ecuador		2		X			X		
El Salvador		2	X			X			
Guatemala		2				X			X
México		1		X		X			X
Nicaragua	2		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Panamá	2		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Perú		2	X			X			X
Venezuela	1	2	X			X			
Uruguay		2	X			X			X

Source: Katz (2009)

Notes: 1) Presidential or Ministerial Commission, 2) Vice-Ministry, 3) Departmental, 4) Interministerial Commission, 4) Technology Commission, 5) Department

# The larger economies tend to lag in the development of ICT plans

**GDP AT PPP AND DATA OF PUBLICATION OF ICT PLAN**



Source: Katz (2009)

## This explains the leadership assumed by State and local governments in promoting ICT agendas

- Redefinition of the top-down paradigm whereby planning flows from national level to regional and local
- Shift in the center of policy development due to lack of leadership (Argentina)
- Change in resource allocation and budgets
- Political competition
- The sub-sovereign emerges as an instance of intermediation between civil society and the state (closer to understanding needs from local economies)
- As of last year, over 1,800 “digital plans” at the municipal level

## With notable exceptions, the region still lacks comprehensive ICT policies

- Lacking a long-term vision regarding the objectives for ICT infrastructure
- No ICT agenda that is aligned with key development plans
- Economic development plans do not consider ICT as a critical component
- Lack of political alignment and coordination among government entities regarding the ICT policy objectives
- Lack of political will to build a national comprehensive ICT agenda
- Policy makers lack in-depth understanding of the social and economic importance of ICT
- Lack of transparency in the process of building consensus between the public and private sector around ICT goals
- As a result, plans are in many cases the sum of secondary objectives lacking a unifying perspective of what they are trying to achieve



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# Need to continue constructing national ICT agendas in the region

- Governments need to assume a pro-active role in development and implementation of an ICT agenda, that goes beyond the regulator of the telecommunications sector
- The National agendas have to include:
  - Strategic vision of the role of ICT
  - Economic priorities in the supply and demand of ICT
  - Mechanisms for achieving not only economic impact but also fulfill social inclusion objectives
  - Mechanisms for promotion of adoption
- From a practical standpoint, the construction of a national agenda needs to follow four steps
  - Define a project for the country that is linked to ICT
  - Reach consensus among all public and private institutions related to ICT
  - Development of national plan
  - Formulation of specific projects
- Two alternatives if the above cannot be fulfilled
  - Leverage tools and programs that can achieve some impact (USO, e-literacy)
  - Rely on the private sector to assume leadership

