



Creating a Level Playing Field

The Tanzania Telecoms Sector - Overview



**Regional Seminar on Costs and Tariffs and Regional Meeting of the
Tariff Group for Africa (TAF)**



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- Agenda
 - Country profile
 - Telecommunications sector overview
 - Legal and regulatory framework
 - Converged Licensing Framework
 - Telecommunications market
 - Benefits of reforms
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Country Profile: Tanzania

- Location: East Africa
 - Total Area: 945,000 Km²
 - Population: 39.8 million
 - Per Capita Income: UD\$ 365
 - Teledensity: 19.4%
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Telecommunications Sector overview

- 1994 separation of Tanzania Postal & Telecommunications corporation into
 - Tanzania Telecom Company Ltd
 - Tanzania Postal corporation
 - Regulator (TCRA)
 - Partial liberalization; mobile operators & data communication services allowed,
 - Importation and installation of electronic equipment liberalized,
 - TTCL privatized 2001 and given 4 years exclusivity period for fixed and international services up to 23rd February 2005),
 - Since 23rd February 2005 the communications sector is fully liberalized;
 - Regulation is for creating a level playing field to enable fair competition among licensed operators and service providers.
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Communications Sector Policies

- National Telecommunications Policy (1997)
 - National ICT Policy (2003)
 - National Postal Policy (2003)
 - National Information and Broadcasting Policy (2003) (details available at <http://www.tcra.go.tz>)
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Sector Legislations

- **Tanzania communications Act No.18/1993;**
- **Tanzania communications Regulatory Authority Act No. 12/2003; (introduced convergence licensing framework)**
 - **Complemented by 14 regulations**
- **Universal Communications Service Access Act #12/2006**



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Institutional arrangement

- Government responsible for strategic Policy guidelines for development of the communications sector
 - The Tanzania Communications Regulatory Authority (TCRA); responsible for regulation of Postal, Broadcasting and Electronic Communications sectors
 - Operators are responsible for building, maintaining info-communication infrastructure, providing efficient and affordable ICT services to Tanzanians (rural & urban)
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Licensing Framework

- Tanzania liberalize fully its Communication sector in February 2005.
 - Adopted Converged Licensing Framework (CLF) as a key strategy to implement liberalization policy
 - CLF is technology and service neutral
 - Accommodates locals with minimum investments
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Licenses Category Under CLF

- 1. Network Facility Licence (NFL)**
 - 2. Network Service Licence (NSL)**
 - 3. Application Service Licence (ASL)**
 - 4. Content Service Licence (CSL)**
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Network Facility Licence (NF);

- Authorises ownership and control of any element, or combination of elements, of physical infrastructure used principally for, or in connection with, the provision of one or more network services, but not including customer premise equipment.
 - Examples of electronic communication infrastructure including Earth Stations, Fixed links and cables, Radio communications transmitters and links, Satellite hubs, Satellite control station, Space station, Submarine cable landing centre, Switching centre, Tower, poles, ducts and pits used in conjunction with other network facilities.



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Network Services Licence (NSL);

- Authorises the operator to establish electronic communication networks for carrying information in the form of speech or other sound, data, text or images, by means of guided or unguided electromagnetic energy, but not including services provided solely on the customer side of the network boundary.
- This category include Bandwidth services, Broadcasting distribution services, Cellular mobile services, Access applications service, Space Segment Services.



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Application Service Licence (AS)

- Authorises reselling or procurement of services from Network Service operators.
 - The licensee does not own network infrastructure. Examples are internet providers, virtual mobile provider, payphone services, IP telephony, Public payphone services.
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Content Service Licence (CS)

- Authorises the provision of content such as
Satellite broadcasting, Terrestrial TV
Broadcasting, Terrestrial radio broadcasting and
other electronic media.
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Market Segments

The CLF subdivides market into four segments as follows:

- **International Market Segment:** Licensee is authorized to offer services from one or more of the four category licences to International market.
- **National Market segment:** Licensee is authorized to provide services National wide.
- **Regional Market segment:** Licensee authorized to provider service in an administrative region.
- **District Market segment:** Licensee authorized to provide services in an administrative district.



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Telecommunication Service Providers

