

# Balancing Act: The dynamics of high demand for low-cost devices and the fight against counterfeits in Ghana

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(ITU webinar Session 2: Exploring challenges posed by counterfeit and tampered Telecommunication/ICT devices and software)

# Counterfeiting of devices is a microcosm of a broader challenge

General News of Friday, 17 May 2019

Source: [www.ghanaweb.com](http://www.ghanaweb.com)

## Stop importing fake devices into the country - George Andah

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Deputy Communications Minister, George Andah

Deputy Communications Minister, George Andah has cautioned Ghanaians especially importers to desist from importing fake and substandard devices into the country.

According to him, these devices contain high radiation emissions which pose health risk to users and for the country to level the playing field for technological investors, importers need to ensure quality products are on the market for consumers.

Lamenting on the rise of fake devices in the country, Mr. Andah revealed that his ministry will not hesitate to disconnect counterfeit devices from use because the health of Ghanaians is paramount to the Akufo-Addo-led government.

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# Ghana go start ban importation of 'fake phones' -



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## Business

## NCA To Crackdown On Counterfeit Mobile Devices

On May 19, 2019, 7:57 AM

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The Government has tasked the National Communications Authority (NCA) to liaise with mobile network operators and other relevant state agencies to determine the level of risk posed by the influx of counterfeit mobile devices on the market.

Mr George Andah, a Deputy Minister of Communications, who gave the directive during his keynote address at a forum in Accra on Friday, to mark this year's World Telecommunications and Information Society Day (WTSD), said the presence of those devices on the market posed health and security risk to the people.

He said government would not hesitate to disconnect fake mobile phones from use, similar to measures Rwanda, Nigeria, South Africa and Tanzania undertook to curb the phenomenon.

