The Hashemite Kingdom of Jordan

TELECOMMUNICATIONS REGULATORY COMMISSION



REGULATORY DECISION ON CHARGES FOR FIXED INTERCONNECTION SERVICES BASED ON TSLRIC+ MODELS

Board of Commissioners Decision No. 8-12/2017 issued on 15/10/2017

1 Introduction

Since 2005, the Telecommunications Regulatory Commission (hereinafter, 'TRC') has shown its motivations to adopt a "*Total Service Long-Run Incremental Cost Plus*" (hereinafter, 'TSLRIC+') as the preferred mechanism for wholesale price setting in the Kingdom.

In September 2009, the TRC published its "*Regulatory decision on the principles to be used in the construction of TSLRIC+ models for the costs of interconnection Services*"¹, which was later followed by the submission of the Hybrid TSLRIC+ models in June 2011. As a result of that process, the TRC published its regulated wholesale charges in the two decisions presented below:

- Regulatory decision on charges for fixed interconnection services based on TSLRIC+ models²
- Regulatory decision on charges for mobile interconnection services based on TSLRIC+ models³

Having reached the end of the period reflected in the previous regulatory decisions (2014), the TRC decided back in 2015 to start a new wholesale price setting process to update the applicable charges. The industry was informed in early 2016 of the initiation of this process and was welcomed to participate throughout the process at different stages such as:

- Data gathering process
- 1st and 2nd public consultations on the Hybrid TSLRIC+ Models

As part of this process, the TRC has updated its Hybrid TSLRIC+ models on the grounds of the methodology that was established in September 2009 to recognise the latest technological developments that have taken place in the market (e.g. introduction of IMS-IP networks, massive take-up of 3G and 4G services, growth in fixed and mobile data traffic).

TRC received data from the Jordan Telecommunications Company ("Orange Fixed"). This enabled the TRC to build TSLRIC+ models of Orange Fixed and an efficient fixed operator of the scale and scope of Orange Fixed. Then TRC engaged in extensive consultation with Orange Fixed during the construction of these models and has carefully considered the issues raised by the operator during the two consultation rounds that took place. Orange Fixed has been provided progressively with two releases of the fixed models and has been able to review in detail the data and calculations used in the model. At each stage the TRC provided Orange Fixed with a written response to all the comments received. These models were accompanied by manuals that described their technical algorithms as well as their overall rationale. Orange Fixed was also given the opportunity to comment on the manual during the consultation periods.

This Regulatory Decision is issued pursuant to the Telecommunications Law, which empowers the TRC to regulate interconnection and the relevant rates and charges.

¹ Telecommunications Regulatory Commission "*Regulatory decision on the principles to be used in the construction of TSLRIC+ models for the costs of interconnection Services*", Board of Commissioners Decision No (17-5/2009) issued on 27 September 2009, amended 18 November 2009.

² Telecommunications Regulatory Commission "Regulatory decision on charges for fixed

interconnection services based on TSLRIC+ models", Board of Commissioners Decision No. (3-16/2011) issued on 16 November 2011.

³ Telecommunications Regulatory Commission "*Regulatory decision on charges for mobile interconnection services based on TSLRIC+ models*", Board of Commissioners Decision No. (3-6/2011) issued on 16 November 2011.

2 The TSLRIC+ Models and Implementation

The TRC has followed the TSLRIC+ modelling methodology described in the Decision 17-5/2009. This is a "hybrid" methodology meaning that the models were created through a process of reconciliation and calibration of bottom-up models with operators' internal data.

The TSLRIC+ models have been constructed using the principles set out in the Decision. At each stage, the TRC has worked closely with the industry in constructing the models. In order to maintain commercial confidentiality, the models have not been released to any operator except Orange Fixed.

The initial models have been amended by the TRC in light of the comments received. This Decision is based on the fixed efficient-operator model.

A version of the fixed efficient-operator model redacted to modify any confidential data is published by the TRC along with this Decision.

3 Interconnection charges

Interconnection charges for the following services provided by fixed operators are determined by the TRC in this Decision:

- Voice Interconnect Link Service
- Collocation and Infrastructure Sharing Service, excluding Duct and Dark Fibre sharing
- Voice Interconnect Link Extension
- National Call Termination
- Call Transit
- Non-Geographic Call Origination
- Emergency Service
- International Access Service
- SDH Bandwidth Service
- International IP Capacity
- Data Interconnect Link
- Dial-Up IP Traffic Collection
- Broadband IP Traffic Collection
- Permanent Data Traffic Collection
- ADSL/VDSL Bitstream (local and regional) and IPstream (national) services
- Carrier Selection and Pre-Selection Call Origination Services
- 0800XXXXX Pre-Paid Internet Dial-Up Service
- International FLAG Connection Service.
- Wholesale Trunk Segment Service
- Wholesale Terminating Segment Service
- Duct and Dark Fibre sharing
- National Directory Enquiries
- Operator Assistance (including Call Connection Services)
- Local Loop Unbundled Service
- International Call Transit
- Tie Cable to connect MDF and HDF
- Billing and Collection Service
- Wood poles sharing.

