## ICT REGULATORY TRACKER

	Indicator	Area	Description	Raw Values	Coding	Benchmark	0 pts	1 pt	2 pts
1	Does a separate (independent in terms of finance, structure, and decision making from the operator(s) and the sector Ministry) Regulatory Authority exist for Telecommunication or Information and Communication Technology (ICT) in your country?	Separate telecom/ICT regulator	Having a separate Regulatory Authority (i.e. independent in terms of finance, structure, and decision-making from the operator(s) and the sector Ministry) is in line with international best practices. Independence heightens the effectiveness of a regulator, with regards to both procedural matters and easier maneuver of funding and actions to achieve the desired social and economic goals. Separation from other governmental agencies/ministries and service providers is generally seen as a factor that enables decisions to be taken in an impartial, fair and transparent manner. This does not negate, however, that in particular circumstances regulators that are not separate may be effective.	"Yes"; "No"	-	2	No		Yes
2	Is the Regulatory Authority autonomous in decision-making?	Autonomy in decision making	Autonomy is relevant to both the accountability and independence of the regulatory authority. It ensures that decisions are made consciously and with impartiality. As the specialized body with knowledge of the market, autonomy grants the regulatory authority with the tools to increase its efficiency and serve as a neutral broker in the market.	"Yes, for all decisions"; "Yes, for some decisions"; "No"	-	2	No	Yes, for some decisions	Yes, for all decisions
3	What are the reporting requirements of the Regulatory Authority? Who is responsible for approving the budget of the regulator? Who appoints the Members and the Head?	Accountability	tuies as wen as impartiality in decision making. Having different governmental bodies deciding over the regulatory authority's structure and funding, in addition to the Head or the Board of the regulatory authority, avoids concentration of power and influence from one of the branches of the government over the regulatory decision. Particularly with regard to financial resources, appointment of the head of the regulator and reporting requirements, it is important to have another branch of the government reviewing the regulator's decisions. By doing so, the government will be implementing a system of checks and balances that is likely to prevent a regulator from, on one hand, over-spending (or over-charging the regulated entities) as well as on the other hand.	"Report to legislature"; "Report to Government (or Prime minister)"; "Report to other ministry"; "Annual report to the sector Ministry"; "No reporting requirements"; "Other" // "Parliament"; "Government"; "Head of government"; "Sector minister"; "Head of the regulator"; "Other, please specify" // "Head of state"; "Government Head of government"; "Sector minister"; "Parliament"; "Other, please specify"	Pre-coding: (In each sub-indicator:) for "Report to legislature" or "Parliament", code as "P"; "Report to Government (or Prime Minister)", "Report to sector Ministry", "Government", "Head of Government" or "Sector Minister", code as "G"; "No reporting" or "Head of regulator", code as "NR". Coding: 3 different answers = 2; 2 different answers = 1; 3 identic answers = 0. Note: "Government" and "Head of Government" can be considered as the same	2	The same entity is responsible for all areas	Two different entities are responsible	Three different entities are responsible
4	With regards to the last financial year, please indicate the sources of the Regulator's annual budget and the percentage of annual budget financed from each source	Percentage of diversified funding	and not just financial sources from government appropriations is in line with international best practices. The funding sources and budgeting processes of regulators (i) may impact on independence, efficiency and cost of regulation and (ii) may directly impact the degree of a regulator's autonomy and competence when carrying out its responsibilities. Multiple sources of funding are generally associated with providing the regulator with more	"Percentage of License fees"; "Percentage of Government	Consider only the percentage of government appropriation. If it represents between 0 and 33% of the annual budget, classify as "minimal influence" = 2; If it represents between 34 and 66% of the annual budget, classify as "moderate influence" = 1; If it represents more than 66% of the authority's annual budget, classify it as "strong influence" = 0.	2	Strong influence	Moderate influence	Minimal influence
5	Are public consultations mandatory before regulatory decisions are made?	Public consultations mandatory before decisions	It is in line with international best practices for the law or regulation to generally require the regulator to conduct public consultations before issuing regulatory decisions. This requirement may specify that consultations are required for regulatory decisions likely to have a significant impact on the market and/or on end users. Public consultations allow for a democratic environment that takes into account in the decision-making process the opinions of consumer associations and individual consumers, the views of established or potential investors as well as other interested parties. They also increase the transparency of the regulatory authority's actions and decisions, and allow for a buy-in from all parties involved in the market.	"Yes"; "In certain cases"; "No"	-	2	No	In certain cases	Yes