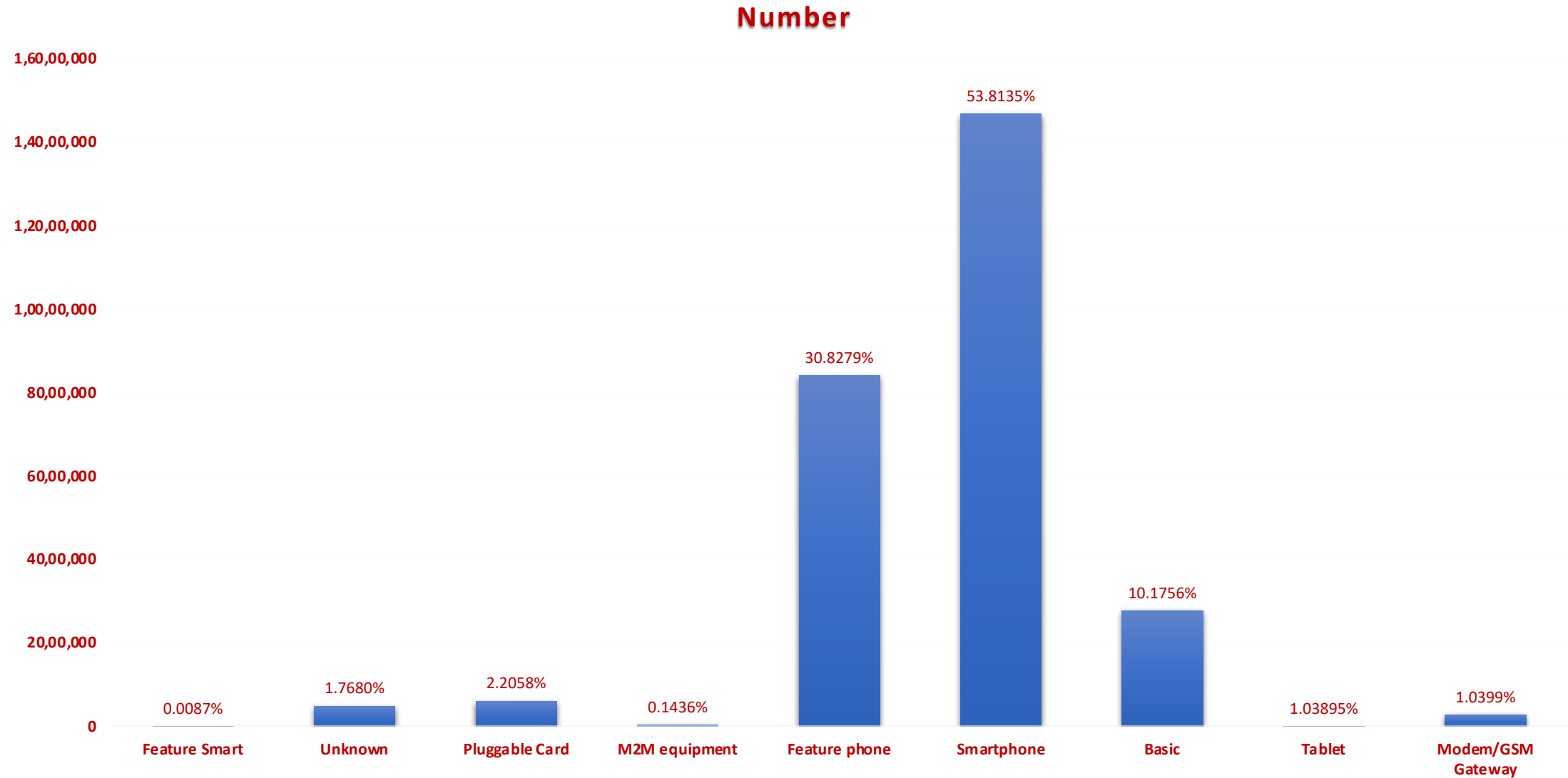


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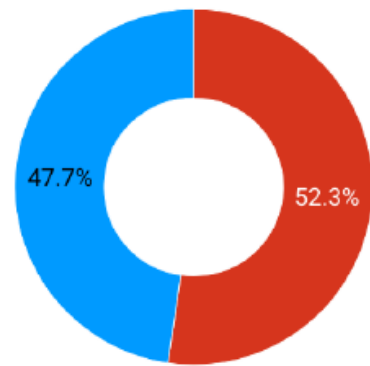
# SAY "NO" TO COUNTERFEITS

# Snapshot of device types and distribution on an MNO's network

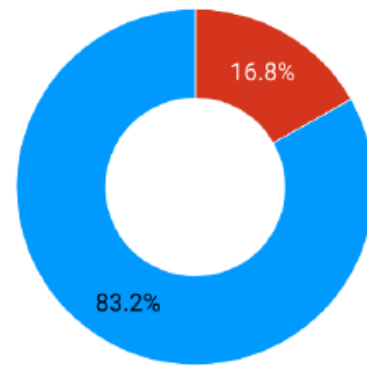


## Ownership of Functional ICT device (12 years and older)

Ownership of Functional Device	Total	Urban	Rural
Mobile phone (smart)	73.1%	83.2%	58.9%
Mobile phone (non-smart)	35.9%	32.4%	40.8%
Laptop	6.9%	9.7%	3.0%
Tablet	1.3%	1.9%	0.4%
None	16.8%	9.8%	26.6%



2010



2021

■ Does not own mobile phone  
■ Owns mobile phone



## Use of ICT Devices to Access Internet (6 years and older)

Device Used to Access Internet	Total ▼	Urban	Rural
Mobile phone	68.2%	79.2%	53.4%
Laptop	5.8%	8.3%	2.4%
Digital television	3.3%	4.4%	1.9%
Tablet	1.0%	1.6%	0.3%
Desktop computer	0.7%	1.1%	0.3%
Other devices	0.0%	0.0%	0.0%
Did not access internet	31.4%	20.4%	46.2%



A snapshot of device access and ownership in Ghana

## Use of Mobile Phones for Financial Transactions (12 Years and Older)

### Use of mobile phone for financial transaction

	Total ▼	Males	Females
Mobile money only	53.2%	54.9%	51.6%
Both mobile money and other financial transactions	3.6%	4.3%	3.0%
Other financial transactions only	1.1%	1.2%	1.0%
Did not use mobile phone for financial transaction	42.1%	39.6%	44.5%