- Licensed Providers of telecommunications services:
 - Four licensed international gateway operators
 - Six licensed mobile telephones providers
 - Two licensed fixed telephones providers
 - Over 40 licensed Internet Service Providers (ISPs)
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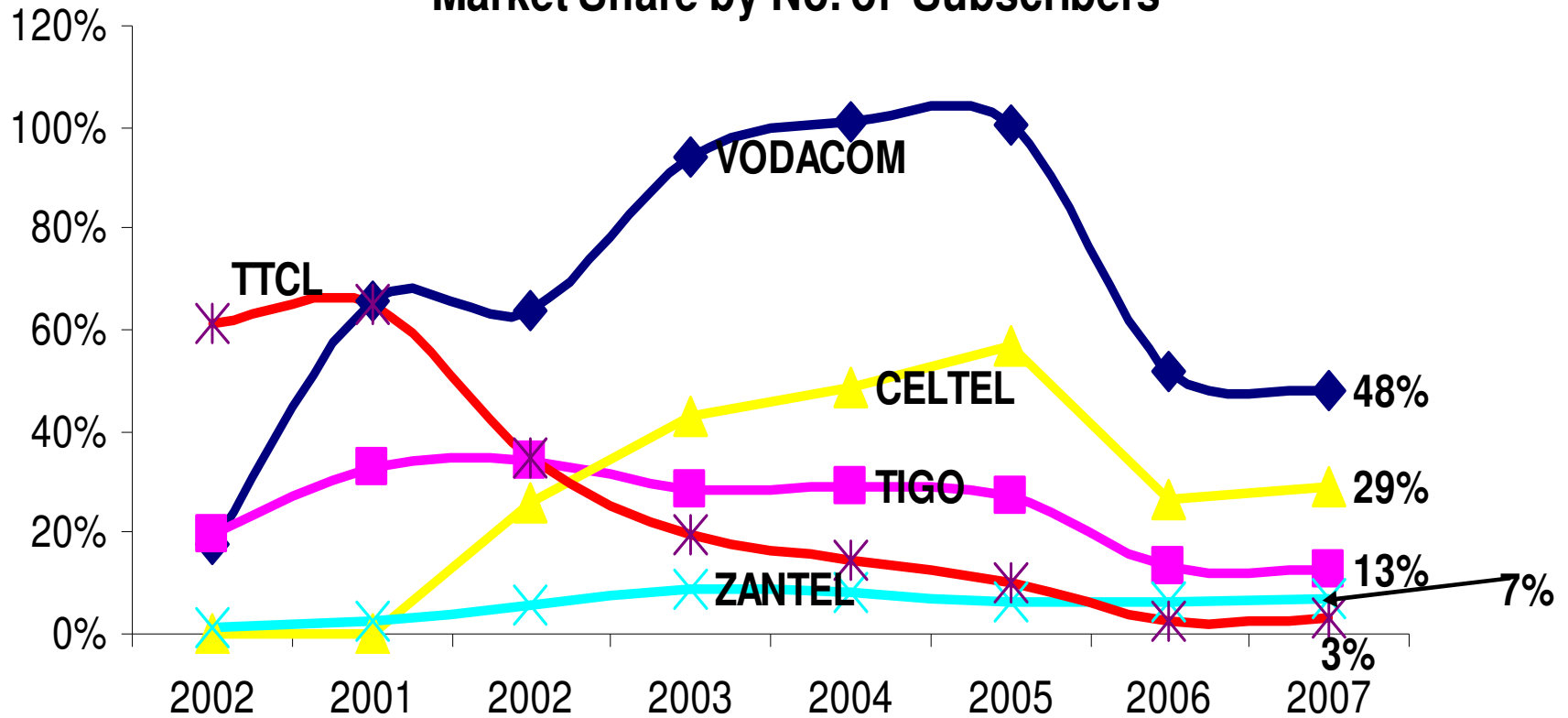
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Licensee	Scope	Network facility	Network service	Application service	Technology used
TTCL	National and international	YES	YES	YES	Copper, WLL, CDMA, 450MHz
Vodacom	National and international	YES	YES	YES	GSM, UMTS / HSDPA
Tigo	National	YES	YES	YES	GSM
Celtel	National	YES	YES	YES	GSM
Zantel	National and international	YES	YES	YES	GSM, CDMA 800MHz
Benson	National	YES	YES	YES	CDMA 450MHz
Six Telecom	International	YES	YES		NA



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Market Share by No. of Subscribers





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Benefits of Liberalization

- Enhanced free and open competition benefiting consumers and the national economy by:
 - Lowering calling tariffs
 - Introduction of new and better products
 - Increased consumer choice
 - Growth in demand for telecommunication services
 - Increasing in investments
 - Increasing coverage
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Benefits of Liberalization