6	Does the separate regulator have enforcement power?	Enforcement power	Granting the regulator sufficient enforcement powers under the law is in line with best regulatory practice. To avoid political interference and ambiguous decisions influenced by the interests of market players, the regulatory authority should be empowered to enforce its decisions and regulations and thus ensure compliance with the rules set, improve the predictability of the regulatory frameworks in place and grow a level-playing field. Particularly, regulators should have sufficient powers to (i) enforce procedures in place; (ii) enforce regulations and licence conditions; and (iii) issue orders, directions to operators to carry out or cease certain activities, and (iv) impose sanctions, fines and other penalties for breach of legal/regulatory obligations.	"Yes"; "No"	-	2	No	-	Yes

**1. Regulatory authority** 

7 What sanctions or penalties can the separate regulator impose?	Sanctions or penalties imposed by regulator	Empowering the regulator to enforce punitive measures, regulations or licence conditions by imposing penalties or sanctions for violations is in line with international best practices. Providing the regulator with sufficient legal grounding to exercise its enforcement functions is a key factor to ensure the legality/validity of the regulator's actions and decisions and to provide legal certainty to the sector.	"Monetary fines"; "Additional licence obligations"; "Modification of licence"; "Licence suspension"; "Licence revocation"	Sub-group "No sanction"; Sub-group "Moderate sanction" ("Monetary fines"; "Additional licence obligations"; "Modification of licence"); Sub-group "Strong sanction" ("Licence suspension"; "Licence revocation")	2	No sanction	Moderate sanction	Strong sanctio
Does the regulatory framework set up a clear dispute resolution mechanism(s) to resolve disputes (e.g. on interconnection issues, customer complaints, etc.)?	Dispute resolution mechanism	As the ICT sector continues to evolve and become increasingly competitive, it is necessary to establish an effective dispute resolution system. Failure to resolve disputes can quickly limit competition, cause delays in the introduction of new services and technologies, block or reduce investment in the sector, and impede liberalization and development of the sector. Establishing clear dispute resolution mechanisms is in line with international practice. These procedures are critical to guarantee timely and effective intervention from regulators and contribute to the efficient functioning of competitive ICT markets as well as to the protection of consumers' rights.	"Yes"; "No"	-	2	No	-	Yes
9 Are appeals to the decision of the Regulatory Authority (entity in charge of regulation) allowed?	Appeals to decisions	Establishing clear and detailed procedures for appealing the regulator's major dispute resolution and enforcement decisions is consistent with good regulatory practices and is an important part of a comprehensive and effective regulatory framework. Allowing interested parties to appeal the regulator's decisions helps to ensure that the regulator is sufficiently accountable to stakeholders, including the state, service providers and consumers and affirms its credibility while providing the market players with the assurance of fairness and rule of law throughout the process.	"Yes"; "No"	-	2	No	-	Yes
10 Does your country have a Competition Authority?	Existence of Competition authority	Competition authorities overlook multiple market segments in order to avoid anticompetitive actions taken by operators with significant market power, actions which would harm other market players, potential new entrants as well as consumers.	"Yes"; "No"	-	2	No	-	Yes
Please indicate below which entities have responsibility for: - Enforcement of quality of service obligations measures - Service quality monitoring	Traditional mandate: entity in charge of quality of service obligations measures and service quality monitoring	Service quality monitoring is a tool to aid in decisions in order to help customers make informed choices, to understand the state of the market (and help operators achieve fair competition), to maintain or improve quality in presence or absence of competition, and also to make interconnected networks work well together. It is equally as important to establish measures for controlling/monitoring quality of service to set achievable and appropriate targets. We consider that an unbiased and independent regulatory authority is the most capable body to be in charge of service quality monitoring.	"Sector Ministry "; "Other Ministry or Government body"; "Regulatory Authority"; "Operator"; "Not regulated"	Combined and cumulative. Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 0.5 and "Regulatory Authority" scores 1	20	According t	o sub-groups cumulati	ive answer
