



MINISTÈRE DE L'ÉCONOMIE NUMÉRIQUE  
ET DE LA POSTE



# ITU Regional Workshop on ICT Statistics for Africa

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## The ICT price basket

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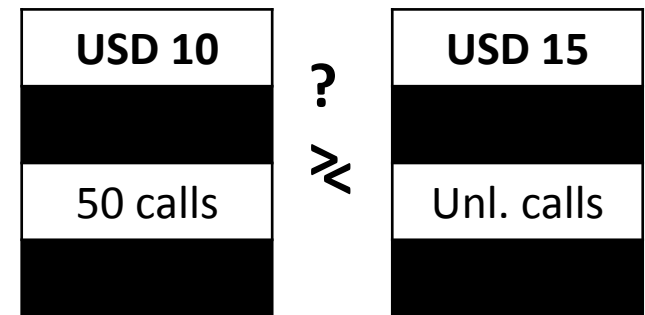


# ITU price data collection

- Price data collected (in advertised currency) for:
  - Fixed telephone
  - Mobile cellular (voice and SMS)
  - Fixed broadband
  - Mobile broadband (data) – **full data collection since 2012**
- Prices for each service are **combined into a basket**
- **Monthly prices** for each basket are presented in:
  - US\$
  - PPP\$
  - As a % pf GNI p.c.

# Why a price basket approach?

- **“Average revenue per minute/SMS/MB”** not meaningful for international benchmarks:
  - With bundling, impossible to separate revenues per source
  - Each country different usage patterns
    - ⇒ Comparing apples and oranges



- **Price basket approach**
  - Ensures that the same services are compared across countries
  - Results are sensitive to the composition of the baskets



## Benchmarking of consumption baskets

- allows updates over time, as consumption of each individual service changes
- allows some comparability among different institutions that use this approach to compare prices (European Commission, OECD, individual regulators.....)
- possible to introduce new- additional services to be compared (bundles)
- more transparent selection of dimensions of the tariffs that are or not to be contemplated /ignored



## Revision of the mobile consumption basket for price benchmarking

- In the EGTI- 2017 meeting a revision of mobile baskets was discussed and approved.
- A subgroup was created and produced a report with consumption data for countries across all the regions of the world to establish the current consumption patterns for ICT services.



# Revision of the mobile baskets: evidence gathered

		Voice (mins/month)	SMS (SMS/month)	Data (GB/month)	ITU Regions represented
Group 1	Low Income	Data points: 13	16	2	Africa, Asia Pacific*
	Mean	81	22	0.26	
	Median	56	12	0.26	
Group 2	Lower middle Income	Data points: 27	18	16	Africa, Asia Pacific, Arab States, the Americas, CIS
	Mean	156	68	1.7	
	Median	125	20	0.5	
Group 2	Upper middle Income	Data points: 29	26	19	Africa, Asia Pacific, Arab States, the Americas, CIS, Europe
	Mean	159	56	1.27	
	Median	147	47	0.9	
Group 2	High Income	Data points: 40	36	29	Africa, Asia Pacific, Arab States, the Americas, CIS, Europe
	Mean	157	95	2.1	
	Median	139	49	1.9	

\* No data for Comoros, Somalia & Haiti – the only economies from the Arab States and the Americas in this group



- There is a clear disparity in terms of consumption patterns among the low-income group and the lower-middle, upper-middle and high-income groups.
- the evidence suggests **two consumption patterns** ought to be considered.



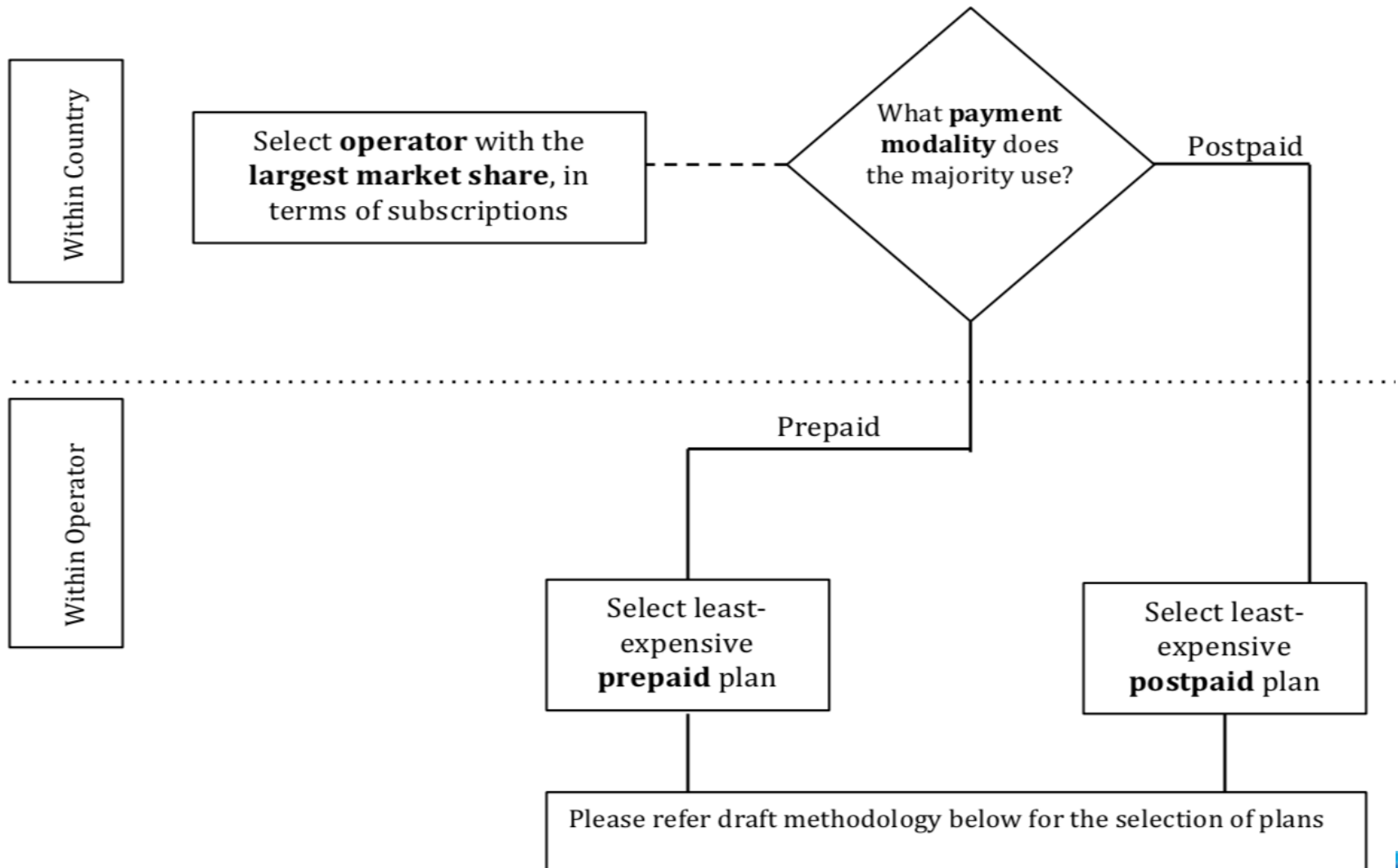


# Tariff selection process

- (1) Select one operator: the one **with highest market share**
- (2) Select payment modality (prepayment/ contract): the one **with higher presence**
- (3) Select the **least expensive plan** that satisfies the consumption requirements (low and high)