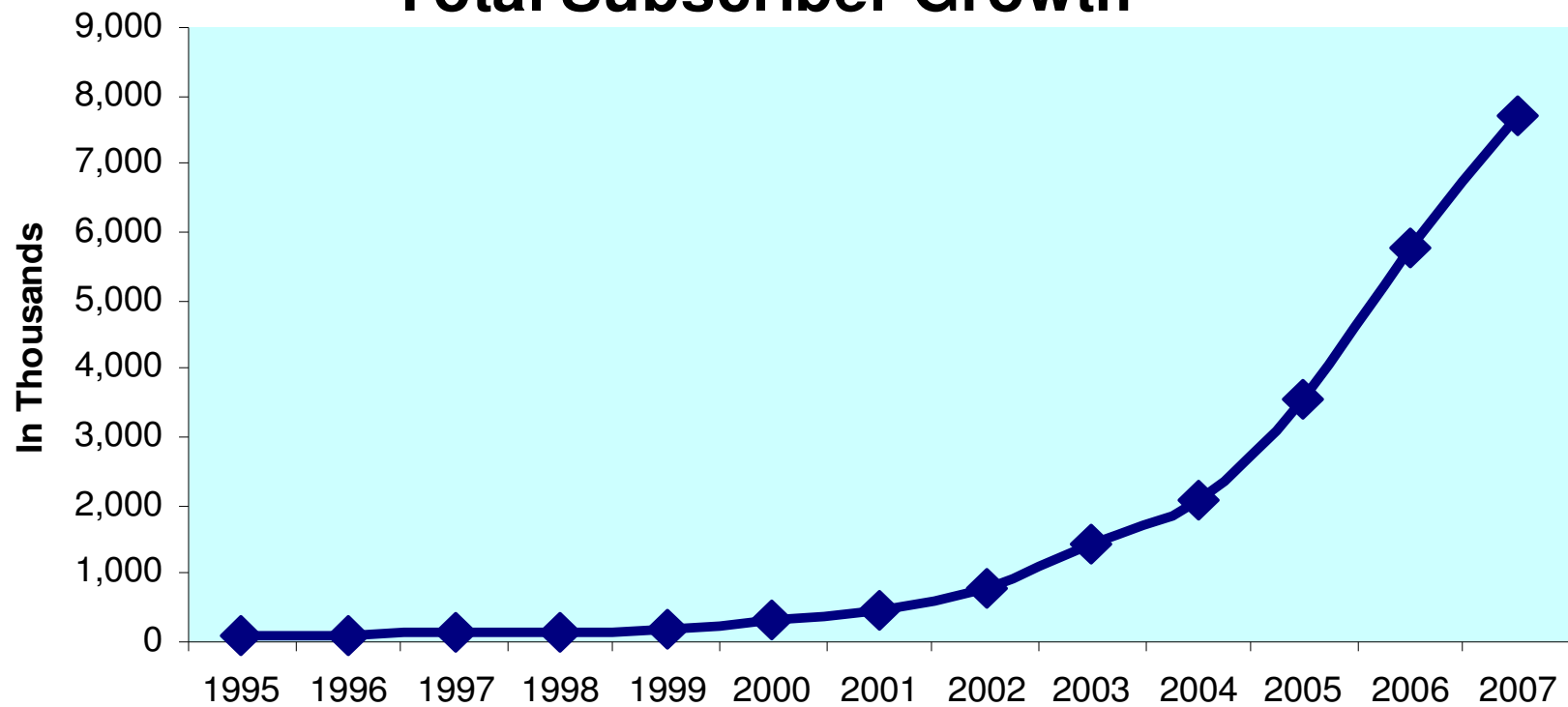
- Services provided:
 - Voice Telephone (fixed & mobile)
 - Data and internet services
 - Public payphones services
 - Short messaging services,
 - Multimedia Messaging Services (MMS),
 - Video streaming, and other 3G related services.
 - Operators are upgrading their networks to NGN to enable delivery of new and more modern services to customers.
 - TTCL (incumbent) has also upgraded its traditional network by digitizing copper wire line into Asynchronous Digital Subscriber Lines (ADSL) which enables provision of broad band services.
 - Types of networks in use:
 - GSM/3G, Copper wire, Fixed wireless, CDMA, WiMax for access networks
 - Fiber, terrestrial microwave and Satellite transmission systems,
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Benefits of Liberalization

