

ERIA TRADE IN SERVICES SECTORAL QUESTIONNAIRE – TELECOMMUNICATIONS - FINAL

COVERAGE (CPC Codes)

2.C. Telecommunications Services

a.	Voice telephone services	7521
b.	Packet-switched data transmission services	7523**
c.	Circuit-switched data transmission services	7523**
d.	Telex services	7523**
e.	Telegraph services	7522
f.	Facsimile services	7521**+7529**
g.	Private leased circuit services	7522**+7523**
h.	Electronic mail	7523**
i.	Voice mail	7523**
j.	On-line information and data base retrieval	7523**
k.	Electronic data interchange (EDI)	7523**
l.	Enhanced/value-added facsimile services, incl. store and forward, store and retrieve	7523**
m.	Code and protocol conversion	n.a.
n.	On-line information and/or data processing (incl. transaction processing)	843**
o.	Other	

Notes: \*\* The service specified constitutes only a part of the total range of activities covered by the CPC item number.

INTRODUCTION

The questionnaire is divided into two parts.

- The policy section covers the conditions of *competition* in the sector, notably policy restrictions on entry; restrictions on *ownership*, private and foreign; and *regulation*, including measures to ensure access to the network, and measures to achieve social objectives such as universal access.
- The market structure section covers information on the number of firms, their market shares and actual ownership patterns.

Note (1): Please give information for the current year only.

Note (2): Whenever a question is not applicable, (eg because the particular activity or institution is not allowed), please indicate using 'NA', rather than leaving the cell blank.

Note (3): Where reporting monetary values, please note currency.

Note (4): If insufficient space is provided, please attach additional information on separate sheets.

SUGGESTED INFORMATION SOURCES

Government department in charge of regulating telecommunications.

Independent national or regional regulatory body overseeing telecommunications (if different from the above institution)

A domestically-owned and/or foreign-invested telecommunications company (if necessary)

## Chapter2: Appendix3- Questionnaire form, Telecommunications

### I. Policy Section

#### A. Commercial presence (mode 3) - restrictions on entry

##### a. Own-facilities basis

1. Are there restrictions on new <i>facilities-based</i> <sup>1</sup> suppliers of telecommunication services in any of the sub-sectors listed below (other than associated with scarcity of spectrum – see Q. 26)?				
Sub-sectors	Entry by any firm?	Total number of firms allowed?	Entry by any foreign firm?	Total number of firms allowed?
Local (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Domestic long distance (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
International (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Mobile voice telephone				
- analog, digital	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Data communications				
- fixed	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- mobile	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Leased lines <sup>2</sup>	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Internet access services				
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- fixed wireless	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Others (eg VoIP, please specify)				
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	

2. If <i>facilities-based</i> entry is restricted, what are the reasons provided by the government?.	
To ensure/increase government revenue from state-owned service supplier(s)	<input type="checkbox"/> Yes <input type="checkbox"/> No
To increase government revenue from privatization of state-owned suppliers	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exclusive rights believed necessary to attract (strategic) investment	<input type="checkbox"/> Yes <input type="checkbox"/> No
To give state- or locally- owned service suppliers time to prepare for competition	<input type="checkbox"/> Yes <input type="checkbox"/> No
To ensure/increase government revenue from license fees	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exclusive rights believed necessary to ensure the provision of universal service	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exclusive rights believed necessary to ensure national security	<input type="checkbox"/> Yes <input type="checkbox"/> No
No perceived economic need for new service suppliers	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other (please state)	

<sup>1</sup> This refers to suppliers who own most or all of the transmission capacity used.

<sup>2</sup> Leased line services are defined as the ability of telecom service suppliers to sell or lease circuits for any type of bulk network capacity (cable, satellite, wireless) to third parties. Restrictions on the ability to resell leased line capacity are covered in question 5.

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3. Are there any restrictions on *facilities-based* companies offering services in certain market segments if they are operating in another market segment (or others) (e.g., local, long distance, international, mobile)?

No  Yes      If yes, please explain the nature of and reason for these restrictions:

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4. Are foreign *facilities-based* telecom service suppliers required to establish under certain legal forms that are not required for domestic operators? If yes, please indicate:

corporation  unincorporated branch  joint venture  partnership  trust  association  
 sole proprietorship

*b. Resale basis*

5. Are there restrictions on new *resale-based*<sup>3</sup> suppliers of telecommunication services in any of the sub-sectors listed below?