The full set of interconnection charges for fixed services determined by the TRC in this Decision is shown in Annex A.

The Interconnection charges set out in this Decision shall apply from 1st of January 2018.

4 Implementing LRIC-based Interconnection Charges

TRC Decision 17-5/2009 established the guidelines on how the TSLRIC+ models would be used by the TRC to set charges for regulated interconnection services. These guidelines were not exhaustive and left open the possibility that the TRC may consider other factors that are relevant at the time of each Regulatory Decision.

The approach adopted by the TRC when setting the new regulated charges is described below:

- 1. When the new charges were considered to be close to the previous ones and/or the regulated services under consideration were not material under the current market situation, a fixed charge has been set for the 2018-2021 period, which is extracted as the average of the efficient operator model's results for that period.
- 2. When the new charges were considered not to be close to the previous ones and the regulated services under consideration were material under the current market situation, a glide path has been defined so as to smooth the impact on the market of this Decision.
- 3. In the case that the market review situation or the regulation justifies it, TRC may make a revision of rates when needed.

Annex A- Interconnection charges for fixed services

The tables below set out the charges for all fixed interconnection services determined by this Decision.

Category	Charge	Rate Unit	2018	2019	2020	2021
Installation Charges	2 Mbps port installation	JD	6.8	6.8	6.8	6.8
Rental charges	2Mbps port rental charge per month	JD/month	4.1	4.1	4.1	4.1
Installation Charges	Fast Ethernet port installation	JD	6.8	6.8	6.8	6.8
Rental Charges	Fast Ethernet port rental charge per month	JD/month	11.4	11.4	11.4	11.4
Installation Charges	Gigabit Ethernet port installation	JD	6.8	6.8	6.8	6.8
Rental Charges	Gigabit Ethernet port rental charge per month	JD/month	13.3	13.3	13.3	13.3
Installation Charges	10 Giga Ethernet port installation	JD	6.8	6.8	6.8	6.8
Rental Charges	10 Giga Ethernet port rental charge per month	JD/month	23.2	23.2	23.2	23.2

Voice Interconnect Link Service

The charges for Trunk Segment and Terminating Segment Services will be applicable for the links installation and rental charges.

Collocation and infrastructure sharing service

Governorate	Item	Unit	Rate Unit	2018	2019	2020	2021
Amman	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	8.2	8.2	8.2	8.2
		Reservation		8.2	8.2	8.2	8.2
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	216.5	216.5	216.5	216.5
		Reservation		216.5	216.5	216.5	216.5
2	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	125.9	125.9	125.9	125.9
		Reservation		125.9	125.9	125.9	125.9
Irbid	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	5.1	5.1	5.1	5.1
		Reservation		5.1	5.1	5.1	5.1
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	135.2	135.2	135.2	135.2
		Reservation		135.2	135.2	135.2	135.2

Governorate	Item	Unit	Rate Unit	2018	2019	2020	2021
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	78.7	78.7	78.7	78.7
		Reservation		78.7	78.7	78.7	78.7
Ajloun	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	5.0	5.0	5.0	5.0
		Reservation		5.0	5.0	5.0	5.0
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	132.3	132.3	132.3	132.3
		Reservation		132.3	132.3	132.3	132.3
Iorosh	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	77.0	77.0	77.0	77.0
		Reservation		77.0	77.0	77.0	77.0
Jerash	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	5.6	5.6	5.6	5.6
		Reservation		5.6	5.6	5.6	5.6
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	146.9	146.9	146.9	146.9
		Reservation		146.9	146.9	146.9	146.9
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	85.5	85.5	85.5	85.5
		Reservation		85.5	85.5	85.5	85.5
Mafraq	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	5.0	5.0	5.0	5.0
		Reservation		5.0	5.0	5.0	5.0
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	132.3	132.3	132.3	132.3
		Reservation		132.3	132.3	132.3	132.3
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	77.0	77.0	77.0	77.0
		Reservation		77.0	77.0	77.0	77.0

Governorate	Item	Unit	Rate Unit	2018	2019	2020	2021
Balqa	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	6.0	6.0	6.0	6.0
		Reservation		6.0	6.0	6.0	6.0
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	156.9	156.9	156.9	156.9
		Reservation		156.9	156.9	156.9	156.9
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	91.3	91.3	91.3	91.3
		Reservation		91.3	91.3	91.3	91.3
cabin Cabi	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	5.7	5.7	5.7	5.7
		Reservation		5.7	5.7	5.7	5.7
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	150.6	150.6	150.6	150.6
		Reservation		150.6	150.6	150.6	150.6
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	87.6	87.6	87.6	87.6
		Reservation		87.6	87.6	87.6	87.6
Madaba	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	5.4	5.4	5.4	5.4
		Reservation		5.4	5.4	5.4	5.4
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	142.7	142.7	142.7	142.7
		Reservation		142.7	142.7	142.7	142.7
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	83.0	83.0	83.0	83.0
		Reservation		83.0	83.0	83.0	83.0