Total Subscriber Growth

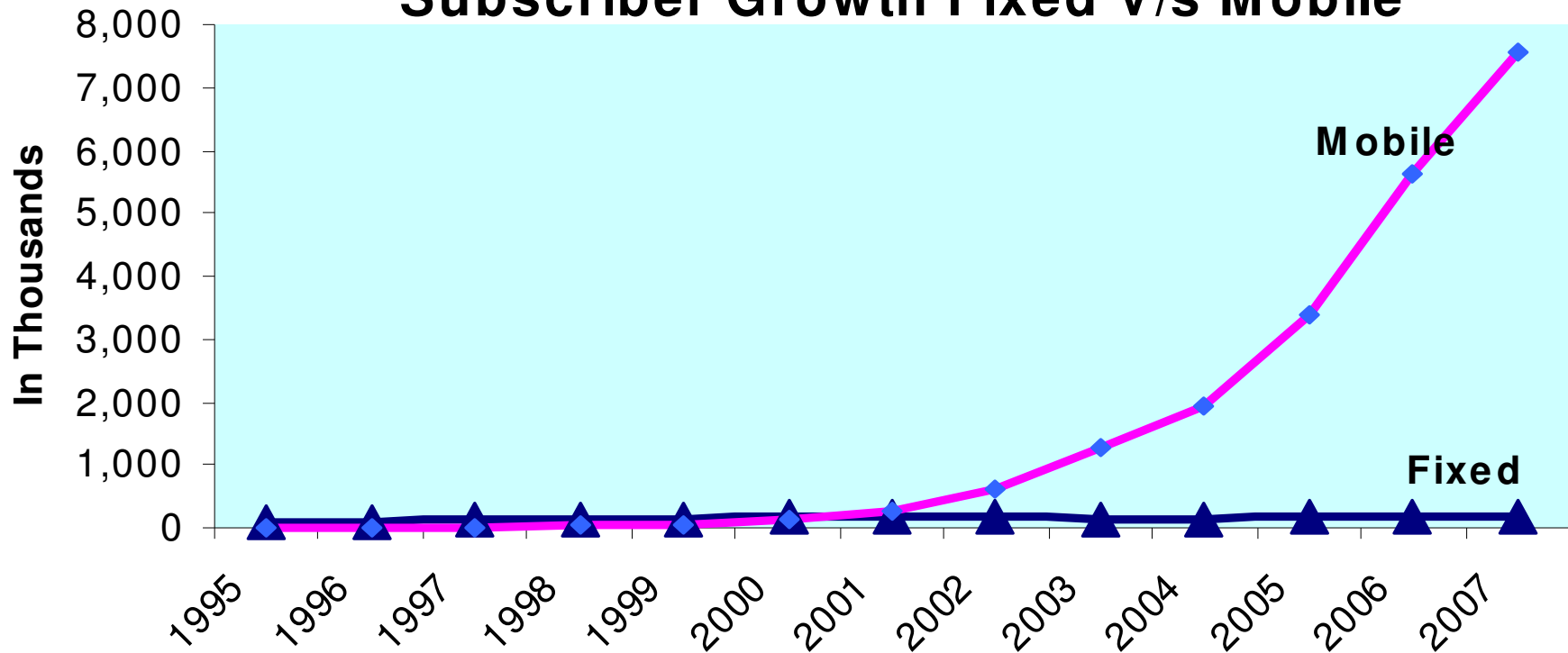




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Benefits of Liberalization

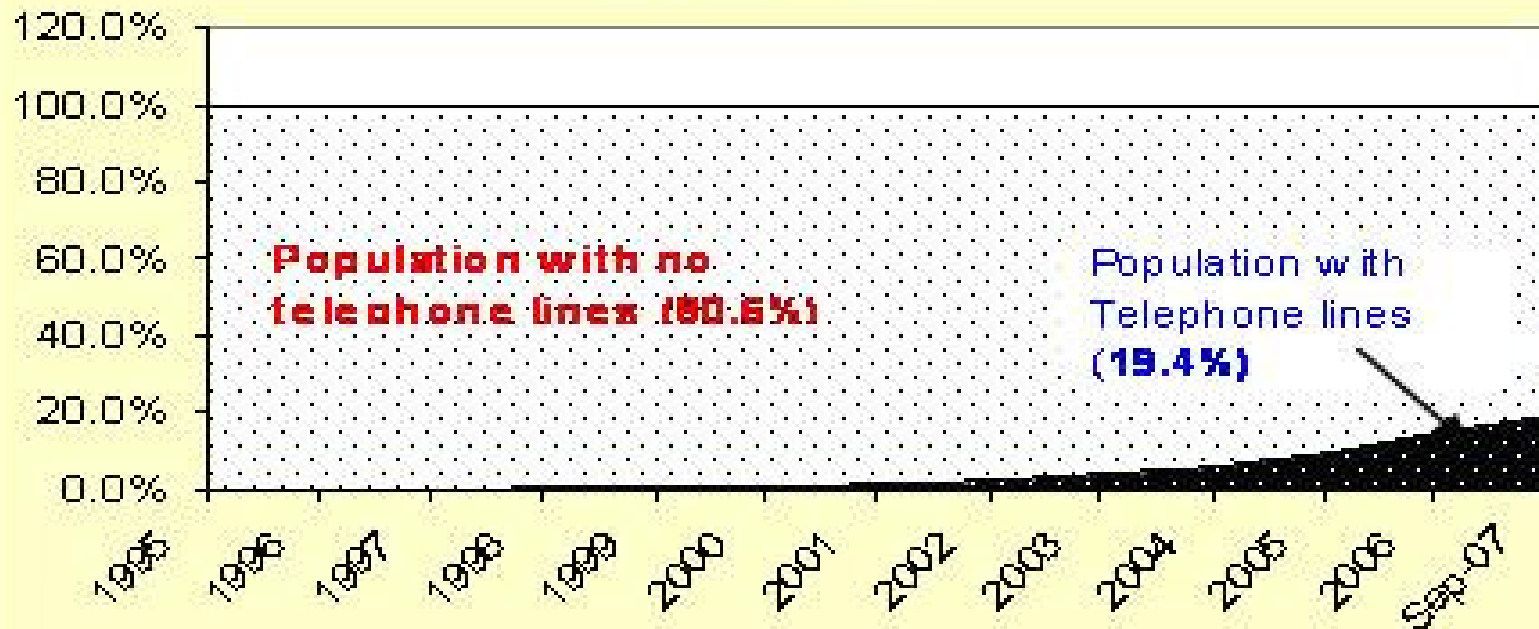
Subscriber Growth Fixed V/s Mobile





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**Fig.2. Telephone Lines per population
(Teledensity)**





