



Information for Development Program

Request for Expression of Interest

A Study, Online Toolkit and Training material on:

– Regulating Competition, Interconnection, and Prices –

Country: International
Notice/Contract Number: 1248
Publication Date: April 27th, 2005
Deadline: May 16th, 2005
Funding Agency: *infoDev*
Implementing Organization: *infoDev*

Eligibility of Bidders: The consultants are expected to be a team of experts, consisting of personnel with knowledge and demonstrated experience in telecommunications, technologies, and regulations. The consultants should have a minimum of 5 to 10 years of relevant experience and a proven record of expertise showing that they are qualified in the field of the assignment and have previous experience in similar studies.

Expression of Interest (EOI): *infoDev* intends to finance the assignment described below under funding to be made available by *infoDev* Donors.

The overall objective of this activity is to develop a study, a tool-kit and training materials related to competition, interconnection, and price regulation. Detailed description of the assignment is provided in the attached Terms of Reference.

The assignment is expected to be completed 28 weeks from the date of signing the contract agreement (i.e. approximately November/December 2005). The assignment is expected to require a level of effort of approx eight person-months to be completed within the available lump-sum budget of US\$195,000 which includes all fees, travel, and other expenses.



Information for Development Program

infoDev now invites eligible consultants to indicate their interest in providing their services. Interested consultants must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Consultants may associate to enhance their qualifications.

For this assignment we specifically request submission of a five page note outlining how the consultants would conduct this assignment if selected. The note should include the following: (a) an analytical framework and a process by which the research will be conducted; (b) a timeline that demonstrates the consultants ability to meet the deadlines as noted in the Terms of Reference below; (c) a brief narrative on resource allocation; and (d) brief summaries of key personnel to be involved in the work, particularly their experience that directly relates to needs of this study. In order to prepare the note, interested consultants should review the Terms of Reference, which is provided below.

We suggest that the EOI including the five page note and all additional documents, brochures etc. should not exceed 25 pages in length.

Electronic submission of the EOI, including the note, is preferred. The EOI can be submitted either as a Microsoft Word or PDF file. Please send your email submission to dpauschert@worldbank.org. (Please, cc. Mrs. Samia Melhem, smelhem@worldbank.org)

Selection will be based on the “Consultants Qualifications” (CQ) method (provision 3.7 and 3.8 of the Consultants Guidelines) in accordance with the procedures set out in the World Bank's Guidelines: Selection and Employment of Consultants by World Bank Borrowers May 2004.

Interested consultants may obtain further information at the address below from 10:00am – 5:00pm US Eastern Daylight Time.

Expressions of interest must be delivered to the address below **by May 16th, 2005.**

Dirk Pauschert
Mail Stop: F5P-503
2121 Pennsylvania Avenue NW
Washington, DC 20433
Tel: [+1] 202-473-1504
FAX: [+1] 202 522-3186
Email: dpauschert@worldbank.org

TERMS OF REFERENCE
A Study, Online Toolkit, and Training Material on:
- Interconnection, Price Regulation and Competition -

I. BACKGROUND/OVERVIEW

This is a joint knowledge product of *infoDev* and the International Telecommunication Union (ITU).

infoDev is a program committed to the use of ICTs for development consisting of public bilateral and multilateral development organizations, working in close cooperation with partners from civil society and the private sector, and assisted by an expert secretariat housed at the World Bank's Global Information and Communication Technology Department (GICT). Its mission is to help developing countries and their international partners use information and communication technologies (ICTs) broadly and effectively, as tools of poverty reduction, sustainable economic growth, and empowerment of individuals and communities. Its work is rooted in the conviction that information and communication are indispensable elements of effective and responsive institutions, governments, markets, and societies. One of the main pillars of *infoDev*'s new strategy (approved by all its donors in July 2004) is the ICT enabling environment. Within that theme, *infoDev* will be producing research and knowledge products to practically assist its partners and stakeholders in reforming the regulatory framework to allow private sector growth in the ICT arena. This entails adapting *infoDev*'s knowledge products to developing countries' needs in terms of policy advice and capacity building services. Web Site: <http://www.infodev.org>

