

**United Nations Conference  
on Trade and Development**Distr.: General  
26 January 2011

Original: English

---

**Trade and Development Board**  
**Trade and Development Commission**  
**Multi-year Expert Meeting on Services, Development and Trade:**  
**the Regulatory and Institutional Dimension**  
Third session  
Geneva, 6–8 April 2011  
Item 3 of the provisional agenda**Services, development and trade: the regulatory  
and institutional dimension – Expanding trade  
opportunities for developing countries**

Note by the UNCTAD secretariat

*Executive summary*

Infrastructure services development fosters economic growth and development, thus contributing to the attainment of the Millennium Development Goals (MDGs). Infrastructure development is an essential component of countries' crisis-mitigation measures and post-crisis integrated growth and development strategies. Sound regulatory and institutional frameworks (RIFs) engender beneficial effects of infrastructure services sectors (ISS) – energy, transport, telecommunications and FS – in achieving socially efficient and equitable outcomes, addressing market failures particularly in financial sector and internalizing the costs of climate change mitigation and adaptation. International trade, regulatory and institutional cooperation, including in regional and South-South context, plays an important role.

## Introduction

1. The third session of the multi-year expert meeting is being held further to the decision taken at the forty-fourth executive session of the Trade and Development Board on 10 July 2008. The objective of the meeting is to assist members in establishing regulatory and institutional frameworks and cooperative mechanisms to strengthen their domestic services capacity and its efficiency, competitiveness and export capacity (Accra Accord, para. 94 (b)).

2. ISS are key economic sectors, constitute essential inputs to economic activities, and promote MDGs – e.g. access to energy and water and poverty reduction. They form an essential component of countries' crisis-mitigation, recovery and post-crisis comprehensive and integrated pro-poor trade and development strategies. Evolving economic environment, technology development and increased uncertainties have presented new challenges to regulators, which will require a continuous adaptation of ISS policy and RIFs at all levels.

## I. Economic trends in infrastructural services

### General overview

3. The global combined annual revenue of ISS stood at \$14 trillion in 2009, or 24 per cent of the world output. Developing countries represent 30 per cent of global ISS output and its importance has increased with the rise of emerging economies.

Table 1.

**Contribution of ISS to world income, employment and trade**

Sector	Share of Global GDP (%)	Share of Global Employment (%)	Share of World Services Trade (%)
Communications services	2.5	6	2.5
Transport services	6		23
Electricity, gas and water services	3.5	1	--
Financial services	6	3	9.5
Related services and technologies	6	3	--
<b>Total</b>	<b>24</b>	<b>13</b>	<b>&gt; 35</b>

4. Trade in ISS is significant and dynamic, particularly for DCs. ISS represent over 35 per cent of world services exports valued at \$1.3 trillion. For 2002–2008, world ISS exports expanded at 17.6 per cent, a faster pace than total services sectors. Developing countries' share in this trade climbed from 21.4 per cent in 2002 to 25.4 per cent in 2008 with their exports outpacing the world average (21.1 per cent and 17.6 per cent respectively). Developing countries' exports outperformed world exports in all ISS subcategories – communications (24.1 per cent), transport (20.2 per cent) and financial (25.2 per cent). In 2009, the estimated value of global energy service trade was \$400 billion, or 11 per cent of world services trade. This brings the share of ISS in world services trade to 46 per cent.

5. Construction services and ISS are interlinked, as construction is required to build infrastructure facilities. They represent 50–80 per cent of total project capital expenditure, and infrastructure represents 20–35 per cent of total construction spending. This implies a

global market for infrastructure-related construction of \$1 trillion in 2008. The sector is projected to grow 70 per cent globally by 2020 to represent 15 per cent of world output.

6. ISS provided 13 per cent of worldwide employment in 2008. Five per cent, or \$67 billion, of world ISS trade occurs through Mode 4, supporting 2 million jobs worldwide. ISS-related Mode 4 could be more significant if ISS-related construction services are taken into account.

7. DC exports in ISS are concentrated in a limited number of economies, given weak productive and export capacities (Table 2). Large DCs are among the top exporters, as transport services are associated with merchandise trade while Singapore has emerged as financial centers. ISS exports represent important source of income for many small DCs.

Table 2.

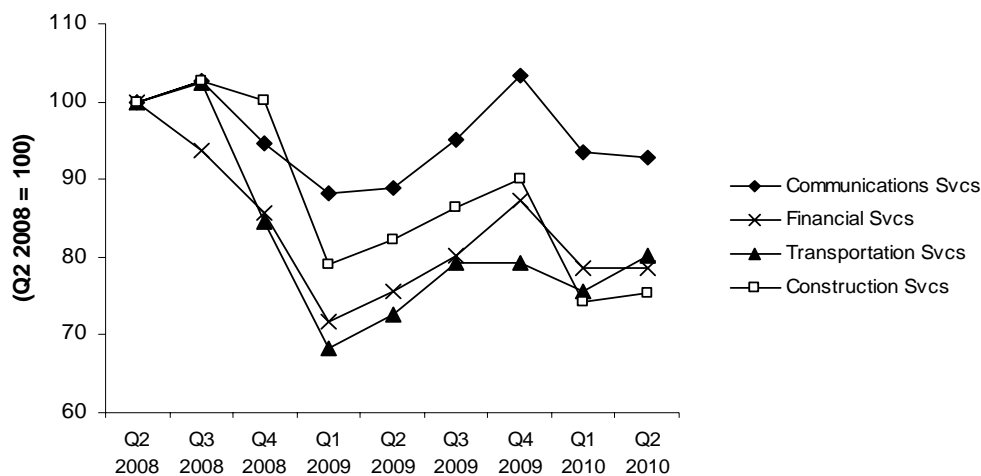
**Top 5 ISS exporters, 2008**

Top exporters in absolute terms				Top exporters relative to GDP		
Communications services	Exports (\$million)	Share of total national services exports (%)	Share of world services exports in this sector (%)	Communications services	Exports/GDP 1000	Share of total national services exports (%)
Kuwait	6,072	53	7	Kuwait	38.4	53
India	2,423	2	3	Bahrain	31.9	19
Egypt	1,611	6	2	Guyana	28.6	16
China	1,570	1	2	Grenada	19.7	8
Russian Federation	1,493	3	2	Republic of Moldova	18.9	14
<b>Transport services</b>				<b>Transport services</b>		
Korea, Republic of	44,768	58	5	Seychelles	185.6	36
China	38,418	26	4	Singapore	158.7	35
China, Hong Kong	28,886	31	3	Panama	134.1	53
Singapore	28,875	35	3	China, Hong Kong	134.0	31
Russian Federation	15,024	29	2	Antigua and Barbuda	111.6	24
<b>Financial services</b>				<b>Financial services</b>		
China, Hong Kong	12,365	13	4	China, Hong Kong	57.4	13
Singapore	8,458	10	3	Singapore	46.5	10
India	5,607	5	2	Bahrain	41.8	24
Korea, Republic of	4,252	6	1	Panama	25.0	10
Brazil	2,066	7	1	Antigua and Barbuda	15.1	3

Source: UNCTAD (2010).

8. While the global crisis had smaller effects on global services trade than merchandise trade, its effects on ISS were significant. World exports of transport and FS, and infrastructure-related construction services, all fell by 20–30 per cent, while the decline on communication services was smaller (figure 1) with the continued growth (7.7 per cent) of global ICT market driven by outsourcing, system and software development. By mid-2010, export levels remained 20–25 per cent below pre-crisis values for all sectors except communication. Energy services are expected to have been resilient due to the low income elasticity of energy.