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Tariffs

- Tariffs are not regulated except when there is market failure
- Example; Interconnection rates are regulated when operators fail to agree on interconnection charges,
 - Interconnection rates are cost based and determined using Long Run Incremental cost (LRIC)
 - Recent determination December 2007 , effective for five years from 1st January 2008 to 31st December 2012
- Retail tariffs are determined by market forces
 - Tariff rates have been declining over time



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**Interconnection rates from 1st October 2004-31st December 2007 in US\$
Cents.**

	1st October 2004	1st March 2005	1st January 2006	1st January 2007
Mobile Termination	10.0	8.9	7.9	6.9
Fixed Termination				
(a) Single Tandem	3.9	3.8	3.6	3.5
(b) Double Tandem	5.5	5.3	5.0	4.8



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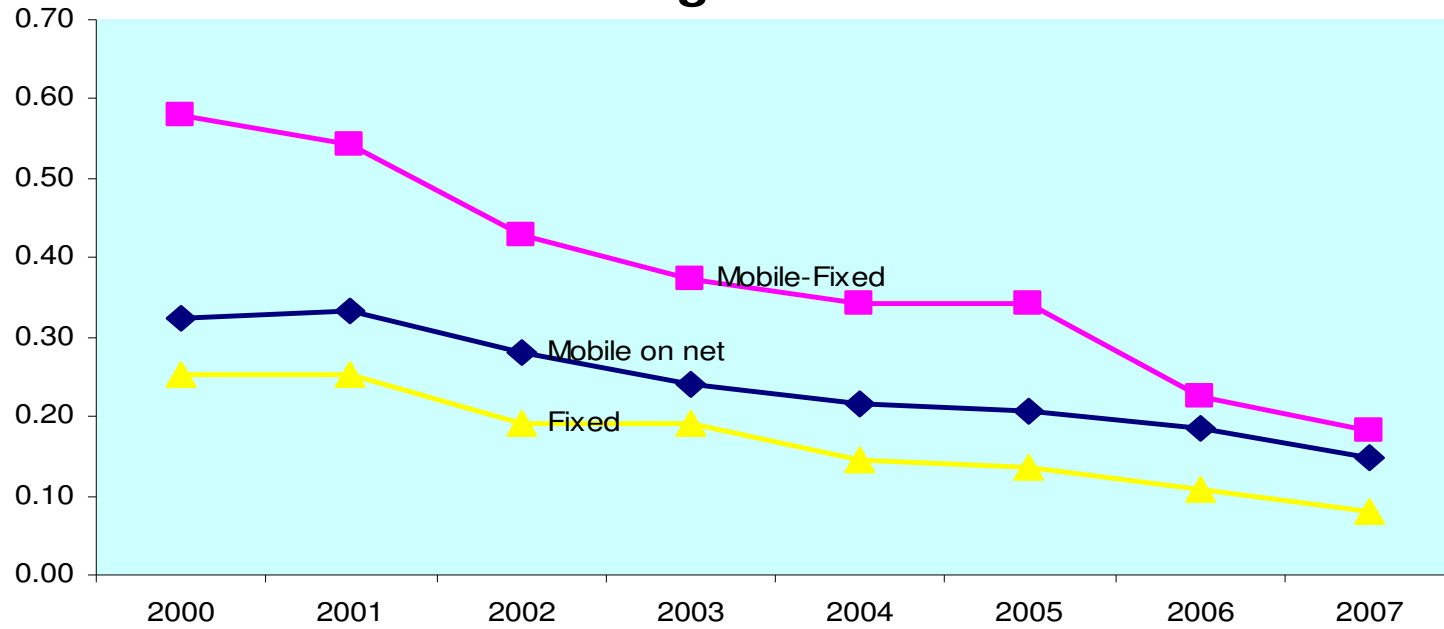
Interconnection Rate Determination No2 of 2007, effective from 1st January 2008

Timeframe	1 st January 2008	1 st January 2009	1 st January 2010	1 st January 2011	1 st January 2012
Voice call termination rates in US cents	7.83	7.65	7.49	7.32	7.16



