

## **The Aspen Institute IDEA Project Framework Paper**

The Aspen Project on International Digital Economy Accords (IDEA) envisions an interconnected global digital platform available to all where the freedom to learn, associate, promulgate, and innovate in profoundly surprising ways and to do business without intrusive and unnecessary regulation is broadly enshrined and protected. But a series of threats to this vision exist that require serious responses. The threats include policies and practices that deny returns to innovators and tie market access to extraneous conditions, or deny market competition to promote national champions. Difficulties multiply if there are ill conceived or overly stringent responses to threats to core public interests concerning security, privacy, and theft. Economic and social goals both will suffer if freedoms of use are not honored or deeply accepted. The goals, in summary, are the pursuit of three “freedoms”:

- ✓ The freedom to innovate
- ✓ The freedom to enjoy privacy, security, and property
- ✓ The freedom of information and association

This paper provides an analysis of the strategic landscape and the choices for collective action to improve global welfare. It first explains why the global information and communication technology (ICT) market is at a transformative moment, an inflection point that can change the dynamics of innovation and growth in ways that could spur global prosperity. Parts I and II sketch the logic of the inflection point, its implications for policy choices, and its impact on economic growth.

Such fundamental changes in the global market for ICT influence, and are influenced by, the geo-economic context of our global choices. As the Internet emerged, global leaders avowed support for competition and equity as pillars of the new digital age. Much work remains, but the spread of communications and information services emerged much faster than anybody predicted before the debut of the Internet. More fundamentally, the takeoff of economic growth in a broad range of lower income countries transformed the economics of ICT markets. New suppliers and new consumers in emerging markets garnered increased influence in world decision-making. Forging innovations in global ICT governance is now more complicated, and many shared values among traditional ICT market leaders (i.e., the OECD nations) are not fully endorsed by new players.

Decisions about reconciling policies that influence competition, equity, and broader public interest values involving freedom of information, privacy, and security is a matter of concern for the societal paths of all countries. Part III argues that there is a closing window of opportunity for concerted OECD leadership. The United States and other like-minded countries have their best chance to use their market and policy leadership to tilt the ICT path until about 2025. After that it will become much more complicated to agree on a value mix that benefits everybody while respecting legitimate differences in national preferences on core societal questions.

What are our options for action? No one policy or institution alone can create a positive path for ICT. Some matters will be left in whole or part to commercial and/or non-governmental stakeholders. That said, we envision three broad fronts for initiatives on behalf of the three freedoms. First, we expect inter-governmental agreements (e.g. treaties or other enforceable agreements) that build on executive agreements or understanding for parallel policy actions by government ministries. Second, norms can be crafted using inter-governmental endorsements (as occurs at APEC or the OECD) or through non-governmental pacts, such as codes of conduct or good practices. Such norms may be worked out in partnership with non-governmental organizations. Third, new non-governmental institutions may develop new capabilities to monitor and enforce agreed upon norms. Part IV sketches an initial vision of these three options and considers the prospects for cooperation and action. As always, the levels of resolve and trust among leaders matters. Ultimately, IDEA is an exercise in thought creation and trust building designed to facilitate real change, not just policy papers.

## I. The ICT Inflection Point

The global information and communications (ICT) market is at an “inflection point” – a point of change from one market dynamic to the next.<sup>1</sup> This market dynamic, and its implications for innovation, is the inflection point. The most profound implication of this shift is that ICT capabilities will be more transformative for every part of our economic and societal processes. Health care and medical research will evolve. The rise of social networks changes the ways in which we associate. Metaphorically, cheap, powerful ICT capabilities are *spreading horizontally* from the office building to all of life’s activities globally and *penetrating vertically* into the corners of processes previously lightly touched (from human centric to machine to machine capabilities; from networked cameras that monitor crowds to implanted bio-medical devices that monitor and respond to an individual’s health).

Three key technological changes are driving this market and technological transition. First is the *shift from integrated architectures to modularity*. Old ICT architectures were integrated and proprietary (e.g., in the early computer industry, manufacturers produced closed systems with proprietary interfaces that prohibited mixing and matching.) At one time IBM software or peripherals would not work with an HP computer and vice versa. As a result, when vendors established a strong presence at one layer of the stack – for example, the IBM processor – they could sell that product as an integrated system to leverage single-solution market dominance over the entire technology platform.

In the new market dynamic, ICT architectures are increasingly modular: instead of a single integrated system, manufactures produce individual components that share a standard interface, and consumers can mix and match these components to create unique platforms. Modularity lowers entry barriers across all ICT sectors (equipment, software, services and content) because vertical integration is no longer needed to obtain market share. Instead, firms specialize in a single product or service solution and compete on a relatively level playing field at that particular layer of the ICT stack. More vendors enter the market, competition increases, so it is more difficult for market leaders to dominate an entire technology platform.