Figure 1.  
Global exports of selected services categories

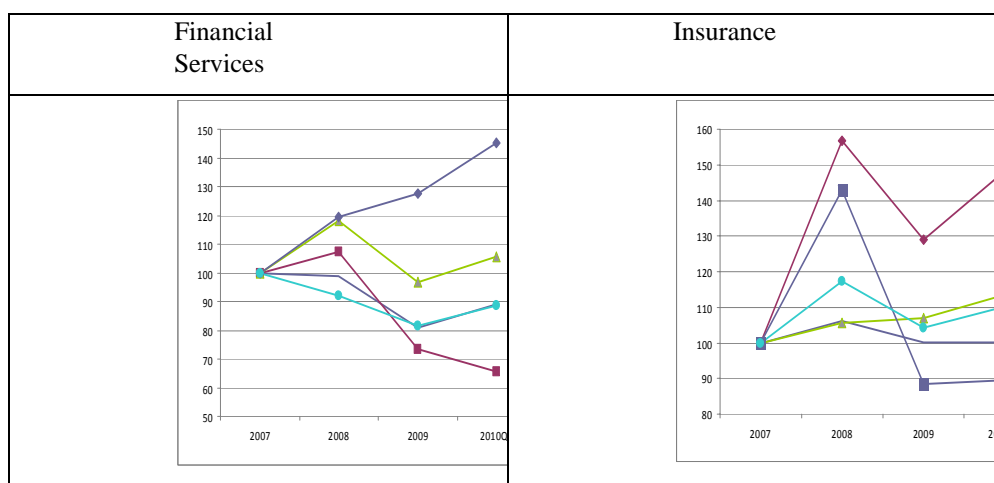


Source: UNCTAD based on IMF BOP.

9. Transport services were severely affected by a sharp drop in merchandise trade. After transport fell 15–25 per cent in 2009, recovery remains weak with volumes in global road, rail, and sea freight below pre-crisis levels by 5–10 per cent in late 2010. Only air cargo has fully recovered. The Baltic Dry Index, tracking shipping demand, declined by 90 per cent in late 2008 and remains at a level between 20–40 per cent of the 2008 peak since June 2009, partly owing to overcapacity. Estimates suggest passenger traffic grew by 10.5 per cent in 2010 after a contraction by 9.1 per cent in 2009.<sup>1</sup> Cross-border FS activities witnessed a sharp drop in 2009, with exports still significantly below their pre-crisis levels (35 per cent for transition economies, owing to their high exposure to troubled banking sector in Europe and the US). Latin America and Asia have exhibited resilience. In insurance, a sharp contraction in exports of transition economies and Latin America are notable (figure 2).

<sup>1</sup> IATA (2009). Annual report 2009.

Figure 2. Exports of financial and insurance services



Source: UNCTAD based on IMF BOP.

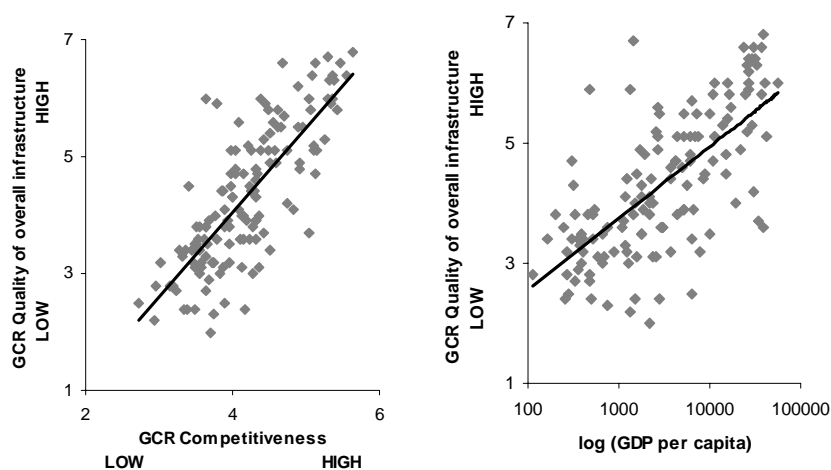
## II. Key policy and RIF issues

10. ISS is an important determinant of trade and competitiveness. Low-cost and reliable communication, transportation, logistics, capital and energy are essential for financing, sourcing, producing and marketing of goods and services, including those conducted within international supply chains. The significance of supply chains is evidenced by increased share in world trade of intermediate goods and services particularly ISS and related services (56 per cent and 73 per cent, respectively). Furthermore, energy, water, transport and logistics costs represent some 30 per cent of total production costs of manufactures.

11. Positive contribution of ISS to competitiveness, diversification and growth has been confirmed by empirical studies. UNCTAD's estimates also find a strong correlation between the quality of infrastructure, and economy-wide competitiveness and national income (figure 3).

Figure 3.

Relationship between infrastructure quality, competitiveness and income levels, 2010



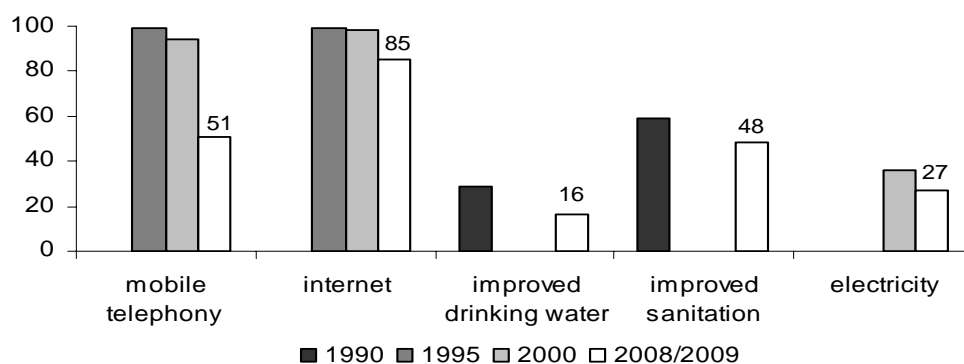
Source: UNCTAD based on WEF data (139 countries).

12. Research suggests that: during 1990–2005, improvements in infrastructure – telecommunication – contributed 99 basis points to per capita income growth in Africa, and deterioration of power services reduced growth by 11 basis points;<sup>2</sup> two countries with good ICT infrastructure trade 33 per cent more than a country pair where one or both countries have poor ICT infrastructure; eliminating electricity outages in DCs can increase business by 5 per cent;<sup>3</sup> a doubling of road density can increase a country’s trade by 13 per cent; a 10 per cent reduction in transport costs can increase a country’s trade volumes by 20 per cent.

13. Globally, over the next decade, the combined annual investment requirement for ISS is estimated at 3 per cent of world GDP. At current levels – 1.7 per cent of world GDP in 2009 or \$1 trillion – infrastructure spending will fall short of full investment requirements. While expanded networks and universal access (UA) have improved access to infrastructure services, progress in attaining MDG targets are limited (figure 4).

Figure 4.

**Share of total developing country population without access to basic infrastructural service.**



Sources: *The MDG Report (2010)*, *IEA World Energy Outlook (2010)*; *WB Rural Access Index (2010)*.

14. Seventy per cent of financing for infrastructure is provided by public funds, with the remaining 10 per cent financed by donors and 20 per cent by private investors.<sup>4</sup> The lack of sufficient public financing has been a major impediment to infrastructural development. With policy changes emphasizing private participation, private financing has become important, reaching \$83 billion in DCs (2008) (figure 5). For 2005–2009, the energy sector attracted half of the total private investment, followed by transport, telecom and water. In each sector, investment levels fell in 2008 before reaching \$94 billion in 2009.<sup>5</sup> Difficulty in achieving cost recovery remains a persistent impediment to private participation, particularly in energy (69 per cent in the electricity sector in low income countries) and water (12 per cent).