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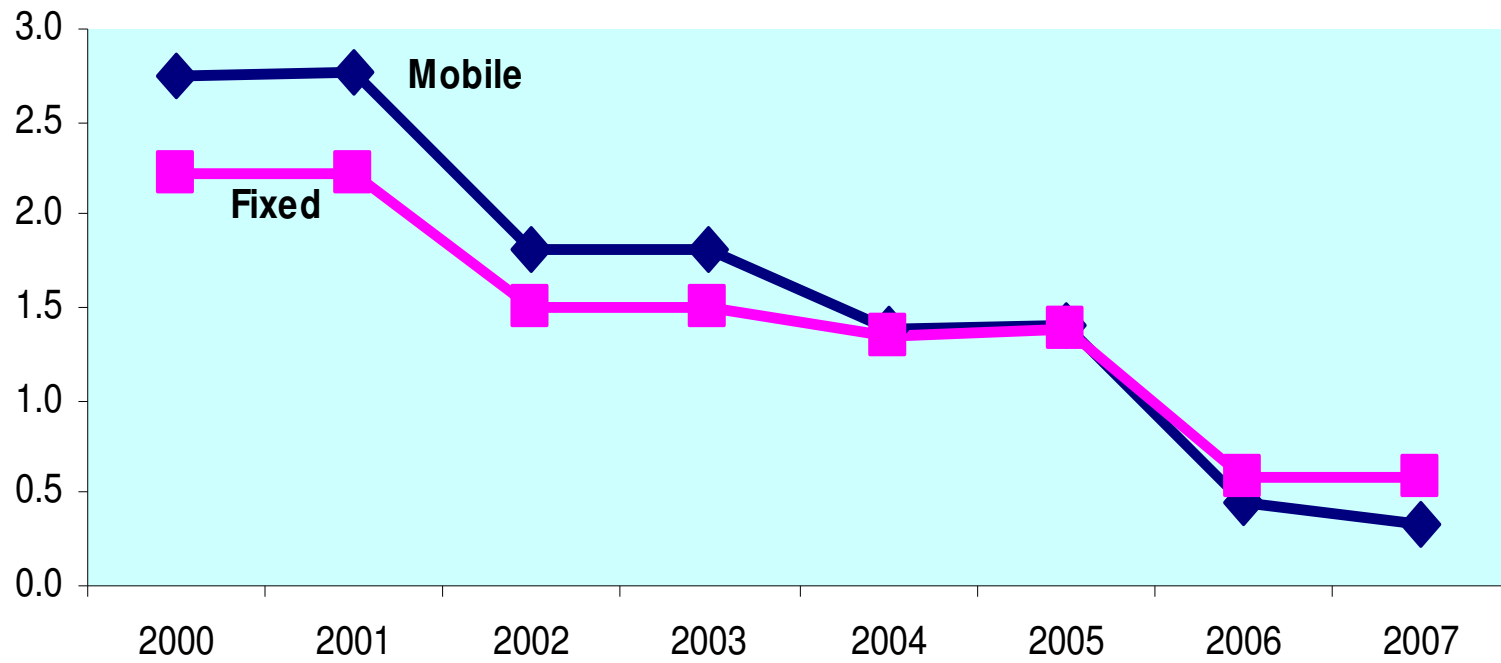
Average National Tariffs





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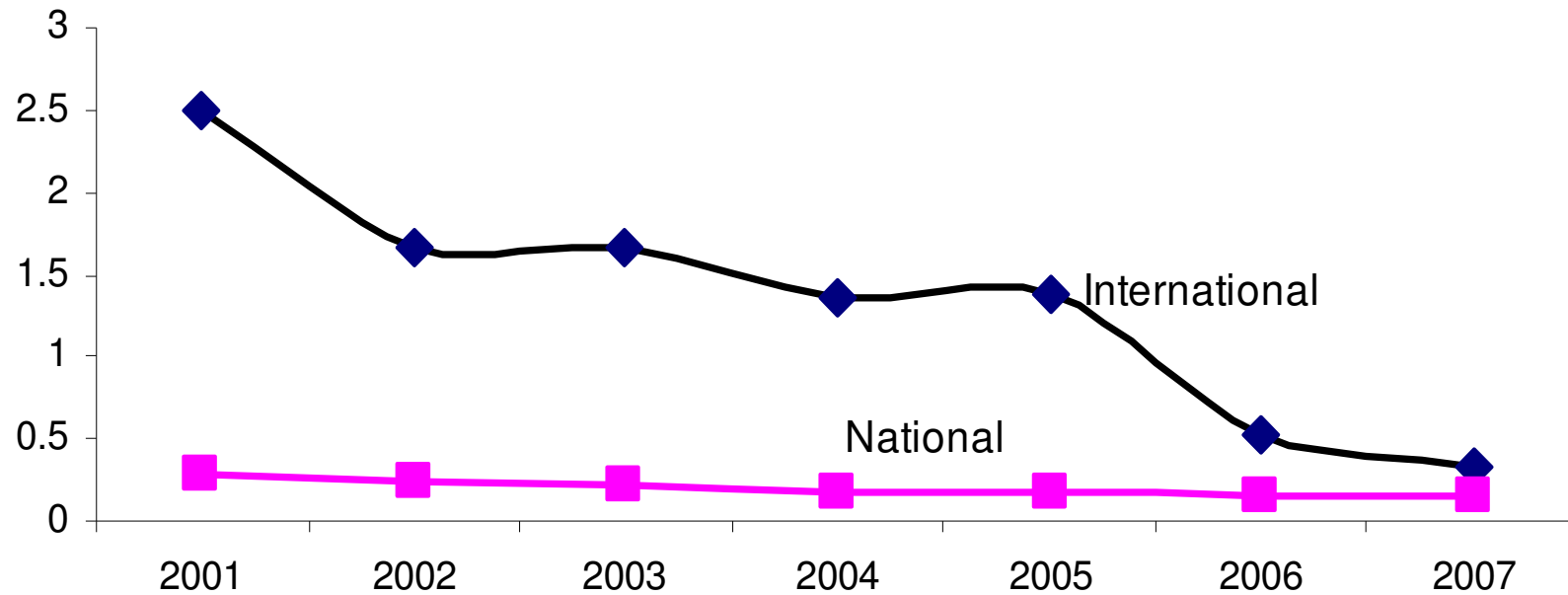
Average International Tariffs