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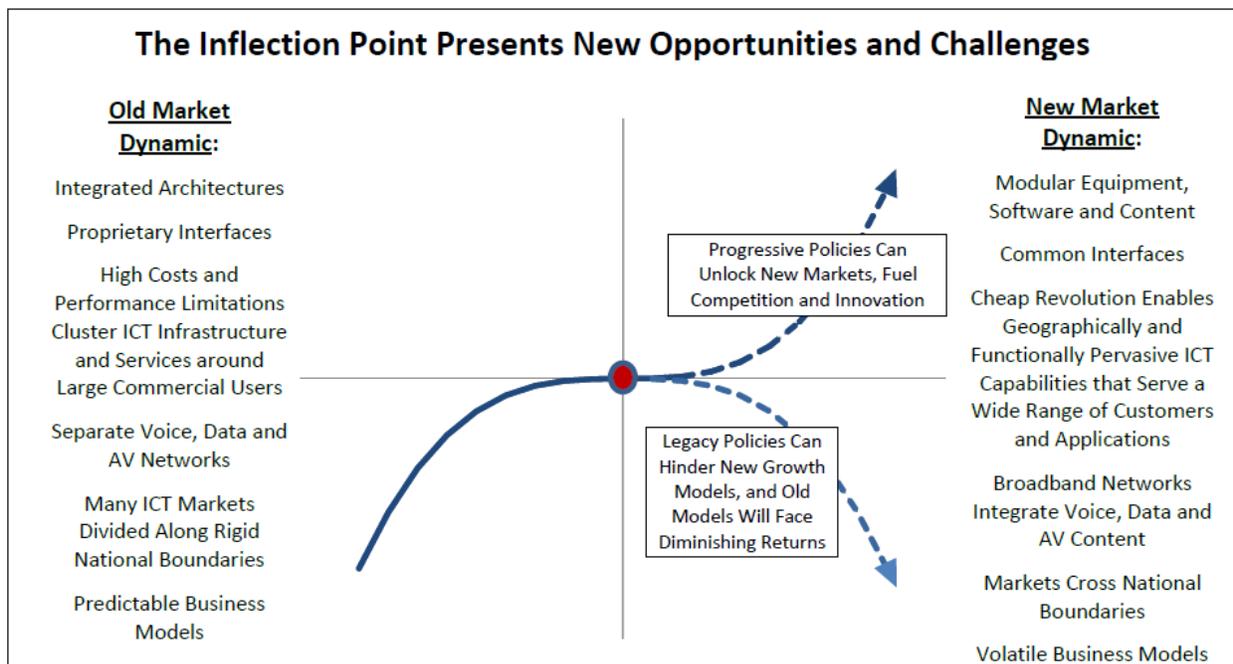
<sup>1</sup> Peter Cowhey, Jonathan Aronson with Donald Abelson, *Transforming Global Information and Communication Markets: The Political Economy of Innovation* (MIT Press, 2009).

Modularity is also increasing consumer choice. Standard interfaces facilitate substitution among rival products, and the increasing array of vendors gives consumers a wide range of substitutes to choose from – instead of choosing among a small group of vertically-integrated system providers, consumers can now pick their favorites at every layer of the stack.

The second fundamental change is the *continuation and spread of the “cheap revolution.”* The microprocessor’s price-performance revolution, symbolized by Moore’s law, is exceeded by data storage and fiber optic performance curves. There are massive economies of scale segments in these industries and specialist firms also thrive in today’s modular environment. Giants and specialists both accelerate the mix and match choices for designers of new solutions. And, the software industry is beginning to selectively enter the “cheap revolution” as interoperability standards and commercial codes with modular interfaces are “repurposed” to use new applications.

The third change is the *widespread deployment of high-speed broadband networks, both fixed and wireless.* In the old market dynamic, service vendors transmitted voice, media, and data content within rigid geographical boundaries and over separate telecom, broadcasting, and Internet networks. In the new market dynamic, a wide variety of network services (e.g., voice) and content (e.g., AV content) can be transmitted over a single, converged broadband network and received on multi-use digital devices, thus blurring the traditional network and device divides between voice, data and broadcasting. Furthermore, unlike their single-format, geographically limited predecessors, broadband networks can transmit services and content across national borders, thus blurring traditional geographical boundaries.