Sub-sectors	Entry by any firm?	Total number of firms allowed?	Entry by any foreign firm?	Total number of firms allowed?
Local (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Domestic long distance (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
International (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Mobile voice telephone				
- analog, digital	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Data communications				
- fixed	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- mobile	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Leased lines	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Internet access services				
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- fixed wireless	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Others (eg VoIP, please specify)				
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	

6. If *resale-based* entry is restricted, what are the reasons provided by the government?.

To encourage facilities-based competition	<input type="checkbox"/> Yes <input type="checkbox"/> No
To ensure/increase government revenue from state-owned service supplier(s)	<input type="checkbox"/> Yes <input type="checkbox"/> No
To increase government revenue from privatization of state-owned suppliers	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exclusive rights believed necessary to attract (strategic) investment	<input type="checkbox"/> Yes <input type="checkbox"/> No

<sup>3</sup> This refers to firms that lease capacity from facilities-based operators and use the leased capacity to provide services to third parties. Resellers may own switches and routers, but they do not own transmission facilities other than terminal equipment.

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To give state- or locally- owned service suppliers time to prepare for competition	<input type="checkbox"/> Yes <input type="checkbox"/> No
To ensure/increase government revenue from license fees	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exclusive rights believed necessary to ensure the provision of universal service	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exclusive rights believed necessary to ensure national security	<input type="checkbox"/> Yes <input type="checkbox"/> No
No perceived economic need for new service suppliers	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other (please state)	

7. Are there any restrictions on *resale-based* companies offering services in certain market segments if they are operating in another market segment (or others) (e.g., local, long distance, international, mobile)?

No  Yes      If yes, please explain the nature of and reason for these restrictions:

---

8. Are foreign *resale-based* telecom service suppliers required to establish under certain legal forms that are not required for domestic operators? If yes, please indicate:

corporation  unincorporated branch  joint venture  partnership  trust  association  
 sole proprietorship

*c. Leased lines and private networks*

9. Are companies permitted to operate private networks of *leased lines* between their various premises?

No  Yes      If yes, is prior authorization required? Explain how this authorization is obtained.

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10. Are companies permitted to operate private networks of "*own facilities*" between their various premises?

No  Yes      If yes, is prior authorization required? Explain how this authorization is.

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11. What types of affiliated firms may be connected to the same private network?.	
Parent/holding companies, subsidiaries and branches	<input type="checkbox"/> Yes <input type="checkbox"/> No
Those companies above and affiliates in which there is minority ownership	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there a minimum percentage ownership required in order to be connected?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, please specify the percentage:	
Close user groups of self-selecting companies and affiliates regardless of ownership linkages	<input type="checkbox"/> Yes <input type="checkbox"/> No

12. Is interconnection of these private networks to the public switched network permitted?

At one end?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Both ends?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, what conditions apply?	

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*B. Restrictions on cross-border trade (mode 1)*

*a. Own-facilities basis*

13. Are there restrictions on the cross-border supply or consumption of telecommunication services over the networks of facilities-based service suppliers in any of the sub-sectors listed above, e.g., callback?

No  Yes      If yes, please describe:  
\_\_\_\_\_

14. Are there routing restrictions (e.g., do new facilities-based entrants have to use the incumbent carrier's international circuits or gateways, or are they free to choose how to route their international traffic)?

No  Yes      If yes, please describe:  
\_\_\_\_\_

15. Is there an expiry date for such restrictions?

No  Yes      If yes, please describe:  
\_\_\_\_\_

*a. Resale basis*

16. Are there restrictions on the cross-border supply or consumption of telecommunication services over the networks of resale-based service suppliers in any of the sub-sectors listed above, e.g., callback?

No  Yes      If yes, please describe:  
\_\_\_\_\_

17. Are there routing restrictions (e.g., do resellers have to use the incumbent carrier's international circuits or gateways, or are they free to choose how to route their international traffic)?

No  Yes      If yes, please describe:  
\_\_\_\_\_

18. Is there an expiry date for such restrictions?

No  Yes      If yes, please describe:  
\_\_\_\_\_

19. Reasons for restrictions on cross-border competition (whether for facilities-based or resale-based services)

To ensure/increase government revenue from state-owned service supplier(s)	<input type="checkbox"/> Yes <input type="checkbox"/> No
To increase government revenue from privatization of state-owned suppliers	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exclusive rights believed necessary to attract (strategic) investment	<input type="checkbox"/> Yes <input type="checkbox"/> No
To give state- or locally- owned service suppliers time to prepare for competition	<input type="checkbox"/> Yes <input type="checkbox"/> No
To ensure/increase government revenue from license fees	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exclusive rights believed necessary to ensure the provision of universal service	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other (please state)	

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C. Ownership

20. Is private ownership of <i>facilities-based</i> telecom service suppliers allowed?				
	Existing operators	Maximum private equity permitted (%)	New entrants	Maximum private equity permitted (%)
Local (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Domestic long distance (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
International (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Mobile voice telephone				
- analog, digital	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Data communications				
- fixed	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- mobile	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Leased lines	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Internet access services				
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- fixed wireless	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Others (eg VoIP, please specify):				
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	