Governorate	Item	Unit	Rate Unit	2018	2019	2020	2021
Karak	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	5.0	5.0	5.0	5.0
		Reservation		5.0	5.0	5.0	5.0
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	132.3	132.3	132.3	132.3
		Reservation		132.3	132.3	132.3	132.3
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	77.0	77.0	77.0	77.0
		Reservation		77.0	77.0	77.0	77.0
cat Ca	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	5.0	5.0	5.0	5.0
		Reservation		5.0	5.0	5.0	5.0
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	132.3	132.3	132.3	132.3
		Reservation		132.3	132.3	132.3	132.3
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	77.0	77.0	77.0	77.0
		Reservation		77.0	77.0	77.0	77.0
Ma'an	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	5.0	5.0	5.0	5.0
		Reservation		5.0	5.0	5.0	5.0
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	132.3	132.3	132.3	132.3
		Reservation		132.3	132.3	132.3	132.3
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	77.0	77.0	77.0	77.0
		Reservation		77.0	77.0	77.0	77.0

Governorate	Item	Unit	Rate Unit	2018	2019	2020	2021
Aqaba	19-inch rack space in shared supplied cabinet (standard 60x90x200)	RU1	JD/unit/month	6.6	6.6	6.6	6.6
		Reservation		6.6	6.6	6.6	6.6
	Cabinet space for standard 60x90x200 cabinet in shared room	Cabinet space	JD/unit/month	174.2	174.2	174.2	174.2
		Reservation		174.2	174.2	174.2	174.2
	Secure room for exclusive use of the Licensee	Sqm	JD/unit/month	101.4	101.4	101.4	101.4
		Reservation		101.4	101.4	101.4	101.4

The following prices are standard for all sites:

Additional facilities	Unit	Rate Unit	2018	2019	2020	2021
Power supply	1 Amp	JD/unit/month	49.7	49.7	49.7	49.7
Cabinet rental (standard 60x90x200)	Cabinet	JD/unit/month	30.8	30.8	30.8	30.8
Intra-building Link	per link up to 100 metre	JD/unit/month	3.5	3.5	3.5	3.5

Voice Interconnect Link Extension

	Rate Unit	2018	2019	2020	2021
2 Mbps port installation	JD	6.8	6.8	6.8	6.8
2 Mbps exchange port rental charge per month/port	JD/port/month	4.1	4.1	4.1	4.1
Fast Ethernet port installation	JD	6.8	6.8	6.8	6.8
Fast Ethernet exchange port rental charge per month/port	JD/port/month	11.4	11.4	11.4	11.4
Gigabit Ethernet port installation	JD	6.8	6.8	6.8	6.8
Gigabit Ethernet exchange port rental charge per month/port	JD/port/month	13.3	13.3	13.3	13.3
10 Giga Ethernet port installation	JD	6.8	6.8	6.8	6.8
10 Giga Ethernet exchange port rental charge per month/port	JD/port/month	23.2	23.2	23.2	23.2

The charges for Trunk Segment and Terminating Segment Services will be applicable for the links installation and rental charges.

National Call Termination

		Rate Unit	2018	2019	2020	2021
Charging Level	Blended	Fils/min	7.2	5.8	4.4	3.0

Call Transit

		Rate Unit	2018	2019	2020	2021
Charging Level	Transit	Fils/min	1.3	1.3	1.3	1.3

Non-Geographic Call Origination Service

		Rate Unit	2018	2019	2020	2021
Charging Level	Blended	Fils/min	7.0	7.0	7.0	7.0

Emergency Service

		Rate Unit	2018	2019	2020	2021
Charging Level	Blended	Fils/min	3.0	3.0	3.0	3.0

International Access Service

		Rate Unit	2018	2019	2020	2021
Charging Level	Blended	Fils/min	3.2	3.2	3.2	3.2

SDH Bandwidth Service

The charges for Trunk Segment and Terminating Segment Services will be applicable for the links installation and rental charges.

International IP Capacity

		Rate Unit	2018	2019	2020	2021
Set up charge		JD	394.8	394.8	394.8	394.8
Rental charge	Capacity rental charge per Mbps per month	JD/Mbps/month	3.2	3.2	3.2	3.2

Data Interconnect Link

		Rate Unit	2018	2019	2020	2021
Installation charge	Data Port installation	JD	6.8	6.8	6.8	6.8
Rental charge	Data Port rental charge per month	JD/month	4.1	4.1	4.1	4.1

The charges for Trunk Segment and Terminating Segment Services will be applicable for the links installation and rental charges.