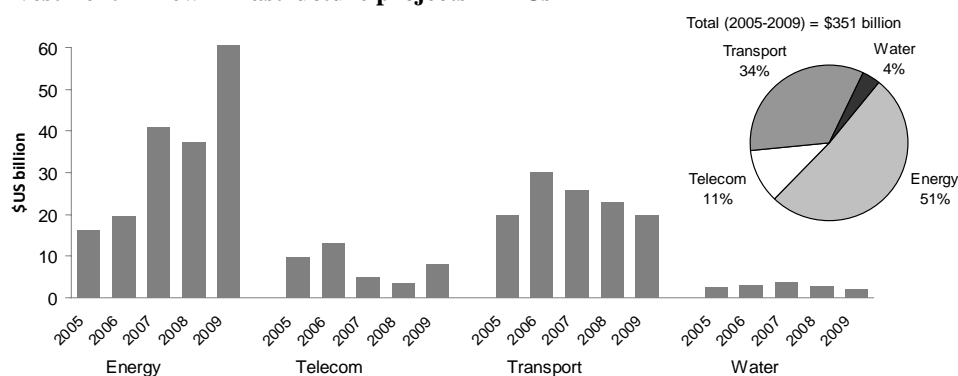
<sup>2</sup> World Bank (2010). Africa’s infrastructure: a time for transformation.

<sup>3</sup> USAID (2010). Information communication technology as a catalyst to enterprise competitiveness.

<sup>4</sup> Leigland (2010). PPI in poor countries.

<sup>5</sup> PPIAF (2010). Assessment of the impact of the crisis on new PPI projects.

Figure 5.  
Investment in new infrastructure projects in DCs



Source: World Bank and PPIAF, PPI Project Database.

15. Total world FDI stock in ISS surpassed \$4 trillion in 2008, representing 43 per cent of total world FDI stock in services, with 21 per cent located in DCs.<sup>6</sup> During 1990–2008, annual world FDI inflows to ISS increased tenfold to \$500 billion, or 48 per cent of global FDI inflows to the services sector. In 2006–2008, DCs captured 22 per cent of global FDI to ISS, the vast majority of which targeted the FS (69 per cent), followed by transport and communication services (23 per cent), and electricity, gas and water (8 per cent). South–South investment became important with the rise of TNCs from China, Hong Kong (China), Malaysia, Brazil and the Republic of Korea. Developing country FDI outflows targeting the services sector reached \$126 billion, 33 per cent of which targeted ISS (FS (79 per cent), transport and communication services (17 per cent), and electricity, gas and water (4 per cent)).

16. Development of ISS and RIFs must be anchored in a comprehensive, integrated and coherent strategy of growth, development and trade, with close coordination with accompanying policies – development planning, macro-economic, industrial, social, trade and investment, competition, consumer protection and environmental policies – promoting competitive productive capacity-building and public goods. Effective RIFs allow governments to successfully pursue multiple public policy goals, including ensuring quality, security, access, affordability and sustainability of infrastructure services. Coherence with sectoral development planning and public and private investment policies is important in ensuring orderly market entry and reliable supply, e.g. planning in energy requires a long-term power sector plan outlining demand-supply forecasts, reliability standard and a least-cost plan with alternative scenarios. Such planning is often neglected in reform process.

17. Various development visions and strategies have prioritized infrastructure development and ISS. The Kenya Vision 2030 envisaged interconnection through a network of roads, railways, ports, airports, water and sanitation facilities and telecommunications, with priority on infrastructure investment, including through PPP. It seeks to increase energy supply by encouraging private power generators and separating generation from distribution. Malawi’s Vision 2020 identified infrastructure development and “improving physical planning” as a priority. Brazil’s “Accelerated Growth Program” (2007–2016) directed \$600 billion to infrastructure, focusing on e.g. transport, energy, water and sanitation. Brazil created effective links between public procurement and

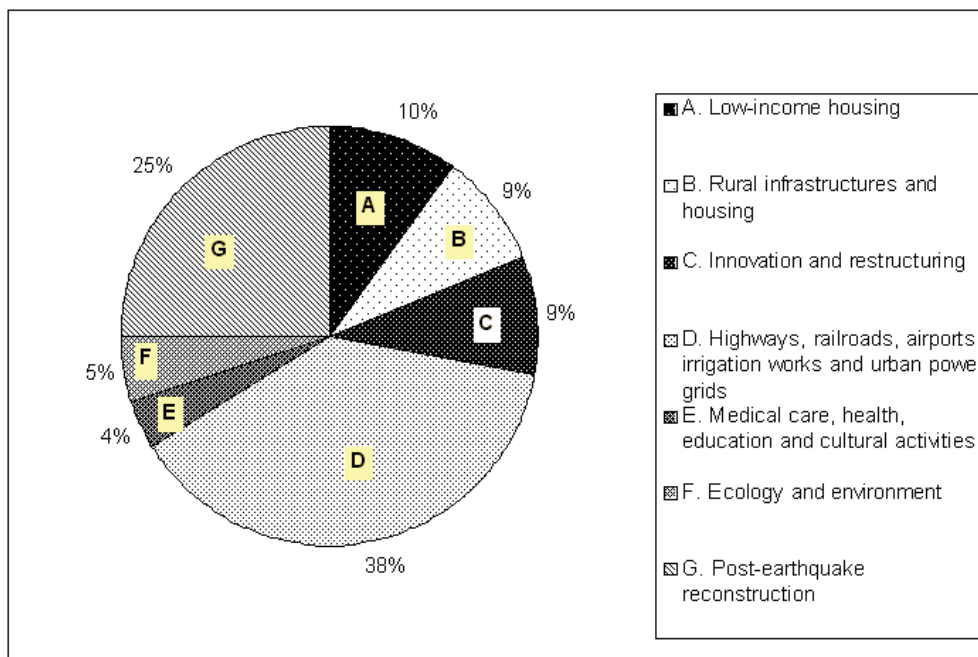
<sup>6</sup> UNCTAD (2010). *World Investment Report*.

domestic productive and innovation capacity, including by introducing “buy national” policies.

18. At the international level, a comprehensive and integrated approach to development planning involving ISS gained increasing support. The G-20 endorsed a Multi-Year Action Plan on Development to reduce infrastructure deficits and bottlenecks for growth. Various stimulus spending has targeted infrastructure development (e.g. China). Initial outlays estimated at \$400 billion or 0.7 per cent of world GDP supported infrastructure investment with a major portion directed to clean infrastructure and technologies.

Figure 6.

**China stimulus package**



19. The case for economic regulations arises from the need to correct market failures (externalities, information asymmetries, and monopolistic market structure) to achieve socially efficient and equitable outcomes that are not possible by allowing markets to allocate resources.

20. ISS were traditionally regarded as natural monopolies and provided by the State, particularly utilities. Since the 1990s, technological advancement coupled with restructuring and privatization allowed for unbundling of different segments in the vertically integrated ISS. Private financing was mobilized in mobile telephony, power generation and ports, but remained limited in roads, rail, power and water distribution. The State disengaged from ISS ownership through privatization, PPPs, concessions, built-operate transfer, FDI and trade. The role of the State was transformed from the one of provider to regulator. Experience of privatization and PPPs has been mixed, and the State continues to maintain substantial stakes in the provision of ISS including State-owned enterprises (SOEs).

21. Private participation can exist alongside government provision, even before sector unbundling. In electricity, independent power producers (IPP) complement State-owned utilities by generating power which the public electricity company retaining control of transmission purchases through power purchase agreements (PPAs). PPAs include quantity, quality, and price of electricity. While PPAs sustain investors' confidence in making



investments, concerns arise that they impede competition in the market. Given the high risk of energy projects, governments often provide guarantees on PPAs. Explicit criteria may be set for the allocation of new built opportunities, including UA obligations.<sup>7</sup>

22. Experience shows that the quality of regulations and institutional capacities matter more than ownership as key determinant of positive ISS performance. Regulations of the utility were prerequisites for pre-empting a public monopoly from being replaced by a private monopoly and avoiding overcapacity or underinvestment. In the electricity distribution sector, the introduction of regulatory agencies was associated with increased firm efficiency through labour efficiency and lower energy losses and with higher social welfare through lower tariffs.<sup>8</sup>

23. Reform since the mid-1990s addressed improvement of governance quality for SOEs. This was achieved through greater decision-making autonomy for the management, objective selection of senior managers, disclosure of conflicts of interest, strengthened monitoring by supervisory agencies, publishing of financial accounts, cost-based accounting system and functional unbundling of costs, and incorporating enhanced incentives for good managerial and staff performance and sanctions for failure to reach targets.