21. Is foreign ownership of <i>facilities-based</i> telecom service suppliers allowed?				
	Existing operators	Maximum private equity permitted (%)	New entrants	Maximum private equity permitted (%)
Local (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Domestic long distance (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
International (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Mobile voice telephone				
- analog, digital	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	

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Data communications				
- fixed	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- mobile	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Leased lines	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Internet access services				
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- fixed wireless	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Others (eg VoIP, please specify):				
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	

22. Is private ownership of <i>resale-based</i> telecom service suppliers allowed?				
	Existing operators	Maximum private equity permitted (%)	New entrants	Maximum private equity permitted (%)
Local (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Domestic long distance (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
International (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Mobile voice telephone				
- analog, digital	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Data communications				
- fixed	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- mobile	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Leased lines	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Internet access services				
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- fixed wireless	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Others (eg VoIP, please specify):				
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	

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23. Is foreign ownership of <i>resale-based</i> telecom service suppliers allowed?				
	Existing operators	Maximum private equity permitted (%)	New entrants	Maximum private equity permitted (%)
Local (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Domestic long distance (fixed) voice telephone services	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
International (fixed) voice telephone services				
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Mobile voice telephone				
- analog, digital	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- satellite	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Data communications				
- fixed	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- mobile	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Leased lines	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Internet access services				
- wire/cable	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
- fixed wireless	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Others (eg VoIP, please specify):				
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
-	<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	

*D. Regulation*

*a. The regulator*

24. Characteristics of the sector regulator	
Name of regulator	
When was the regulator established?	
Is the regulator institutionally separate from the ministry responsible for telecommunications ?	<input type="checkbox"/> No <input type="checkbox"/> Yes
If yes, when was the regulator made separate?	
Are the decisions of the regulator self-executing, or must they be approved by the ministry or government before they can take effect	<input type="checkbox"/> Self-executing <input type="checkbox"/> Need Ministry approval



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*b. Licensing*

25. Are individual or general/class *operating licenses* required for the provision of the following services?<sup>4</sup>  
What type of selection process is used (include bureaucratic discretion under 'beauty contest')?

Service Sub-sector	Type of Licence Required <sup>5</sup>	Type of Selection Process		
Local (fixed) voice telephone services - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Local (fixed) voice telephone services - resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Domestic long distance (fixed) voice telephone services - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Domestic long distance (fixed) voice telephone services - resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
International (fixed) voice telephone services - wire/cable - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
International (fixed) voice telephone services - wire/cable - resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
International (fixed) voice telephone services - satellite - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
International (fixed) voice telephone services - satellite - resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Mobile voice telephone – analog/digital - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		

<sup>4</sup> Operating licences are for purposes of supplying a service. They are distinct from radiocommunications/spectrum licences for the use of radio frequencies.

<sup>5</sup> Individual (or operator-specific) licenses are generally customized and detailed (and may be specific to a particular technology), are frequently granted through some sort of competitive selection process, and are typically used when a regulator has an interest in ensuring a service is provided in a particular manner (eg where the operator is deemed to have market power). General authorisations (or class licences) establish general conditions of operation, typically including consumer protection, and are generally issued without a competitive selection process to all qualified entities.

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Mobile voice telephone – analog/digital - resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Mobile voice telephone - satellite - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Mobile voice telephone - satellite -resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Data communications - fixed - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Data communications - fixed - resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Data communications - mobile - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Data communications - mobile - resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Leased lines - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Leased lines -resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Internet access services - - wire/cable - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Internet access services - - wire/cable - resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> “Beauty Contest” <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		

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Internet access services - - fixed wireless - facilities based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Internet access services - - fixed wireless - resale based	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Others (eg VoIP, please specify)-	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
-	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		

26. When *spectrum licenses* are required for the provision of the following services, what processes are required (include bureaucratic discretion under 'beauty contest')?<sup>6</sup> The service providers in this context are all facilities-based, in that they all must hold a spectrum licence.

Service Sub-sector	Type of Licence Required	Type of Selection Process		
Local (fixed) voice telephone services	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Long Distance (fixed) voice telephone services	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
International (fixed) voice telephone services - satellite	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Mobile voice telephone - analog/digital	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Mobile voice telephone - satellite	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Data communications - fixed	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		

<sup>6</sup> Operating licences are for purposes of supplying a service. They are distinct from radiocommunications/ spectrum licences for the use of radio frequencies.

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Data communications - mobile	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Internet access services - - fixed wireless	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
Others (eg VoIP, please specify)	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		
	<input type="checkbox"/> Individual <input type="checkbox"/> General	<input type="checkbox"/> Auction <input type="checkbox"/> "Beauty Contest" <input type="checkbox"/> Combination <input type="checkbox"/> First come, first served		

27. Do any licences grant exclusive rights?

- No  Yes If yes, please indicate the nature of those exclusive rights, the relevant market segments and when the exclusive rights will expire.