Network convergence further increases ICT competition by facilitating cross-over from one service or device sector to another – i.e., VoIP providers are competing with the traditional telecom operators in basic voice services, and mobile operators are competing with traditional network broadcasters by transmitting digital media content to increasingly sophisticated mobile video screens.



These critical shifts – from integrated architectures to modularity and from separate voice, media and data networks to converged broadband – are increasing ICT market competition at all layers of the stack. As a result, ICT firms can no longer achieve the same returns with traditional (leverage-based) business models: new strategies are needed to adjust to an increasingly competitive global market environment. While there is still a need for vigilant competition policy, the risks are more selective in the past.

At the same time, the inflection point is opening many new market opportunities. For example, instead of transmitting media content to a geographically defined market over traditional broadcast networks, content providers can now distribute digital AV content over converged broadband to a much larger global audience. In the IT services sector, “cloud” providers can distribute application processing and data storage services to a wider range of consumers over the web and achieve new global economies of scale.

However, these new market opportunities require new business models, and many of the new models are not supported by the existing ICT governance arrangements. The IDEA project seeks to renovate current ICT governance arrangements to unlock these new market opportunities and facilitate inflection point innovation and growth. We also seek solutions to legitimate public interest concerns – from traditional concern over competition and universal access to ICT capabilities to goals related to freedom, security, privacy, and protection of intellectual property.

## **II. The Importance of Policy Action – the ICT Global Economic Multiplier**

The ICT sector is a huge global market and a critical driver for overall economic growth. Global ICT market spending will likely surpass \$4 trillion in 2010, accounting for just over 6% of global GDP and 20% of global trade.<sup>2</sup> (In contrast, the world auto market was approximately \$3 trillion in 2007.) Unlike many critical economic sectors, ICT spending is already recovering from the 2008-2009 recession. The market should grow at a compound annual growth rate of 6.2 – 6.4% over the next five years, and global spending will likely approach \$5 trillion by 2013.<sup>3</sup>

Global broadband expansion and the digital content migration are expanding ICTs into the media and entertainment industry, and the ICT market is even bigger if digital media revenue is included. Global revenue for the digital content market (gaming, video, music, and advertising) totaled approximately \$43 billion in 2007, and the market could surpass \$180 billion by 2015.<sup>4</sup> Digital media and advertising grew steadily throughout 2008 and 2009 despite the overall

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<sup>2</sup> TIA 2010 ICT Market Review and Forecast: [http://www.tiaonline.org/market\\_intelligence/mrf/](http://www.tiaonline.org/market_intelligence/mrf/). “ICT Spending to Bounce Back,” WITSA Press Release, May 27, 2010, [www.witsa.org/v2/media\\_center/pdf/WITSA\\_PressRelease ICTSpendingToBounceBack\\_20100527\\_FINAL.pdf](http://www.witsa.org/v2/media_center/pdf/WITSA_PressRelease ICTSpendingToBounceBack_20100527_FINAL.pdf).

<sup>3</sup> Ibid.

<sup>4</sup> 2007 revenue from *OECD IT Outlook 2008*. 2015 estimate is an extrapolation based on these global forecasts: Magna Global: \$103 billion online advertising sector by 2015; IE Market Research: \$32.5 billion digital music sector by 2014; eMarketer: \$1.3 billion mobile video sector by 2014; In-Stat: \$4.5 billion online video sector by 2012; Pyramid Research: \$18 billion mobile gaming sector by 2014; Strategy Analytics: \$24 billion online gaming sector by 2013.

decline in global consumer spending, and digital spending already accounts for approximately 20% of total entertainment and media revenue in some regions.<sup>5</sup>

As a result of these strong growth trends, the ICT sector should directly contribute 1.2 million new jobs by 2014 and account for 8.7% of total global GDP by 2020.<sup>6</sup> [More detail is provided in the IDEA background paper on Market Access Opportunities in the Global Information and Communications Markets.]

Furthermore, ICT innovations create new economies of scale, open new markets, lower transaction costs, improve supply chain efficiency, and facilitate R&D across a variety of economic sectors. For example, cloud computing is already speeding innovation by connecting enterprises with higher levels of technology at reduced costs, facilitating international collaboration, and making it much easier to analyze large databases to identify critical trends. In the medical field, ICT network innovations are enabling remote medical examinations that extend services into traditionally underserved rural markets, and microchip innovations are creating a new market for implantable biomedical devices.