Dial-Up IP Traffic Collection

		Rate Unit	2018	2019	2020	2021
Rental charge	Port rental charge per month	JD/month	0.8	0.8	0.8	0.8

Broadband IP Traffic Collection

	Rate Unit	2018	2019	2020	2021
Monthly charges per Mbps	JD/month	21.2	21.2	21.2	21.2

Permanent Data Traffic Collection

		Speed (kbps)	Rate Unit	2018	2019	2020	2021
Monthly rental charges	Port rental monthly charges/speed	64	JD/month	5.4	5.4	5.4	5.4
		128	JD/month	6.7	6.7	6.7	6.7
		256	JD/month	6.8	6.8	6.8	6.8
		512	JD/month	7.1	7.1	7.1	7.1
		1024	JD/month	7.7	7.7	7.7	7.7
		2048	JD/month	8.9	8.9	8.9	8.9

ADSL/VDSL local Bitstream services

		Speed	Rate Unit	2018	2019	2020	2021
Installation charge			JD	42.1	42.1	42.1	42.1
Monthly rental charges	ADSL/VDSL Bitstream (local), without modem		JD/month	0.36	0.36	0.36	0.36
	ADSL Bitstream (local), with modem		JD/month	1.87	1.87	1.87	1.87
	VDSL Bitstream (local), with modem		JD/month	3.06	3.06	3.06	3.06

ADSL/VDSL regional Bitstream services

		Speed	Rate Unit	2018	2019	2020	2021
Installation charge			JD	42.1	42.1	42.1	42.1
Monthly rental charges	ADSL/VDSL Bitstream (regional), with	128 kb/s	JD/month	1.88	1.88	1.88	1.88
	modem	256 kb/s	JD/month	1.89	1.89	1.89	1.89
		512 kb/s	JD/month	1.92	1.92	1.92	1.92
		1 Mb/s	JD/month	1.98	1.98	1.98	1.98
		2 Mb/s	JD/month	2.11	2.11	2.11	2.11
		4 Mb/s	JD/month	2.35	2.35	2.35	2.35

	Speed	Rate Unit	2018	2019	2020	2021
	6 Mb/s	JD/month	2.59	2.59	2.59	2.59
	8 Mb/s	JD/month	2.84	2.84	2.84	2.84
	16 Mb/s	JD/month	3.81	3.81	3.81	3.81
	24 Mb/s	JD/month	4.79	4.79	4.79	4.79
	40 Mb/s	JD/month	7.92	7.92	7.92	7.92
	80 Mb/s	JD/month	12.80	12.80	12.80	12.80
ADSL/VDSL Bitstream (regional),	128 kb/s	JD/month	0.37	0.37	0.37	0.37
without modem	256 kb/s	JD/month	0.39	0.39	0.39	0.39
	512 kb/s	JD/month	0.42	0.42	0.42	0.42
	1 Mb/s	JD/month	0.48	0.48	0.48	0.48
	2 Mb/s	JD/month	0.60	0.60	0.60	0.60
	4 Mb/s	JD/month	0.84	0.84	0.84	0.84
	6 Mb/s	JD/month	1.09	1.09	1.09	1.09
	8 Mb/s	JD/month	1.33	1.33	1.33	1.33
	16 Mb/s	JD/month	2.31	2.31	2.31	2.31
	24 Mb/s	JD/month	3.28	3.28	3.28	3.28
	40 Mb/s	JD/month	5.23	5.23	5.23	5.23
	80 Mb/s	JD/month	10.10	10.10	10.10	10.10

ADSL/VDSL national IPstream services

		Speed	Rate Unit	2018	2019	2020	2021
Installation charge			JD	42.1	42.1	42.1	42.1
Monthly rental charges	ADSL/VDSL IPstream (national), with	128 kb/s	JD/month	2.70	2.70	2.70	2.70
	modem	256 kb/s	JD/month	2.72	2.72	2.72	2.72
		512 kb/s	JD/month	2.75	2.75	2.75	2.75
		1 Mb/s	JD/month	2.83	2.83	2.83	2.83
		2 Mb/s	JD/month	2.97	2.97	2.97	2.97
		4 Mb/s	JD/month	3.27	3.27	3.27	3.27
		6 Mb/s	JD/month	3.56	3.56	3.56	3.56
		8 Mb/s	JD/month	3.85	3.85	3.85	3.85
		16 Mb/s	JD/month	5.03	5.03	5.03	5.03
		24 Mb/s	JD/month	6.20	6.20	6.20	6.20
	40 Mb/s	JD/month	9.73	9.73	9.73	9.73	
		80 Mb/s	JD/month	15.59	15.59	15.59	15.59

		Speed	Rate Unit	2018	2019	2020	2021
ADSL	/VDSL IPstream (national),	128 kb/s	JD/month	1.19	1.19	1.19	1.19
without	ut modem	256 kb/s	JD/month	1.21	1.21	1.21	1.21
		512 kb/s	JD/month	1.25	1.25	1.25	1.25
		1 Mb/s	JD/month	1.32	1.32	1.32	1.32
		2 Mb/s	JD/month	1.47	1.47	1.47	1.47
		4 Mb/s	JD/month	1.76	1.76	1.76	1.76
		6 Mb/s	JD/month	2.05	2.05	2.05	2.05
		8 Mb/s	JD/month	2.35	2.35	2.35	2.35
		16 Mb/s	JD/month	3.52	3.52	3.52	3.52
		24 Mb/s	JD/month	4.69	4.69	4.69	4.69
		40 Mb/s	JD/month	7.04	7.04	7.04	7.04
		80 Mb/s	JD/month	12.90	12.90	12.90	12.90