ITU is a world-wide organization which brings governments and industry together to coordinate the establishment and operation of global ICT/telecommunication networks and services; it is responsible for standardization, coordination, and development of international telecommunications including radio communications, as well as the harmonization of national policies. To fulfill its mission, ITU adopts international regulations and treaties governing all terrestrial and space uses of the frequency spectrum as well as the use of all satellite orbits which serve as a framework for national legislations; it develops standards to foster the interconnection of ICT/telecommunication systems on a world-wide scale regardless of the type of technology used; and it fosters the development of ICT/telecommunications in developing countries.

The Telecommunication Development Sector (ITU-D) is the development arm of the ITU, the main responsibility of which is to foster ICT/telecommunication development in developing countries through policy advice, provision of technical assistance, mobilization of resources, and initiatives to extend access and bridge the digital divide.

Challenges to Regulators and Existing Approaches to Regulation

Most countries have established—or are in the process of establishing—regulatory authorities to implement competition-centered policies on ICT reform and ICT infrastruc-

ture development. The diffusion, structure, and usage of an ICT infrastructure is influenced by the substantive regulatory standards that are applied, by the way regulators incorporate market considerations into their decisions, and by the relations they establish with the government and the courts, as well as the regulated sector, consumers, and the media. The ICT sector has undergone some dramatic changes lasting recent years, triggered by the development of new technologies and the convergence of existing ones, leading now to a merging of markets and services. These developments affect traditional regulatory strategies, raising questions such as how to deal with growing pressure to adopt converged licensing regimes and how to successfully realize the potential of alternative network infrastructures such as WI-FI and WIMAX to bring both services and high-speed Internet access to urban and rural areas.

The ICT Regulatory Toolkit

As a tool to help regulators identify their individually relevant questions and to provide with answers and guidance, *infoDev* in cooperation with the ITU will develop an ICT Regulatory Toolkit. The Toolkit is an update and expansion of *infoDev*'s popular and influential Telecom Regulators' Handbook. The ICT Regulatory Toolkit will be a web-based tool, divided into several modules being authored in the 2005-2006 time frame. The Modules currently planned to be developed include: (a) **Overview on Regulation**; (b) **Radio Spectrum Management**; (c) **Extending Services Beyond the Market**; (d) **Licensing** (Recently completed); (e) **Legal and Institutional Aspects of Regulation**; (f) **New Technologies and Their Impact on Regulation**; and (g) **Interconnection, Price Regulation, and Competition**. The latter three modules are currently being commissioned in parallel by *infoDev*.

Beyond the aforementioned modules, *infoDev* and ITU are already discussing the framework and content for additional modules, for example, a module focusing on ICT related taxation issues. With this strategy and building up on its predecessor's success, the ICT Regulatory Toolkit will become a regularly updating and constantly improving live tool to provide regulators, operators, policy makers, sector experts, and the general public the latest on regulation strategies, best practices, and case studies.

The Module on Regulating Competition, Interconnection and Prices as one Part of the ICT Regulatory Toolkit

Interconnection and retail price regulation are two of the most important elements of ICT/telecommunications policy in a liberalized environment. They are also areas which require considerable technical, economic, and financial skills and therefore a critical challenge for regulators in developing countries in need of building capacity in fairly implementing liberalized markets. With recent changes in regulatory frameworks and the development of competitive networks open to a full range of ICT operators and service providers (e.g., mobile, Internet), interconnection and price regulation has become a domain requiring increasing technical, financial, and economic expertise. Regulators not only need sufficient human and technical resources, but also economic understanding and adequate tools and methodologies to address those issues and enforce their decisions.

More than ever, decisive and informed guidance is required in the multi-operator environment by newly created regulators.