\_\_\_\_\_

28. Are separate licenses required to establish branches in each state/province?

- No  Yes

29. Specify the main licensing conditions new entrants must fulfill.

Payment of license fee?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Presentation of detailed business plan?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Network coverage / satellite footprint requirements	<input type="checkbox"/> No <input type="checkbox"/> Yes
Minimum capital?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Safeguards against anti-competitive behaviour?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Compatible home country regulation?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Other (please state):	

30. Are foreign-owned telecommunication service suppliers subject to different licensing conditions from domestic suppliers?

- No  Yes If yes, please specify what additional requirements have to be met by foreign suppliers

\_\_\_\_\_

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31. Once the licenses have been allocated, are there restrictions on firms' ability to sell, dispose of, or otherwise transfer these licenses?

No  Yes      If yes, please explain the policy and methods allowed:

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Does spectrum trading occur?

No  Yes

*c. Regulation of network interconnection*

32. How are interconnection agreements among service providers determined?

	Between fixed line service providers	Between mobile and fixed line carriers	Between mobile carriers	Between internet service providers
Private negotiation between parties?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Private negotiation, but general terms set by regulatory agency?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Detailed terms set by regulatory agency?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Other (please specify):				

33. Which of the following aspects of interconnection are set by the regulatory agency?

	Between fixed line service providers	Between mobile and fixed line carriers	Between mobile carriers	Between internet service providers
Technical standards?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Procedures for interconnection?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Time frames for interconnection?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Points of interconnection?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Price of interconnection?	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Other (please specify):				

34. Which of the following interconnection pricing rules apply in your country?

	Between fixed line service providers	Between mobile and fixed line carriers	Between mobile carriers
Reciprocal pricing <sup>7</sup>	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Unbundling <sup>8</sup>	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Imputation <sup>9</sup>	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Other (please specify):			

<sup>7</sup> Reciprocal pricing requires that all networks charge the same amount to terminate calls coming from other networks.

<sup>8</sup> Unbundling requires the dominant network operator to sell network components independently of each other, so that rival networks are not forced to buy services they do not need.

<sup>9</sup> Imputation rules are designed to eliminate any markup on services components sold to competing firms over and above the implicit charges for internal use — and should tend to equalize prices charged by direct competitors.

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35. Other aspects of interconnection	
Are actual interconnection agreements required to be made public?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Are reference agreements publicly available?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Are mobile phone carriers allowed to charge for incoming mobile calls?	<input type="checkbox"/> No <input type="checkbox"/> Yes

*d. Regulation of end-user tariffs*

36. How are end used tariffs determined in your country?		
	For fixed line calls	For mobile calls
By market forces (ie not regulated)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Average price caps for groups of services established by the regulator (eg CPI-X caps)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Price caps for individual services established by the regulator (eg CPI-X caps)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Rate of return regulation	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Other cost-based regulation	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Other (please specify):		

37. Tariff rebalancing <sup>10</sup>	
Are fixed line services providers allowed to charge a subscriber access charge (eg per month) as well as a charge per call?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Have tariffs been rebalanced?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Are there plans to rebalance tariffs?	<input type="checkbox"/> No <input type="checkbox"/> Yes
If yes, when is the plan scheduled to be completed	

*e. Universal Service*

38. How does the government define universal service (or universal access)?
_____

39. What are the policy instruments used to pursue the universal service objective?	
Monopoly?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Roll-out obligations in services licences?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Subsidies to operator(s); e.g., from universal service funds or state budgets	<input type="checkbox"/> No <input type="checkbox"/> Yes
Vouchers or other forms of subsidy to target consumers?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Other (please state):	

<sup>10</sup> Tariff rebalancing may be required when the dominant fixed line carrier provides both local and long distance/international services. Rebalancing is sometimes defined as the elimination of cross subsidies from long distance/international services to local call services. A broader definition (eg as used by ITU) is the elimination of the subscriber access deficit, ie eliminating the undercharging for subscriber access (as distinct from use), for example by instituting a separate subscriber access charge.

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40. On which service suppliers are universal service obligations imposed??	
Incumbent operator?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Private operators offering local services?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Private operators offering long distance and international services?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Other (please state):	

II. Market Structure

41. Please list the characteristics of all facilities-based operators providing the following services.			
Name of firm	Year of service commencement	Market share	Owners of capital and their respective shares (domestic/foreign/government)
Domestic fixed line			
International fixed line (combine with above only if necessary)			
Mobile voice telephone services (analog/digital)			

42. Other	
How many providers are offering telecommunications services through networks other than the public switched network?	
VoIP	
Through cable TV network	
By satellite	
Other (eg through electricity networks – please state) _____	
How many internet service providers are there?	

If you have any queries about this questionnaire, please contact:

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