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Evolution of Telephone Tariffs





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PREPAID TARIFFS PER OPERATOR AS AT 31st DECEMBER 2007 (USD Cents Per Minute)

DESTINATIONS	Time	Celtel	Tigo	TTCL Fixed	TTCL Mobile	Vodacom	Zantel	BOL	Average
Own Mobile Network	Peak	0.19	0.18	0.11	0.18	0.26	0.20	0.05	0.17
	Off Peak	0.19	0.06	0.11	0.15	0.23	0.20	0.05	0.14
	Late Night/Disc ount	0.19	0.06	0.06	0.08	0.05	0.20	0.05	0.10
Other Mobile networks	Peak	0.25	0.30	0.23	0.23	0.34	0.23	0.15	0.25
	Off Peak	0.25	0.30	0.20	0.20	0.34	0.23	0.15	0.24
National Fixed Network (0 - 50km)	Peak	0.25	0.30	0.11	0.18	0.34	0.23	0.10	0.22
	Off Peak	0.25	0.30	0.11	0.15	0.34	0.23	0.10	0.21
National Fixed Network (51 - 500km)	Peak	0.31	0.30	0.15	0.18	0.34	0.23	0.15	0.24
	Off Peak	0.31	0.30	0.12	0.15	0.34	0.23	0.15	0.23
National Fixed Network > 500km	Peak	0.38	0.30	0.15	0.18	0.34	0.23	0.15	0.25
	Off Peak	0.38	0.30	0.12	0.15	0.34	0.23	0.15	0.24
SMS - National		0.05	0.04	-	-	0.05	0.04	0.02	0.04
Average		0.27	0.25	0.13	0.17	0.30	0.22	0.11	0.21



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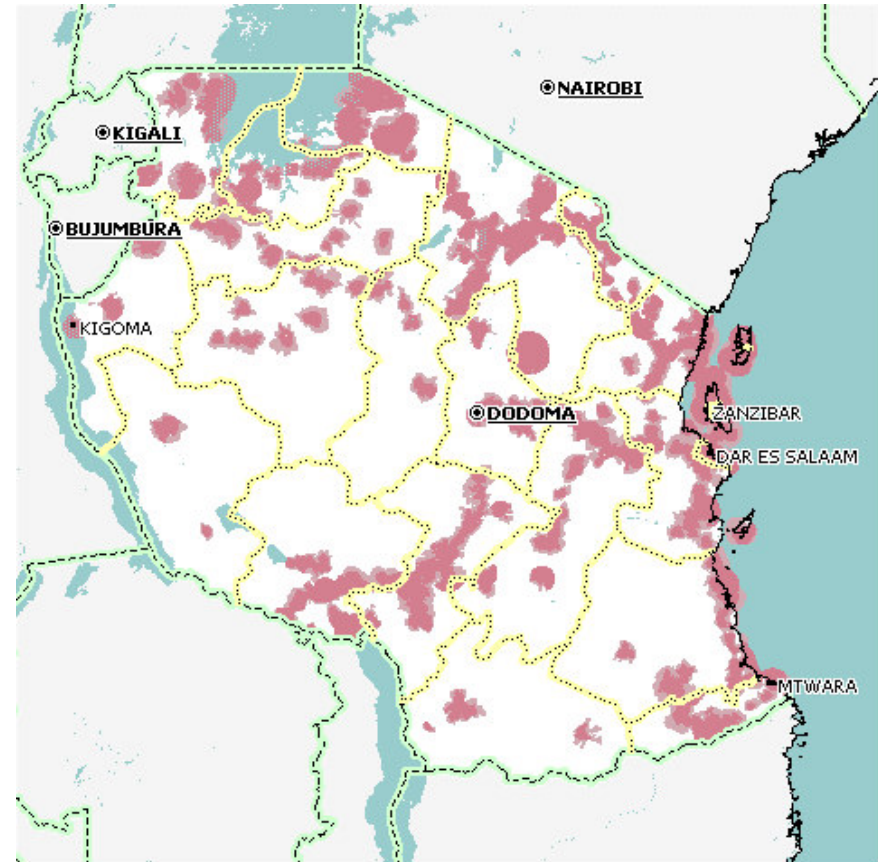
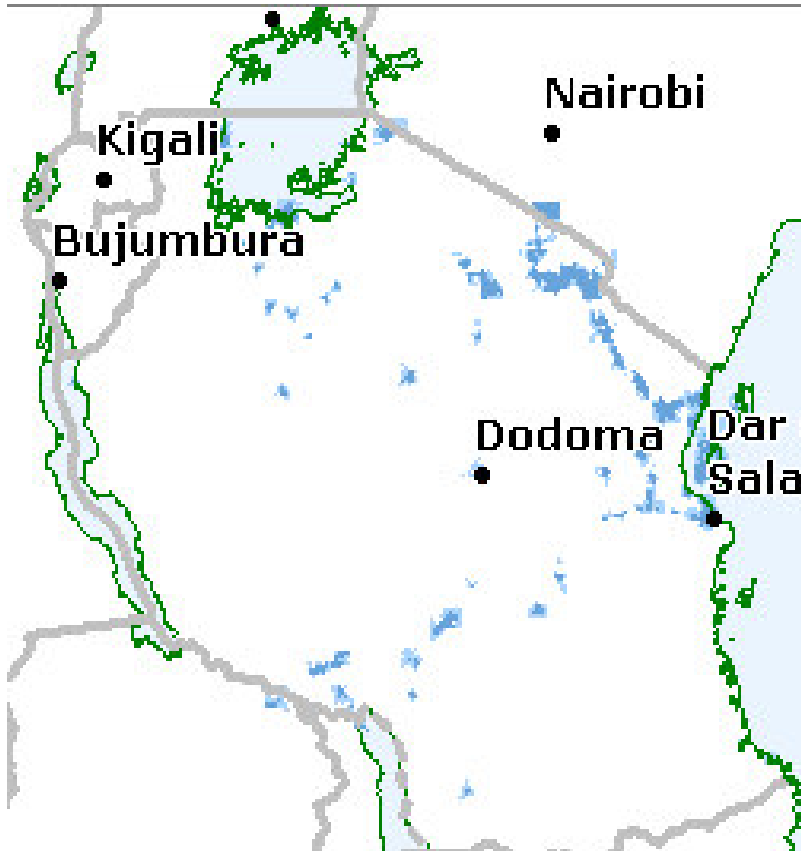
PREPAID INTERNATIONAL TARIFFS		
COMPANY NAME	IN TSHS	IN US CENTS
CELTEL (T) LTD	530.40	0.44
MIC (T) LTD	523.92	0.44
TTCL	398.00	0.33
VODACOM (T) LTD	561.00	0.47
ZANTEL	491.40	0.41
BENSON ON LINE (BOL)	336.00	0.28
AVERAGE	473.45	0.39
NATIONAL TARIFFS	252.00	0.21