In view of the difficulties involved in regulating the new ICT environment the old-fashioned way, some experts have advised to substitute competition policy for regulation. Therefore, issues of interconnection and retail price regulation must be considered in a particular institutional regulatory context: trade-offs between competition policy and regulation.

In such a context, recognizing the fundamental importance of an appropriate access/retail pricing regime for improved access and connectivity to Information and Communications Technology (ICT) services, *infoDev* proposes to launch a study on interconnection and price regulation for interconnection retail services to deepen the understanding on regulatory reform as a vector for stimulating economic productivity and growth and for bridging the digital divide. *infoDev*, therefore invites proponents to deliver the following:

1) *Study on Regulating Competition, Interconnection and Prices.*

This study will address the economic and strategic issues involved in extending access as well as regulatory instruments to ensure fair and efficient pricing in the ICT/telecommunications sector. The focus of the study should be understood in a context of new technologies and the convergence of telecommunications, broadcasting, and ITU as well as the transition from monopoly to competition in ICT/telecommunication markets.

The purpose of the study is threefold:

- Provide an introduction to the rationale of competition and ICT/telecommunication policies and approaches to foster a transition toward efficient and fair competitive markets.
- Describe the principles of interconnection and analyze at the national, regional and multilateral levels new issues raised by the rapidly changing telecoms landscape with high mobile adoption rates and a wider spreading Internet market culture.
- Identify the general objectives and discuss different approaches to price regulation in a context of technological change and convergence of networks.

The findings will have immediate practical importance for regulators and are expected to have continued relevance for the next five years.

2) *Web-based electronic “Toolkit” on Regulating Competition, Interconnection and Prices.* The web-based toolkit is derived from the aforementioned study, but presents the content in a pre-defined methodology (see below). The purpose of the toolkit is not only to provide regulators access to the findings of the study but to offer value added by meaningfully hyper linking the content to all other seven modules of the regulatory toolkit, thus offering a non-linear learning experience

reflecting on all relevant aspects of regulation. The toolkit will also contain some original content that elaborates on issues presented in the study.

- 3) *Training Material.* The training material offers a summarized perspective on the relevant questions in a Microsoft Power Point presentation. The purpose of the training material is to enable *infoDev* staff to present the study findings to regulators.

Regulators in developing countries are usually not able to leverage the same amount of resources and skills than regulators in developed countries. Thus, in developing the aforementioned study and the module, the consultants should emphasize to discuss tools of minimum complexity that require a minimum of resources and that are operational in the specific environment and circumstances in which most developing country regulators do have to function.

II. SCOPE OF WORK

First Deliverable: Study on Regulating Competition, Interconnection and Prices

Objectives and Scope of the Work

The general objectives and scope of the work is to understand how, in a fast moving technological environment, regulatory policies on competition, interconnection, and prices may be adapted in order to fully leverage the opportunities created by rapid technological changes.

Due to the dramatic technological advance and possible major challenge regulators and policy makers will face in the frame of the next phase of reform to design and implement a new set of relevant and effective models and tools, the consultant will provide a brief history of traditional competition, interconnection, and prices at the beginning of the study.

This introductory section will bring into question whether traditional approaches are still viable in a context of technological changes leading to convergence, increased competition, and new non-regulated services. The study will explore traditional approaches and note where these approaches may no longer be relevant (as an example, is traditional price regulation of fixed line services still necessary in markets where the majority of subscribers are mobile subscribers and many users view mobile services as a substitute for traditional fixed line services?).

The study should include the following parts:

A primer of competition in the ICT sector

The process of ICT regulation is complex and needs to be executed based on a solid foundation of relevant theoretical knowledge, insight on world wide best practices, and knowledge of the sector and its evolution through to the present time. In order to lay out the foundation of knowledge needed by regulators to successfully manage ICT/telecommunication regulation, the scope of this module will first be to give an introduction to the rationale for competition policy and government intervention to implement policy as well as the interplay of competition and ICT/telecommunication policies and approaches to foster the transition towards full competition.