# A snapshot of device access and ownership in Ghana

## Ownership of Functional ICT Device (12 years and older) - Regional Variation

Region	Mobile phone (Smart) ▼	Mobile phone (Non-smart)	Tablet	Laptop	None
Greater Accra	89.2%	27.9%	3.1%	12.2%	6.4%
Ashanti	81.4%	33.3%	1.2%	7.5%	11.1%
Eastern	76.8%	41.3%	1.1%	5.2%	14.2%
Central	76.4%	39.4%	1.2%	7.0%	14.1%
Western	76.3%	35.6%	1.0%	5.7%	14.9%
Bono	75.4%	35.9%	0.9%	7.2%	15.0%
Ahafo	73.4%	41.5%	0.6%	4.6%	15.9%
Volta	71.7%	44.6%	0.8%	5.1%	17.5%
Western North	68.1%	38.2%	0.4%	3.6%	19.8%
Bono East	62.3%	39.1%	0.5%	3.8%	23.5%
Oti	55.5%	41.1%	0.4%	3.0%	29.4%
Upper East	51.4%	39.2%	0.4%	4.0%	30.2%
Upper West	49.1%	34.5%	0.5%	5.6%	35.0%
Northern	47.3%	38.8%	0.5%	4.9%	32.7%
North East	43.0%	35.8%	0.2%	2.9%	40.3%
Savannah	40.8%	32.7%	0.2%	2.9%	42.1%



## Ownership of Functional ICT Device (12 years and older – District Variation)

Rank	Region	District	Percent of population 12 years and older that does not own a functional ICT device
1	Greater Accra	Ayawaso West Municipal	3.3%
2	Ashanti	La Dade-Kotopon Municipal	4.0%
3	Greater Accra	Tema West Municipal	4.0%
5	Ashanti	Adentan Municipal	4.2%
<b>Ghana</b>			<b>14.1%</b>
257	Northern	North East Gonja	51.6%
258	North East	Yunyoo Nasuan	52.7%
259	Northern	Gushegu Municipal	52.9%
260	Northern	Karaga	53.0%
261	Savannah	North Gonja	55.8%