24. Assuring quality RIFs is the locus of national efforts to improve ISS performance, wherein useful lessons can be learnt. EU's "Smart Regulation" aims to get legislation right, including on ISS, by managing the quality of regulation throughout the policy cycle, improving the stock of its legislation through simplification and evaluation of benefits/costs, including through impact assessment, and improving implementation with guidelines. Australia's Office of Best Practice Regulation requires a regulation impact statement on the merit and efficiency of regulatory actions in meeting policy objectives with minimal costs for business and the community, assists decision-makers' understanding of the costs and benefits, encourages transparent, timely and meaningful stakeholder consultation, and ensures information-sharing between Government and the public.

25. Pricing regulation contributes to balancing differing interests, as price signals do not work in ISS due to monopoly and the lack of competition, and UA goals. Excessively high prices will defeat UA while artificially low prices discourage investment. Revenue capping method (RCM) is gaining attraction for its contribution to energy efficiency, as it influences demand-side response and consumer behaviour. The rate of return and price cap approaches provide no incentives for energy efficiency, as the more energy a company sells, the more revenue it makes. RCM sets a ceiling on the revenue that the operator could obtain in a given period, so that their profit increases by encouraging energy savings by consumers.<sup>9</sup> For DCs, concern exists that the potential efficiency gains from end-users are insufficient to warrant the transaction costs of adopting the RCM, which requires further examination.

26. Institutionally, the legal, financial and administrative independence in making decisions autonomously and accountably is important for the credibility of regulatory institutions. Meaningful stakeholder involvement is crucial to balancing different interests – suppliers, consumers and government agencies. Governments increasingly use various means, such as new technologies, to ensure regular interactions. The accountability requires transparency, regular performance evaluations, and appeal/review processes. Effective dispute-settlement procedures are essential for enhanced compliance, accountability, improved quality and pricing in ISS. A first review of a petition by the regulator before

---

<sup>7</sup> Draft peer review reports. Eberhard *et al.* (2010).

<sup>8</sup> Estache and Rossi (2008). Regulatory Agencies: Impact on Firm Performance and Social Welfare.

<sup>9</sup> Ashley Brown (2010).

recourse to tribunals would avoid delays. Addressing disputes between operators and regulators, as well as operators and consumers, is instrumental. Peru's National Institute of Competition and Protection of Intellectual Property (INDECOPI) exemplifies efforts to protect consumer interest by addressing their complaints.

27. The clarity of roles and coherence between sector regulators and competition authorities would avoid duplication and conflicts, and enhance implementation. Sector regulation is often applied *ex ante* whereas competition law *ex post*. This requires coordinating and harmonizing competition law and sectoral regulation and policies, eliminating barriers to fair interconnection, regulation of monopolistic market power and dominant positions arising from vertical integration, assessing the feasibility of mergers and acquisitions (M&A), and facilitating inter-agency cooperation. This can pre-empt "forum shopping", whereby firms seek actions by the "friendliest" agency, and "double jeopardy". Countries allocate variously regulatory jurisdiction between the institutions (box 1).

**Box 1. Competition policy and sectoral regulations**

In Indonesia, responsibility in telecom is shared between Ministry of Communication and Information Technology and the competition authority (KPPU) through an MOU with KPPU entitled to provide advice on competition policy issues. In Australia, the Competition and Consumer Commission is responsible for national competition law across all industries. Sector regulators such as the Australian Communications Authority are only responsible for technical regulation. In the United Kingdom, the Office of Communications is competent on both competition and sector-specific rules. In Jamaica, the Office of Utilities Regulation has to refer matters of competitive significance to the Fair Trading Commission. Peru's INDECOPI is a horizontal competition authority in all sectors except telecommunications which has sectoral regulator. INDECOPI has competence for all *ex post* review (unfair competition acts) and *ex ante* assessment of energy-sector M&As.

28. Coordination between sector regulators and competition authorities is important in non-network ISS not characterised by natural monopoly where competition is feasible, because particular competition issues arises in a market with a mix of private and public ownership (e.g., the United Kingdom airport market). Replacing economic regulation by competition regulations is a possible outcome. The regulator may broaden its analysis to factor in the impact of decisions concerning regulated airports on downstream markets and competing, unregulated airports.

29. RIFs require continuous adaptation to evolving market environment, technological developments and emerging challenges. The financial crisis affected the viability of many ISS providers. The rapid expansion of technology frontiers calls for regulatory modernization. In telecommunication, convergence has necessitated a second wave of regulatory reforms,<sup>10</sup> to ensure infrastructure sharing, services-neutral and technology-neutral licenses, enhanced competition, and expanding UA from fixed-line voice services to broadband. Climate change mitigation and adaptation is significant for ISS regulations as the sector is a major contributor to global carbon emissions. Regulatory actions are needed to improve measurement and control of emissions, promote cleaner energy, technology and energy efficiency, and prevent and manage water scarcity, natural disasters and reconstruction.

<sup>10</sup> ITU (2010). ICT Regulatory News.

### III. Regulatory reform in FS

30. The global financial crisis demonstrated the critical shortcomings in financial RIFs. It was an apparent case of regulatory failure in addressing rampant market failure, and challenged the efficient market hypothesis, thereby calling for reviewing the role of the State in financial regulation. Ultimately, the success of the regulatory reform would be judged against whether it could address the root causes of the crisis and preventing future crises, and to restore a well-functioning financial system that allocates capital to useful productive and real economy activities.

31. FS present unique features conditioning regulatory approaches. First, the sector is a backbone of economic activities, thus social and economic cost of regulatory failure is extremely high. Second, integration of the financial market makes international regulatory cooperation critical. Otherwise, regulatory arbitrage would make national regulations ineffective. Third, differentiated/less stringent regulatory regimes for DCs for their lower level of regulatory infrastructure (regulatory and policy space) may be difficult to reconcile with full capital mobility, lending support to some form of capital control. Otherwise, DCs would incur higher adjustment cost associated with upward regulatory harmonization and institutional reform. Fourth, reform will incur economy-wide adjustment costs. These underline the case for coherent but not common regulatory structure adapted to national circumstances because what works for one country may not work for another.

32. The financial regulatory architecture is currently under extensive restructuring in national and international platforms. The thrust of the reform is to make the regulatory framework more holistic by transforming micro-prudential supervision of individual banks into macro-prudential supervision of an entire financial system. Also at issue is to build an institutional solidarity mechanism for burden sharing that requires the financial sector to pay for the costs of its risk-taking to compensate those who suffered its costs, including through financial taxes, which are justified on efficiency grounds – internalize externalities associated with financial excesses.<sup>11</sup> In regulatory terms, market entry and technical regulations are the core of these efforts. Proposed regulatory approaches are largely price-based in that incentives are modified for banks to change their risk-taking behaviour while certain “activity restricting” quantitative approaches are also pursued, like an outright prohibition of certain “socially harmful” activities, including proprietary trading by deposit-taking banks (“Volcker rule”) and banks’ ownership of hedge funds and private equities.

33. The regulatory focus on macro-prudential supervision implied corresponding changes in national institutional settings and their functions. Extending the regulatory perimeter to sectors excluded from tighter banking regulations meant a reallocation of competencies among agencies, and creating a dedicated one on macro-prudential supervision. Macro-prudential focus had macroeconomic policy implications, as it would require macroeconomic surveillance and coordination with monetary policy, thereby blurring the distinction between fiscal and monetary policies, and financial regulations.

---

<sup>11</sup> Alexander *et al.* (2010). Crisis management, burden sharing and solidarity mechanism in the EU.