ADSL/VDSL local Naked Bitstream services

	Speed	Rate Unit	2018	2019	2020	2021
Installation charge		JD	42.1	42.1	42.1	42.1
Monthly rental charges	ADSL/VDSL Naked Bitstream (local), without modem	JD/month	6.05	6.05	6.05	6.05
	ADSL Naked Bitstream (local), with modem	JD/month	7.56	7.56	7.56	7.56
	VDSL Naked Bitstream (local), with modem	JD/month	8.75	8.75	8.75	8.75

ADSL/VDSL regional Naked Bitstream services

		Speed	Rate Unit	2018	2019	2020	2021
Installation charge			JD	42.1	42.1	42.1	42.1
Monthly rental charges	ADSL/VDSL Naked Bitstream	128 kb/s	JD/month	7.57	7.57	7.57	7.57
	(regional), with modem	256 kb/s	JD/month	7.58	7.58	7.58	7.58
		512 kb/s	JD/month	7.61	7.61	7.61	7.61
	1 Mb/s	JD/month	7.68	7.68	7.68	7.68	
		2 Mb/s	JD/month	7.80	7.80	7.80	7.80
		4 Mb/s	JD/month	8.04	8.04	8.04	8.04
		6 Mb/s	JD/month	8.28	8.28	8.28	8.28
		8 Mb/s	JD/month	8.53	8.53	8.53	8.53
		16 Mb/s	JD/month	9.50	9.50	9.50	9.50
		24 Mb/s	JD/month	10.48	10.48	10.48	10.48
		40 Mb/s	JD/month	13.62	13.62	13.62	13.62

	Speed	Rate Unit	2018	2019	2020	2021
	80 Mb/s	JD/month	18.49	18.49	18.49	18.49
ADSL/VDSL Naked Bitstream	128 kb/s	JD/month	6.06	6.06	6.06	6.06
(regional), without modem	256 kb/s	JD/month	6.08	6.08	6.08	6.08
	512 kb/s	JD/month	6.11	6.11	6.11	6.11
	1 Mb/s	JD/month	6.17	6.17	6.17	6.17
	2 Mb/s	JD/month	6.29	6.29	6.29	6.29
	4 Mb/s	JD/month	6.54	6.54	6.54	6.54
	6 Mb/s	JD/month	6.78	6.78	6.78	6.78
	8 Mb/s	JD/month	7.02	7.02	7.02	7.02
	16 Mb/s	JD/month	8.00	8.00	8.00	8.00
	24 Mb/s	JD/month	8.97	8.97	8.97	8.97
	40 Mb/s	JD/month	10.92	10.92	10.92	10.92
	80 Mb/s	JD/month	15.80	15.80	15.80	15.80

ADSL/VDSL national Naked IPstream services

		Speed	Rate Unit	2018	2019	2020	2021
Installation charge			JD	42.1	42.1	42.1	42.1
Monthly rental charges	ADSL/VDSL Naked IPstream	128 kb/s	JD/month	8.39	8.39	8.39	8.39
	(national), with modem	256 kb/s	JD/month	8.41	8.41	8.41	8.41
		512 kb/s	JD/month	8.45	8.45	8.45	8.45
		1 Mb/s	JD/month	8.52	8.52	8.52	8.52
		2 Mb/s	JD/month	8.67	8.67	8.67	8.67
		4 Mb/s	JD/month	8.96	8.96	8.96	8.96
		6 Mb/s	JD/month	9.25	9.25	9.25	9.25
		8 Mb/s	JD/month	9.55	9.55	9.55	9.55
		16 Mb/s	JD/month	10.72	10.72	10.72	10.72
		24 Mb/s	JD/month	11.89	11.89	11.89	11.89
		40 Mb/s	JD/month	15.42	15.42	15.42	15.42
		80 Mb/s	JD/month	21.29	21.29	21.29	21.29
	ADSL/VDSL Naked IPstream	128 kb/s	JD/month	6.89	6.89	6.89	6.89
	(national), without modem	256 kb/s	JD/month	6.90	6.90	6.90	6.90
		512 kb/s	JD/month	6.94	6.94	6.94	6.94
		1 Mb/s	JD/month	7.01	7.01	7.01	7.01
		2 Mb/s	JD/month	7.16	7.16	7.16	7.16

Speed	Rate Unit	2018	2019	2020	2021
4 Mb/s	JD/month	7.45	7.45	7.45	7.45
6 Mb/s	JD/month	7.75	7.75	7.75	7.75
8 Mb/s	JD/month	8.04	8.04	8.04	8.04
16 Mb/s	JD/month	9.21	9.21	9.21	9.21
24 Mb/s	JD/month	10.39	10.39	10.39	10.39
40 Mb/s	JD/month	12.73	12.73	12.73	12.73
80 Mb/s	JD/month	18.59	18.59	18.59	18.59

