## ANNEX (1)

# Umniah's comments on the draft Interconnection, Infrastructure Sharing and Mobile National Roaming Instructions

#### **General Comments:**

- We fully endorse the inclusion of infrastructure sharing as a vital mechanism for promoting competition within the telecommunications market. Infrastructure sharing fosters a more competitive environment, ensuring that all operators can access the necessary resources to compete effectively. This directly benefits consumers by enhancing service quality, expanding coverage, and increasing choices available to them.
- However, to ensure that infrastructure sharing is implemented fairly, it is essential that the regulatory framework includes robust enforcement mechanisms to prevent anti-competitive behaviors. Without these measures, Owning Licensees may impose unfavorable terms or excessive pricing, ultimately undermining the intended purpose of these instructions. We strongly urge the TRC to ensure that Owning Licensees are not able to take advantage of vaguely defined terms or engage in practices that would stifle competition and limit consumer benefits.
- Furthermore, clear and transparent pricing guidelines, along with a fast-track dispute resolution process, are necessary to prevent delays and ensure that the Licensees can access infrastructure on equitable terms. This will promote a level playing field across the market, preventing dominant players from controlling access to critical infrastructure through unreasonable pricing or terms, and thus, hindering market growth and innovation.

- The draft Infrastructure Sharing Instructions do not distinguish between infrastructure sharing as a standalone service and infrastructure sharing combined with collocation for Licensees requesting interconnection services to physically interconnect with the equipment of the Owning Licensee. It is essential that these two services are clearly defined in the instructions, along with the relevant obligations for all licensees and those specific to Designated Licensees.
- Infrastructure Sharing Instructions covers only the passive elements of network infrastructure. However, we expect TRC to address the
  requirements for active infrastructure sharing within the regulatory framework by incorporating principles of active sharing. This should
  include, but not be limited to, elements such as mobile switching centers, backhaul connectivity to telecom operators' networks, radio
  access nodes, and other necessary equipment, along with the associated facilities required to deliver services. The extent of sharing
  for these active infrastructure elements should be specified as below:
  - a. Multi Operator Radio Access Network (MORAN), in which only the radio access network equipment is shared between operators.
  - b. Multi Operator Core Network (MOCN) services, in which both spectrum and radio access equipment are shared.
- The draft Infrastructure Sharing Instructions do not adequately address the competitive challenges posed by exclusive agreements that certain licensed operators establish with property owners or developers of private, public, or commercial facilities. These agreements create barriers to entry and exclude competitors from these geographic markets by restricting access for other operators. As a result, end-users are deprived of competitive service options. Additionally, such exclusivity arrangements often lead to discriminatory pricing and inflated costs for other operators, making it financially unviable for them to provide services in these areas.
- To address the above concern, we propose the following amendments to the instructions:
  - **Definition of Critical Property**: A facility, whether private or public, where Telecommunications Network Facilities are provided exclusively or predominantly by one or more licensed operators. In such properties, it is economically, technically, or procedurally impractical for competing operators to deploy similar Telecommunications Network Facilities.
  - Adding a new article to the obligations section (3.Rules applicable to Designated Licensees) as follows: "In instances where Telecommunications Network Facilities are deployed, owned, or operated under an exclusive agreement by a particular service provider within a Critical Property, these facilities shall be classified as critical facilities. The service provider

operating in such a Critical Property shall be designated as a dominant licensee within the defined geographical boundary of the property (Site) and shall be subject to the Infrastructure Sharing Instructions stipulated in these regulations."

The above proposed amendment ensures that any Telecom Network Facilities established under exclusive agreements in private or public properties are deemed critical for regulatory purposes. This classification is designed to mitigate anti-competitive practices and guarantee equitable access for all licensed operators.

## **Specific comments:**

## **Main Body**

#	Article	Comment
4. C	4. Definitions	
	Collocation means the provision of physical space and	According to the draft interconnection instructions, Collocation is not
	technicalfacilities necessary to accommodate and connect the	linked to infrastructure sharing, though it should be integrated with
	relevant equipement of another Licensee seeking access.	infrastructure sharing for interconnected services that require
		collocation. Therefore, collocation should be mandatory for all
		licensees when seeking access for interconnection with another
		licensee, particularly for services where a licensee has been
		designated as dominant, such as wholesale call termination. These
		services rely on collocation to facilitate interconnection at the Point of
		Interconnection (Pol) at the host licensee's site.
	Host Mobile Operator means a mobile operator on whose system	The definition is not cleared, we suggest to include separate definition
	or network a subscriber roams by means of roaming arrangements	of the National Roaming Service which will clarify the service and the
	by the Hosted Mobile Operator.	definitions of Host/Hosted Mobile Operator.

	Accordingly, we suggest to add the followng defintion of the National
	Roaming Service:
	Natonal Roaming Service: a service that allows subscribers of one
	mobile network operator (the "Hosted Mobile Operator") to use the
	network infrastructure of another operator (the "Host Mobile Operator")
	when they are outside the coverage area of their home network but still
	within the same country.
Hosted Mobile Operator means the mobile operator with which a	
subscriber has a direct contractual relationship for access to and	
use of mobile services.	
IP-based network means a Telecommunications System in which	The definition should not limit the IP-based networks to only layer 3
Internet Protocol is used as the Open System Interface (OSI) layer	protocol, it should include a variety of protocols and services across
3 protocol (OSI Reference Model).	multiple layers. This would give a fuller picture of how these networks
	function in practice, especially in interconnection settings where
	multiple layers of communication may be involved (e.g., transport,
	physical, data link layers).
	Accordingly, we suggest amending the definition as follows:
	IP-based network means a Telecommunications System in which
	Internet Protocol is the primary protocol used for routing and data
	exchange, typically at Layer 3 of the Open System Interface (OSI)
	Reference Model, and may involve protocols operating at higher
	layers for end-to-end communication.
Sharing Agreement means an agreement between an Owning	The instructions do not distinguish between infrastructure sharing as
Licensee and a Sharing Licensee for sharing the Owning Licensee's	an independent service and infrastructure sharing for interconnection
Telecommunications Network Facilities.	purposes. Both services should be clearly defined in the instructions,

along with the obligations that apply to all licensees and those specific to designated licensees.