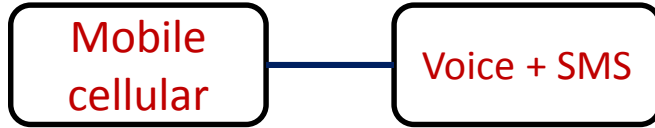
# Tariff selection process

Figure 1: Recommended process flow, mobile cellular



# Mobile Cellular – revised baskets

Previous sub-basket

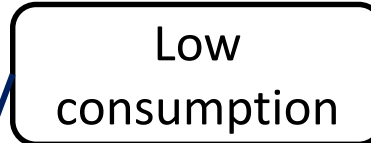
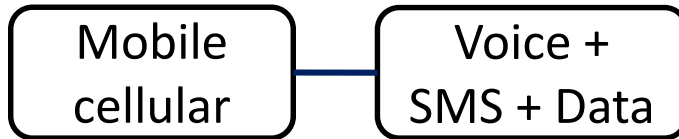


Approx. 50 min + 100 SMS  
(based on OECD 2010)

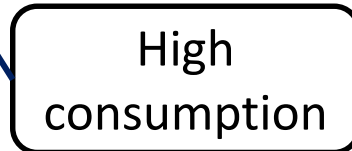
**Old!!!**

**New!! From October 2018**

New sub-baskets



**70 min + 20 SMS + 500 MB**  
(3G and above)



**140 min + 70 SMS + 1.5 GB**  
(3G and above)

# Report data based on the most common contract type per country

	Previous ITU Basket	Revision	Rationale
<b>Type of subscription</b>	<p>Prepaid</p> <p>Exception: Postpaid if prepaid subscription base &lt; 2% (e.g. Japan)</p>	<p><b>Prepaid</b> if prepaid subscription base &gt; 50%</p> <p><b>Postpaid</b> if postpaid subscription base &gt; 50%</p> <p><i>Exception:</i> If no data are available on subscriptions, select prepaid by default</p>	<p>Countries ought to report on the type of service that <b>represents the majority</b> in their respective markets.</p> <p><b>Prepaid</b> is the predominant contract type worldwide (<b>default</b> selected if data are not available)</p>

# From one to two consumption baskets

	Current ITU Basket	Proposed revision	Rationale
Voice	30 calls equating to approximately 51 mins	<b>Low consumption basket:</b> <b>70 mins</b>  <b>High consumption basket:</b> <b>140 mins</b>	The disparity in consumption patterns across countries was evident.
SMS	100 SMS	<b>Low consumption basket:</b> <b>20 SMS</b>  <b>High consumption basket:</b> <b>70 SMS</b>	With the availability of data, the natural <b>trend from the evidence is a decline in SMS use.</b>

- A bundled offer may be selected if least-cost criteria is met.
- If bundles are selected the *minimum* consumption as above must be included.

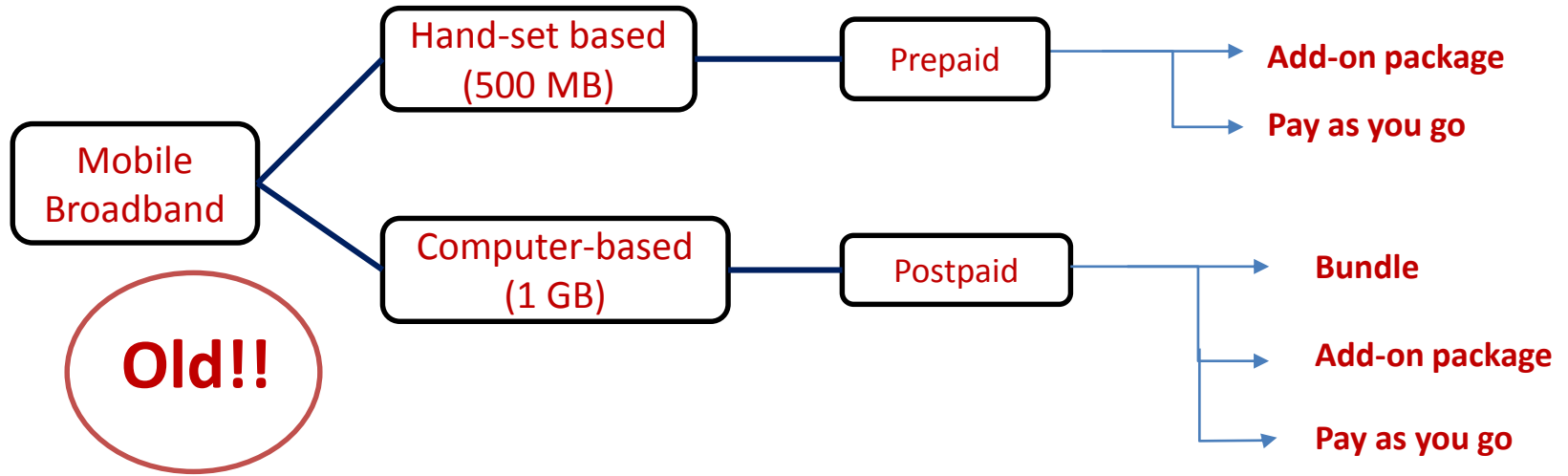
# Data added to voice and SMS

	Current ITU Basket	Proposed revision	Rationale
<b>Data</b>	N/A	<p>The least expensive data add-on with the following data caps at <i>minimum</i>:</p> <p><b>Low consumption</b> basket: <b>500 MB</b></p> <p><b>High consumption</b> basket: <b>1.5 GB</b></p> <p>Note: Access is to the open public Internet. Any zero-rated plans or those with geographic limitations must not be selected, even if cheaper.</p>	<p>As per the evidence gathered on data consumption it is recommended that data is included in the sub-basket. However, unlike voice and SMS it is a service that has a steep upward trend. As such the consumption baskets need to be revised periodically.</p>