Third-Party Carrier Selection and Preselection Call Origination Service

	Rate Unit	2018	2019	2020	2021
Third party call origination (single transit)	Fils/min	7.0	7.0	7.0	7.0
Third party call origination (double transit)	Fils/min	7.2	7.2	7.2	7.2

Carrier Selection Traffic Origination Service

	Rate Unit	2018	2019	2020	2021
Call origination / Minute	Fils/min	7.0	7.0	7.0	7.0
CAC setup	JD	4.5	4.5	4.5	4.5
CAC modification	JD	4.5	4.5	4.5	4.5
CAC cancellation	JD	4.5	4.5	4.5	4.5

Carrier Preselection Traffic Origination Service

	Rate Unit	2018	2019	2020	2021
Call origination / Minute	Fils/min	9.2	9.2	9.2	9.2
CAC setup	JD	4.5	4.5	4.5	4.5
CAC modification	JD	4.5	4.5	4.5	4.5
CAC cancellation	JD	4.5	4.5	4.5	4.5

0800XXXXX Pre-Paid Internet Dial-Up Access Service

	Rate Unit	2018	2019	2020	2021
Call origination / Minute	Fils/min	1.9	1.9	1.9	1.9

	Cross-connection Ba	ndwidth Capacity	Rate Unit	2018	2019	2020	2021
Installation charges	E1		JD	394.8	394.8	394.8	394.8
(Installation charges for	E3 or DS3		JD	394.8	394.8	394.8	394.8
accessing FLAG)	STM-1		JD	394.8	394.8	394.8	394.8
	STM-4		JD	394.8	394.8	394.8	394.8
	STM-16		JD	394.8	394.8	394.8	394.8
	STM-64		JD	394.8	394.8	394.8	394.8
	Fast Ethernet		JD	394.8	394.8	394.8	394.8
	Gigabit Ethernet		JD	394.8	394.8	394.8	394.8
	10 Giga Ethernet		JD	394.8	394.8	394.8	394.8
Rental charges	E1	Monthly rental with collocation	JD/month	237.5	237.5	237.5	237.5
(Monthly rental charges to	E3 or DS3	Monthly rental with collocation	JD/month	891.8	891.8	891.8	891.8
access FLAG)	STM-1	Monthly rental with collocation	JD/month	1,739.0	1,739.0	1,739.0	1,739.0
	STM-4	Monthly rental with collocation	JD/month	3,601.3	3,601.3	3,601.3	3,601.3
	STM-16	Monthly rental with collocation	JD/month	7,576.1	7,576.1	7,576.1	7,576.1
	STM-64	Monthly rental with collocation	JD/month	16,199.8	16,199.8	16,199.8	16,199.8
	Fast Ethernet	Monthly rental with collocation	JD/month	1,426.7	1,426.7	1,426.7	1,426.7
	Gigabit Ethernet	Monthly rental with collocation	JD/month	4,633.4	4,633.4	4,633.4	4,633.4
	10 Giga Ethernet	Monthly rental with collocation	JD/month	16,241.7	16,241.7	16,241.7	16,241.7
	E1	Monthly rental without collocation	JD/month	136.1	136.1	136.1	136.1
	E3 or DS3	Monthly rental without collocation	JD/month	689.1	689.1	689.1	689.1
	STM-1	Monthly rental without collocation	JD/month	1,536.3	1,536.3	1,536.3	1,536.3
	STM-4	Monthly rental without collocation	JD/month	3,398.6	3,398.6	3,398.6	3,398.6
	STM-16	Monthly rental without collocation	JD/month	7,373.4	7,373.4	7,373.4	7,373.4
	STM-64	Monthly rental without collocation	JD/month	15,997.1	15,997.1	15,997.1	15,997.1
	Fast Ethernet	Monthly rental without collocation	JD/month	1,224.0	1,224.0	1,224.0	1,224.0
	Gigabit Ethernet	Monthly rental without collocation	JD/month	4,430.7	4,430.7	4,430.7	4,430.7
	10 Giga Ethernet	Monthly rental without collocation	JD/month	16,039.0	16,039.0	16,039.0	16,039.0

Wholesale Trunk Segment Service

Category	Charge	Speed	Rate Unit	2018	2019	2020	2021
Installation charges	Trunk Segment of Leased Line		JD	394.8	394.8	394.8	394.8
Rental charges	Z0 (from 0 up to 16 km)	64 kbps	JD/month	0.6	0.6	0.6	0.6
		128 kbps	JD/month	0.9	0.9	0.9	0.9