To clarify, Infrastructure Sharing must be mandatory for all licensees seeking interconnection with another licensee, particularly for services where a licensee has been designated as dominant, such as Wholesale Call Termination, Wholesale Broadband Access, or other defined interconnection services. In this regard, wholesale collocation and infrastructure should be included in the Reference Interconnection Offer (RIO) and addressed within the Interconnection Agreement. Conversely, access to infrastructure as a standalone service should be governed by the terms of the Sharing Agreement.

## 5. Dispute Resolution

- In the event of any dispute or difference arising between or among the Licensees relating to or arising out of an Agreement, including the implementation, execution, interpretation, rectification, termination or cancellation of the Agreement, the Licensees shall meet within 10 (ten) working days of written notice of the dispute or difference from one Licensee to the other (or such longer time as mutually agreed by the Licensees in writing) to negotiate in good faith in an effort to settle such dispute or difference, and if the dispute or difference is not resolved to the Licensees' satisfaction within 5 (five) working days of the meeting (or such longer time as mutually agreed by the Licensees in writing), the Licensees shall proceed as follows:
  - Within 2 (two) working days, the dispute or difference shall be referred to a joint committee of the Licensees' respective

- The term "Agreement" referenced in this section pertains specifically to the "Interconnection Agreement" as defined in these instructions. Does this imply that Article 5 applies solely to the Interconnection Agreement, excluding Sharing Agreements and National Roaming Agreements from the dispute resolution process outlined in this section? Clearly specifying which agreements are covered would help avoid any confusion.
- This Article addresses disputes related to or arising from an Agreement but does not cover the negotiation phase if licensees fail to reach an Agreement. Therefore, we strongly recommend including the following provision: "If a Licensee is unable to reach an Agreement with another licensee on the terms and conditions of interconnection or other arrangements

chief executive officers or alternates appointed by them. The chief executive officers or appointed alternates shall use their best endeavours to settle or resolve the dispute or difference as expeditiously as possible, but in any event within a period 15 (fifteen) working days of the matter being referred to them (or such longer time as mutually agreed by the Licensees in writing);

 Such dispute or difference shall be referred to the TRC for determination if either or both parties so request or in the alternative if both parties agree then the matter may proceed to arbitration. within one (1) month after the initial written request for interconnection by either party, either party may submit a written notice requesting that the TRC adjudicate the matter. The TRC's decision on all disputed matters shall be binding on both parties.

As for the last point "Such dispute or difference shall be referred
to the TRC for determination if either or both parties so request
or in the alternative if both parties agree then the matter may
proceed to arbitration", we believe that this point should clearly
state that the TRC's decision on the disputed matter shall be
binding on both parties".

#### **Section I - Interconnection Instructions**

#	Article	Comment
3.	Scope of these Instructions	
	-	
3	All Designated Licensees shall produce and publish a Reference	Prior consultation of the RIO before publication and approval by the
	Interconnection Offer (RIO), all new and updated RIOs shall be subject	TRC is crucial. Given that the RIO defines the terms and conditions
	to TRC approval prior to publication.	governing Interconnection Agreements, it is important that existing
		licensees, as key stakeholders, be consulted before the TRC grants
		approval. This consultation process ensures that their input is
		considered in shaping the RIO.
		All new/updated RIOs should be subject to a formal consultation
		process involving licensees, followed by TRC approval before
		publication. The TRC will manage the consultation, with its final

7	When two Licensees reach an agreement and sign an Interconnection Agreement, the TRC will then have thirty (30) days from the date of submitting the draft Interconnection Agreement to the TRC in which to approve the Interconnection Agreement or require changes by the parties in order to comply with these Instructions. The Interconnection Agreement shall be approved by the TRC in writing.	determination completed within 30 days of the draft RIO submission.  We suggest adding the following term as stated in the current Interconnection Instructions: "Interconnection Agreements shall be submitted to the TRC for approval and shall be considered to be approved if no comments are provided by the TRC within 30 days of submission".
14	All Licensees, upon receipt of a reasonable request from another Licensee, should enter into good faith negotiations to conclude an Interconnection Agreement. Licensees should meet all reasonable requests for Interconnection Services and shall adhere to non-discrimination between Interconnect Services they provide to their own business units and affiliates, and those they provide to other Licensees.	We seek clarification regarding the obligations imposed on "all licensees" to offer and provide interconnection services, particularly in comparison to the obligations imposed on Designated Licensees (section 3). The rules appear to mandate that all licensees must engage in good faith negotiations and fulfill reasonable interconnection requests, which aligns with the obligations of Designated Licensees, except that the latter are typically required to publish a
		Reference Interconnection Offer (RIO). It would be beneficial to gain a clearer understanding of the distinctions in obligations between these two categories of licensees and how the general requirements for all licensees correspond with the more detailed obligations of Designated Licensees.

• Additionally, we would like to address the provision stating that 'Licensees should meet all reasonable requests for Interconnection Services and shall adhere to non-discrimination between Interconnect Services they provide to their own business units and affiliates, and those they provide to other Licensees.' This term does not clearly define 'affiliates' or 'business units.' We believe that the non-discrimination requirement should specifically cover the relationship between licensed entities, as non-licensed affiliates or business units related to a licensee are typically governed by internal commercial processes.

## 3. Rules applicable to Designated Licensees

## 3.2 Transparency

All new and updated RIO's shall be subject to the TRC's approval prior to be legally valid. After approval by the TRC, the Designated Licensee shall publish the approved RIO on its website and inform the other Licensees within 15 days following the approval by the TRC.