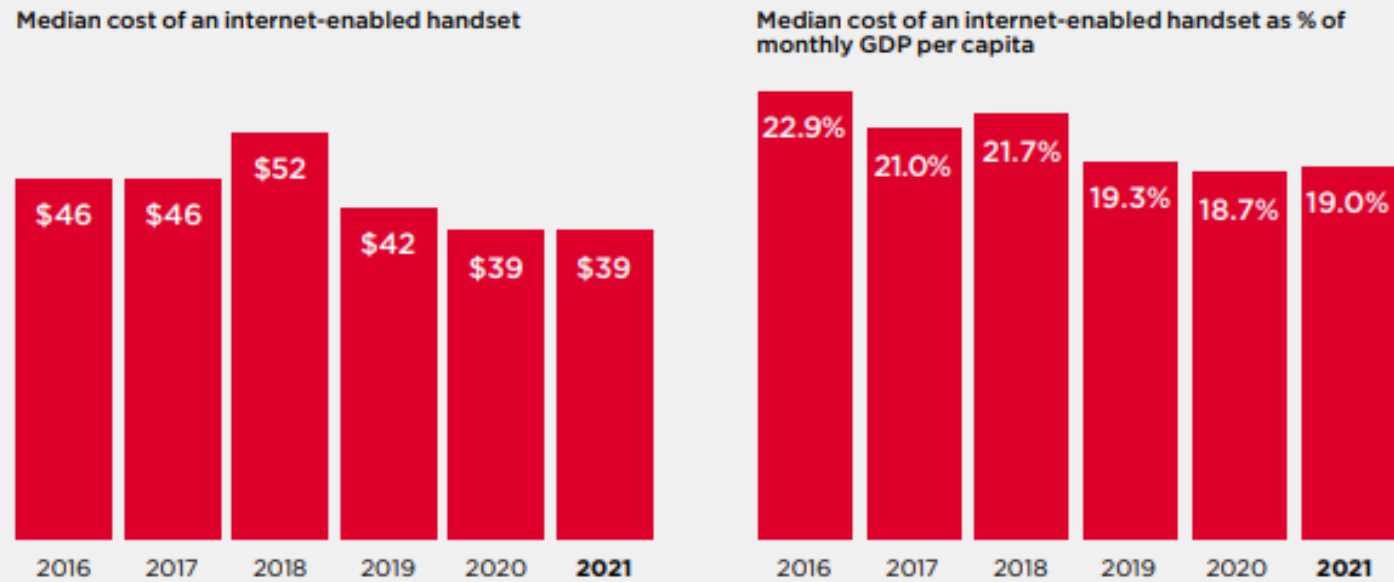




# Affordability of handsets and devices remains a challenge

1. There is a huge demand for mobile devices and handsets in Ghana.
2. The mobile phone is the most widespread tool for accessing the internet – about 68.2%.
3. Mobile financial services is also a key driver of the mobile phone penetration – 53.2% of the population use their phones for MFS.
4. The distribution of access to and ownership of functional devices reflects the socio-economic demographics of Ghana – device access/ownership is higher in regions with lower poverty rate and lower in regions with the highest poverty rate.
5. Income inequalities within Ghana is a driver of device ownership and access to connectivity.
6. This confirms the GSMA 2022 State of mobile connectivity conclusion that barriers preventing mobile internet use are still affordability, particularly of handsets, and literacy and digital skills. Across LMICs, affordability of entry level internet-enabled handsets has remained relatively unchanged.

### Figure 24: Median cost and affordability of an internet-enabled handset across LMICs, 2016–2021

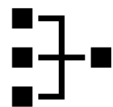


**Note:** Price of handset is the cheapest internet-enabled feature phone or smartphone available (at the time of collecting data) sold by mobile operators or mobile phone retailers (It does not reflect prices of second-hand or black-market handsets).

**Source:** GSMA Intelligence calculations based on pricing data from Tarifica

Across LMICs, affordability of entry-level internet-enabled handsets has remained relatively unchanged... The affordability of an internet-enabled handset has not significantly improved across all regions and for the poorest 20% of the population, the cost of a handset represents 54% of their monthly income.

# The legal regime for devices and handsets in Ghana



## 1. National Communications Authority Act, 2008 (Act 769)

Section 3 (n) empowers the NCA to certify and ensure the testing of Electronic Communications Equipment (ECE) for compliance with international standards; and environmental health and safety standards including electromagnetic radiation and emissions



## 2. Electronic Communications Act, 2008 (Act 775)

Section 66(1) states that any terminal equipment sold or otherwise provided in this country may be connected to a public electronic communications network if the Authority certifies that the terminal equipment is in compliance with international standards, and environmental, health and safety standards including standards for electromagnetic radiation and emissions.



## 3. Type Approval regime:

The main objective is to ensure that all Electronic Communications Equipment that are used in Ghana comply with the applicable technical standards accepted by the Authority relative to:

- Efficient Use of radio frequency spectrum
- Interconnection of Terminal Equipment with PTNs without causing any damage,
- Protection of the health and the safety of the user,
- Electromagnetic Compatibility (EMC).