Due to these factors, ICT network expansion strongly influences overall national productivity. The U.S. Broadband Coalition estimates that U.S. broadband investments produce a tenfold economic return. The impact is even stronger in emerging markets. McKinsey estimates that increasing emerging market mobile broadband penetration to 54% – i.e., bringing emerging market broadband penetration to the 2009 fixed penetration rates in Western Europe – would yield returns of \$420 billion and up to 14 million jobs to the global economy (Table 1).<sup>7</sup> Overall, the combination of direct and indirect ICT impacts means that every 10% increase in broadband penetration increases a country's GDP growth by at least 1% (Figure 1).<sup>8</sup>

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<sup>5</sup> In the U.S. market, PWC expects digital spending to account for 25% of the total U.S. E&M revenue by 2013. "Acceleration of Digital Transformation to Create Increasingly Fragmented Entertainment and Media Market by 2013," *Globe Newswire*, June 16, 2009, <http://www.globenewswire.com/newsroom/news.html?d=167177>.

<sup>6</sup> WEFORUM, *Global IT Report 2009-2010*, March 25, 2010, citing AT Kearney job forecast and McKinsey GDP forecast based on Global Insight data.

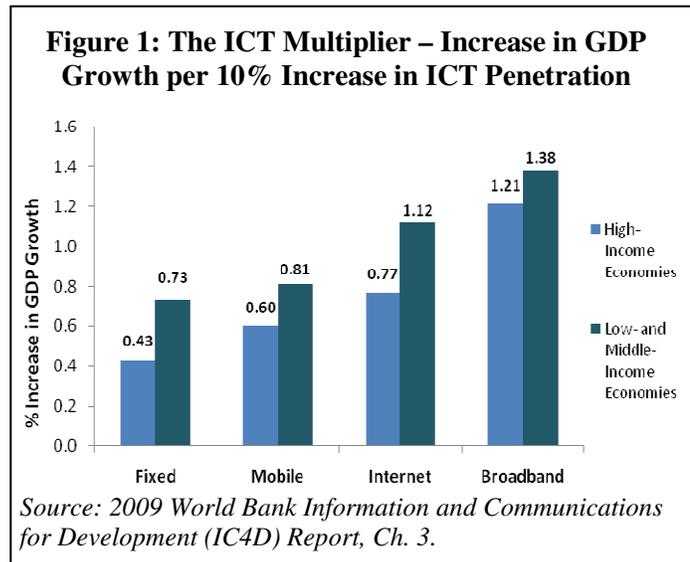
<sup>7</sup> Ibid.

<sup>8</sup> Christine Zhen-Wei Qiang and Carlo M. Rossotto with Kaoru Kimura, "Economic Impacts of Broadband," Ch. 3 in the *2009 World Bank Information and Communications for Development (IC4D) Report*, May 22, 2009, [http://siteresources.worldbank.org/EXTIC4D/Resources/IC4D\\_Broadband\\_35\\_50.pdf](http://siteresources.worldbank.org/EXTIC4D/Resources/IC4D_Broadband_35_50.pdf).

**Table 1: Economic Impact from Increasing Emerging Market Mobile Broadband Penetration to 54%**

	GDP Growth (\$ Billion)	Job Growth (Million Jobs)
Asia	150 – 180	6.6 – 8.0
Africa	40 – 90	1.3 – 3.1
Central & Eastern Europe	60 – 80	0.9 – 1.3
Latin America	50 – 70	1.1 – 1.7

Source: WEFORUM Global IT Report 2009-2010, citing McKinsey & Co. analysis.



### III. The Window for Action – Responding to Shifting Global Market Power

Strong leadership will be needed to identify new best-practice norms and principles at the inflection point and to build an international consensus around innovation-enabling governance arrangements. Someone has to move first. These norms, principles and arrangements will need to benefit people throughout the world in gaining access to the global communications and information ecosystem.

Someone has to move first. It is important to understand the three reasons why the U.S. is currently in the position to start this leadership process.

First, the U.S. currently commands dominant market share. In 2008, U.S. ICT expenditures totaled \$1.06 trillion.<sup>9</sup> The EU was close behind at \$1.01 trillion, and strong EU support will be critical. However, the European ICT market is still fragmented along national boundaries, and fragmentation significantly weakens EU market power. Japan (at \$350 billion) and China (at \$327 billion) are the second- and third-largest single-country spenders, but their expenditures are only 30% of the U.S. total.

In addition, U.S. market strength holds across all ICT sectors. Ranked by 2006 revenues, U.S. firms were among the global top three in communications equipment (Motorola, Cisco), IT equipment (HP, IBM, Dell), semiconductors (Intel, Texas Instruments), IT services (EDS, Tech Data), software (Microsoft, Oracle), and Internet-based activities (Amazon, Google, AOL).<sup>10</sup> Electronics manufacturing is the only sector without a U.S. presence in the global top-ten.