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COVERAGE

Celtel



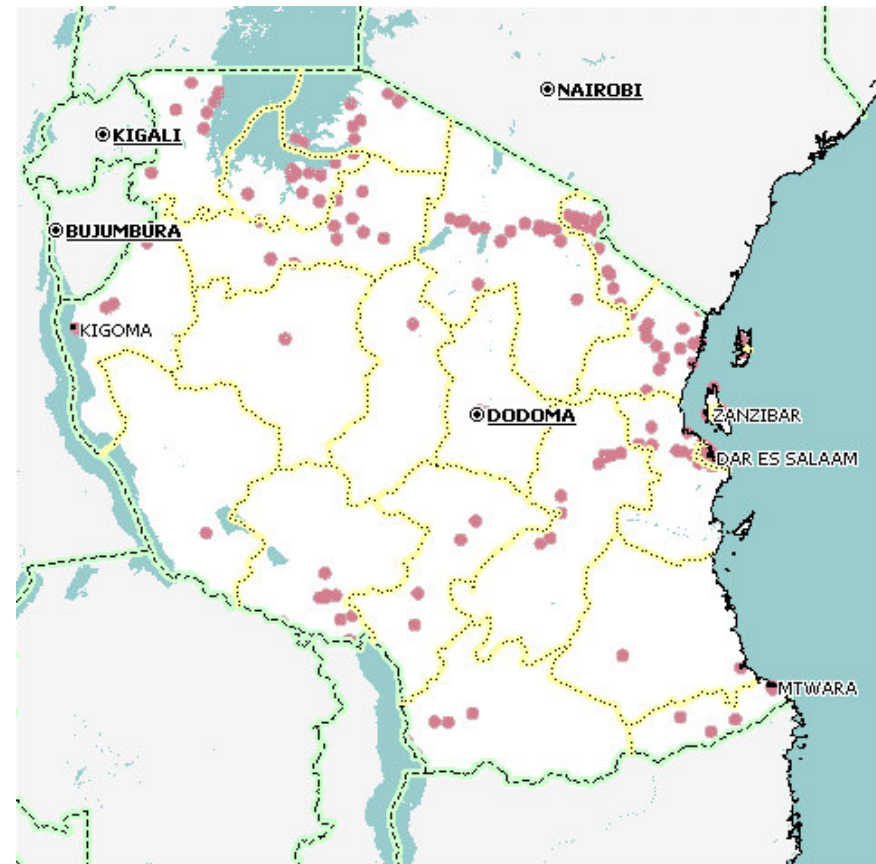


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COVERAGE



MIC (T) LTD





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Conclusion:

- Liberalization and competition yields substantial benefits if properly implemented .
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Thank you for listening
Asante

Lucas Mwalongo & Abdul Hussein

lmwalongo@tcra.go.tz

ahussein@tcra.go.tz

Website: www.tcra.go.tz