**Box 2. Role of central banks in financial regulations**

Central banks traditionally played less prominent role in financial sector stability, as maintaining low and stable inflation was their main contribution to financial sector stability. Macro-prudential focus of current reform has strengthened their role. Financial stability is a shared responsibility, involving fiscal authority, non-central bank supervisors and competition authorities. Thus, the design of institutional arrangements is important. Where both monetary policy and prudential regulations are conducted by the central bank, separate governance arrangements are needed to ensure monetary policy independence (e.g. United States). Where monetary policy is separate from macro-prudential supervision (e.g. United Kingdom's Financial Services Authority), strong inter-agency coordination is important, to ensure coherence of macro-prudential policies with monetary policy objectives. In the United Kingdom, the Bank of England would be responsible for the prudential oversight.

34. The United States adopted the “Dodd Frank Wall Street Reform and Consumer Protection Act”, which creates a systemic risk regulator (Financial Stability Oversight Council) to conduct macro-prudential supervision, establishes a consumer protection entity to address mortgages and credit card, extends regulatory coverage to “shadow banking system” (private equity and hedge funds), enhances transparency in derivatives trading (the central clearance of the OTC derivatives), addresses corporate governance (executive pay), strengthens regulation on systemically significant institutions. The EU approved three pan-European supervisory authorities to deal respectively with banking, insurance and securities, and a European Systemic Risk Board composed of central banks and supervisors to address macro-prudential regulation. There is need to study countries which did not make regulatory changes as well as learn lessons from countries which have done well, e.g., China, India, Canada and Australia.

35. At the international level, regulatory reform and coordination have evolved around the Financial Stability Board and G-20. The major reform agenda is strengthening bank capital and liquidity standards under the Basel Committee on Banking Supervision (BCBS). The new rules on bank capital and funding (“Basel III”) seek to improve the banking sector's resilience to financial shocks and strengthen macro-prudential regulation and supervision, and will be introduced gradually to facilitate sectoral and macroeconomic transition, beginning in January 2013 until 2022.

**Box 3. Basel III**

To improve the ability of banks to cover losses, Basel III improved the quality of the regulatory capital base and increased its amount. On quality of capital, emphasis is placed on common equity (e.g. common shares and retained earnings) as the highest quality component of bank capital in absorbing losses, and the definition of common equity are tightened. On the amount of capital, the required level of common equity is increased from 2 per cent to 4.5 per cent, and the minimum level of Tier 1 capital (which include common equity) from 4 per cent to 6 per cent. Banks are required to hold a capital conservation buffer of 2.5 per cent in the form of common equity to withstand future stress. This brings the total common equity requirements to 7 per cent. Existing rules tended to have pro-cyclical impact, as banks reduced credit provision and increased capital base in a downturn to absorb increased losses, which have an effect similar to monetary contraction. New rules require banks to increase capital buffers in good times to draw down in periods of stress. The absence of adequate risk coverage of various on- and off-balance sheet risks were major destabilizing factors, as risks associated with derivatives-related exposures were not adequately captured. Basel III strengthens the capital requirement for such exposures. As regards leverage ratio, the build-up of excessive on- and off-balance sheet leverage in the banking system amplified financial volatility. Leverage ratio has been introduced to set a limit to banks' borrowing. For the first time, Basel III introduces a global minimum liquidity standard. During the crisis, despite adequate capital levels, various banks suffered a shortage in liquidity with the rapid reversal of market conditions.

36. Reform is expected to bring long-term economic gains by reducing the probability and frequency of future crises. The proposed changes prompted an intense debate over their possible adverse effects, as tighter capital requirements could increase the cost of credit and lower its availability (an assumption some studies contest).<sup>12</sup> Estimates by the financial industry group indicated that reform would subtract an annual average of as much as 0.6 per cent from the path of real GDP growth over 2011–2015 for the United States, EU and Japan. By contrast, BCBS estimates suggest that the impact would be moderate, both in the short and long terms, distributed over time.<sup>13</sup> A 1 percentage point increase in the required ratio of capital would typically lead to an average annual growth rate reduction of 0.04 percentage points. This could translate into loss in annual rate of 0.12 per cent in the United States, 0.15 per cent in the euro area and 0.17 per cent in Japan over 2011–2018. Gradual implementation is found important in allowing banks to raise capital by retaining earnings and issuing equity rather than by cutting lending and increasing interest rates.

37. A major outstanding issue is the moral hazard created by systemically important financial institutions ("too big to fail" banks). They are so large and interconnected as not to be allowed to go into bankruptcy, and benefit from an implicit government guarantee. They have an incentive to take excessive risks and benefit from subsidized cheaper funding. Various regulatory approaches are being tested. One is to require higher capital for such banks to reflect the greater risks they pose to the financial system. Another is to introduce *ex ante* safe, rapid and effective "resolution" regimes, including on a cross-border scale, in case of insolvency. Such procedures would define how losses are distributed among creditors, so as not to disturb the system and expose taxpayers to loss.

<sup>12</sup> <http://www.gsb.stanford.edu/news/research/admatiopen.html>.

<sup>13</sup> BCBS, August 2010.

38. On financial transaction taxes (e.g. tax on foreign exchange transactions, derivatives, and bank balance sheets), G-20 countries have different perspectives. The idea was presented as a mechanism to improve prudential regulation by taxing excessive risk-taking, so that banks can pay for the costs of financial crisis and provide an innovative source of financing for global public goods. Taxes levied at a very low level would not significantly distort financial markets while providing significant source of revenue. Tax of 0.005 per cent on currency transaction is estimated to generate \$33 billion annually. IMF proposed a “financial stability tax” on bank balance sheet to pay for a bank resolution fund and/or a “financial activity tax” on profits and remuneration to provide a general revenue fund.

39. Regulatory reform has important implications for DCs. Subsidiaries of cross-border banks from developed countries often have dominant positions in DCs, and the regulatory changes applying to parent banks could affect DCs. Over 50 per cent of total banking assets are held by foreign banks in 34 of 91 countries reporting data. New regulatory environments aimed at securing financial transactions, including more stringent information requirements on counter-party in low-rated countries, increase the cost of business, as evidenced by a significant fall in trade financing for DCs. Higher liquidity and capital requirements may increase the cost of holding minority interest in emerging markets’ banks, and could reduce cross-border investment and lending, owing to unfavourable risk weights assigned to DCs. New risk weights assigned to different assets would render loans to SMEs and project finance more costly, adversely affecting economic and employment growth. New liquidity standards may challenge long-term bank funding for emerging market banks with thin domestic financial markets for long-term funding. Tighter rules might induce financial companies to resort to “jurisdiction shopping” in search for looser regulations.<sup>14</sup> This may result in increased exports of financial services from DCs, but could increase risks and volatility of their financial sector.

40. Many DCs were relatively de-coupled from the financial crisis as they had pursued a prudent regulatory approach and/or were not fully integrated in the global financial markets. Since many DCs are yet to adopt the Basel II framework and Basel III is not mandatory, it is important that they are able to adjust the rules to national circumstances so that implementation of the new rules does not risk their financial stability or developmental objectives. The potential costs of introducing Basel III are high given their existing levels of RIFs, institutional infrastructure and Banks’ internal controls (risk-ratings models and data requirement). Sophistication and development of financial markets in any country should be in step with the improvements in regulatory skills.

41. Some DC experiences reveal the importance of ensuring linkage between real economy and financial sector through adequate regulations and toolkit to link the sector to development objectives. Banks least affected by the crisis were those that stuck to the traditional banking, concentration on retail banking and restrictions on excess leverage. Where private banks failed to extend credit to the productive sector, many DCs resorted to State-owned/public banks and development banks (e.g. BNDS in Brazil). Banks from countries with carefully controlled financial markets performed well (India, China). Islamic finance is among the fastest growing segments in global finance, with its revenue expected to reach \$120 billion by 2012. The lack of exposure to certain types of assets associated with the crisis – and its asset-based and risk-sharing nature – have shielded Islamic financing from the crisis, as they are forbidden from investing in such derivative instruments.<sup>15</sup> These features make their activities more closely related to the real economy, which can provide useful lessons.