Since the Designated Licensee is a party to the Interconnection Agreements, and the provisions of these agreements are based on the Designated Licensee's Reference Interconnection Offer (RIO), any changes to the RIO could directly impact the existing contractual obligations between the Designated Licensee and other licensees.

Without prior consultation with all affected licensees, updates to the RIO could result in unilateral changes that undermine the legal standing of existing Interconnection Agreements. This could create situations where the updated RIO legally supersedes the existing Interconnection Agreements, effectively annulling certain terms without the involvement or consent of the other party.

		To ensure the legal integrity of both the RIO and the Interconnection
		Agreements, we believe it is essential that any updates to the RIO
		be subject to prior consultation with the Licensees, followed by
		necessary amendments to the Interconnection Agreements, in
		order to align with the new/amended RIO and avoid any legal
		disputes.
34	A Designated Licensee shall periodically update its RIO, or upon request by	Since the Designated Licensee is a party to the Interconnection
	the TRC, to take account of any changes to these Instructions or other TRC	Agreements, and the provisions of these agreements are based on
	Regulations; new or modified Interconnection Services offered by the Designated Licensee; changes to the associated networks, processes and	the Designated Licensee's Reference Interconnection Offer (RIO),
	systems; or any other regulatory requirements that may directly impact the	any changes to the RIO could directly impact the existing
	terms and conditions of a RIO. The Licensee shall obtain the TRC's approval on the updated RIO.	contractual obligations between the Designated Licensee and other
	on the apaated Mo.	licensees.
		Without prior consultation with all affected licensees, updates to the
		RIO could result in unilateral changes that undermine the legal
		standing of existing Interconnection Agreements. This could create
		situations where the updated RIO legally supersedes the existing
		Interconnection Agreements, effectively annulling certain terms
		without the involvement or consent of the other party.
		To ensure the legal integrity of both the RIO and the Interconnection
		Agreements, we believe it is essential that any updates to the RIO
		be subject to prior consultation with the Licensees, followed by
		necessary amendments to the Interconnection Agreements, in
		order to align with the new/amended RIO and avoid any legal
		disputes.
	3.3 Content of the Reference Interconnection Offer	(RIO)
		\/

39	The TRC may require Designated Licensees to include certain services in their RIO other than the ones described in the Annex B.	We believe that the TRC should establish a clear basis for including any additional services in this term. This should be in accordance with the Interconnection Instructions framework, which requires that the Reference Interconnection Offer (RIO) encompasses the services defined in the relevant market for the Designated Licensee, as outlined in the Market Review.
41	3.5 Amendment to existing Interconnection Se	
41	Any material changes in the setup of existing Interconnection Services of the Designated Licensee should be communicated with other concerned Licensees and shall be submitted to the TRC for approval.	We believe that such material change in the setup of existing Interconnection Services requires a formal consultation process prior to implementing major changes to Interconnection Services, allowing affected Licensees to voice concerns.
43	In case of upgrading of Interconnection Services to more efficient technologies, the Designated Licensee shall coordinate such major changes with all Licensees affected and give them a notice period of at least one (1) year prior to the start of these changes. Coordination shall take place in accordance with these Instructions.	We suggest amending this article to the following" "In case of upgrading Interconnection Services to more efficient technologies, the Designated Licensee shall coordinate such major changes with all Licensees affected and give them a notice period of at least one (1) year, or any longer/shorter period agreed upon with the Licensees, prior to the start of these changes. Coordination shall take place in accordance with these Instructions.
44	Each Licensee shall bear its own costs incurred through any migration in the Interconnection Services to new technologies.	We suggest aligning more closely with the best international practices, by amending the articles as following:  "Each Licensee shall bear its own costs incurred through any migration in the Interconnection Services to new technologies, unless otherwise agreed upon by the Licensees or mandated by the TRC."

#### 4. Charges and Cost Principles

Any new or amended charges conditions proposed by the Designated Licensee for the RIO shall be approved by the TRC. If requested by the TRC, Designated Licensees shall provide the TRC with adequately detailed and documented cost studies and models that support the proposed charges, or their amendment. Those studies shall be based on causal cost allocation, including proper consideration of joint and common costs and a reasonable cost of capital, according to international best practice and the TRC's determinations.

The term could be interpreted to imply that the rates of regulated interconnection services that are already approved by the TRC for the period of four years might be subject to change during this period. We emphasize that the rates of regulated interconnection services approved by the TRC covering the period of four years should remain stable to allow interconnected Licensees to build their strategic plans accordingly. Therefore, we suggest clarifying that any new or amended charge conditions proposed by the Designated Licensee should not alter the rates approved by TRC during this four-years period.

### 6. Technical Aspects

## 6.3.4 Link Capacity

The TRC notes that some incumbent operators discourage the practice of using routes in this way from both a technical and commercial standpoint.

However, high-usage routes are widely employed and may be very efficient.

This term is not entirely clear, we suggest reformatting this provision to ensure it reflects regulatory mandate.

## 6.5 Interconnection of Signalling Networks

Designated Licensees shall specify the signalling configuration to be used on interconnect links within their RIOs.

As article (10) above states that "The Designated Licensee shall ensure that the Interconnection Services in its Reference Interconnection Offer include services to support both circuit switched and packet switched (IP-based) technologies and that the Designated Licensee meets all reasonable requests for services using IP technologies. The Designated Licensee shall ensure that Interconnect Services it provides to its own retail divisions to support IP based technology are available to all Licensees".

In order to secure the requirements for signalling configuration and
service provision, we believe that the RIO must specify the signaling
protocols that will be used for interconnection, typically SIP for IP
interconnection or SS7/ISUP for traditional interconnection.
We suggest of the following amendnet to this article as following:
"Designated Licensees shall specify the type of signaling to be
used on interconnect links within their RIOs."