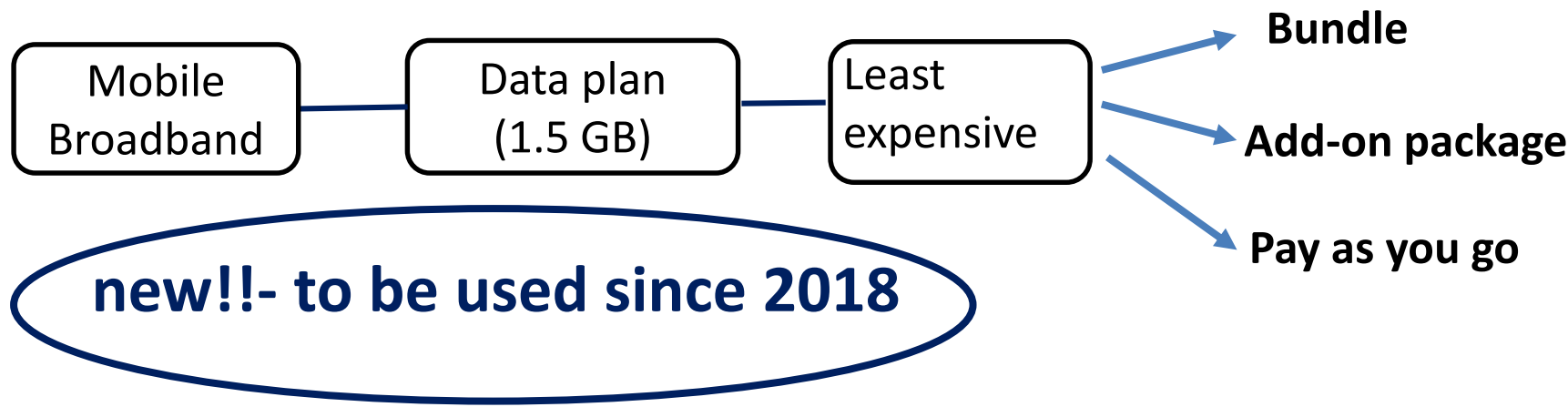


# Mobile broadband: from two to one basket

Previous sub-basket



New sub-basket

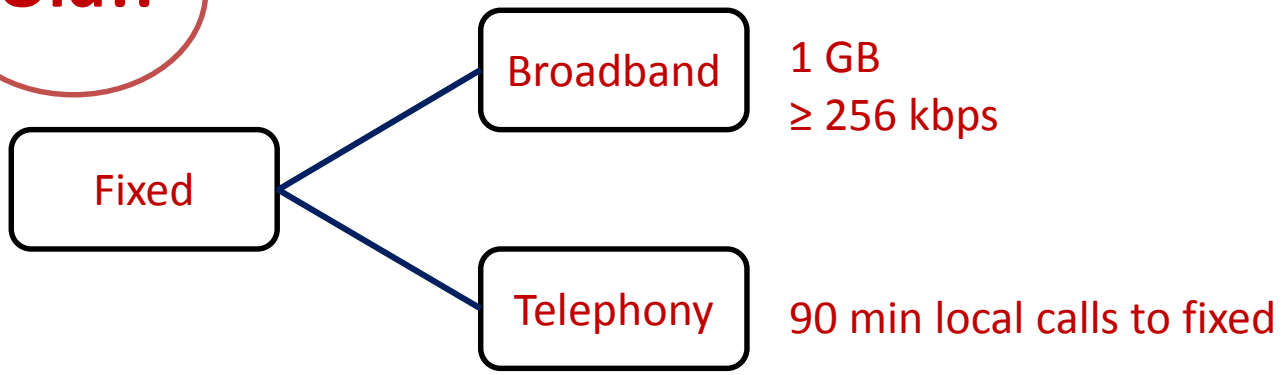




# Fixed broadband as a standalone basket but with increased data cap

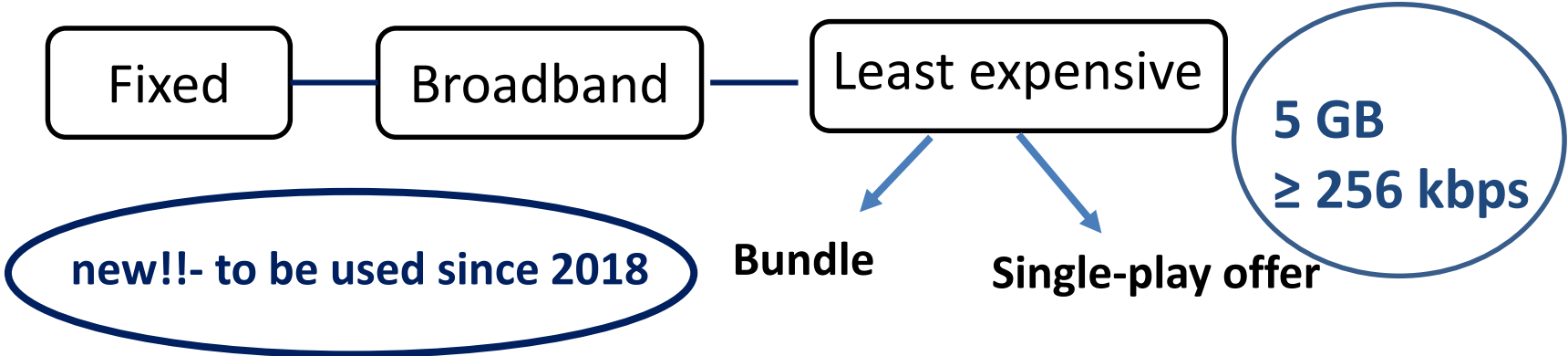
Previous sub-basket

**Old!!**



Collected but not reported.  
Is there value in continuing with this sub-basket?