---

<sup>14</sup> Beck (2010), *Regulatory reform After the Crisis: Opportunities and Pitfalls*.

<sup>15</sup> IFSB, IDB, IRI (2010). *Islamic Finance and Global Financial Stability*.

42. The crisis-related financial rescue measures brought to the forefront their trade and competition effect, and implications for GATS commitments and rules, including “right to regulate”. Government support to the financial sector in developed countries ranged from 0.8 per cent to 18.9 per cent of individual GDP. The United States extended \$1.7 trillion to financial institutions, and European countries \$854 billion. While these measures may be justified on the systemic ground, their sheer size indicates likely significant trade and competition distorting effects. These measures led to consolidation and concentration of large institutions, and their increased size and market share, by strengthening their competitive edge with subsidized cheaper funding and, in some cases resulting in rescuing otherwise unviable institutions.<sup>16</sup> Indeed, the larger banks tend to hold lower capital than their smaller competitors, hence higher leverage and return on equity. Many DCs lack fiscal capacity to undertake such measures.<sup>17</sup>

43. No explicit definition of subsidies exists under GATS. Specifically for FS, potentially GATS-inconsistent measures taken “for prudential reasons” could be justified under a “prudential carve-out” for ensuring integrity and stability of financial system (GATS Annex on FS). Nonetheless, specific commitments – national treatment – would be relevant in regulating the manner in which subsidies are granted. If support measures are reserved for domestic, as against foreign, FS suppliers in committed sectors, they may be challenged although such measures may be covered, again, by prudential carve-outs. For instance, one financial rescue programme defined eligibility criteria as those financial institutions “established and regulated” and having “significant operations” in the country. The regulatory discretion in determining what constitute “significant operations”, for instance, might give rise to differing interpretations. The issue that arises then is whether these measures satisfy conditions of that carve-out provision, namely, (a) they are taken for prudential reasons; and (b) they are not being used as a means of avoiding the Member's commitments or obligations.

44. FS are the sector where the most commitments were made after tourism, including WTO accession commitments containing deeper liberalization. The 110 schedules contain commitments, particularly in Mode 3, in at least one FS sector with relatively extensive coverage of core commercial bank services – deposit taking and lending – and fewer commitments in capital market-related services such as trading.

45. The ongoing RIF reform, and economic rationales underpinning it, would affect liberalization under the Doha Round. Offers are mainly improvement of Uruguay Round commitments rather than new ones. Some countries called for a cautious approach to negotiations. Without addressing the effects of subsidies, further liberalization could expose DCs to unfair competition. Large financial operators in DCs may act as vectors of contagion, given that foreign banks have strong presence. DCs are giving greater attention to host country regulations by requiring the establishment through the creation of a subsidiary (which entails legal personality), rather than direct branching, and by seeking assurances from subsidiaries' parent institutions about the financial soundness of branches and subsidiaries. Particular type of commercial presence is thus perceived as instrumental for prudential oversight of foreign suppliers. Application of rules of origin and roll-back of measures in financial sector is difficult.

46. Concern arises from capital account opening implied by GATS commitments. Since certain FS entail capital movement by their very nature (e.g. deposit taking, lending or securities through Mode 1), GATS requires free capital movements associated with such commitments although liberalization in payments and capital transfer are not an obligation.

---

<sup>16</sup> WTO (2009).

<sup>17</sup> UNCTAD, TD/B/C.I/MEM.3/5.

This could potentially constrain DC ability to manage and control capital flows to protect themselves from the excessive financial volatility while sensible capital account management has gained increased acceptability. The recent episode of capital controls (e.g. tax on foreign purchase of domestic assets) introduced by several countries (e.g., Brazil) to counter increased capital inflows, and possible distortive outflows, lends further support to capital account management.

47. Commitments undertaken by 17 countries under the “Understanding on Commitments in FS” are seen as indicating the future direction of liberalization in FS as evidenced by requests. Some question the economic rationale of such commitments, including for prudential reasons. Its “standstill obligations” imply that any limitations to the commitment should be limited to existing non-conforming measures, thereby eliminating the difference between “bound” and “applied” level of regulations. There is an obligation to allow for the provision of “new FS” by any foreign suppliers established in the territory. This might run counter to the increased regulatory attention given to financial product safety, consumer protection and risk management. Provisions on government procurement where MFN and national treatment obligations are extended are WTO-plus. These obligations are replicated in regional contexts, especially North-South, the implications of which warrant closer attention.

#### **IV. Transport services**

48. Transport costs affect trade, production and competitiveness, especially for goods produced in international supply chains. Passenger transport is essential to tourism (\$3 billion-a-day business) where DCs, including LDCs, have developed competitiveness and trade. It is the main source of foreign exchange for one third of DCs and one half of LDCs, where it represents 40 per cent of GDP. Transport services are capital and technology-intensive, relying on essential infrastructure facilities (e.g. port, airport), while some segments of road and maritime services are labour-intensive with large small-scale operators. Maritime and road transport carries 90 per cent of global trade. Road transport is important for inland and short-ranged transport, as the main internal and regional transport mean especially for land-locked countries, because rail and maritime networks are not fully developed.

49. All transport services are highly regulated for externality, safety and security reasons. Regulations are usually designed by transport ministries and implemented by sectoral transport regulators. Airport or port agencies manage physical infrastructure, which often remains under public ownership but may be run by the private sector through PPPs (e.g. management contracts). Transport regulations address: safety and security (e.g. technical conditions of vehicle, and the qualifications of the pilots/drivers); social legislation; market entry (e.g. licenses); conditions of key infrastructure facilities; environmental aspects (e.g. pollution control, hazardous cargo); and UA. Subsidies are prevalent, particularly road and rail. Stimulus spending prioritized transport infrastructure (e.g. China 22 per cent, EU 11 per cent, and the United States 9 per cent).

50. Climate change mitigation and adaptation became an important regulatory objective, given that the sector is responsible for 23 per cent of world energy-related GHG emissions, 65 per cent of which originates in road transport. Efficient fuel use, fuel shift and the reduction of GHG emissions were introduced in international air and maritime transport regulations, including individual and fleet vehicle controls, efficient-fuels regulations and fuels/CO<sub>2</sub>-based taxes. Technological adaptation to such new, more-costly, regulatory standards introduces challenges for DCs to preserve their competitiveness and to adopt strategies to meet new regulatory adaptation challenges, including R&D and alternatives



fuels and vehicles, certification schemes, lower emissions fleet renewals, and ECO driving. Technology transfer is key to the climate technology mechanism under the UNFCCC.

51. International regulatory cooperation is crucial in liberalization and regulation of cross-border trade in transport services. Traffic routes, access quotas and technical standards in air and road freight transport are dealt with through bilateral agreements e.g. under the International Civil Aviation Organisation (ICAO). Traffic routes and cabotage (both air and maritime) are often excluded from trade agreements on reciprocity grounds. Bilateral road transport agreements (BRTAs) are the predominant mode of organization of international road transport. BRTAs determine the traffic between the two parties to the exclusion of third countries and set a quantitative framework by annually establishing quotas for the number of authorized journeys, including for transit. They typically prohibit cabotage, define transit taxes and technical standards, manage a system of permit and traffic quota.

52. Market access to foreign passenger air carriers has been determined by a complex system of 3,500 bilateral air service agreements (BASAs), including a few regional agreements. About 100 of ICAO's BASAs between 50 countries cover two-thirds of world traffic. BASAs effectively impose country-specific quotas in each market and grant core "air freedoms." Such "traffic rights" are excluded from WTO under Annex on Air Transport Services. Liberalization of air traffic rights through BASAs is estimated to increase passenger traffic by 15–30 per cent. "Open skies" within regional integration agreements or plurilateral air services agreements further accelerates integration and better cost allocation by avoiding restrictions on international route rights and enabling cooperative arrangements between airline companies (code and routes sharing).