2 Please indicate below which entities have responsibility for licensing	Traditional mandate: entity in charge of licensing	Development and implementation of authorization policies determine the structure, adaptability and level of competition of ICT services. We consider that an unbiased and independent regulatory authority has the knowledge and tools to best allocate authorizations with the goal of maximizing market productivity and efficiency.	"Sector Ministry "; "Other Ministry or Government body"; "Regulatory Authority"; "Operator"; "Not regulated"	Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 1 and "Regulatory Authority" scores 2	2	Sub-group "Not regulated"	Sub-group "Government"	"Regulator Authority
Please indicate below which entities have responsibility for: I - Interconnection rates - Price regulation	Traditional mandate: entity in charge of interconnection rates and price regulation	There is a consensus among economists and regulators that interconnection prices should promote economic efficiency, actively promoting competition, and additionaly help achieve universal service. In the presence of market failures, price regulation is also important to avoid the exercise of market power, promote economic efficiency and competition and ensure that the prices are fair given the quality of service provided. We consider that an unbiased and independent regulatory authority is the most capable body to be in charge of interconnection rates and price regulation.	"Sector Ministry "; "Other Ministry or Government body"; "Regulatory Authority"; "Operator"; "Not regulated"	Combined and cumulative. Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 0.5 and "Regulatory Authority" scores 1	2	According t	o sub-groups cumulati	ive answer
Please indicate below which entities have responsibility for: Spectrum Management - Radio frequency allocation and assignment (licensing)	Spectrum: Entity in charge of radio frequency allocation and assignment	Spectrum is a scarce resource and its efficient use can make an impact upon economic prosperity. Specific technical and service rules govern spectrum allocations and, as a result, they are a crucial determinant of the structure and performance of industry and of institutions devoted to ensuring public safety, security and national defense. We consider that an unbiased and independent regulatory authority has the knowledge to best allocate spectrum authorizations		Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 1 and "Regulatory Authority" scores 2	2	Sub-group Not regulated	Sub-group Government	Regulato Authorit
Please indicate below which entities have responsibility for the functions listed: Spectrum Management - Monitoring and Enforcement	Entity in charge of Spectrum Monitoring and Enforcement	Spectrum monitoring aids spectrum managers to plan and use frequencies, avoids incompatible usage and identifies sources of harmful interference. Spectrum use planning and resolution of spectrum scarcity issues can be accomplished through study and analysis of spectrum occupancy data. We consider the regulatory authority to be the best suited body to deal with compliance regarding rules and regulations, interference issues, frequency use and occupancy.	Government body"; "Regulatory Authority"; "Operator"; "Not	Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 1 and "Regulatory Authority" scores 2	2	Sub-group Not regulated	Sub-group Government	Regulato Authori

16 Please indicate below which entities have responsibility for: Universal Service/Access	Entity in charge of universal service/access	Telecommunications markets are dynamic, new technologies are constantly emerging and new services rapidly become popular and then indispensable. Thus, UAS aspirations rise over time and effective regulation could help fulfilling some of these aspirations. We consider the regulatory authority the body most suitable to be responsible for UAS for its industry sector expertise and skilled technical, economic and financial staff; moreover it has a degree of independence perceived to be one step removed from politics and also holds credibility with the industry (the main partner in the implementation of UAS policy).	"Sector Ministry "; "Other Ministry or Government body"; "Regulatory Authority"; "Operator"; "Not regulated"	Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 1 and "Regulatory Authority" scores 2	2	Sub-group Not regulated	Sub-group Government	Regulatory Authority
17 Please indicate below which entities have responsibility for: Entity in charge of broadcasting (radio and TV transmission)	New mandate: entity in charge of broadcasting (radio and TV transmission)	Having a converged regulator with authority over ICT and media/broadcasting is in line with international best practices. Since a single authority is charged with regulating these services, the need for formal coordination processes between agencies/authorities is no longer present, often allowing for more efficiency at planning and introducing converged technologies and services to the market. Because of this, converged regulators are conducive to enabling market integration in a converged environment.	"Sector Ministry "; "Other Ministry or Government body"; "Regulatory Authority"; "Operator"; "Not regulated"	Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 1 and "Regulatory Authority" scores 2	2	Sub-group Not regulated	Sub-group Government	Regulatory Authority