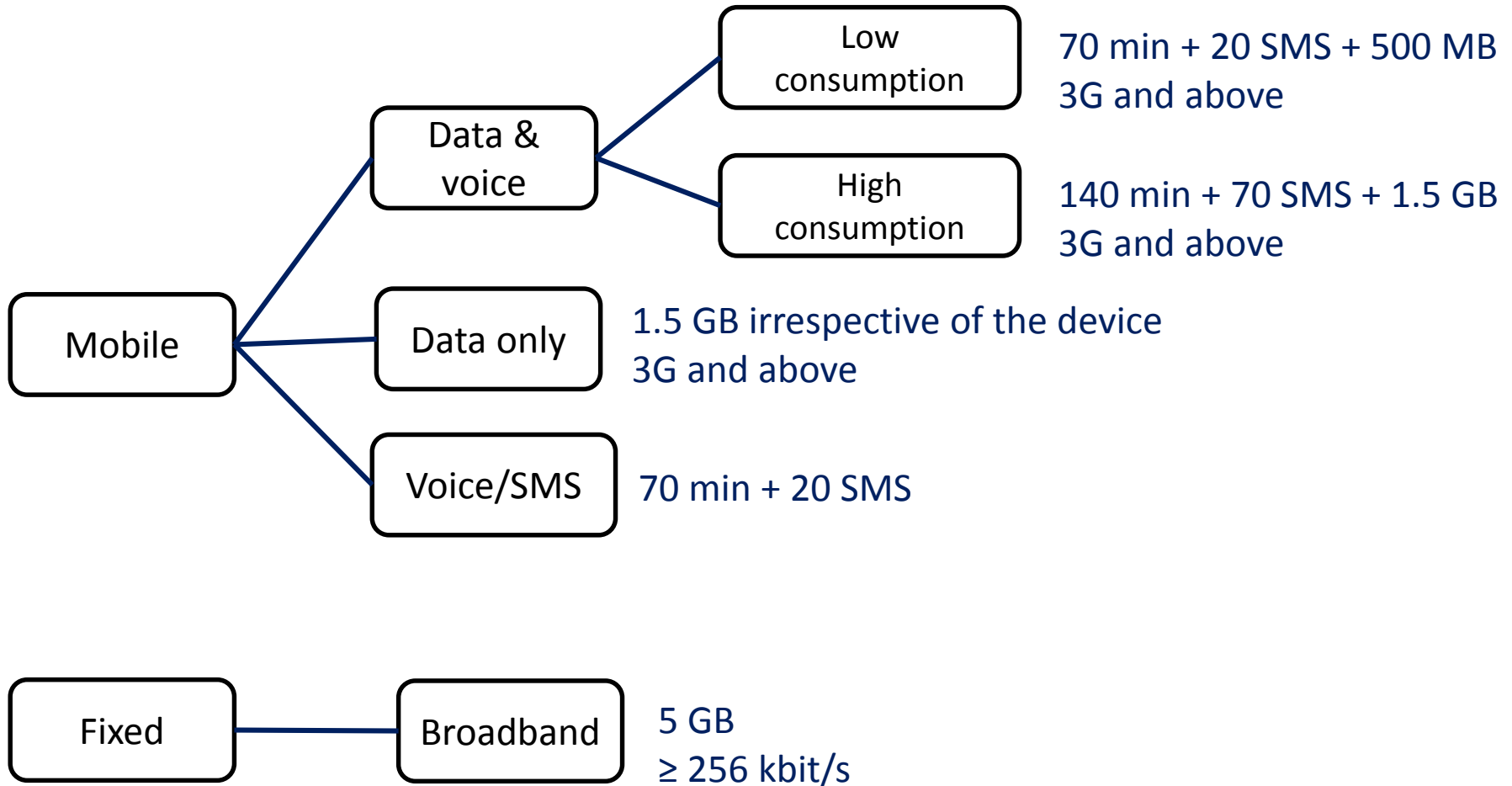
New sub-basket



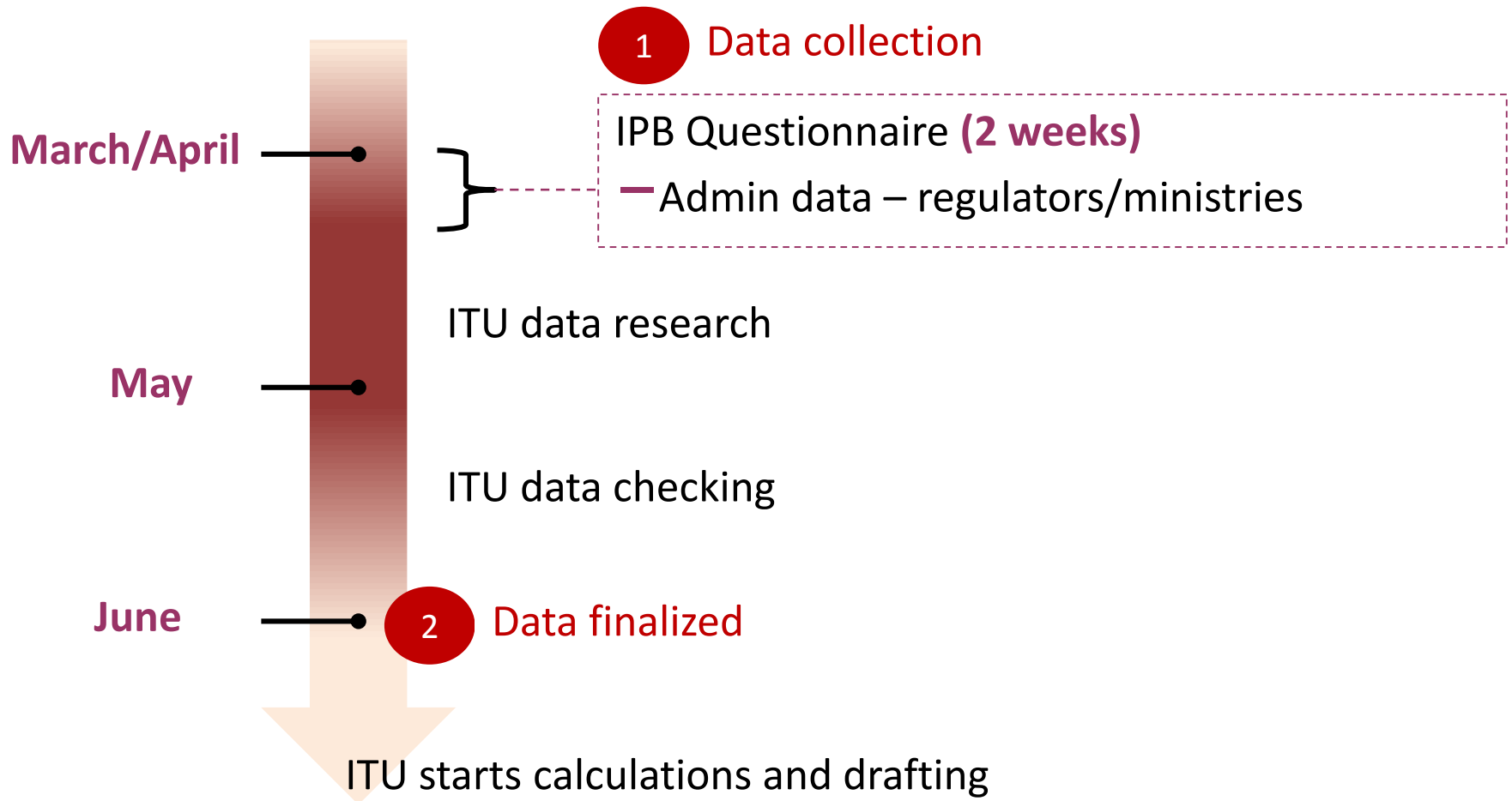


# Summary: new price baskets

From October 2018

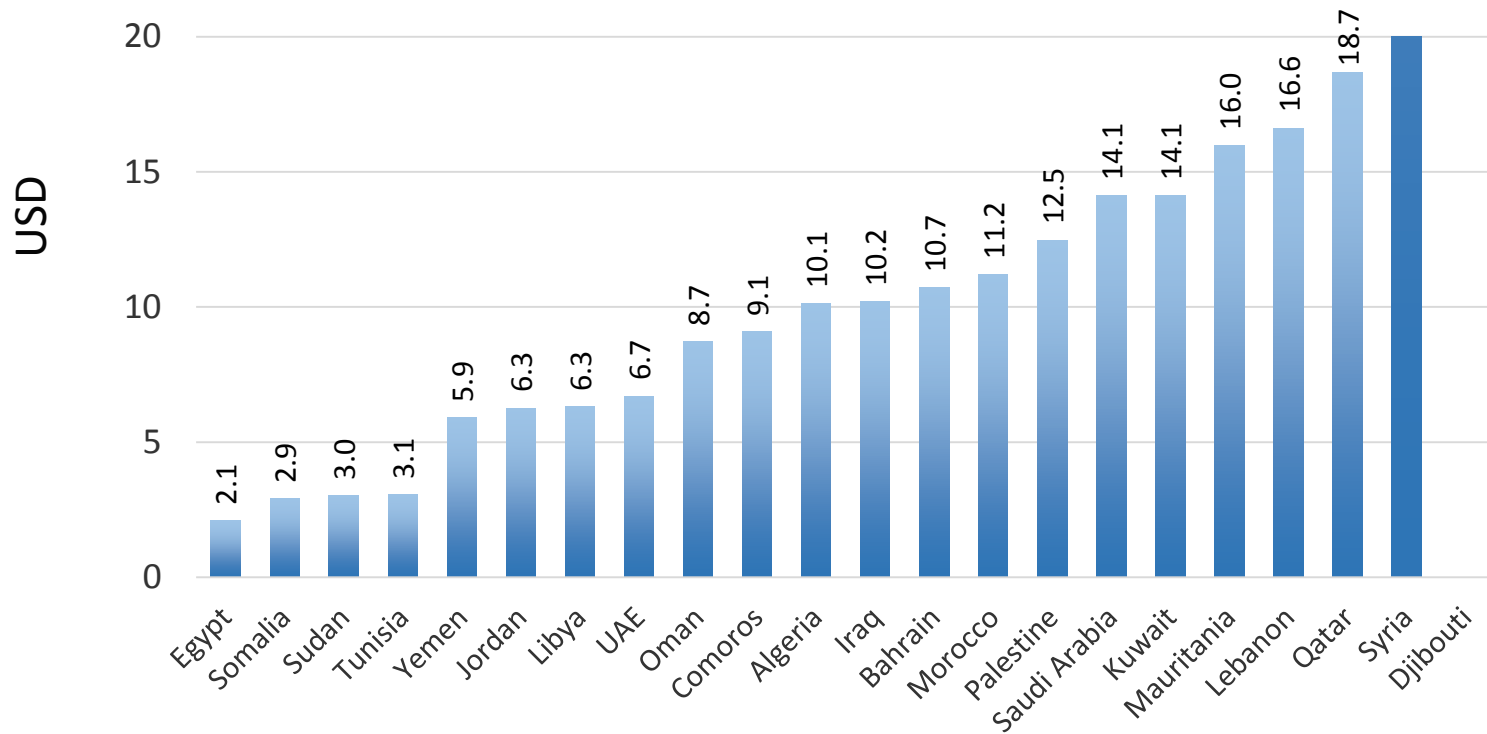


# IPB data collection



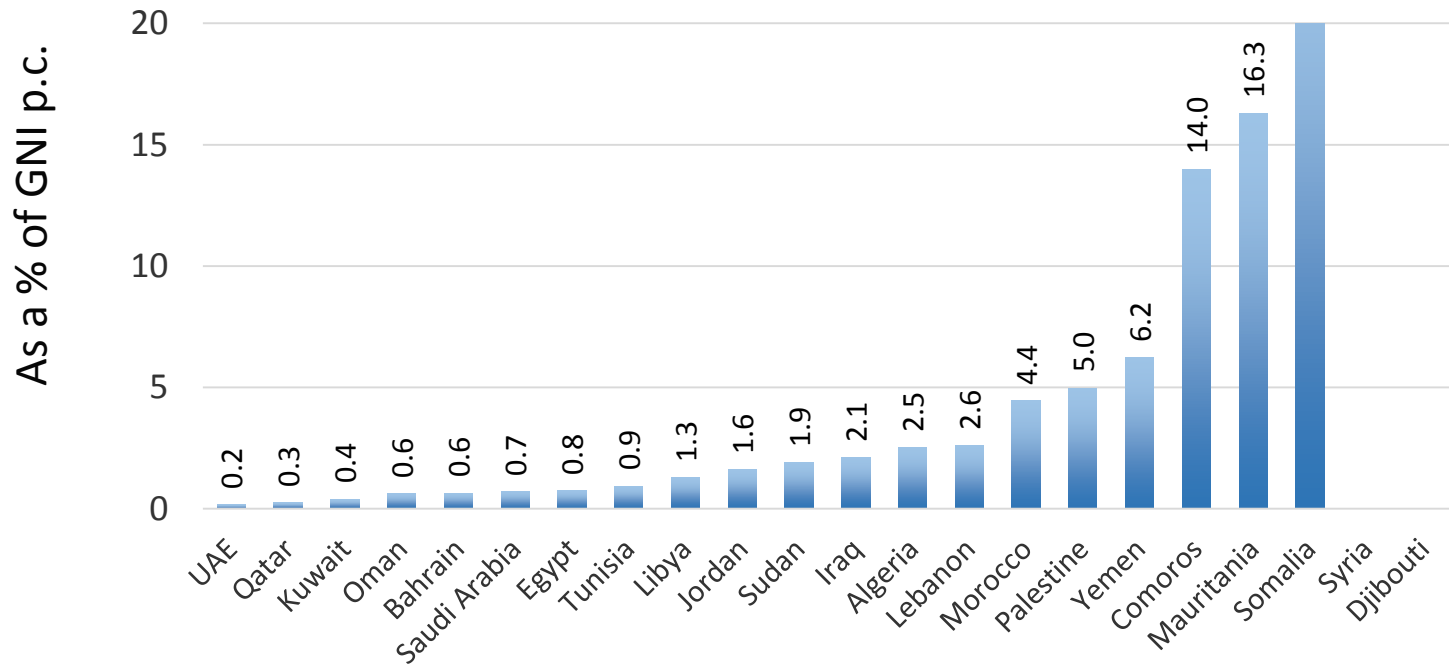
# Mobile-cellular prices

Prepaid mobile-cellular prices, end 2016