53. For maritime transport, 18 competition-limiting private undertakings (e.g. "shipping conferences", "stabilization agreements", often carved out of national competition laws) has constituted a central regulatory issues affecting maritime transport. The sector is concentrated with 20 companies representing 70 per cent of world market share.

54. The effective level of openness in transport is higher than GATS commitments. Transport services are typically traded through Modes 1 and 3. Traffic rights in air transport are excluded from GATS; liberalization commitments are limited in road and maritime transport. For example, 49 countries made specific commitments in Road Freight Transport Services (RFTS) but only 13 countries did so in mode 1, a critical mode in RFTS, and carve-out of cabotage is a common feature. Thirty-eight countries made commitments in international maritime freight transport. MFN exemptions are common in cargo and passenger road transport (50 countries in RFTS including EU, Switzerland, South Africa and the United States), 19 largely motivated by the need for reciprocity under BRTAs.

55. Entry barriers in RFTS include licenses/permits for cross-border services and quotas regarding volume or operators, limitations to cabotage or economic needs tests. Licenses are required to operate in 33 of 37 OECD countries. Requirements for trans-shipment and use of national commercial services for cargo (e.g. customs brokers) are reported. Nationality conditions on employees exist in 39 countries. Restrictions apply to foreign participation and form of incorporation.<sup>20</sup> Discriminatory treatment in licence granting, internal and transit taxes and compulsory escorts has been also reported. Excessive taxation for vehicles, technical standards (e.g. maximum weight) and environmental standards (e.g. maximum level of CO<sub>2</sub> emissions) could constitute non-discriminatory barriers. Lack of harmonization in customs procedures hinders road transport. Services suppliers in all

<sup>18</sup> For comprehensive analysis, UNCTAD (2010). *Maritime Transport Review 2010*.

<sup>19</sup> IRU (2009). *WTO and Road Transport*.

<sup>20</sup> World Bank (2010).

transport sectors, including professional truck and bus drivers, face visa-related obstacles. They are significant as the foreign nationality of the drivers is common. The GATS negotiations are yet to deliver real market access on Mode 4.<sup>21</sup>

56. Several DCs have expressed interest in removing barriers on passenger transport under a “tourism cluster” to facilitate the growth of tourism industries.<sup>22</sup> Passenger transport is a prerequisite for the tourism sector. Eighty per cent of tourism occurs through air with 480 million international tourists registered in 2009. Liberalization would require regulatory cooperation. Phasing out MFN exemption could be important in expanding trade opportunities. Negotiations need to address above-mentioned barriers, particularly in Modes 1 and 4. Facilitating visa issuance and control for transport services suppliers could be beneficial. For LDCs, preferential market access in ISS through e.g. Mode 4 MFN waiver could generate important gains. Negotiations on trade facilitation are relevant in addressing barriers affecting RFTS, including transit.

57. Since reciprocity plays a pivotal role in transport services, and physical proximity is a precondition for road transport, regional trade, regulatory and cooperative frameworks is important. ASEAN embarked on liberalization and regulatory cooperation in cross-border road freight transport (“Framework Agreement on the Facilitation of Inter-state Transport” of 2009), by setting the number of interstate transport vehicles (500 per party) that may be used by established transport operators, which contributed to 3 per cent increase in exports. African countries scaled up road and air transport integration, such as under “SADC Protocol on Transport, Communications and Meteorology” (2008) by creating a multimodal/logistic integrated framework for transport to address comprehensively infrastructure development, market access and regulatory cooperation, and regional funding.<sup>23</sup> Difficulties were encountered owing to weak vehicle and road safety, delays in border crossing and underdeveloped rural networks. The Yamoussoukro Decision gradually liberalizes intra-Africa air transport, supported by common regulations on safety, security and competition safeguards. Concerns over local competition constrained implementation. The implementation of regional frameworks often encountered challenges, such as in reconciling trade commitments and domestic policy objectives (e.g. NAFTA case on cross-border road transport).

## V. Energy services

58. The energy sector is among the largest market, with an annual value representing 10 per cent of global GDP. Demand growth for energy would continue with dynamic growth of emerging economies. The sector is capital-intensive, with large investment required for prospecting, production and transport. While oil/coal markets are global, electricity/gas are regional, owing to transportation and storage constraints. Energy services encompass services involved in the exploration, development, extraction, transportation, transmission, distribution, marketing, consumption, trade and management of energy. For electricity, main components are power generation, transmission over high-voltage lines, distribution to end-consumers through low-voltage lines, and others related to retail sales (e.g. installation, metering and billing).

59. While trade in fuels is regarded as merchandise trade, production, generation and trade of energy are generally considered as services. Cross-border trade is limited, as only a marginal proportion of national output is exported. Much of this trade is among

---

<sup>21</sup> WTO (2010).

<sup>22</sup> WTO, S/CSS/W/19 and S/C/W/127.

<sup>23</sup> ICA (2008). Update on regional infrastructure projects.

neighbouring countries. Paraguay is the world's largest exporter of electricity, representing 7 per cent of global exports. The major foreign investors are large firms from developed countries, while firms from Brazil, India and Malaysia are important investors, mainly in DCs.

60. Liberalization and regulatory reform in the sector has included: privatization of state-owned utilities; vertical separation of generation, transmission, distribution and commercialization; horizontal separation limiting industry concentration among generators; ensuring equal access to transmission and distribution infrastructures; and establishment of an independent regulator. Around 100 countries allowed private participation between 1990 and 2005, particularly in generation and commercialization to end-users,<sup>24</sup> creating wholesale and retail electricity markets. Private participation is more difficult in the transmission and distribution (e.g. metering, billing, collection and retail services).

61. Independent power producers (IPPs) became important in generating new power capacity, which increased the variety of services, e.g. site selection, environmental impact assessments and project management. This represents an opportunity for UA by developing smaller-scale power generating systems closer to the demand, including rural areas unconnected to national grid.

#### **Box 4. Power systems in Africa**

A review of the power sectors of six Southern and Eastern African countries revealed that the reliance on national (mainly hydro) energy sources and insufficient long-term planning often led to costly emergency thermal generation owing to frequent droughts. Many engaged the private sector, particularly in generation (including through PPPs or IPPs operating alongside the SOE) with greater government role in other segments (e.g. transmission).<sup>25</sup> The competence of the regulator in planning, managing complex tendering processes, effective contract conclusion, overseeing PPAs and tariff setting, was key determinant of success. Universal service and rural electrification might require creating specific government agencies, distinct of the regulator.

62. Fostering energy efficiency for climate change mitigation remains a key regulatory challenge. "Europe 2020", for instance, sets a goal of 20 per cent of energy from renewable sources and 20 per cent increase in energy efficiency. China is developing new grid infrastructures to increase renewable energy source and reduce transmission losses. Various regulatory measures are used: investment in energy-efficient equipment; use of renewable energy through "feed-in tariff schedules" and access rights for independent clean small-scale suppliers; technology and processes ("smart grids", "smart metering"); market-oriented mechanisms such as certificates on the firms' energy efficiency savings; voluntary agreements; and energy audits. Coordination between different government entities is important as energy efficiency initiatives require involvement of various agencies with sector regulators leading programme oversight. For smaller DCs without resources, new investment is required including technology transfer.

63. Subsidies to energy production and consumption are prevalent as governments promote UA and energy security, and downstream domestic industries. Such subsidies create negative incentive against energy efficiency and conservation. There is momentum towards phasing-out subsidies or raising domestic electricity prices. China plans to eliminate preferential electricity tariffs for highly energy-intensive sectors and adopt a

<sup>24</sup> WTO (2010). Energy services.

<sup>25</sup> Anton Eberhard and Katharine Nawaal Gratwick (2010).

tiered pricing for residents whereby unit price increases with consumption. Indonesia raised tariff rates by 10 per cent combined with direct subsidies for lower-income consumers.