The first part of the work will explain the basics of the financial aspects of ICT/telecommunications regulation, and the basics of competition in ICT/telecommunication markets with a focus on specific aspects, approaches, and best practices for regulation authorities to influence the structure of competition in ICT/telecommunication markets. This part will explain the basic concepts of competition policy and remedies for anti-competitive conduct. Various practices and procedures for intervention will be discussed. Last, concerns about mergers, joint ventures, and acquisitions will be addressed.

Competition and Interconnection Regulation

The aim of the second part will be to describe the principles of interconnection and how they relate to influencing competition in ICT/telecommunication markets. Interconnection issues and the regional and multilateral interconnection rules in a rapidly changing ICT/telecommunications landscape will be described, including fixed-mobile and mobile-mobile interconnection in light of skyrocketing mobile subscribers, particularly in developing countries, and the growing Internet market and culture. Best practices concerning a range of interconnection procedures and forms of dispute resolution will be identified. This section will also analyze the financial terms of interconnection, explaining various models and approaches to interconnection charge and interconnection cost calculations. Specific attention will be given to Internet interconnection charges and interconnection between mobile networks and fixed-mobile network interconnection. Last, this section will identify different mechanisms to facilitate information sharing among all participants, infrastructure sharing agreements between incumbents and competitors as well as how to ensure the quality and cost effectiveness of interconnection amongst different operators (e.g. treatment of competitor information and customer information, quality of service for interconnected operators and service providers, local loop unbundling, infrastructure sharing between mobile operators to reach unserved areas more cost-effectively, and national and regional Internet exchange points, etc.).

Price Regulation and Competition in ICT/Telecommunication Markets

This third part will lay out the general objectives of price regulation and discuss different approaches to price regulation such as discretionary price setting, rate of return regulation, incentive regulation, their advantages and disadvantages and how they influence competition in ICT/telecommunication markets. It will include an overview of Price-Cap Regulation and Price Cap Variations and an introduction to the basic price cap formula and calculation methods. An introduction to more sophisticated elaborations of

the basic model introducing various factors such as inflation, productivity, depreciation will be provided.

New technologies and their Impact on Regulating Competition, Interconnection and Prices

infoDev and ITU are currently developing a separate study on the impact of new technologies (such as VoIP, WIMAX etc.) on Regulation. The selected consultants for this present study will address the impact of new technologies in two ways:

1. It will be addressed throughout the study as a way to document how new technologies are already affecting competition, interconnection and price regulation. Thus, the consultants will reflect on the impact of new technologies across all aspects and chapters of the study on regulating competition, interconnection, and prices.
2. In addition, the selected consultant will develop a separate "looking forward" chapter as one part of the present study and will integrate (summarize) the impact of new technologies with a prospective view: what can regulators expect to be the impact in the future?

Indicative Table of Contents

The following, indicative table of contents is meant to illustrate the scope and complexity of the present study. The final table of contents will be determined by discussions between infoDev, ITU and the selected consultants.

The consultant will focus on the production of benchmarks, and offer case studies and examples taken from the developing world. The consultant will propose metrics, models, and tools to help regulators in their operational work.

- 1) Introduction
 - a. A brief history of interconnection price regulation and competition policy
 - b. Levels of technological changes, competition and new services in retail, wholesale and interconnection market
 - c. Exploring the validity of areas of regulation in the new environment for interconnection, price regulation, and competition policy
- 2) A Primer on Competition in ICT/Telecommunication Markets
 - a. An introduction to the rationale for competition policy
 - i. Competition policy versus regulation
 - ii. Forms of regulations and approaches to antitrust enforcement
 - iii. Comparison of antitrust policy and regulation: advantage and pitfalls
 - iv. Detailed benchmark of competition versus regulation authorities in developing countries