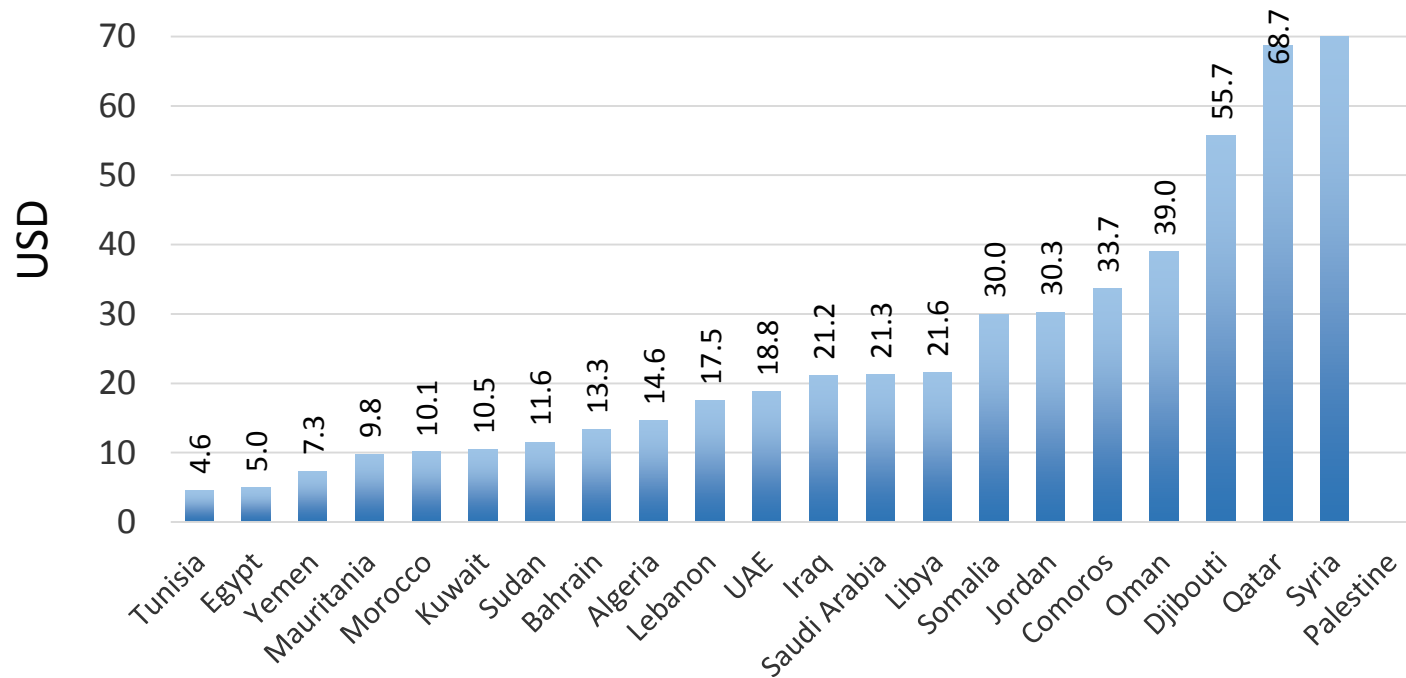
# Mobile-cellular prices

Prepaid mobile-cellular prices, end 2016

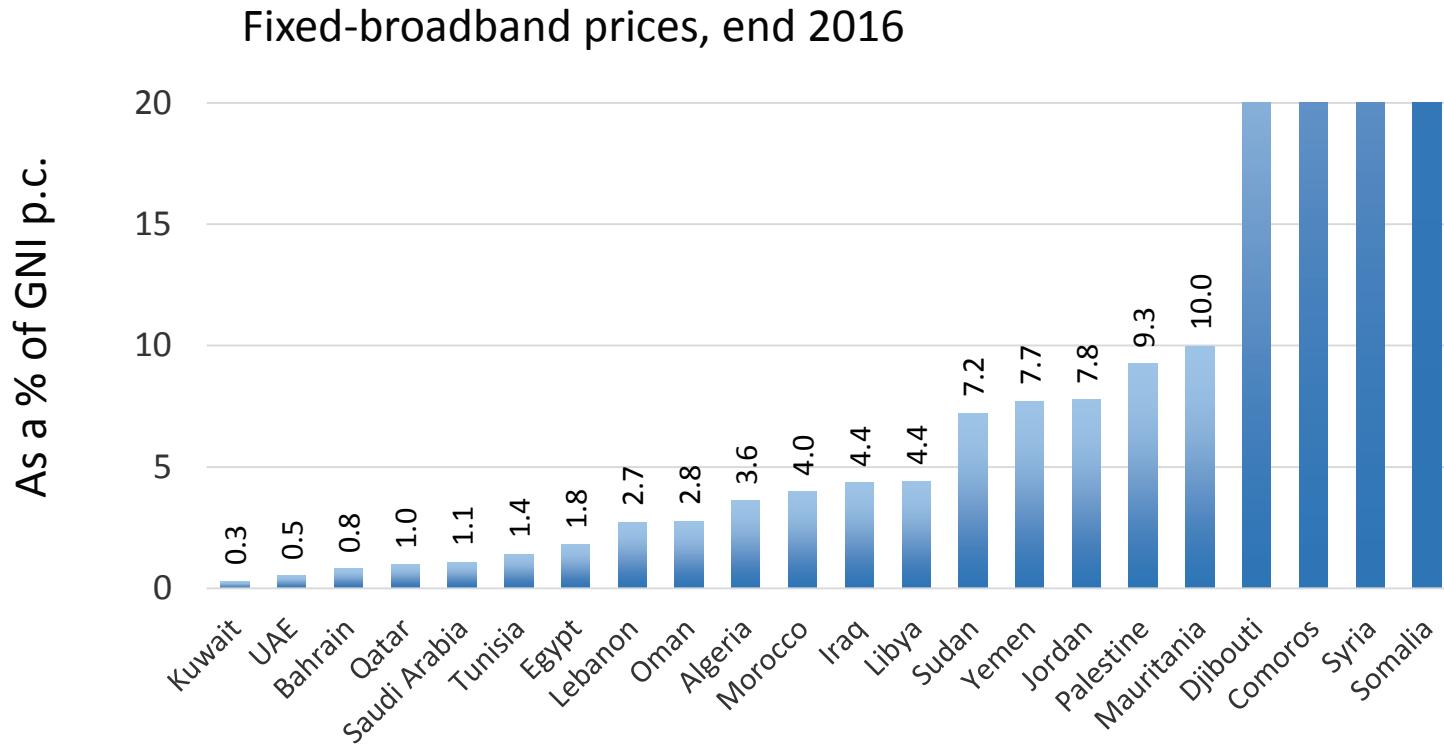


# Fixed-broadband prices

Fixed-broadband prices, end 2016

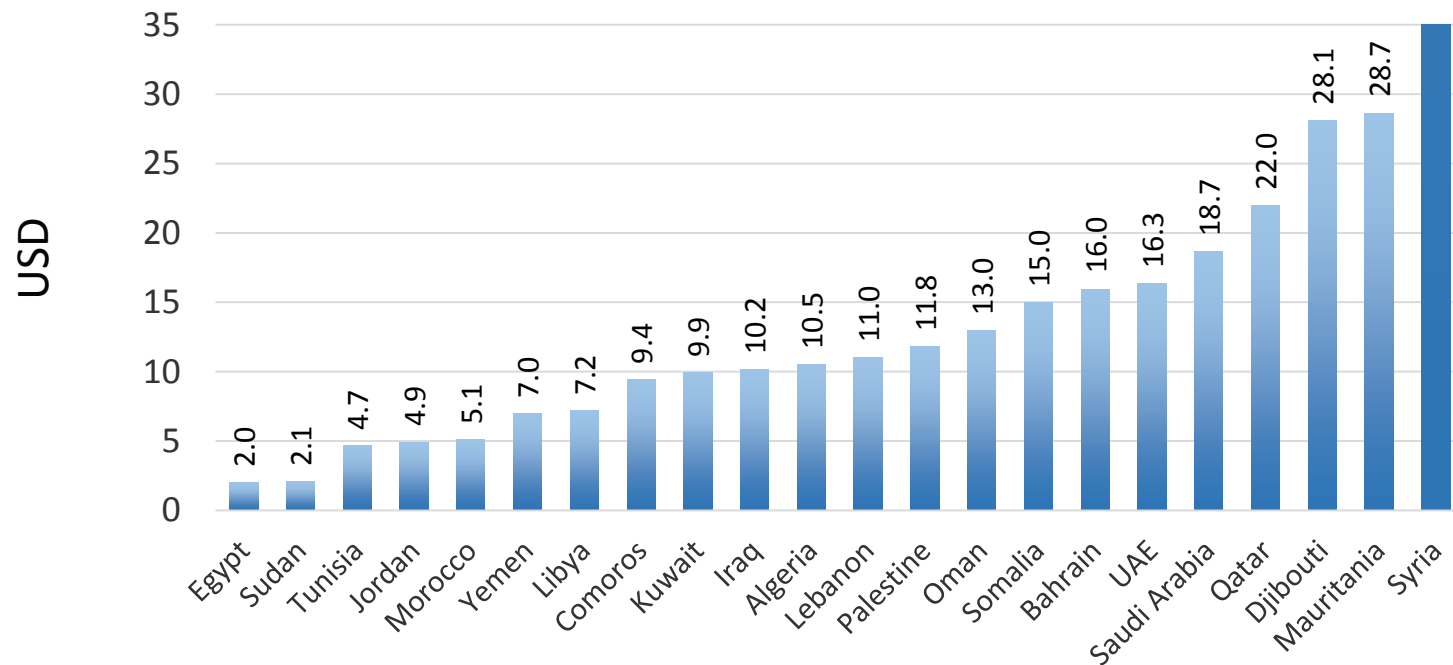


# Fixed-broadband prices



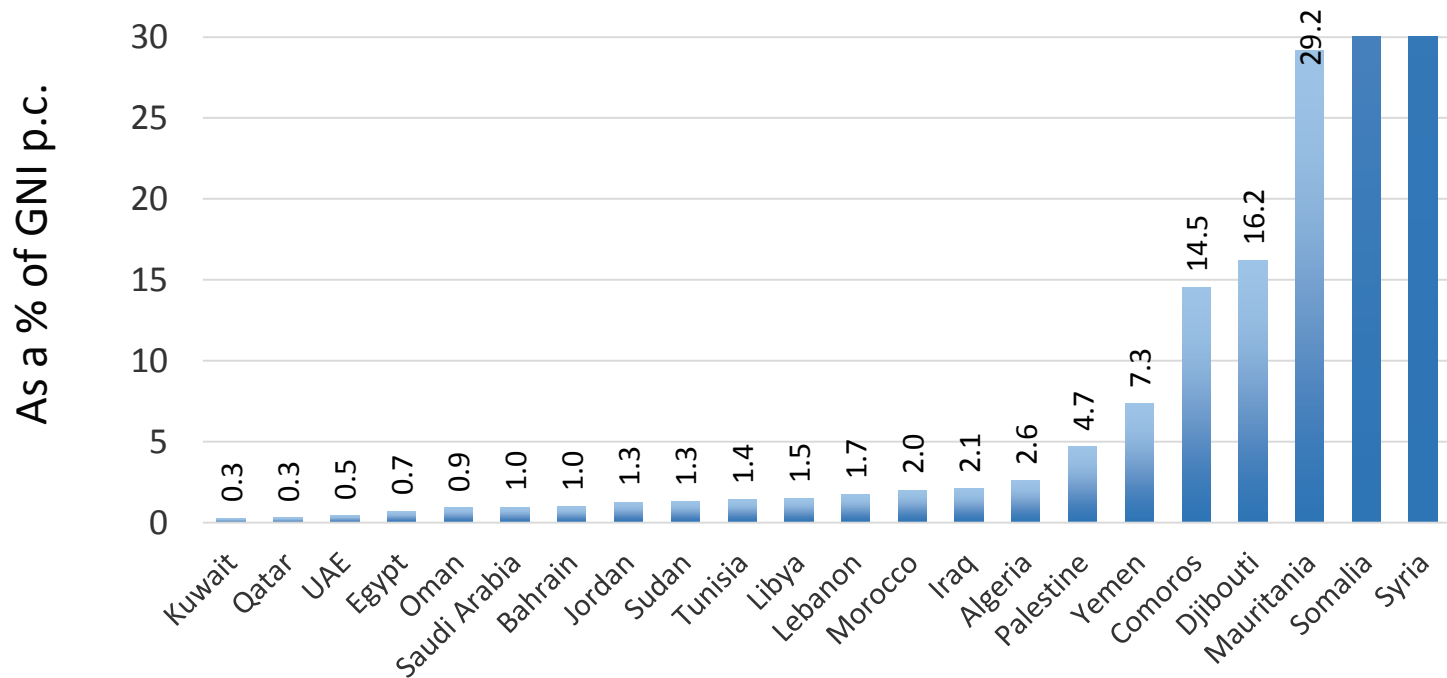