Please indicate below which entities have responsibility for the functions listed: Entity in charge of broadcasting content	New mandate: entity in charge of broadcasting content	Cf. description of question 17.	"Sector Ministry "; "Other Ministry or Government body"; "Regulatory Authority"; "Operator"; "Not regulated"	Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 1 and "Regulatory Authority" scores 2	2	Sub-group Not regulated	Sub-group Government	Regulatory Authority
19 Please indicate below which entities have responsibility for: Internet content	New mandate: entity in charge of Internet conten	t Cf. description of question 17.	"Sector Ministry "; "Other Ministry or Government body"; "Regulatory Authority"; "Operator"; "Not regulated"	Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 1 and "Regulatory Authority" scores 2	2	Sub-group Not regulated	Sub-group Government	Regulatory Authority
20 Please indicate below which entities have responsibility for: Information Technology	New mandate: entity in charge of IT	Cf. description of question 17.	"Sector Ministry "; "Other Ministry or Government body"; "Regulatory Authority"; "Operator"; "Not regulated"	Sub-group "Not regulated" ("Operator, "Not regulated") scores 0, Sub-group Government ("Sector Ministry", "Other Ministry or Government") scores 1 and "Regulatory Authority" scores 2.	2	Sub-group Not regulated	Sub-group Government	Regulatory Authority
<ul> <li>Is the Regulatory Authority responsible for:</li> <li>1a. Providing comparative tariff information</li> <li>1b. Informing consumers of their rights (consumer education)</li> </ul>	Consumer issues: entity responsible for comparative tariff information, consumer	If the regulator does not have the ability to demand information from operators, particularly incumbent operators, to assess overall market performance and/or investigate alleged violations, then service providers can engage in anti-competitive practices to the detriment of consumers. As a result, the entire regulatory system can be undermined, thus creating uncertainty and constraining market development. Regulators that have the ability to address consumer complaints, allowing consumers another	"Yes"; "No"	Combined and cumulative: - for questions 1a and 1b, "Yes" scores 0.5 and "No" scores 0	2	Accord	ding to cumulative s	score.
2. Handling consumer complaints	education and handling consumer complaints	avenue of redress for complaints that are not resolved directly with the operators, ensure transparecy and increased social welfare.		<ul> <li>for question 2, "Yes" scores 1 and "No" scores 0</li> </ul>				
2. Handling consumer complaints	education and handling	avenue of redress for complaints that are not resolved directly with the operators, ensure		•	22		-	
<ul><li>2. Handling consumer complaints</li><li>22 What types of licences are provided in your country</li></ul>	education and handling	avenue of redress for complaints that are not resolved directly with the operators, ensure transparecy and increased social welfare.	"Service-specific individual licences"; "Multi-service individual licenses"; "Unified/global licences"; "General authorizations"; "Simple notification"; "Licence exempt "	•	22	Only Service-specific individual licenses	Only Multi-service	Unified/global licences, General authorizations or Simple notification
	education and handling consumer complaints	avenue of redress for complaints that are not resolved directly with the operators, ensure transparecy and increased social welfare. Issuing service-specific licenses, which refer to a particular type of service over a specific type of network, is a customized and lenghty process that does not keep up with the innovations and developments of the ICT sector. Multi-service individual licenses represent a further, although not optimal, step into dropping the barriers for service innovations. General, unified/global licenses stand for increased market liberalization and the application of equal conditions to all service providers, enabling a more competitive environment. It should be noted that issuing individual licences for the radio spectrum authorizations remains a common practice throughout the world, particularly where the demand for the	"Service-specific individual licences"; "Multi-service individual licenses"; "Unified/global licences"; "General authorizations"; "Simple notification"; "Licence exempt "	scores 0 Although the question allows multiple answers, the scoring is not cumulative, the highest score (1 or 2) is taken only once.			Only Multi-service	licences, General authorizations or