- b. Concepts of competition policy
 - i. Market definitions
 - ii. Barriers to entry
 - iii. Market power and dominance
 - iv. Essential facilities in competition policy and costing
 - v. Benchmark and study cases
 - c. Remedies for anti-competitive conduct.
 - d. Various practices and indications for intervention
 - i. Abuse of dominance,
 - ii. Refusal to supply essential facilities,
 - iii. Cross subsidization, misuse of information,
 - iv. Vertical price squeezing,
 - v. Customer lock in,
 - vi. Restrictive agreements
 - vii. Benchmark and study cases
 - e. Mergers, joint ventures and acquisitions
- 3) Part 1 Competition and Interconnection Regulation
- a. Review of interconnection
 - i. Fundamental issues associated with interconnection regulation
 - 1. Principles
 - Unbundling and access to essential facilities
 - Asymmetric interconnect regulation
 - CPP versus RPP
 - Direct versus indirect regime, bill and keep
 - 2. Pricing network component
 - Costing principles
 - Cost modeling
 - Sensitivity of cost models to changes in key parameters
 - 3. Costing models
 - COSITU
 - WBG cost model
 - Sensitivity of cost models to changes in key parameters
 - 4. Benchmarking interconnection
 - Benchmarking interconnection rates
 - Benchmarking interconnection regime
 - ii. Challenges and opportunities for developing country regulators
 - 1. Problems of transparency & access to information
 - 2. Regulatory dispute mechanism
 - b. Fixed-to-mobile, mobile-to-fixed and mobile-to-mobile interconnection
 - i. Technical basics on fixed-mobile-fixed interconnection regimes, economic models
 - ii. Global and regional trends in the regulation of fixed-to-mobile origination and termination interconnection
 - 1. Identification and regulation of dominant operators
 - 2. Setting retail prices

3. Setting interconnect termination rates
- iii. Benchmarking
 1. Termination charges
 2. Retention rates
 3. Regulatory regimes
- c. VoIP Interconnection
 - i. Technical/market description of voice-over-IP
 1. What makes it the same as current telephony services?
 2. What makes it different from current telephony services?
 - How it works technically, specialized devices
 - Quality considerations, traffic measurement
 3. Use of VoIP
 - By traditional operators
 - By illegal operators: relationship to call-back and other toll bypass schemes
 - ii. Interconnection: VoIP/VoIP and VoIP/PSTN
 1. Challenges raised by VoIP for traditional interconnection arrangements
 - Permitting or requiring interconnection with traditional operators
 - Access to international gateways
 - CPE restrictions
 - Pricing interconnection
 - Challenges of estimating cost in IP networks which interconnect with traditional circuit-switched PSTN networks
 2. Recommendations on issues at stake
 - Where to intercept the call data: access provider network, ISP, gateway provider, terminating operator network?
 - Should the 'peering' model prevail as in the case of the Internet?
 - Is the calling party model the efficient solution?
 - Costing of voice Internet telephony
 3. Emerging global trends in VoIP regulation and lessons for developing nations
 - Benchmarking selected developing and developed countries (A comparative table)
- d. Exchanging Internet Traffic & Internet Exchange Points IXPs
 1. The role of IXPs in the Internet: Physical description
 - Definition of peering v transit
 - What is IXP?
 - Historical perspective
 2. The growth of regional IXPs: Competitive and policy dynamics for the development of regional IXPs
 - Neutrality of IXPs