## 6.8 Quality of Service

- The Quality of Service measures shall include the Grade of Service during Busy Hour (blocking probability), either applied to individual interconnect links or across all interconnect links, and may include the following:
  - a. AnswerSeizur Ratio (ASR),
  - b. Transmission delay as defined in ITU-Recommendation G.114,
  - c. Transmission loss (loudness) as defined in ITU-T Recommendation P.76,
  - d. Noise and distortion as defined in ITU-T Recommendations Q.551-554, G.123, G.232, G.712 and P.11,
  - e. Echo and loss of stability as defined in ITU-T Recommendation G.122
  - f. Cross-talk as defined in ITU-T Recommendation P.16.

While this article is more aligned with **circuit-switched interconnections**, it doesn't explicitly address QoS measures specific to **IP-based interconnection**, such as:

- Packet loss: Measuring dropped packets in IP networks.
- Jitter: Variation in packet arrival times.
- MOS (Mean Opinion Score): For voice quality in VoIP scenarios.
   Including these metrics would ensure that the QoS standards also cover IP interconnection, which uses SIP and packet-switched networks.

#### **ANNEX B – Interconnection Services**

#### **B.1** Overview

Collocation and Infrastructure Sharing Services - The provision by a Licensee to other Licensees of space in its premises and/or the use of part of its physical or virtual infrastructure, such as ducts, dark fibre, energy, masts, towers, etc., to other Licensees. The regulatory framework of Infrastructure sharing is stipulated in separate instructions.	We believe that the interconnection instructions should differentiate between infrastructure sharing as a standalone service which will be covered in separate instructions, and infrastructure sharing combined with collocation for the purpose of interconnection the subject matter of this instructions as stated in article (80/c) above. Both services should be clearly defined in the instructions, along with the obligations applicable to all licensees and those specific to designated licensees.
<b>Operator Services</b> – The provision of Operator Services, such as directory enquiries and emergency services, operated by a Designated Licensee to other Licensees.	This definition seems to imply that specific markets for directory enquiries and emergency services will be established, with Designated Licensees responsible for providing these services. Is this the intent of including this provision under Designated Licensee?
Local Unbundling Access Services – The provision of unbundled access services in the local loop by one Licensee to other Licensees, This service can include Local Loop Unbundling (LLU) and Virtual Unbundled Local Access (VULA):  VULA (Virtual Unbundled Local Access) – The service by which a	As for the definition of LLU, the term 'Owning Licensee' in the instructions refers to a Licensee that owns, manages, or leases a Telecommunications Network Facility, excluding those related to LLU service. In this context, 'Owning Licensee' included in the
Licensee requesting that service uses a virtual connection provided by another Licensee (the VULA provider) to provide services to end-users connected to the VULA provider's access network. VULA is a form of wholesale access service in which the interconnection occurs locally at	definition should be replaced with "Designated Licensee".
the Optical Line Termination (OLT).  Local Loop Unbundling (LLU) – The LLU Service is a service where the customer's local copper loop in the Owning Licensee's network is disconnected from the rest of the Owning Licensee's network and permanently connected via a co-located Point of Access to the	

	Requesting Licensee's network, from which services are provided to	
	the end-user.	
B.2	- Traffic Conveyance Services	
B.2	.2- Traffic Transit Service	
135	Designated Licensees that provide fixed telecommunications services shall	The wording of this article could be interpreted to mean that a
	provide international, national and IP Transit Services for all other interconnected Licensees.	Designated Licensee in any market and at the same time is
	interconnected Licensees.	providing fixed telecommunications services, is obligated to provide
		international, national, and IP Transit Services for all interconnected
		Licensees. However, our understanding is that this obligation
		should apply specifically to Designated Licensees in the fixed
		telecommunications market. TRC should take into consideration
		that the draft competition safeguard instructions, currently under
		consultation, propose the removal of predefined market definitions.
		As a result, we expect that there will no longer be a predefined "fixed
		telecommunications market," which may necessitate further
		adjustments to this provision (135).
136	Other Licensees may provide national and /or international Transit Services.	Change "national and /or international Transit" to National
		Traffic Transit/International Traffic Transit" the same
		definition included in the Instructions.
		This term should include also IP Transit service.
B.6	- Number Translation Service	B.6 should be changed to B2.4
140	A Number Translation Traffic Origination Service is defined as a service	08 already defined by the interconnection instructions as interconnection
	where an end-user dials a non-geographic number (currently using leading digits 08, 09 and 117) to a fixed terminating point on another Licensee's	service under "Number Translation Traffic Origination Service", where
	Network and is charged a fixed fee irrespective of the distance between the	the Premium rate services (PRS) short codes, such as those starting with

points of origination and termination. In some instances, this charge to the originating end-user might be zero.

specific prefixes (e.g., 09 or 117), are not considered standard interconnection services and should not be subject to interconnection agreement in the same way as regular telecommunication services. Instead, those numbering ranges are treated separately due to their unique nature, which involves higher charges for content-related or value-added services, considering that:

- Premium Rate Services (PRS) are categorized as value-added services, which are typically billed at higher rates than regular calls.
- Interconnection Agreements typically cover standard telecommunication services, such as voice, SMS, and data transmission, where rates and terms are more regulated and subject to cost-based principles. PRS are generally excluded from these agreements due to their different commercial and pricing models.
- 3. Billing and pricing issues are commonly raised in relation to PRS; Operators may apply higher tariffs for connecting calls to these numbers, and interconnection arrangements for PRS may require special agreements to manage revenue-sharing, taking into consideration the complexity of managing such arrangements on the billing systems as following;
  - PRS involve higher charges, which require billing systems to handle complex revenue-sharing models between operators and PRS providers. The originating and

terminating operators need to exchange detailed billing records to ensure accurate charging.