22 What types of licences are provided in your country	education and handling consumer complaints	avenue of redress for complaints that are not resolved directly with the operators, ensure transparecy and increased social welfare. Issuing service-specific licenses, which refer to a particular type of service over a specific type of network, is a customized and lenghty process that does not keep up with the innovations and developments of the ICT sector. Multi-service individual licenses represent a further, although not optimal, step into dropping the barriers for service innovations. General, unified/global licenses stand for increased market liberalization and the application of equal conditions to all service providers, enabling a more competitive environment. It should be noted that issuing individual licences for the radio spectrum authorizations remains a common practice throughout the world, particularly where the demand for the use of a particular frequency band exceeds availability. An open entry market allows for competitive behaviour and self-regulating, thus ever- adapting, market conditions. Without the licensing barrier to overcome, service providers can focus their investment into infrastructure building, innovation and competitive	"Service-specific individual licences"; "Multi-service individual licenses"; "Unified/global licences"; "General authorizations"; "Simple notification"; "Licence exempt " Service-specific individual licences; "Multi service individual licenses"; "Unified/global licences"; "General authorizations"; "Simple notification"; "Licence exempt "	scores 0 Although the question allows multiple answers, the scoring is not cumulative, the highest score (1 or 2) is taken only once.	2		Only Multi-service	licences, General authorizations or Simple notification
<ul> <li>22 What types of licences are provided in your country</li> <li>23 What types of licences are provided in your country</li> <li>24 Do you require any operators to publish Reference Interconnection</li> </ul>	education and handling consumer complaints Types of licences provided License exempt Operators required to publish Reference Interconnection Offer	avenue of redress for complaints that are not resolved directly with the operators, ensure transparecy and increased social welfare. Issuing service-specific licenses, which refer to a particular type of service over a specific type of network, is a customized and lenghty process that does not keep up with the innovations and developments of the ICT sector. Multi-service individual licenses represent a further, although not optimal, step into dropping the barriers for service innovations. General, unified/global licenses stand for increased market liberalization and the application of equal conditions to all service providers, enabling a more competitive environment. It should be noted that issuing individual licences for the radio spectrum authorizations remains a common practice throughout the world, particularly where the demand for the use of a particular frequency band exceeds availability. An open entry market allows for competitive behaviour and self-regulating, thus everadapting, market conditions. Without the licensing barrier to overcome, service providers can focus their investment into infrastructure building, innovation and competitive services. When operators are required to publish RIO, new entrants have sufficient information about the network to allow for decision-making, thus reducing entry time, and to provide a baseline for negotiation. The publication of a standard offer, in the form of a RIO, narrows the scope for a dominant operator to discriminate among applicants for	"Service-specific individual licences"; "Multi-service individual licenses"; "Unified/global licences"; "General authorizations"; "Simple notification"; "Licence exempt " Service-specific individual licences; "Multi service individual licenses"; "Unified/global licences"; "General authorizations"; "Simple notification"; "Licence exempt " "Yes"; "No"	scores 0 Although the question allows multiple answers, the scoring is not cumulative, the highest score (1 or 2) is taken only once.	2	individual licenses	Only Multi-service	licences, General authorizations or Simple notification

27 Is infrastructure sharing for mobile operators permitted (e.g. Mobile Virtual Network Operators)?	Infrastructure sharing for mobile operators permitted	Network-sharing agreements can optimize the use of the coverage for operators, generally reducing costs, thus being beneficial for both the service providers and the consumers. It can also serve as incentive to network deployment. MVNOs allow for other market players - operators - to resell existing products and services from another provider or even bulkbuying minutes and data, increasing the profitability of the market.	"Yes"; "No"	-	2	No	-	Yes
28 Is infrastructure sharing mandated (towers, base stations, posts, ducts, etc.) or actively incentivized?	Infrastructure sharing mandated	Infrastructure sharing between market operators or with other industries can decrease expenditures by the joint deployment and maintenance of facilities as well as increase productivity of the usage of scarce resources.	"Yes"; "No"	-	2	No	-	Yes
29 Is co-location/site sharing mandated or actively incentivized?	Co-location/site sharing mandated	Passive infrastructure sharing is aesthetically, enviromentally and economically positive. It provides the opportunity for investment on the improvement of services, greater coverage and innovation due to reduced fixed costs.	"Yes"; "No"	-	2	No	-	Yes
30 Is unbundled access to the local loop required?	Unbundled access to the local loop required	Unbundling reduces infrastructure deployment costs and avoids unnecessary duplication of sections of the incumbent's infrastructure. By reducing the amount of initial investment - fixed costs -, market entry is stimulated, driving competition forward.	"Yes"; "No"	-	2	No	-	Yes