- Requirement for regulatory support
 - The case for regional IXPs
 - How IXPs change Internet traffic distribution
 - Cost model – International bandwidth cost v domestic bandwidth cost
 - 3. IXPs as a bottleneck in Internet. Rate setting and cost sharing in national IXPs
 - What are the costs
 - Who should pay for what
 - Examples of neutral IXP's in Europe
 - What the neutral IXP's charge
 - 4. Long-haul facility pricing as a break on Internet development
 - Trends in long haul pricing
 - Trends in IP transit pricing
 - Long haul bandwidth (Africa-UK/France)+ transit port price v transit bought in Africa
 - Virtual peering – removing the requirement for long haul bandwidth?
 - 5. African IXPs
 - Benchmark
 - Benefit of keeping internet traffic local to save costs and improve latency
 - e. Cross border interconnection
 - 1. Issues at stake and benchmarks
 - A comparative table for voice long distance, international data services, mobile voice and data
 - Weaning incumbents carriers off accounting rates
 - Submarine cable landfalls
 - 2. Roaming and cross border connectivity
 - GSM and prepaid issues
 - Benchmarking
 - 3. Regional interconnection clearing house
 - Advantages / disadvantages
 - When to use
 - A comparative table
 - Private sector players – The business of clearing houses
- 4) Part 2 Price Regulation and Competition in ICT/Telecommunication Markets
- a. Basics of pricing issues
 - i. Economics versus accounting measures of tariffs/costs
 - ii. Pricing principles
 - 1. Efficiency and optimality
 - 2. Two part tariffs
 - 3. Pricing and externality
 - 4. Pricing and discrimination

- iii. Structures and levels of prices
 - 1. Structure : price set up, time set up, price per minute
 - 2. Levels
- iv. Benchmarking retail prices
 - 1. The issues
 - 2. A toolkit to benchmark fixed, mobile, leased lines
- b. Ex ante price regulation
 - i. Why regulating retail prices?
 - ii. Rate of return
 - 1. Definition
 - 2. Advantage/pitfalls
 - iii. Anticompetitive pricing practices
 - iv. A priori individual homologation
- c. Price cap in practice
 - i. From theory to practice
 - ii. Advantage/pitfalls
 - iii. Questions & issues in price capping
 - 1. Definition of the basket
 - Which services include in the basket?
 - Which timing?
 - When to exclude a service from the basket ?
 - 2. Instruments
 - Assessing price basket variation
 - Assessing productivity factor
 -
- d. Toward a double price cap
 - i. Consistency between retail and wholesale prices
 - ii. A model of double price cap

Second deliverable – Merging the Study into a Web-Based Product (ICT Regulatory Toolkit):

The aforementioned study, in addition to its own value as a knowledge resource, will also generate knowledge for and feed into the development of the toolkit-module. However, the toolkit-module itself is considered an independent product to the extent that it will offer a number of features and additional content which is not covered by the study. The module will offer (a) core documents; (b) secondary documents; (c) practice notes and (d) reference documents. Especially the latter two will be derived from and linked to the intellectual framework that is set by the study, but will clearly present additional material that is beyond the study's scope of work.

As described further in section three below, *infoDev* has already developed a standard format for modules of the ICT regulatory toolkit and the consultants will be expected to develop content according to this format. The consultants will use the standard model for the web-based toolkit already developed by *infoDev* (as exemplified in the existing li-

censing module – please see III. Resources). In preparing the web-based module, the consultants will work closely both with infoDev and the web-design firm commissioned by infoDev to develop the common information architecture, look & feel and functionalities of all toolkit modules.

To this end, the selected consultant will:

- Develop the web-based module based on the aforementioned study;
- Develop logical content/theme linkages and references between the different modules and between the different parts within each module where appropriate;
- Use extensive developing country examples and case studies, while balancing the choice of country and regional examples to provide a global overview of ICT/telecommunication regulation best practices that reflects a range of country and regional perspectives;
- Communicate progress regularly with relevant infoDev staff and adapt the module according to input from infoDev, ITU, and the WBG Steering Committee. An infoDev task manager with in-depth knowledge of the module's subject matter is assigned to ensure close cooperation with the selected consultant;
- Conduct several review meetings with infoDev, taking into account comments, suggestions, and feedback offered on form and substance during the review meetings;
- Present the findings of the study as a set of four different document formats for the online-ICT regulatory toolkit:
 - Core Document – The core document is a revised and abridged version of the main module. It will provide a high level summary of the process and issues related to policy aspects of regulation and will serve as the framework for the online content from which more detailed information will be hyperlinked.
 - “Secondary” Documents – Secondary documents will open as separate pages on the web site, hyperlinked from the core document or other content. These secondary documents will contain more detailed discussion or examples of issues (in text and graphical format) than that contained in the core document. Some of the content will come from text boxes, tables and more detail-oriented sections of the module in question.
 - Practice Notes – Practice notes will also open as separate web pages. Practice notes are short Case Studies summarizing for the reader good practices and international experience. Practice notes will provide summaries, context and practical advice regarding reference documents and other content. They will often be intermediary steps to reading reference documents. For example, in the licensing module, by clicking a link to a certain telecommunications licence, the reader may first be guided to a practice note that describes the licence, and that gives background, context and practical advice on its use.
 - Reference Documents – Reference documents will contain documents and other data selected by the consultants and WBG advisors as representative of good practices and precedents dealing with the module's main theme.
- The selected consultant will be provided with detailed information on the methodology upon beginning the work. The types of documents will be hyperlinked to a data-