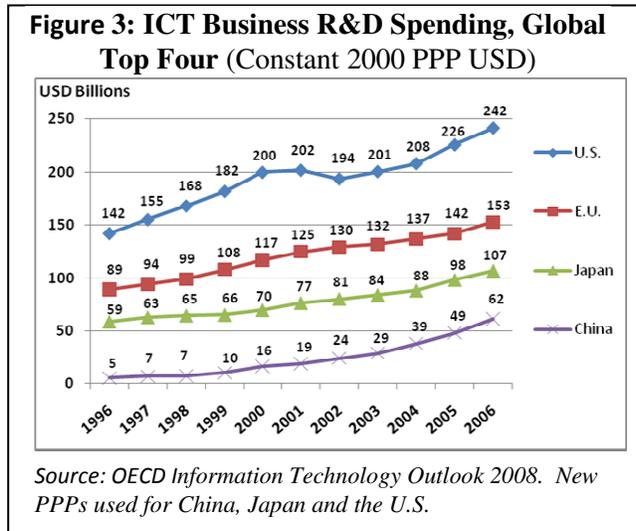
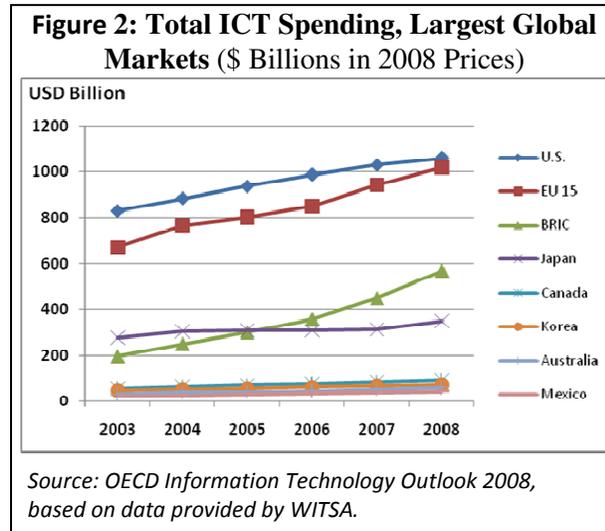
Second, in 2006 the U.S. also dominated in ICT R&D spending—it was the highest ICT R&D spender (\$242 billion), followed by the European Union (\$153 billion), Japan (\$107 billion), and China (\$62 billion).<sup>11</sup> The U.S. also has a large lead in installed ICT capital stock,

<sup>9</sup> OECD Information Technology Outlook 2008.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

which speeds U.S. consumer uptake of ICT innovations and encourages further investment (since rapid consumer uptake generates quick returns). So, U.S. firms probably will maintain a leading edge in ICT innovation, at least in the near-term.



Third, the United States holds a strong lead in AV content and IT services, sectors that face some of the biggest inflection-point challenges and opportunities. For example, U.S. firms dominate in high value-added AV content, and inflection point market changes are seriously undermining current business models in the AV content sector. As a result of convergence trends, broadcasters face serious competition from new IT and telecom entrants, and content pirates are increasingly using broadband advancements to expand illegal distribution channels and undermine current AV IPR and royalty licensing regimes. But, these same technological changes could open totally new legal distribution channels for AV content. Although content providers face increasing competition in their home markets, global broadband deployment and international AV standards can open an entire new range of international consumers.

In short, U.S. firms are on the leading edge of ICT market innovation, and are already encountering the inflection-point challenges that slower innovators have yet to reach. Moreover, since the U.S. is the only single-country ICT market with a large and diversified global market share, it is in a unique position to act on the full range of emerging challenges before they can negatively impact global ICT market growth. Unlike other single-country markets with a more narrow ICT presence, if U.S. government officials team with U.S. industry leaders and the NGO community to seek inflection-point governance solutions, they can tap into a broad range of industry expertise spanning all layers of the ICT stack that will enable the U.S. to provide unified global leadership for the full range of ICT policy challenges.