31 Is secondary spectrum trading allowed?	Secondary trading allowed	Secondary trading promotes optimal, thus more economically productive, use of spectrum. It also helps to create a self-regulating environment given the more effective usage of the frequency bands, both by the new entrant and the network operator who already possesses the rights.	"Yes"; "No"	-	2	No	-	Yes
32 Is band migration allowed?	Band migration allowed	If band migration is allowed, the market participants can provide new services within their existing license. This increases incentives for innovation and more efficient use of the networks, as well as decreasing the cost of a new license.	"Yes"; "No"	-	2	No	-	Ye
Is number portability required from: a) Fixed-line operators?/ If yes, i this service currently available to fixed subscribers?	Number portability s available to consumers and required from fixed- line operators	Number portability increases competition and quality of services among service providers in order to retain their current clients (which are no longer held back by the imposition of a new telephone number).	"Yes"; "No" // "Yes"; "No"	If both answers are "No" or one is "No" and the other blank, code as "No"; if number portability is required but not available code as "Partial". Finally, if both answers are "Yes", code as "Yes".	2	No	Partial	Ye
34 Is number portability required from: b) Mobile operators?/ If yes, is this service currently available to subscribers?	Number portability available to consumers and required from mobile operators	Cf. description of question 33.	"Yes"; "No" // "Yes"; "No"	If both answers are "No" or one is "No" and the other blank, code as "No"; if number portability is required but not available code as "Partial". Finally, if both answers are "Yes", code as "Yes".	2	No	Partial	Ye
Are individual users allowed to make voice over IP (VoIP) or Internet telephony phone calls?	Individual users allowed to use VoIP	As an option to the traditional telephony, the VoIP services represent a different way of placing calls that has been improving over time and imposing competition on the historical market players. It stimulates traditional business models to become more efficient, innovative and reduce costs in order to keep their places in the market.	"Yes"; "No"		2	No	-	Ye
Has your country adopted a national plan (initiative, policy, strategy, etc) to promote broadband?	National plan that involves broadband	The adoption of a national plan that includes broadband reinforces the necessity of a consensus and coordination for both the infrastructure deployment and the regulation of the services to be provided. A more coordinated and accountable environment, in turn, accelerates innovation, boosts investment and raises productivity, all of which, along with the universal access goal of the broadband plan, contribute to higher penetration and competition levels.	"Yes"; "No"		2	No	-	Yes
	Level of competition in		"Monopoly"; "Partial competition"; "Full		30			
<ul> <li>Level of competition:</li> <li>Basic services (Local fixed line services, Domestic fixed long distance, International fixed long distance)</li> </ul>	local and long distance (domestic and international) fixed line services	International best practices favor competition over monopolies in the ICT market since competitive markets are known to increase consumer welfare by lowering prices, promoting innovation, improving consumer choice and raising the quality of services. Note: the question refers to what is legally permissible in each member state.	competition" // "Monopoly"; "Partial competition"; "Full competition" // "Monopoly"; "Partial competition"; "Full competition"	For each sub-indicator, score 0 for "Monopoly"; 1 for "Partial competition"; and 2 for "Competition". Take average average of the three scorings.	2	Average s	core of the three sub-ir	ndicators
Level of competition: IMT (3G, 4G, etc.)	Level of competition in IMT (3G, 4G, etc.) services	Cf. description of question 37.	"Monopoly"; "Partial competition"; "Full competition"		2	Monopoly	Partial competition	Compe
39 Level of competition: Broadband services (DSL, Cable modem, Fixed Wireless Broadband)	Level of competition in cable modem, DSL, fixed wireless broadband	Cf. description of question 37.	"Monopoly"; "Partial competition"; "Full competition" // "Monopoly"; "Partial competition"; "Full competition" // "Monopoly"; "Partial competition"; "Full competition" // "Monopoly"; "Partial competition"; "Full competition"	For each sub-indicator, score 0 for "Monopoly"; 1 for "Partial competition"; and 2 for "Competition". Take average average of the three scorings.	2	Average	score of the four sub-in	ndicators
40 Level of competition:	Level of competition in	Cf. description of question 37.	"Monopoly"; "Partial competition"; "Full		2	Monopoly	Partial competition	Compet
Leased lines Level of competition:	leased lines Level of competition in	Cf. description of question 37.	competition" "Monopoly"; "Partial competition"; "Full		2			
<ul> <li>International Gateways</li> <li>Status of the main fixed line operator (public, partially privatized/partially private, fully privatized/private)</li> </ul>	International Gateways Status of the main fixed line operator	Both the regulatory authority and the incumbent being overseen by the same entity is not optimal as the decision-making process could be biased to lean towards the interests of the incumbent rather than promote market competition, quality of services and greater welfare for the population.	competition" "State-owned", "Partially privatized", "Partially private, "Fully privatized", "Fully Private"		2	Monopoly State-owned	Partial competition Partially privatized/Partially private	Compe Full privatized