base that provides precedents, practical examples, and commentary on the practices and issues discussed. Final decisions about where such a database will be maintained, by whom, with what criteria to screen content for inclusion, how quality is maintained and related technical and quality control issues will be decided by *infoDev* in consultation with ITU and the WBG steering group.

- The selected Consultants will co-ordinate with *infoDev* in developing the module format, look and feel; and with *infoDev*'s web designers to produce the web-based product.
- *infoDev* will also oversee and manage relationships with various regulators providing intellectual input, reference documents and case studies related to the different modules of the toolkit.

The toolkit will also be published in CD-ROM and paper form, and it is expected that most of the material produced will be used for training and capacity building.

Third deliverable - Developing Training Materials and Review Workshops

In order to facilitate the dissemination of the results of the work, the consultant will provide a training module with detailed comments and explanations.

The training module will be integrated in a generic powerpoint presentation format to be used by *infoDev* and ITU staff to disseminate and organize full propagation of the study results.

The consultant will prepare draft versions of each component of the study for review and discussion. The assessment process will be organized through several review meetings. ITU may participate in such review meetings by virtual or video conference.

Composition of the Steering Committee and details in the organization of review meetings will be proposed to the Consultant at the beginning of the assignment.

III. ORGANIZATION OF WORK

Resources

Generally, the selected consultants are expected to identify all resources (papers, books etc.) necessary for completion of the work. However, several *infoDev* and ITU products are specifically important as reference points for developing the final products and it is expected that the selected consultants will make use of the following to develop the content of the toolkit-module.

- *The Telecommunications Regulations Handbook* (2000). The original Handbook (Telecommunications Regulations Handbook) was published in 2000 and has

since been translated to six languages and has been distributed by ITU and *infoDev*. It has become a world renowned, standard reference book for regulators and an indispensable training tool for their new personnel. It consists of six chapters: (a) An overview of regulation, (b) licensing, (c) price regulation, (d) interconnection, (e) competition and (f) universal service. The Handbook is one of *infoDev*'s most successful products, and was used in several capacity-building events. The deliverables defined in this EoI will have strong resemblance to the content, methodology, and design of the handbook; however, they will offer new and updated content and explore more profoundly the impact of new technologies on regulation. Overall, the toolkit module will present a clear evolution from the Handbook.

- *The Pilot Module on Licensing (Module 2.) of the ICT Regulatory Toolkit (2004).* *infoDev* and ITU commissioned the development of a pilot module on licensing (previous Chapter 2 in original telecommunications handbook) according to the methodology and objectives of the new ICT Regulatory Toolkit. This pilot module is to demonstrate the core functionality of the new ICT Regulatory Toolkit and consists of five sections describing the background, policy, and legal context of telecommunications licensing, types of licensing and authorization regimes, and the practices and procedures used in various countries. The module includes boxes, figures, and tables that illustrate licensing processes in various countries and regional groups, including a checklist of contents of typical licenses. The Licensing module is a complete revamp of the former Telecommunications Handbook's Chapter two. Access will be provided to the selected firm.
- *ITU Annual Regulatory Survey Database.* The Regulatory Reform Unit of ITU conducts an annual regulatory survey of its membership. The survey poses questions dealing with a range of regulatory issues such as appeals processes and the state of competition in markets. Access to information on the database will be provided to the selected firm.
- *Joint ITU World Bank Study on Dispute Resolution in the ICT/Telecommunications Sector: Current Practices and Future Directions*
http://www.itu.int/ITU-D/treg/publications/ITU_WB_Dispute_Res-E.
- <http://www.itu.int/itudoc/itu-d/question/studygr1/q6-1-1.pdf>
- http://www.itu.int/ITU-D/treg/Case_Studies/index.html
- <http://www.itu.int/ITU-D/treg/profiles>
- <http://www.itu.int/ITU-D/treg/related-links/links-docs/interconnectlegisl.html>
- <http://www.itu.int/ITU-D/treg/related-links/links-docs/interconnect.html>