# Mobile-broadband prices

Mobile-broadband prices, handset-based,  
500 MB, prepaid, end 2016



# Mobile-broadband prices

Mobile-broadband prices, handset-based,  
500 MB, prepaid, end 2016



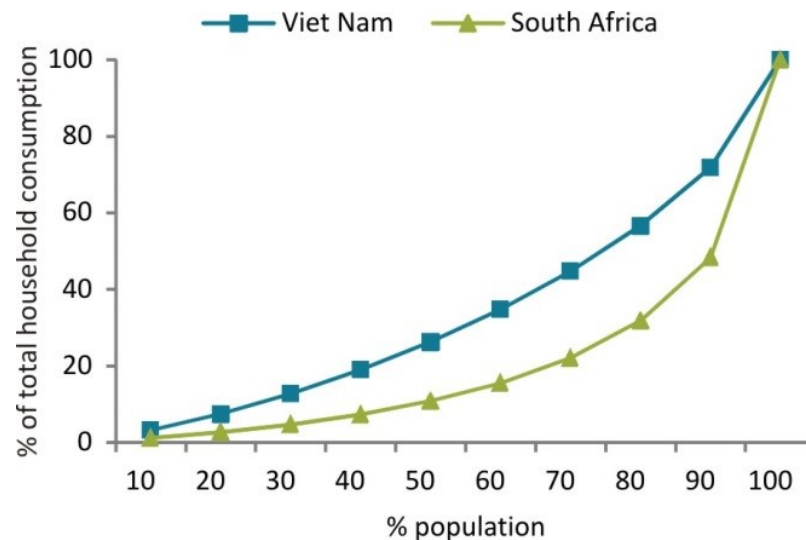
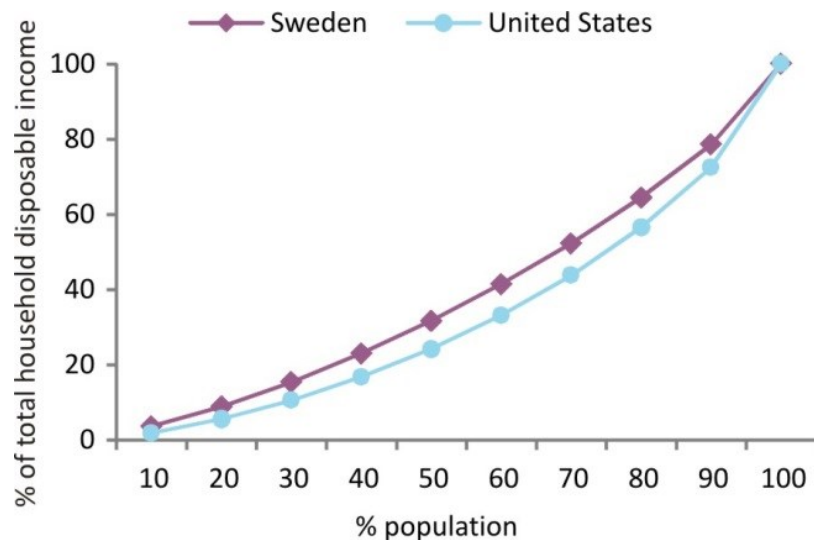


# Affordability of broadband services in view of income inequalities



- Data on household disposable income and expenditure:
  - ▣ Reflect people's economic welfare
  - ▣ Provide insights into differences in affordability within countries

Distribution of household disposable income (left) and household consumption (right)