- PRS have variable charges, which might be set by the service provider/ content provider rather than the telecom operators. Billing systems cannot distinguish between PRS short codes and regular numbers to apply different rates accordingly.
- PRS typically involve revenue-sharing models, where a
  portion of the charges collected from the end-user is
  shared between the operators and the content provider.
  Billing system is not being able to manage these
  agreements and distribute revenues appropriately.

In the other hand, the consideration of Premium Rate Services (PRS) under interconnection services could lead to a situation where the content provider contracts exclusively with one licensee, expecting to be accessible to customers of all operators. However, this setup creates potential market distortions and risks, including:

- If a content provider contracts with only one licensee, that licensee gains exclusive control over the access to the premium content. This would mean that all other operators are required to route their customers' calls to that licensee, essentially giving the contracted licensee a monopolistic advantage.
- Other licensees may respond by setting very high calling rates for their customers to access the PRS short codes controlled by the contracted licensee. This discourages their customers from using

the PRS and reduces the advantage gained by the licensee holding the contract with the content provider.

- 3. This pricing strategy by competing licensees could pressure the content provider to negotiate deals with those licensees as well, in order to avoid losing potential customers due to the high cost of accessing their services. Essentially, the other licensees may use pricing as a tool to force the content provider into contracts, ensuring a more balanced market for PRS access.
- Ultimately, this situation harms consumers by artificially inflating the prices of PRS short codes for customers of the non-contracted licensees, which restricts access to the services and may reduce demand.

Treating PRS as part of interconnection services risks creating market distortions by incentivizing anti-competitive behavior, such as high pricing by other operators. To avoid these issues, PRS should not be treated under standard interconnection terms. Instead, separate, transparent commercial agreements should govern the provision of PRS, ensuring fair competition and avoiding potential pricing manipulation or market dominance by a single licensee.

Accordingly, we kindly request that Premium Rate Services (PRS) short codes, such as those starting with specific prefixes (e.g., 09 or 117), be excluded from the scope of interconnection services as defined in the interconnection instructions. PRS are inherently different from standard interconnection services due to their nature as value-added services and

		the associated higher billing rates for content or service provision as
		outlined above.
B.7	- Transport Services	B.7 should be changed to B.3
1	The provision by a Licensee to other Licensees, of transport capacities and	The term "Transport Services" should be revised to "Dedicated Capacity"
	connectivity for the implementation of an Interconnection service. This shall include (but not limited to) leased line circuits used by Licensees between	to align with the terminology used in the defined market as outlined in
	their own premises and international circuits.	the market review regulatory decisions. This ensures consistency with
		regulatory definitions and reflects the specific nature of the service
		being discussed.
B.8	Collocation and Infrastructure Sharing Services	B.8 should be change to B.4
147	The regulatory framework of Infrastructure Sharing is stipulated in separate	We believe that the interconnection instructions should differentiate
	Infrastructure Sharing Instructions.	between infrastructure sharing as a standalone service which will be
		covered in separate instructions, and infrastructure sharing combined
		with collocation for the purpose of interconnection the subject matter of
		this instructions as stated in article (80/c) above. Both services should be
		clearly defined in the instructions, along with the obligations applicable
		to all licensees and those specific to designated licensees.
B.9	- Operator Services	B.9 should be changed to B.5
B.9.	1 - Operator Assistance Services	B9.1 should be changed to B.5.1
B9.2	2 - Emergency Services	B9.2 should be changed to B.5.2
	All Licensees shall offer connection to the Public Emergency Services to	The obligation outlined in this clause applies to all licensees; however, the
	other Licensees.	service definition in section B.1 above states, "Operator Services – The
1		provision of Operator Services, such as Directory Enquiries and

Bo	2. Dive atomy Every inica Compile	Emergency Services, operated by a Designated Licensee to other Licensees." This creates a contradiction with the current clause, as the definition limits the obligation to Designated Licensees, while the clause imposes it on all licensees.
В9.	3 – Directory Enquiries Service	B9.3 should be changed to B.5.3
152	Designated Licensees shall provide Directory Enquiry Services to other Licensees.	Since no specific market has been defined for this service and customers are entitled to access directory services from any telecom provider, we seek clarification on why this obligation is placed solely on the Designated Licensee. It is essential that all licensees be equally responsible for providing this service to other licensees.
B.1	0- International Gateway Access Service	B.10 should be changed to B.6
B.1	1– Billing and Collection Services	B.11 should be changed to B.7
B.1	4 – Private Peering	
162	Private Peering is a service provided by a Licensee that facilitates the interconnection of its Network with that of another Licensee by creating a direct physical connection (usually consisting of one or more physical ports) so that both networks can exchange mutually agreed balanced internet traffic between them.	<ul> <li>Unlike regulated interconnection services, private peering is a voluntary and bilateral commercial agreement between two operators, typically without any financial settlement or payment involved.</li> <li>Private peering relates primarily to the exchange of internet traffic and does not fit within the scope of traditional telecom services, such as voice or SMS, which are the primary focus of regulated interconnection services.</li> <li>ITU-T Recommendations often separate telecom interconnection agreements (e.g., voice) from internet traffic</li> </ul>

C3.2	2 Transport Link Planning	
C3 ·	- Planning Processes	
٩NI	NEX C – Interconnection Processes	
		voice, SMS, and data transmission.
		while interconnection services focus on regulated telecom services like
		commercial arrangement primarily used for internet traffic exchange,
		Accordingly, Private peering should be defined under a voluntary,
		voluntary peering agreements.
		<ul> <li>in countries like the UK (Ofcom) and Germany (BNetzA) clearly distinguish between interconnection obligations and private,</li> </ul>
		rates).
		interconnection agreements (which have defined, regulated
		peering agreements (often voluntary and free) and
		Regulatory bodies like the FCC in the U.S. distinguish between
		regulatory scope.
		private networks. Private peering is thus treated as outside the
		impose rules on how internet traffic is exchanged between
		interoperability for traditional telecom services and does not
		European Electronic Communications Code (EECC) emphasizes
		activity.
		exchange arrangements, treating them as separate spheres of

required from the "Designated Licensee".

services within the Interconnection Agreements.