- http://www.itu.int/ITU-D/treg/Legislation/CITEL/co-462_e.pdf
- <http://www.comesa.int/ict/guidelines/telecomms/>
- <http://www.trasa.org.bw/files/attachments/interconnction%20%20guidelines.doc>

Timing

The assignment is expected to be completed within 28 weeks of commencement. The assignment is expected to require a level of effort of approximately eight person-months to be completed within an available lump-sum budget of US\$195,000.00 which includes all fees, travel, and expenses, etc. The project funds will be disbursed in five tranches. The release of each tranche will be further conditioned upon *infoDev* being satisfied with each of the deliverables before proceeding to the next.

Conduct of the Assignment

In undertaking this assignment, the consultants will work under the general direction of the task supervisor from *infoDev*. The consultants will take the lead and will be directly responsible for all tasks, while the task supervisor will be closely involved in reviewing reports and providing guidance as necessary. Final decisions will be made by *infoDev* in consultation with ITU and the WBG steering group.

Consultant qualifications

Consultants with a proven record in the following areas of knowledge will be considered:

- Expertise on issues interconnection, price regulation, and competition policy and regulation.
- Understanding on the overall issues related to telecommunications regulation, law, and economics.
- First class research capacity and ability to develop the Toolkit based on the content and methodology of the previous work done by *infoDev* and ITU.
- International experience in developing countries, particularly in the area of telecommunications reform.
- Reputation and expertise in the field amounting to 5 to 10 years of experience

Timeline and Deliverables

Tranche	Deliverable	Indicative Due Date
<ul style="list-style-type: none"> ▪ Tranche 1 (10%) ▪ (US\$19,500) 	None: the first tranche will be paid by <i>infoDev</i> to enable the consultant to start developing the Study	Mid of June 2005
<ul style="list-style-type: none"> ▪ Tranche 2 (20%) ▪ (US\$39,000) 	Workshop/Presentation: First Draft of The Study and a Toolkit blueprint as well as proposed, additional content materials for the toolkit.	Mid of July 2005
<ul style="list-style-type: none"> ▪ Tranche 3 (20%) ▪ (US\$39,000) 	Workshop/Presentation: Final draft of the study submitted to <i>infoDev</i> for review	End of August 2005
<ul style="list-style-type: none"> ▪ Tranche 4 (20%) ▪ (US\$39,000) 	Workshop/Presentation: Final Version of the study and the module of the toolkit to <i>infoDev</i> . Presentation of Draft Training/Presentation Material.	End of September 2005
-	Presentation of Study and Toolkit at WSIS. Integrate final comments on toolkit as derived from WSIS.	End of November 2005
<ul style="list-style-type: none"> ▪ Tranche 5 (30%) ▪ (US\$58,500) 	Presentation of Final Study, Toolkit and Training Material	End of December 2005

Contact Information:

Dr. Dirk Pauschert, *infoDev*
2121 Pennsylvania Ave., NW
Room: F5P 172
M/S: F P5-503
Washington, DC 20433 USA
Tel: 202.473.1504 Fax: 202.522.3186
E-mail: dpauschert@worldbank.org