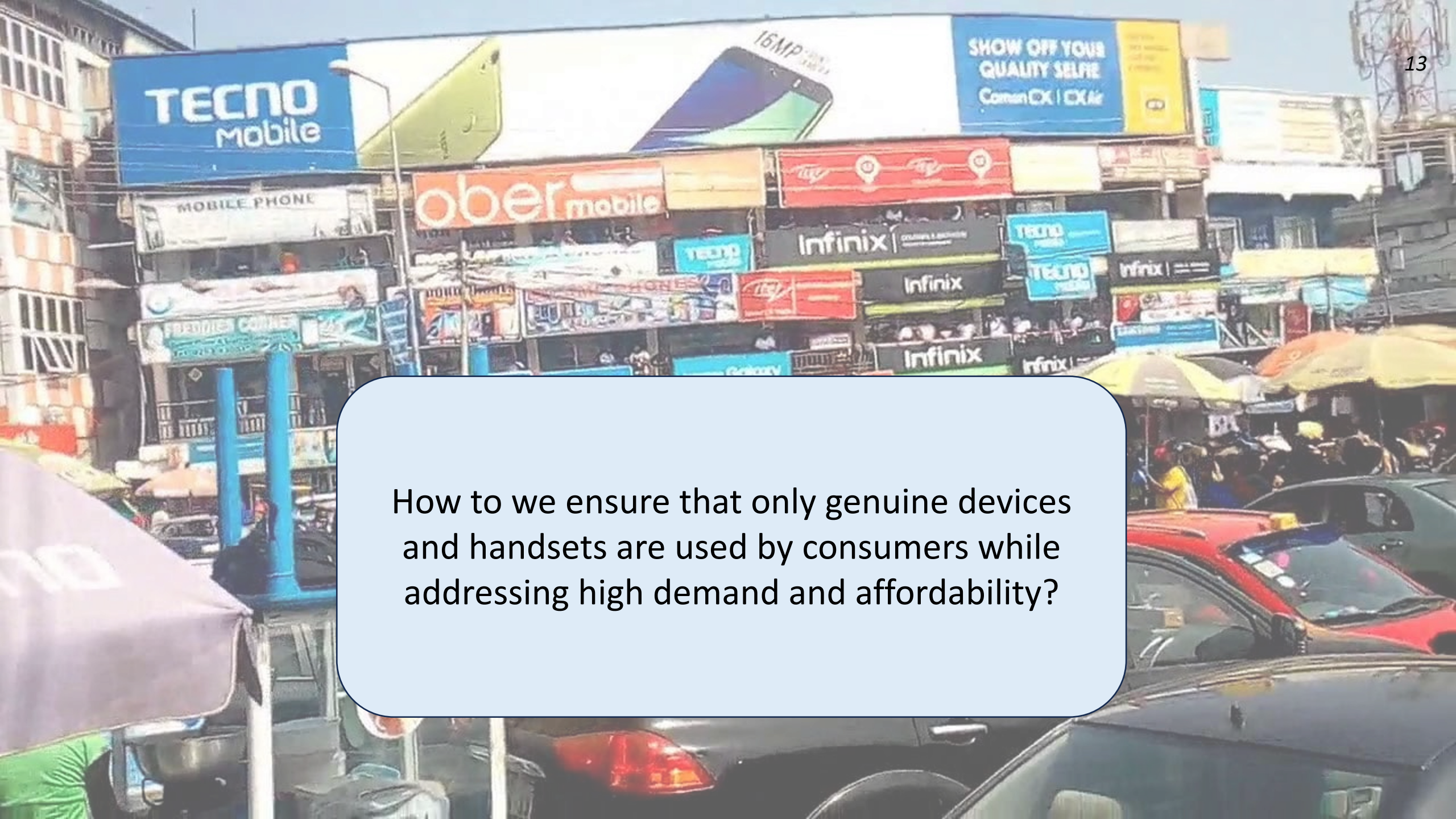
## 4. Emergency Communications System Instrument, 2020 (EI 63)

Establishment of a Central Equipment Identity Register which shall be the centralised database for validly registered terminal equipment on all networks of mobile and service providers in the country. A network operator or service provider shall connect the Equipment Identity Register of the network operator or service provider to the Central Equipment Identity Register for purposes of synchronisation and the sharing of information.

# The key stakeholders in the device value chain







How to we ensure that only genuine devices and handsets are used by consumers while addressing high demand and affordability?

# A trip to Ghana's biggest mobile phone hub

**Video from Tip-Toe lane**

# Contrasting the formal and informal channels of device acquisition

## Formal Channels



Outlets and points of sale with limited number of devices and geographical locations



New phones only



Route is usually formal importation through recognized entry points



Authentication is determined via type approval processes for testing SAR, RF and Signaling Electromagnetic Fields (EMF) etc.