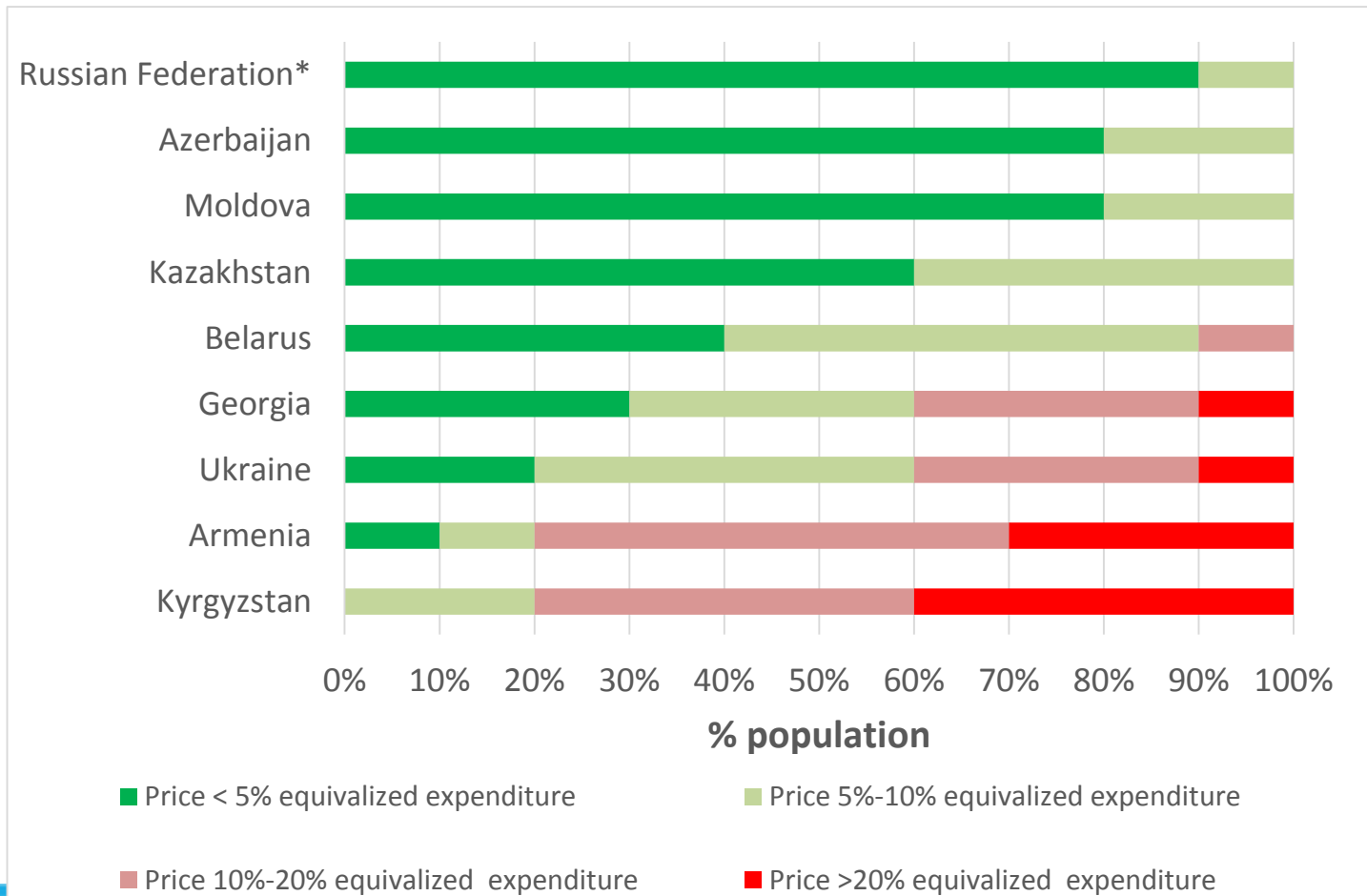


Source: Data for the United States and Sweden are sourced from the OECD Database on Income Distribution and refer to 2011. Data for South Africa and Viet Nam are sourced from the World Bank's PovcalNet and refer to 2008.

# Households **income inequalities** greatly influence the affordability of **mobile broadband**



Prepaid handset-based mobile-broadband prices, 500MB/month, as % of household expenditure (2013)





## **3. Tariff collection and selection criteria**

# ITU IPB questionnaire (online)



International Telecommunication Union  
BDT Administration Site - ITU\_USERS\magpanta

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ITU ICT Price Basket Questionnaire 2013

InProgress 2/12

**Jamaica**  
Fiscal Year: Beginning 01.04  
National Currency: JMD Dollar

Fixed postpaid local telephone service

Please provide the postpaid tariffs in national currency of the operator with the largest market share (as measured by the total number of subscriptions). If prices vary between regions of the country, provide the tariffs that apply to the largest city. Taxes should be included. Special offers and plans with limited availability cannot be used.

i151\_OPf Fixed-telephone operator

What is the name of the fixed local telephone operator providing these tariffs?

2011: LIME 2012: LIME 2013:

i151Plan Fixed-telephone tariff plan

What is the name of the fixed local telephone plan?

2011: 2012: Standard postpaid plan 2013:

## Information collected

- Name of the operator/ISP
- Name of price plan used
- Website/link of the plan
- Tax rate applied
- Price data

# Fixed-broadband prices

- Fixed-broadband connection charge
- Fixed-broadband monthly subscription charge
- Fixed-broadband speed, in Mbit/s
- Fixed-broadband cap, in GB
- Fixed-broadband - price of excess usage



# Rules applied in collecting fixed-broadband Internet prices (i)

1. Prices of the **largest** operator (in terms of fixed-broadband subscriptions).
2. Prices in **advertised currency**, including taxes.
3. Only **residential**, single user prices should be collected.
4. If prices vary in regions, prices of largest city (in population) should be provided.



## Rules applied in collecting fixed-broadband Internet prices (ii)

5. Cheapest plan based on a **5GB monthly** usage and an advertised download speed of at least 256 kbit/s
6. 12-month plan (or the one closest to this commitment period)
7. Most subscriptions in the country (DSL, cable, fixed WiMAX, etc.).
8. Same price plan for monthly subscription, to the price of the excess charge, the volume of data that can be downloaded, etc.





## Rules applied in collecting fixed-broadband Internet prices (iii)

9. Prices should be collected for a regular (non-promotional) plan. If there is a discount for the first months of contract, the price after the discount period should be selected
10. Bundled services - preferable to use prices for a specific service; otherwise, note the additional services
11. Plans with limited hours of use will not be considered







# Example fixed-broadband prices



Superfast Fibre Packages

**Fast Packages**

Special Packages

<b>Fast Packages</b>	Monthly <b>BD 10</b>	Monthly <b>BD 12</b>	Monthly <b>BD 15</b>
Package Speed	10Mbps	10Mbps	14Mbps
Upload Speed	1.5Mbps	2Mbps	2Mbps
Double-up Download Speed	20Mbps	20Mbps	30Mbps
Double-up Upload Speed	1.5Mbps	1.5Mbps	2Mbps
Double-up Monthly Rental	BD5	BD5	BD5
Threshold (GB)	 <p>70GB</p>	 <p>100GB</p>	 <p>140GB</p>
Bahrain WiFi access**			

# Mobile-cellular indicators – rules (i)

1. **Operator with the largest market share** [...] If prices vary between different regions of the country, **prices refer to those applied in the largest city** [...]
2. Collected in advertised currency, **including taxes**
3. Prices refer to **prepaid plans** [...] the one that comes closest to each usage (e.g. 70 min and 20 SMS) [...]
4. If per-minute prices are only advertised in internal units [...] the price of the [***cheapest & closest to 30 day validity***] top-up/refill charge is used

## Mobile-cellular indicators – rules (ii)

5. regular **(non-promotional) plans** and exclude special or promotional offers, limited discounts
6. “**favourite**” numbers (for family, friends, etc.) with a special price [...] will not be taken into consideration
7. Prices refer to **outgoing local calls**
8. If prices vary between minutes (1<sup>st</sup> minute = price A, 2<sup>nd</sup> minute = price B, 3<sup>rd</sup> minute = price C) [...] price per minute =  $(A+B+C)/3$

## Mobile-cellular indicators – rules (iii)

10. If there is a **connection cost per call**, then this is taken into consideration based on the total number of calls
11. [...] off-peak prices [...] cheapest before midnight is used
12. [...] peak prices, the most expensive one during the daytime is used
13. [...] weekend prices, the price that applies Sundays during the daytime is used

## Mobile-cellular indicators – rules (iv)

14. If [...] **no weekend price, the average peak and off-peak** price valid during the week is used
15. If peak and off-peak SMS prices exist, the average of both is used
16. If calls are charged by call or by hour (and not by the minute) [...] formula will be calculated on the basis of the total number of calls and minutes
17. Where monthly, recurring charges exist, they are added

## Mobile-**broadband** indicators – rules (1)

1. technologies: **UMTS, HSPA family, LTE family, CDMA EV-DO family and mobile WiMAX**. Prices applying to WiFi or hotspots excluded
2. Collected in advertised currency, **including taxes**
3. residential, single-user prices [...] If prices vary between regions, prices applying to the largest city

## Mobile-broadband indicators – rules (2)

5. from the operator with **the largest number of mobile-broadband subscriptions**. If not available, from the mobile-cellular operator with the largest market share
  
8. commitment period (postapid): the closest to 12 months



## Mobile-broadband indicators – rules (3)

9. The selected plan should not be the one with the cap closest to 1.5 GB, but the cheapest for that monthly consumption  
E.g. if an operator offers a 1 GB and a 3 GB plan, the cheapest taken: 3 GB plan or twice the 1 GB plan
10. Price data should be collected for a **validity period of 30 days**
11. packages (including a certain data volume) or Pay-as-you-go offers should be used when they are the cheapest option for a given basket or the only option available



## Mobile-broadband indicators – rules (4)

12. Careful read of the fine print: ‘unlimited’ seldom so
13. **non-recurrent fees**, such as installation/set-up fees, **not considered**
14. Preference given to **cheapest packages, even if bundled**. If bundled, indicate in a note

## Mobile-broadband indicators – rules (5)

15. **non-promotional plans** and exclude promotional offers and limited discounts or special user groups (e.g. existing clients)

excl. prices that apply to a certain type of device  
(iPhone/Blackberry, iPad)

excl. allowances during the night



**Thank you!!!**