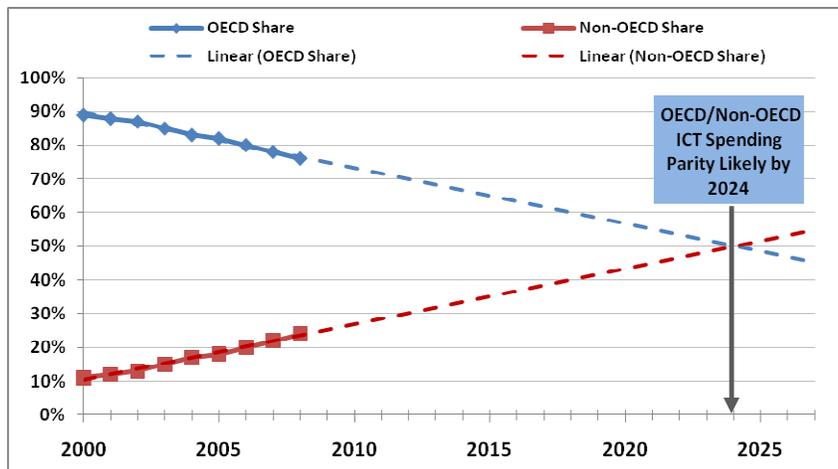
However, the time frame for U.S. leadership is limited. The global economic center of gravity is slowly shifting toward the emerging markets. Non-OECD countries already account for 49% of the global economy, and this number could rise to 57% by 2030.<sup>12</sup> In the ICT sector, the emerging markets – particularly Brazil, Russia, India and China (the BRIC markets) – are

<sup>12</sup> OECD Perspectives on Global Development 2010: Shifting Wealth.

growing much faster than the developed markets. Between 2003 and 2008 the BRIC markets grew at 18.2% CAGR, and they will likely grow 8.9% in 2010.<sup>13</sup>

Due to these uneven growth rates, U.S. and overall OECD market share is steadily decreasing. In 2008 the OECD share of global ICT spending was 76%, but that share has been decreasing by approximately 2% per year.<sup>14</sup> If this trend continues, the OECD and non-OECD portions of global ICT spending should reach parity around 2024.

**Figure 4: Global ICT Spending: OECD versus Non-OECD Share of the Global Total**



Source: OECD IT Outlook 2008 (2003-2008 data); OECD IT Outlook 2006 (2000-2005 data). Linear projections based on the 2000-2008 OECD data.

At the inflection point, this shifting market gravity is critical for three reasons. First, emerging market access will become increasingly important for ICT products and services. Modularity, convergence, and network expansion will make it much harder for a single vendor (or group of vendors) to dominate a particular geographical region. To remain competitive, ICT vendors must cast a broader geographical net, and emerging markets (with their escalating GDP and consumer buying power) will be a key area for growth.

Second, many emerging markets are facing strong internal pressures to roll out protectionist industrial policies that are not compatible with inflection point innovation and growth. These countries are now reaching the development stage where their own home-grown ICT firms can compete in the global market, and their rising domestic GDP and consumer buying power is increasing domestic consumption for ICT products. In response, many emerging market regulators are rolling out new industrial policies designed to turn their domestic markets into protected incubators for homegrown standards and firms, primarily by limiting the entry and presence of foreign standards and firms. Although these policies satisfy some short-

<sup>13</sup> When the BRIC markets are excluded from the 2010 global forecast, the expected global growth rate drops from just over 6% (all with BRIC included) to 4.1% (all non-BRIC). TIA 2010 ICT Market Review and Forecast.

Projected BRIC growth rates available at:

[http://www.tiaonline.org/market\\_intelligence/mrf/index\\_MRF\\_page\\_4.cfm](http://www.tiaonline.org/market_intelligence/mrf/index_MRF_page_4.cfm)

<sup>14</sup> OECD IT Outlook 2008.

term emerging market domestic interests, they also restrict competition, and that restricts longer-term emerging market innovation and growth.

Third, the increasing importance of emerging markets on the world stage makes it critical that they have a seat at the table for the next round of global ICT agreements. Yet, their current location on the development trajectory (and associated internal protectionist pressures) make it difficult for these emerging markets to reach internal consensus on the ideal global norms and principles for inflection point and post inflection point ICT market growth.

At present, a U.S. and OECD coalition probably has enough leverage to bring these critical emerging markets to the table and to build a global consensus on needed governance reforms. Since the developed markets still hold a dominant market share, emerging market firms still need access to them – they cannot meet their growth targets in isolation. As a result, the U.S. and other OECD markets can still leverage their market position to counter protectionist tendencies in the emerging markets, bring these key players on board, and construct a new governance regime that will be beneficial for all.

However, the U.S. and the OECD face a narrowing window for utilizing this leverage. By 2025 the global market balance will shift toward the emerging markets, and it will become harder for the developed countries to play a leadership role and more difficult to reach a global consensus on the ICT policy reforms needed to unlock inflection point opportunities

We could be sanguine about this if we were confident that all of the challenges in adapting governance to our opportunities would work themselves out through a business as usual process. Past public policies and technology breakthroughs have tilted the ICT architecture towards greater competition and technological diversity driven by market choices and modularity. This has promoted core public interest values, but we almost certainly are not at a stable equilibrium point for the inflection point.<sup>15</sup>

The current challenges arise from market access restrictions at and within borders for goods and services, obstacles to innovation and commerce arising from clashes in national approaches to public interest regulations, legacy regulations that do not respond to the changing realities of digital services and content, and impediments to network innovation and development. They are made more severe by failure to achieve timely advances on our understanding of how to achieve core public interest values. The Aspen IDEA project papers on “market opportunities” and “Internet freedom” address the issues in detail.