Device verification to ensure compliance with global standards, legitimate TAC / IMEI

## Informal Channels



The sale and distribution of phones is purely based on the forces of demand, supply, affordability



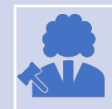
A mixture of new, used, recycled and stolen phones



Multiple routes include direct import, online purchases, swap by customers repatriation by individuals abroad and smuggling

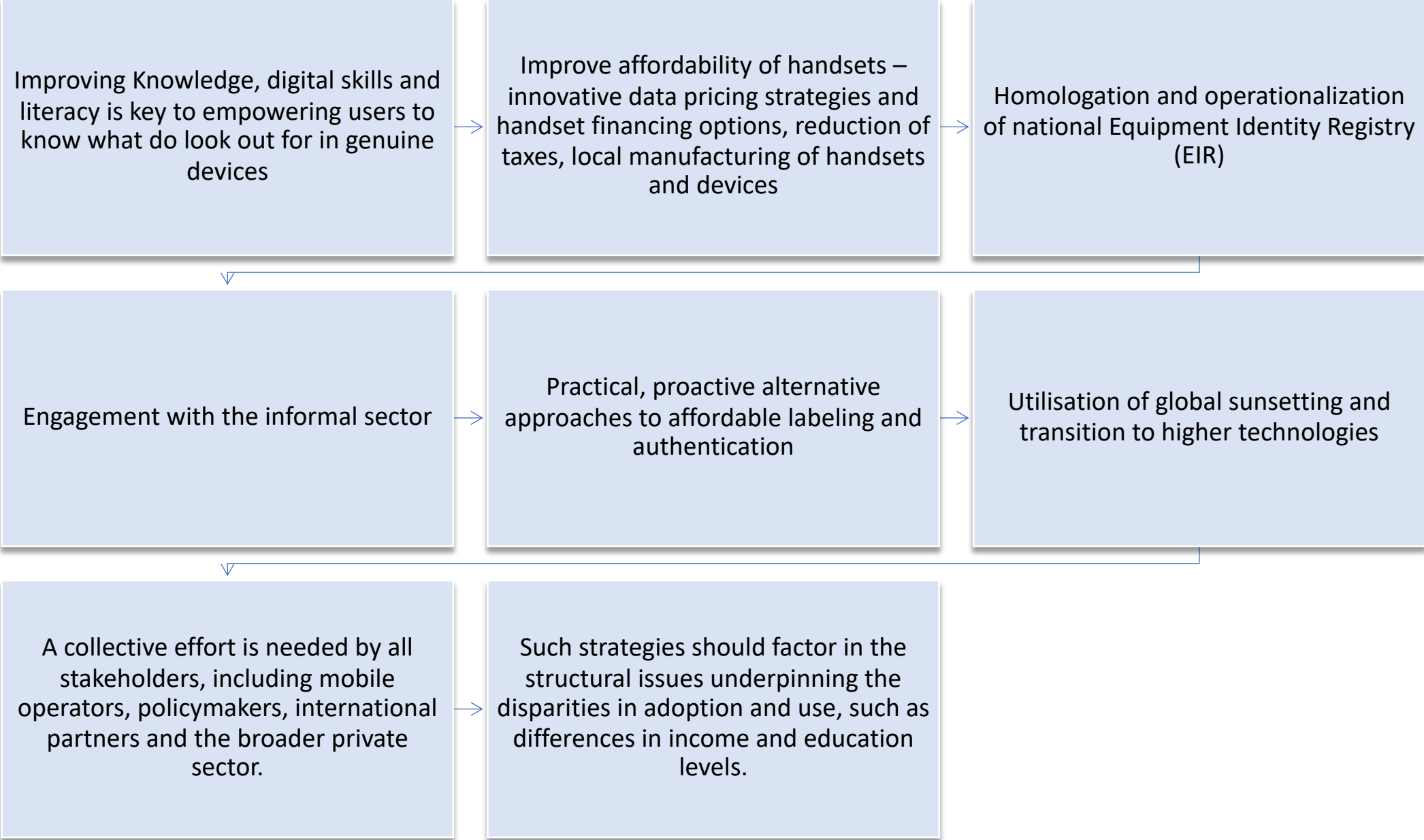


Authentication is via knowledge of device characteristics, visual cues (display, screen, camera, sound), packaging, origin of your product, trust for vendor



Device verification to ensure compliance with global standards, legitimate TAC / IMEI

# What will a win-win outcome look like?





**It is important to scale the heights of the best standards,  
but we need to also aspire to go further...**



**High jump**

Standards to meet the bar and comply with best practices to guarantee health and safety



**Long jump**

Areas to reach in ensuring the required knowledge, skills, and best practices are accessible to all demographics

**Thank you**