64. Trade in energy-related services occurs mainly through: on-line consultancy, trading and brokering; cross-border interconnection of electricity grids; commercial presence; and temporary movement of service suppliers providing technical and managerial services and personnel for construction and upgrading of facilities and grids. Trade in electricity is limited owing to diverging interests among neighbouring partners regarding non-trade concerns (e.g. security), pricing, electricity sharing, third-party access and transmission fees. Commercial presence is often the preferred way of supply while limitations are applicable (e.g. restrictions on foreign ownership or joint-venture requirements). The energy security concern renders national self-sufficiency a major policy objective for many, which affects liberalization.

65. No separate classification of “energy services” exists in WTO, with energy-related subsectors classified under various sector including distribution, construction, consulting and engineering. This creates uncertainty in scheduling and negotiations. Relevant services are: services incidental to mining; services incidental to energy distribution, particularly for electricity; and pipeline transportation services. Liberalization commitments in these areas are modest and mainly limited to recently acceded members. Eighteen countries made commitments in these subsectors. Commitments range from 3 members (retail sales of motor fuels) to 79 (engineering services).

66. Ownership affects trade in the sector, as SOEs have important presence (e.g. China, France, Brazil, Russian Federation and Republic of Korea).<sup>26</sup> Mode 1 supply of electricity can be restricted by the lack of third-party access to transmission and distribution networks, as network owners may refuse such access, hence the importance of competition rules to ensure non-discriminatory and transparent access conditions to grids, while GATS contains disciplines on monopolies and business practices. On Mode 4, access hurdles are created by burdensome visa requirements, limitations on the period of stay and qualification requirements. The slow issuing of licenses to operate in unbundled segments, restrictions on the entry of equipment for production and maintenance services, the differences in technical standards and the lack of interconnection between national electricity grids, affect trade.

67. The modest liberalization record might warrant new approaches while energy security and development concerns of DCs should be fully addressed in ensuring adequate pacing and sequencing between national RIFs and liberalization. Some proposed a cluster approach to energy sector whereby a range of relevant subsectors in energy supply chain are dealt with comprehensively while concern exists that such an approach may lead to sweeping liberalization. Ensuring third-party access to transportation and distribution networks could enable effective market entry. The negotiations for multilateral disciplines on domestic regulation are relevant where policy space for DCs to adapt regulations to changing circumstances given DCs’ underdeveloped domestic regulation is a matter of concern. Given similarities of energy to telecommunication, there is a suggestion to adopt regulatory disciplines on energy similar to “reference papers” on basic telecommunication services, disciplining competitive safeguards, interconnection and universal service, development implications of which warrant careful analysis.

68. Given the strong regional dimension of electricity, regional trade, regulatory and development cooperation plays key role. Various regional experiences revealed sectoral sensitivities of liberalization/harmonization. While NAFTA pursued liberalization, national

---

<sup>26</sup> United States ITC (2010).

reservations persisted, including on concerns regarding public provision of electricity. Some regulatory regimes in certain states of the United States have excluded Canadian hydropower suppliers from marketing in those markets.<sup>27</sup> Similarly, EU's efforts towards a single market for energy remains unfinished, as most wholesale markets remain national with high concentration in generation; vertical integration reduces the incentives to trade and new entry; and the level of cross-border trade remain insufficient to exert pressure on generators in national markets. In SADC, the Southern African Power Pool (SAPP) (1995) offered bilateral long-term PPAs and a short-term energy market, but some national utilities faced difficulty in meeting export obligations for national self-sufficiency concerns. To address such a gap, SAPP members are planning generation projects to meet both short- and long-term electricity needs. Energy cooperation is also supported by the 1998 SADC Energy Protocol and the Regional Electricity Regulators Association of Southern Africa.

## VI. Conclusions

69. Development of ISS must be anchored in a comprehensive, integrated and coherent strategy for growth, development and trade, which will require close coordination with complementary policies. RIFs need to be continuously adapted to rapidly changing market conditions, technological developments and pressing global challenges. Enhanced trade and regulatory cooperation, particularly South–South, need to be promoted for expanding ISS trade, investment and development, including through exchange of national experiences and know-how, to overcome regulatory resource and capacity constraints. Trade agreements have raised concerns regarding the impact of trade rules on national regulatory autonomy, as well as development of ISS. To improve regulatory and pro-development outcomes, multi-stakeholder interaction including policymakers, regulators, trade negotiators, civil society, and private sector is important.

---

<sup>27</sup> Horlick *et. al.* (2002). *NAFTA Provisions and the Electricity Sector.*



## United Nations Conference on Trade and Development

Distr.: General  
4 February 2011

English only

**Trade and Development Board**  
**Trade and Development Commission**  
**Multi-year Expert Meeting on Services, Development and Trade:**  
**the Regulatory and Institutional Dimension**  
 Third session  
 Geneva, 6–8 April 2011  
 Item 3 of the provisional agenda

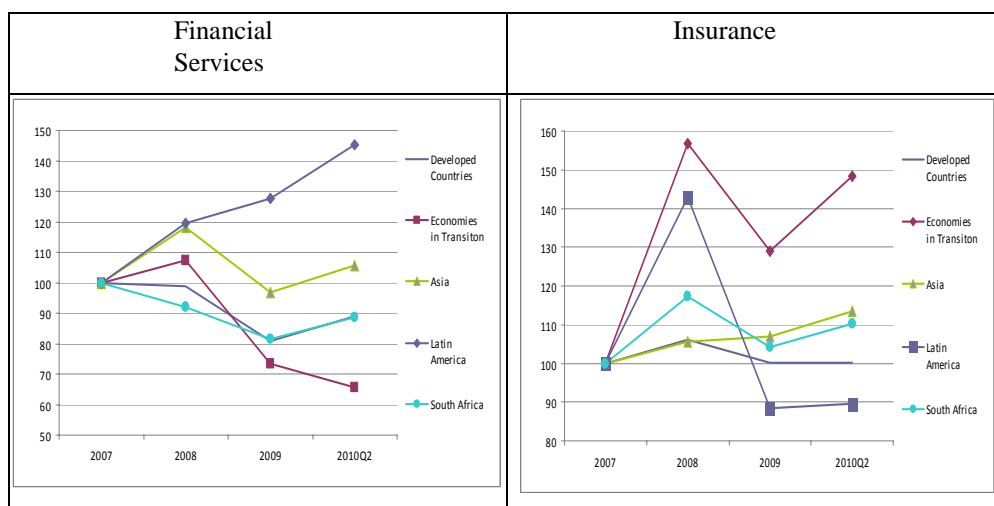
## Services, development and trade: the regulatory and institutional dimension – Expanding trade opportunities for developing countries

Note by the UNCTAD secretariat

### Corrigendum

#### Figure 2

For the existing figure 2 *substitute*



Source: UNCTAD based on IMF BOP.

**Executive summary**

In the third sentence, *for* FS *read* financial services (FS)

**Paragraph 3**

In the second sentence, *for* Developing countries *read* Developing countries (DCs)

**Paragraph 27**

In the first sentence, *for* implementation *read* regulatory implementation

**Paragraph 34**

At the end of the last sentence, *add* a new footnote with the following reference:

Y.V. Reddy (2009). India and the Global Financial Crisis: Managing Money and Finance.

**Paragraph 41**

For the second sentence, *substitute*

Banks least affected by the crisis were those that stuck to the traditional banking, concentrating on retail banking and avoiding excess leverage.

**Paragraph 56**

In the second to the last sentence, *for* in ISS through e.g. Mode 4 MFN waiver *read* e.g. Mode 4, in ISS through MFN waiver

**Paragraph 63**

For the second sentence, *substitute*

Such subsidies could create negative incentive against energy efficiency and conservation.

**Paragraph 68**

At the beginning of the fourth sentence, *insert* Research indicates that,