179	Licensees offering Transport Link Services should provide the services to other Licensees in a non-discriminatory manner.	As the obligation to provide the Transport link falls on the Designated Licensee, the clause should be amended to explicitly reflect that it is required from the "Designated Licensee".
180	Planning of Transport Links, including civil engineering work shall be the responsibility of the Licensee providing the Transport Link. However, both Licensees should collaborate in such planning exercises.	As the obligation to provide the Transport link falls on the Designated Licensee, the clause should be amended to explicitly reflect that it is required from the "Designated Licensee".
C3.	4 Removal of Transport Links	
183	Licensees offering Transport Links Services should define a process for the removal of an existing Transport link within their Interconnection Agreements.  - Wholesale Broadband/Local Access Service Proces	As the obligation to provide the Transport link falls on the Designated Licensee, the clause should be amended to explicitly reflect that it is required from the "Designated Licensee".
205	The procedures and provisioning intervals are listed below.  a. Upon receipt of a requesting Licensee's provisioning request, the Owning Licensee should provide an initial response within ten (10) working days  b. If the Licensee receives a positive response to the requesting Licensee, the two parties will have a maximum of fifteen (15) working days in which to reach agreement on the manner and the time frame in which the WBA/WLA services will be provisioned  c. Provided that the two parties reach agreement within the time frame specified above, the TRC will issue its approval or to require changes	<ul> <li>The terms "WBA/WLA" should be explicitly clarified as         Wholesale Broadband Access (WBA) and Wholesale Local Access         (WLA).</li> <li>Regarding item (d), it should be clearly stated that the TRC's         decision must be binding.</li> </ul>

206	The Designated Licensees shall define their bitstream unbundling	Why such obligation in this article applied only for the provision of				
	provisioning procedures in their RIOs.	bitstream unbundling service, we believe it should be also extended to both Wholesale Broadband Access (WBA) and Wholesale Local Access				
		(WLA) to ensure comprehensive coverage and consistency across all				
		relevant wholesale services under this article of C5.				
C6 -	-Request for Service Process					
211	Designated Licensees shall define the format for service request to be	What is meant by 'Any Agreement'? The scope of these instructions				
	accepted within its RIO and within any Agreements.	pertains specifically to interconnection services, which require a formal				
		Interconnection Agreement.				
214	A Licensee refusing a request for an Interconnection Service shall respond in	We are unable to identify a clear distinction between the obligations				
	writing to the Licensee providing its reasons for the refusal in full. This response shall be also copied to the TRC.	placed on designated and non-designated licensees. Based on our				
		interpretation of the instructions, both categories of licensees seem to be				
		subject to the same requirements, with the sole exception being that				
		designated licensees are mandated to publish the RIO.				
		We kindly ask for clarification on the specific distinctions between the				
		obligations imposed on designated and non-designated licensees,				
		beyond the requirement for designated licensees to publish the RIO?				
215	In the event of a Licensee refusing a request for an Interconnection service,	We believe the TRC should clearly outline the criteria it will use to make				
	the requesting Licensee shall have the right to refer the matter to the TRC. The TRC shall investigate and may make a determination.	determinations in order to ensure fairness and transparency. It is				
		important to differentiate that non-Designated Licensees should not be				
		required to provide interconnection services under the same terms as				
		Designated Licensees. If all licensees are mandated to offer				
		interconnection services, the only distinction between Designated and				
		non-designated licensees would be the requirement for Designated				

	Licensees to publish their RIO. This lack of differentiation raises con-					
	about the need for distinct obligations.					
C9.	2 – Traffic and Quality of Service Measurement					
	Why the term 6.2.2.3 "Traffic Controls," which is covered under the					
	current Interconnection Instructions (clauses 218-222), has been					
	removed?					

# **Section II - Infrastructure Sharing Instructions**

#	Article	Comments
	1 Purpose and Scope of these Instructions	
1	These Instructions ensure the importance of Infrastructure Sharing for fair competition and consumer benefits. These Instructions ensure that agreements are in place between Licensees with guidelines to prevent anti-competitive consequences.	·
10	Designated Licensees shall meet all reasonable requests for access to its Telecommunications Network Facilities under fair and reasonable	The TRC has not specified which defined market will have a Designated Licensee. Does this imply that a separate market will be created for such designation, subjecting the

terms and conditions, including the price. Such written request shall specify the infrastructure elements for which the access is requested.

Designated Licensee to specific obligations as outlined in these instructions? Or will any Licensee designated within a defined wholesale or retail market automatically fall under these obligations? The clarity of this provision is critical. The TRC should explicitly define the scope of the Designated Licensee within these instructions and clearly distinguish between the obligations of the Designated Licensee and other licensees.

The term is vague, allowing the Owning Licensee to interpret it to its advantage. Clear definitions will prevent unfair practices and ensure Requesting Licensee can access infrastructure on equitable terms.

- We believe that the TRC should publish detailed guidelines on what constitutes "fair" and "reasonable" terms for infrastructure-sharing agreements. These guidelines should include:
  - Standardized pricing models based on actual costs.
  - Clear conditions for the refusal of requests, with a requirement for the Owning Licensee to submit technical justifications to the TRC for approval.