Category	Charge	Speed	Rate Unit	2018	2019	2020	2021
		256 kbps	JD/month	1.7	1.7	1.7	1.7
		512 kbps	JD/month	3.1	3.1	3.1	3.1
		1024 kbps	JD/month	6.0	6.0	6.0	6.0
		E1	JD/month	11.8	11.8	11.8	11.8
		E3	JD/month	91.7	91.7	91.7	91.7
		DS3	JD/month	118.6	118.6	118.6	118.6
		STM-1	JD/month	439.0	439.0	439.0	439.0
		STM-4	JD/month	1,508.6	1,508.6	1,508.6	1,508.6
		STM-16	JD/month	5,682.9	5,682.9	5,682.9	5,682.9
		Fast Ethernet	JD/month	259.8	259.8	259.8	259.8
		Gigabit Ethernet	JD/month	2,440.4	2,440.4	2,440.4	2,440.4
		10 Giga Ethernet	JD/month	24,390.3	24,390.3	24,390.3	24,390.3
	Z1 (from 16 up to 40 km)	64 kbps	JD/month	1.5	1.5	1.5	1.5
		128 kbps	JD/month	2.5	2.5	2.5	2.5
		256 kbps	JD/month	4.4	4.4	4.4	4.4
		512 kbps	JD/month	8.2	8.2	8.2	8.2
		1024 kbps	JD/month	15.8	15.8	15.8	15.8
		E1	JD/month	31.0	31.0	31.0	31.0
		E3	JD/month	240.5	240.5	240.5	240.5
		DS3	JD/month	311.1	311.1	311.1	311.1
		STM-1	JD/month	1,151.8	1,151.8	1,151.8	1,151.8
		STM-4	JD/month	3,958.3	3,958.3	3,958.3	3,958.3
		STM-16	JD/month	14,910.9	14,910.9	14,910.9	14,910.9
		Fast Ethernet	JD/month	681.8	681.8	681.8	681.8
		Gigabit Ethernet	JD/month	6,403.2	6,403.2	6,403.2	6,403.2
		10 Giga Ethernet	JD/month	63,995.5	63,995.5	63,995.5	63,995.5
	Z2 (from 40 up to 80 km)	64 kbps	JD/month	4.0	4.0	4.0	4.0
		128 kbps	JD/month	6.5	6.5	6.5	6.5
		256 kbps	JD/month	11.6	11.6	11.6	11.6
		512 kbps	JD/month	21.7	21.7	21.7	21.7
		1024 kbps	JD/month	41.9	41.9	41.9	41.9
		E1	JD/month	82.3	82.3	82.3	82.3
		E3	JD/month	637.5	637.5	637.5	637.5
		DS3	JD/month	824.5	824.5	824.5	824.5

Category	Charge	Speed	Rate Unit	2018	2019	2020	2021
		STM-1	JD/month	3,052.6	3,052.6	3,052.6	3,052.6
		STM-4	JD/month	10,490.8	10,490.8	10,490.8	10,490.8
		STM-16	JD/month	39,518.8	39,518.8	39,518.8	39,518.8
		Fast Ethernet	JD/month	1,806.9	1,806.9	1,806.9	1,806.9
		Gigabit Ethernet	JD/month	16,970.6	16,970.6	16,970.6	16,970.6
		10 Giga Ethernet	JD/month	169,609.7	169,609.7	169,609.7	169,609.7
	Z3 (from 80 up to 150 km)	64 kbps	JD/month	8.3	8.3	8.3	8.3
	_	128 kbps	JD/month	13.5	13.5	13.5	13.5
		256 kbps	JD/month	24.0	24.0	24.0	24.0
		512 kbps	JD/month	44.9	44.9	44.9	44.9
		1024 kbps	JD/month	86.7	86.7	86.7	86.7
		E1	JD/month	170.4	170.4	170.4	170.4
		E3	JD/month	1,319.7	1,319.7	1,319.7	1,319.7
		DS3	JD/month	1,707.0	1,707.0	1,707.0	1,707.0
		STM-1	JD/month	6,319.5	6,319.5	6,319.5	6,319.5
		STM-4	JD/month	21,718.5	21,718.5	21,718.5	21,718.5
		STM-16	JD/month	81,813.6	81,813.6	81,813.6	81,813.6
		Fast Ethernet	JD/month	3,740.7	3,740.7	3,740.7	3,740.7
		Gigabit Ethernet	JD/month	35,133.3	35,133.3	35,133.3	35,133.3
		10 Giga Ethernet	JD/month	351,133.9	351,133.9	351,133.9	351,133.9
	Z4 (more than 150 km)	64 kbps	JD/month	14.9	14.9	14.9	14.9
		128 kbps	JD/month	24.3	24.3	24.3	24.3
		256 kbps	JD/month	43.1	43.1	43.1	43.1
		512 kbps	JD/month	80.8	80.8	80.8	80.8
		1024 kbps	JD/month	156.0	156.0	156.0	156.0
		E1	JD/month	306.5	306.5	306.5	306.5
		E3	JD/month	2,374.1	2,374.1	2,374.1	2,374.1
		DS3	JD/month	3,070.8	3,070.8	3,070.8	3,070.8
		STM-1	JD/month	11,368.5	11,368.5	11,368.5	11,368.5
		STM-4	JD/month	39,070.5	39,070.5	39,070.5	39,070.5
		STM-16	JD/month	147,178.4	147,178.4	147,178.4	147,178.4
		Fast Ethernet	JD/month	6,729.4	6,729.4	6,729.4	6,729.4
		Gigabit Ethernet	JD/month	63,203.0	63,203.0	63,203.0	63,203.0
		10 Giga Ethernet	JD/month	631,671.4	631,671.4	631,671.4	631,671.4