#### **IV. The Way Forward – Three Fronts for Action to Advance Three Freedoms**

Given the complex challenges and opportunities of ICT at the inflection point, hybrid approaches to reform are necessary if success is to be achieved. The challenge will be to match the principles and approaches to the problems at hand. We envision the creation of not one, but multiple, International Digital Economy Accords. To get things to work will require getting the big principles right and letting the norms, rules, and their implementation flow from that. Institutional innovation, including non-governmental institutions, will likely be necessary.

It is important to recognize the twin measuring sticks of success. On the one hand, no approach will be perfect—the question is whether it significantly improves on the alternative of

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<sup>15</sup> Cowhey and Aronson, *Transforming Global Information and Communications Markets*.

not acting at all. Focusing on agreed norms may be a necessary exercise before reaching enforceable agreements, for example. On the other, we must not confuse process with substance: is the change being produced, or changes in combination, so minor or slow that it misses the opportunity? Hollow proclamations of new norms without real changes in a timely way won't get the job done. *As we use these twin measuring sticks, the IDEA project urges that we look to measure our progress against three "freedoms":*

- ✓ The freedom to innovate
- ✓ The freedom to enjoy privacy, security and property
- ✓ The freedom of information and association

What ICT governance policies are needed and how can this be implemented? IDEA believes that a variety of paths forward will be necessary. As a convenient simplification, keep in mind *three fronts for advancing the improvement of global governance*:

- ✓ **The "Treaty Option":** binding inter-governmental agreements (e.g., Governments enter into trade, communications, law enforcement, privacy, intellectual property or other enforceable multilateral agreements).
- ✓ **Global Norms:** Non-treaty agreements that advance common expectations about desired outcomes and how to achieve them. These could be led by civil society, not just governments (e.g., Companies agree to "Codes of Conduct," "Good Practices" or other Norms to further agreed upon goals). Voluntary consensus standardization models have worked to promote ICT growth in the past two decades.
- ✓ **NGO Institutions:** Civil society institutions that could flexibly and transparently provide alternatives to inter-governmental organizations (e.g., create private organizations to monitor and enforce the agreed upon norms).

This simplification of the fronts for advancement into three categories will save IDEA participants from an encyclopedic manual of international cooperative options. But they are consistent with findings from more detailed treatises. Many international institutions and international agreements are well established, including the ITU and the WTO, and have regional bases (such as APEC, the OECD and CITELE). We have had ample opportunity to study what works, and why, in global governance. The results of this study serve as helpful reminders of what realistically can be achieved, and add some nuance to the "three fronts" for action.

Most scholars acknowledge that "self-help" by nations and national policy discretion normally trumps efforts at rigid harmonization of national rules or supplanting national capabilities with ones under the control of global institutions. Analysts of successes in global governance put more emphasis on the questions of whether international agreements can:

- ✓ *Set normative expectations and endorsement of some policy principles* (sometimes called "soft law" in the international legal community) even though these expectations and endorsements are not enforceable
- ✓ *Improve information flows and lower the costs of decision-making and bargaining among global stakeholders*, thereby increasing the likelihood that countries will either voluntarily agree on greater mutual adjustments of policies or find it simpler to negotiate more ambitious collective codes (e.g., the WTO non-

discrimination rules force agreements to be more ambitious than if countries could discriminate on market opening agreements)

- ✓ *Simplify the problems of cross-national coordination* by, for example:
  - *Agreements that particular national policy options are presumptively excluded* (while not harmonizing the overall policy mix, such as rules excluding certain options for national standards),
  - *Agreements to hold countries accountable for creating a particular policy capability* (as in the Basic Telecommunications Agreement requirement that there be an independent telecom regulator),
  - *Accept mutual recognition of rules and decisions of other countries* as long as they adhere to a common policy framework (a major feature of EU coordination)
- ✓ *Reduce the risks and increase the rewards of cooperation by international monitoring, certification, and enforcement arrangements* that can supplement (or legally channel) national self-help when there are disputes over meeting cooperative obligations.
- ✓ Countries sometimes have *more ambitious agreements*, including:
  - *Creation of binding codes* (such as WTO tariff agreements or, by a combination of custom and agreement, aspects of the law of the sea).
  - *Creation or acceptance of a special global capability* that is not tidily beholden to a particular country, as in World Bank lending or (arguably) Icahn's role in domain names.
  - *Creation of mutual recognition agreements* with regard to safety and compliance procedures (e.g., mutual recognition of national testing and certification of telecom equipment).