## 2. Telecommunications Network Facilities Sharing Obligations

Any Licensee that owns, leases or manages the following Telecommunications Network Facilities should negotiate and enter into a Sharing Agreement, upon reasonable request, with respect to the following facilities:

As mentioned in our general comments, where we recommend that the TRC to include active sharing in the instructions, the definition of Telecommunications Network Facilities should also be catgorized also into active sharing elemts.

	a. telecommunications Sites, including but not	
	limited to land, space and access to such	
	Sites;	
	b. masts, towers, poles, antenna structure and	
	other similar structures used on a Site;	
	c. space, buildings, shelters and rooms on a	
	Site, including access to such Site;	
	d. utilities required for the operation of the	
	Site, including but not limited to power,	
	cooling, fire protection and earthing;	
	e. rights of way, trenches, and	
	f. Dark fiber, cable access, including but not	
	limited to ducts, routes and trays.	
17	Where the TRC determines that a Telecommunications Network	Clear criteria for evaluating sharing agreements should be outlined
	Facilities sharing arrangement is inconsistent with the relevant	Such criteria serving as a reference for both the TRC and the
	license(s), and/or identifies a risk of lessening of competition as a	licenssees. This would ensure that sharing agreements are
	consequence of such sharing, it may require such specific arrangement	assessed against standardized benchmarks, providing
	to be discontinued.	transparency and alignment with TRC approval processes.
2.1	Requirement to Share Telecommunications Netwo	rk Facilities
20	All negotiations for Sharing Agreements shall be conducted by all	As for the part of this article "If two licensees agree to enter
	parties in good faith. If two licensees agree to enter negotiation for	negotiation for infrastructure sharing", does that mean if the Owning
	infrastructure sharing, the Owning Licensee of the facility shall not:	Licensee refuses to enter into negotiations, the request is

a. Obstruct or delay negotiations;

automatically dismissed? Additionally, does this article address the

negotiation process between licensees where the Owning Licensee

	b. Refuse to provide information relevant to a	is not a designated operator? This is particularly important given that
	Sharing Agreement, including information	Designated Licensee is obligated to negotiate under Articles 14, 18,
	necessary to identify the	and 19.
	Telecommunications Network Facilities	
	requirement and cost data.	
21	Negotiating Licensees should provide enough information to each other during the negotiation process on issues related to the facility sharing. Such information shall always be treated as confidential by the negotiating parties. Response to any such request should be prompt to	We believe that a specific timeframe for responding to information requests during the negotiation process be clearly outlined in this article. This would help prevent any misinterpretation or unnecessary delays in providing the requested information,
	avoid delay.	ensuring a more efficient and transparent negotiation process.
233	To facilitate improved co-ordination and compatibility of sharing Telecommunications Network Facilities, the Sharing Agreement shall employ standard provisions for the establishment and operation of such facilities under the Sharing Agreement. The provisions should cover at least the areas of:  a. The commencement and activation provisions of the Sharing Agreement;  b. A complete schedule of services provided by the Sharing Agreement, including any ancillary services (i.e. air conditioning, fire control, and electricity);  c. Conditions relating to the configuration and dimensioning of services, technical specifications and operational specifications;	As for the clause (i) Dispute resolutaion, we believe that disputes over infrastructure sharing can lead to significant delays in finalizing agreements. To prevent strategic stalling by the Owning Licensee and ensure timely access, we believe that implementing a fast-track dispute resolution process specifically for disagreements related to infrastructure sharing. This process should ensure that any dispute is resolved within a maximum of 60 days. Furthermore, it should be clearly stated that the TRC has the authority to adjudicate such disputes and that its decisions will be binding on the parties involved.

d.	The Sharing Lic	ensee's a	ccess ri	ghts to the
	Telecommunica	tions Netv	vork Fa	cilities;
e.	Maintenance,	safety	and	cleaning

- f. Conditions relating to fault clearance including urgent faults;
- g. Security;

conditions;

- h. Billing and payment process, and
- i. Dispute resolution.

# An Owning Licensee shall have the right to refuse a Sharing Request in the following cases:

- a. where the available space is either fully occupied (taking into account that any unnecessary equipment shall be removed) or the remaining space is reserved for the Owning Licensee or another Requesting Licensee use, as specified within this Instructions;
- b. where the sharing of a facility is not technically or economically feasible; or there are any General engineering concerns.
- c. Where the Sharing Request, if granted, will constitute a threat to safety or affect the

As for item (b), and to avoid potential misuse of this clause, we believe that TRC should introduce specific and objective criteria that must be met to justify a refusal based on technical or economic feasibility as following:

- 1) The Owning Licensee should be required to provide detailed evidence demonstrating why sharing is not economically or technically feasible. This should include cost-benefit analysis, capacity constraints, or technical specifications that prove the impossibility of accommodating the Sharing Request.
- 2) In cases where there is disagreement regarding the economic or technical feasibility of the sharing, the Requesting Licensee should have the right to request of TRC intervention. This ensures that decisions are made based on factual and unbiased grounds.

	reliability of the Owning Licensee's network	3) The Owning Licensee should submit a report to the TRC
	or services.	outlining the specific technical or economic challenges and
		providing a detailed explanation of why sharing cannot be
		facilitated. TRC should have the authority to review and
		challenge these findings, ensuring that the refusal is
		legitimate and not a strategy to avoid sharing obligations.
		This approach ensures that refusals are based on legitimate
		reasons and not used as a tool to delay or prevent infrastructure
		sharing.
25		This article might be interpreted that the Owning licensee could
	, the Designated Owning Licensee shall provide detailed written	refuse the sharing request and provide a proposed emendanetss to
	reasons and justifications to the Requesting Licensee in case of a	the requested sharing, we beilieve that the terms should be
	refusal. If possible, the Designated Owning Licensee should propose	repharsed as following:
	amendments to the requested sharing in order to overcome the reasons	In cases where the Owning Licensee is a Designated Licensee, the
	for the refusal of the Sharing Request. A copy of the response shall be	Designated Owning Licensee shall:
	sent to TRC.	Describe detailed amittee and instifications to the
		Provide detailed written reasons and justifications to the
		Requesting Licensee in the event of a refusal to share,
		outlining both the technical and economic reasons for the decision.
		uccision.
		Where feasible, propose amendments to the Sharing
		Request that would allow the sharing to proceed, thereby
		addressing the concerns leading to the refusal.
		<u> </u>