Category	Charge	Speed	Rate Unit	2018	2019	2020	2021
Installation charges	Terminating Segment of Leased	Line	JD	43.2	43.2	43.2	43.2
Rental charges	Per link (from 0 up to 3 km)	64 kbps	JD/month	18.7	18.7	18.7	18.7
		128 kbps	JD/month	19.6	19.6	19.6	19.6
		256 kbps	JD/month	21.2	21.2	21.2	21.2
		512 kbps	JD/month	24.5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24.5	
	on charges Terminating Segment of Lease	1024 kbps	JD/month	31.1	31.1	31.1	31.1
		E1	JD/month	44.2	44.2	44.2	44.2
		E3	JD/month	590.1	590.1	590.1	590.1
		DS3	JD/month	627.1	627.1	627.1	627.1
		STM-1	JD/month	1,093.2	1,093.2	1,093.2	1,093.2
		STM-4	JD/month	2,349.3	2,349.3	2,349.3	2,349.3
		STM-16	JD/month	7,106.7	7,106.7	7,106.7	7,106.7
		Fast Ethernet	JD/month	815.6	815.6	815.6	815.6
		Gigabit Ethernet	JD/month	3,156.0	3,156.0	3,156.0	3,156.0
		10 Giga Ethernet	JD/month	26,919.1	26,919.1	26,919.1	26,919.1
	Per km (> 3 km)	64 kbps	JD/month	6.2	6.2	6.2	6.2
	al charges Per link (from 0 up to 3 km)	128 kbps	JD/month	6.5	6.5	6.5	6.5
		256 kbps	JD/month	7.1	7.1	7.1	7.1
		512 kbps	JD/month	8.2	8.2	8.2	8.2
		1024 kbps	JD/month	10.4	10.4	10.4	10.4
		E1	JD/month	14.7	14.7	14.7	14.7
		E3	JD/month	196.7	196.7	196.7	196.7
		DS3	JD/month	209.0	209.0	209.0	209.0
		STM-1	JD/month	364.4	364.4	364.4	364.4
		STM-4	JD/month	783.1	783.1	783.1	783.1
		STM-16	JD/month	2,368.9	2,368.9	2,368.9	2,368.9
		Fast Ethernet	JD/month	271.9	271.9	271.9	271.9
		Gigabit Ethernet	JD/month	1,052.0	1,052.0	1,052.0	1,052.0
		10 Giga Ethernet	JD/month	8,973.0	8,973.0	$\begin{array}{c c} 43.2\\ 18.7\\ 19.6\\ 21.2\\ 24.5\\ 31.1\\ 44.2\\ 590.1\\ 627.1\\ 1,093.2\\ 2,349.3\\ 7,106.7\\ 815.6\\ 3,156.0\\ 26,919.1\\ 6.2\\ 6.5\\ 7.1\\ 8.2\\ 10.4\\ 14.7\\ 196.7\\ 209.0\\ 364.4\\ 783.1\\ 2,368.9\\ 271.9\\ 1,052.0\\ \end{array}$	8,973.0

Duct and Dark Fibre sharing:

	Rate Unit	2018	2019	2020	2021
Installation (per meter)	JD/m	0.6	0.6	0.6	0.6
1 pair of dark fibre monthly rental / 1 metre	JD/m/month	0.3	0.3	0.3	0.3
Duct monthly rental / 1 metre	JD/m/month	0.2	0.2	0.2	0.2

National Directory Enquiries

		Rate Unit	2018	2019	2020	2021
Charging Level	Blended	Fils/min	32.3	32.3	32.3	32.3

Operator Assistance (including Call Connection Services)

		Rate Unit	2018	2019	2020	2021
Charging Level	Blended	Fils/min	32.3	32.3	32.3	32.3

Local Loop Unbundled Service

		Rate Unit	2018	2019	2020	2021
Installation charge	Full Local Loop Unbundled Service	JD	43.2	43.2	43.2	43.2
Installation charge	Shared Local Loop Unbundled Service	JD	43.2	43.2	43.2	43.2
Rental charge	Full Local Loop Unbundled Service	JD/month	5.7	5.7	5.7	5.7
Rental charge	Shared Loop Unbundled Service	JD/month	1.2	1.2	1.2	1.2

International Call Transit

		Rate Unit	2018	2019	2020	2021
Charging Level	Blended	Fils/min	1.5	1.5	1.5	1.5

Tie cable to connect MDF and HDF

		Rate Unit	2018	2019	2020	2021
Installation charge	Per meter (100 pairs)	JD	12.7	12.7	12.7	12.7
Rental charge	Per meter (100 pairs)	JD/month	0.6	0.6	0.6	0.6

Billing and Collection Service

		Rate Unit	2018	2019	2020	2021
Billing and Collection	Billing and Collection Service	JD/bill	0.9	0.9	0.9	0.9

Wood poles sharing

		Rate Unit	2018	2019	2020	2021
Rental charge	Per pole	JD/month	1.1	1.1	1.1	1.1