Two other features matter significantly in designing a strategy for global governance. One is familiar to everyone skilled in government decision-making—*forum shopping matters* as much for global governance as for domestic choices. The other is the *shifting role of stakeholders in global governance*.

The choice of forum influences the “constitutional rules” underlying any decision process and policy package from a governance initiative. It changes the lead agency driving the process from national governments. And it carries a distinctive “reputation” among global stakeholders as policy choices move from Washington and Brussels to New Delhi or Brasilia. Often it is helpful to seek new negotiating arenas to dislodge traditional ideologies and prompt creative action. For example, in the mid-1990s the G-7 played an important role by endorsing a set of new principles of ICT governance. This proclamation might have remained at the level of rhetoric, but negotiators found a way to pursue an inter-governmental level of binding accords; the WTO served this purpose during the 1990s GATS negotiations. The WTO venue circumscribed a less reform friendly ITU; moreover, the WTO's ability to create a novel form of quasi-harmonization of policy capabilities catalyzed even greater harmonization of telecom regulatory codes that went far beyond the requirements of the WTO accord. IDEA begins with the supposition that it will take progress in many forums, representing cooperative initiatives among

USG agencies and their counterparts, to move forward. A key challenge for the IDEA participants is figuring out the right mix of forums in a new decision environment.

The last great wave of reform in the global governance of ICT markets occurred in the mid-1990s as telecom liberalization and the emergence of the Internet and the Web propelled ICT into a high level of political and economic attention. Since then, two major changes have taken hold among global stakeholders in ICT governance.

The first shift is *the changing mix of market influence in ICT*, and thus of bargaining roles in governance. While the OECD region remains clearly predominant for now, change is happening. Leadership has to start with the current leaders—if they don't agree, who will?—but needs a plan that can also serve the emerging centers of market influence. This will be an important topic for IDEA participants as they seek to reach a consensus among OECD participants.

The second change is the *rising role of civil society actors in global negotiations* regarding markets and civil society interests. This is symbolized by the growing formal role for these stakeholders in inter-governmental meetings. Furthermore they could have a significant role in implementing practical changes in governance. As the number of influential stakeholders rise, it is often harder to reach agreement on major changes in binding inter-governmental agreements. Given the diverse range of changes that are needed, this suggests that new normative codes and institutional capabilities created by consent and cooperation among civil society will be key parts of IDEA outcomes, as suggested by the two fronts of “norms” and “NGO institutions”. Examples might include:

- ✓ Industry codes involving aspects of privacy protection.
- ✓ Mixed public-private authorities, organized by industry and monitored by governments, to assure higher common capabilities for global network security.
- ✓ NGO-led institutions to monitor and report problems in regard to Internet freedom.

There are ample precedents for these kinds of innovations featuring civil society leadership. For example, the Internet Engineering Task Force was a major process improvement over other standards setting approaches at the ITU at a key moment in the development of computer networking. Part of its flexibility and speed arose from its streamlined procedures and non-governmental status while allowing participation (in their private capacities) of academic, government and corporate experts.

Whatever the preferred set of options for redesigning global governance, the truth is that major governance shifts typically begin in the largest domestic markets. The beginning of a core consensus (not perfect agreement) on domestic governance reform will bolster any campaign for global change. Until some core for business-government consensus is forged in the United States, international diplomatic and negotiating initiatives are unlikely to bear fruit.

Getting from where we are to where we want and need to be is always the hard part. Navigating the path to change always takes time, leadership, and trust building in order to craft acceptable compromises, both within and among countries. The more players and the higher the stakes, the harder it is to reach agreement. Yet, the cost of waiting for crisis or collapse before implementing reform could be staggering.

Moreover, as national borders and market segments blur, it becomes harder to govern solely on a national basis. National policy choices have an inevitable international component. We seek common approaches that promote global coordination but also allow for significant variation in national policies.

The complexity of the task, and the high stakes, means that it will take commitment by the highest level of leadership in government and civil society to get through the many hurdles that reform will confront. One purpose of IDEA is to build a mutual understanding and trust that all of the key stakeholders will make the necessary effort. This process will begin in the United States. But, if successful, it will move to reaching the same level of commitment and consensus with the European Union's leadership. And then it will undertake the task of convincing leaders in the emerging markets that they, too, share an interest in acting with a sense of decisive urgency on seizing the opportunities for improving global society opened by this ICT inflection point.