The Designated Owning Licensee must send a copy of the refusal and the proposed amendments to TRC for review. Additionally, TRC shall have the authority to investigate the refusal and assess whether the proposed amendments are reasonable and sufficient to overcome the barriers to sharing. In case of a refusal decision where that the Owning Licensee is a This article does not specify the actions the TRC may take following Designated Licensee, the TRC should examine the refusal and request its examination and site survey. Accordingly, we suggest to amend the Designated Owning Licensee to provide the TRC with a written the artcile as below: justification. The TRC may perform a Site survey if necessary to ensure 26. Any refusal by the Designated Owning Licensee to share the compliance. infrastructure must include a comprehensive technical and economic justification. The TRC shall evaluate the refusal within 30 days, and if the justification is deemed insufficient, the TRC may mandate infrastructure sharing. Additionally, the TRC may perform a site survey, if necessary, to verify the validity of the refusal and

## 2.2 Sharing Agreement Negotiation Procedures

In the case that two licensees agree to start the negotiation process for sharing, the Owning Licensee shall provide a Sharing Request form to the Requesting Licensee within five (5) days of being requested to provide. The form should contain all details and information required by the Owning Licensee to start a feasibility study.

This article does not address the actions to be taken if the Owning Licensee refuses to initiate the negotiation process after receiving a request. We propose adding provision to clarify the consequences of such refusal. Specifically, if the Owning Licensee fails to provide the Sharing Request form within the stipulated five (5) days or refuses to engage in negotiations, the Requesting Licensee should have the right to escalate the matter to the TRC. The TRC should

ensure compliance with the instructions.

		then intervene to facilitate the negotiation process and ensure compliance with the obligations set forth in these instructions.
34	The decision to refuse a Sharing Request shall be communicated in writing to the Requesting Licensee specifying the reasons for such refusal within five (5) days of completing the feasibility study.	This article should also specify that if the Owning Licensee refuses a Sharing Request, the written communication must include a detailed explanation of the reasons for the refusal. To ensure transparency and fairness, the steps of the Requesting Licensee can take should be added to this article if the Requesting Licensee disagree with the refusal; it should be stated that if the refusal is deemed unjustified by the Requesting Licensee, the Requesting Licensee has the right to escalate the matter to the TRC for further review and resolution.
2.7	Charges of Sharing Facilities	
61	All charges of sharing agreements shall be subject to TRC approval.	We believe that the TRC's authority to mandate adjustments to unreasonable charges offered by the Owning Licensees should be grounded in the principle of cost-based pricing. Therefore, we propose the following amendment to the article:  61. All charges for sharing agreements shall be subject to TRC approval. The TRC will ensure that these charges comply with cost-based pricing principles and are assessed according to approved methodology for determining fairness and reasonableness.

**Section III - Mobile National Roaming Instructions** 

#	Article	Comments
2.	Mobile National Roaming Obligations	
13	The unjustified refusal to negotiate in good faith or denial of the provision of facilities for roaming or other discriminatory practices with respect to roaming will be considered a violation of the license terms and subject to sanctions.	We beieve that TRC should specify the mechanisms for resolving disputes over perceived unjustified refusals, including a formal process for escalation to the TRC.
14	Mobile National Roaming agreements shall be submitted to the TRC for approval. The obligations of the Licensee under these Instructions shall be interpreted by the TRC so far as is reasonably possible in the circumstances, they are competitively neutral and non-discriminatory.  4. Charging of Mobile National Roaming	We believe that a detailed timeframe for TRC review process to ensure timely approval of Mobile National Roaming agreements and avoid unnecessary delays.
33	The Mobile Operators shall negotiate the charges for Mobile National Roaming. If the Mobile Operators fail to agree on the prices to be charged, either Mobile Operator may refer the dispute to the TRC for resolution. Such TRC resolution shall be binding and enforceable to all parties.	TRC should specify the pricing methodologies which will be used to ensure that charges are fair, transparent, and non-discriminatory.  If the host MNO offers excessive prices, the TRC should adopt a well-established pricing methodology to enforce fair pricing for national roaming. Here are the most commonly used pricing methodologies:  Cost-Oriented Pricing: This is a commonly accepted and fair approach for national roaming services:  1. Develop a cost-based model to ensure prices reflect actual network costs. Or

2.	Impose	а	retail-minus		approach		to	ensure	
	competit	ive	pricing	if	the	host	MNO	is	charging
	excessiv	ely.							

By adopting one or more of these methodologies, TRC can enforce fair pricing for national roaming services and prevent anticompetitive behavior by the Host Mobile Operators.

## 6. Regulatory Supervision of Roaming Agreements

The parties to a Mobile National Roaming Agreement shall submit the agreement to the TRC within five (5) days from signing the Agreement. The TRC shall review the agreement to ensure compliance with the law, regulations, these Mobile National Roaming Instructions and other regulatory requirements. The TRC may require the Mobile Operators to amend any terms and conditions in the Mobile National Roaming agreement. The Mobile National Roaming Agreement is subject to the TRC approval.

TRC should set the timeline for reviewing and approving national roaming agreements to avoid delays that could impact service rollout.

## 7. Obligations Associated with the Provision of Mobile Services

The Hosted Mobile Operator shall promptly honour all payment dues prescribed in the Mobile National Roaming Agreement.

We believe that the TRC should include clear guidelines for handling disputes over payment dues to ensure timely resolution and prevent financial discrepancies.