43 National anti-trust/competition law recognizes the concept of "dominance" or Significant Market Power (SMP)	Legal concept of dominance or SMP	Defining the concept of Significant Market Power (SMP) is an important step to avoid anticompetitive behaviour. When operators are classified as having significant market power, it is possible for the regulator to impose ex ante regulations (i.e. mandatory publication of Reference Interconnection Offers) to avoid erroneous use of this power.	"Yes"; "No"		2	No	-	Ye

r framewoi	Criteria used in determining "dominance" or SMP (geographical, market share, control of essential facilities, easy access to financial resources, strength of the countervailing power of consumers, economies of scale and scope)	Criteria used in determining dominance or SMP	Because market share by itself does not imply significant market power, it is important to have multiple criteria contributing to the definition of SMP - thus increasing the chances of recognizing those operators with power enough to impose anticompetitive environment to other market players.	"Geographical"; "Market share"; "Control of essential facilities"; "Easy access to financial resources"; "Strength of the countervailing power of consumers"; "Economies of scale and scope"		2	No criteria in place	One or two criteria in place	Three or more criteria in place
Competition framewor	Restrictions to foreign participation/ownership: Facilities-based operators	Foreign participation/ownership in facilities-based operators	Foreign investment facilitates the growth and development of the telecommunications sector, increasing access to capital for network development and modernization, and allowing for the transfer of technology and know-how leading to increased productivity, innovation and competitiveness.	"No restriction"; "Controlling interest"; "50%"; "Minority interest"; "No foreign ownership allowed"	For "No restriction" or "Controlling interest" code as "Loose control"; for "50%" or "Minority Interest" code as "Moderate control"; and for "No foreing ownership allowed" code as "Full control".	2	Full control	Moderate control	Loose control
<b>0</b> .4	Restrictions to foreign participation/ownership: Spectrum-based operators	Foreign participation/ownership in spectrum-based operators	Cf. description of question 45.	"No restriction"; "Controlling interest"; "50%"; "Minority interest"; "No foreign ownership allowed"	For "No restriction" or "Controlling interest" code as "Loose control"; for "50%" or "Minority Interest" code as "Moderate control"; and for "No foreing ownership allowed" code as "Full control".	2	Full control	Moderate control	Loose control
47	Restrictions to foreign participation/ownership: National service operators (Local service operators & Long-distance service operators)	Foreign participation/ownership in local service operators/long-distance service operators	Cf. description of question 45.	"No restriction"; "Controlling interest"; "50%"; "Minority interest"; "No foreign ownership allowed"// "No restriction"; "Controlling interest"; "50%"; "Minority interest"; "No foreign ownership allowed	For each sub-indicator, score 0 for "No restriction" or "Controlling interest"; score 1 for "50%" or "Minority Interest" score 1; and 2 for "No foreing ownership allowed". Take average average of the two scorings.	2	Average s	core of the two sub-in	dicators
48	Restrictions to foreign participation/ownership: International service operators	Foreign participation/ownership in international service operators	Cf. description of question 45.	"No restriction"; "Controlling interest"; "50%"; "Minority interest"; "No foreign ownership allowed"	For "No restriction" or "Controlling interest" code as "Loose control"; for "50%" or "Minority Interest" code as "Moderate control"; and for "No foreing ownership allowed" code as "Full control".	2	Full control	Moderate control	Loose control
49	Restrictions to foreign participation/ownership: Internet Service Providers (ISP)	Foreign participation/ownership in Internet Service Providers (ISPs)	Cf. description of question 45.	"No restriction"; "Controlling interest"; "50%"; "Minority interest"; "No foreign ownership allowed"	For "No restriction" or "Controlling interest" code as "Loose control"; for "50%" or "Minority Interest" code as "Moderate control"; and for "No foreing ownership allowed" code as "Full control".	2	Full control	Moderate control	Loose control
50	Restrictions to foreign participation/ownership: Value-added service providers	Foreign participation/ownership in value-added service providers	Cf. description of question 45.	"No restriction"; "Controlling interest"; "50%"; "Minority interest"; "No foreign ownership allowed"	For "No restriction" or "Controlling interest" code as "Loose control"; for "50%" or "Minority Interest" code as "Moderate control"; and for "No foreing ownership allowed" code as "Full control".	2	Full control	Moderate control	Loose control

Source: ITU, www.itu.int/go/tracker