

Research ICT Solutions



OTT APPLICATIONS DRIVING DATA REVENUE GROWTH

ITS SEOUL

25 JUNE 2018

OTT'S AS A THREAT

REGULATORS

- OTTs have had a “negative impact on the industry” (Council of African Regulators)
- MNO revenues are not growing, caused by declining voice and SMS revenues and stagnant or slow-growing data revenues (Orange and Sonatel)
- “OTT players [should] pay for the infrastructure use” (Kenya)
- “OTTs should be blocked, like in the United Arab Emirates” (Benin).
- Introduction of OTT tax in Uganda

ACADEMICS

- Mobile revenues have stagnated or declined as a result of OTTs - Jayakar et al (2014) and Barclay (2015)
- OTTs represent a measurable threat to operator revenues - Sujata, et al (2015).
- Regulation needs to be introduced to prevent the erosion of operator revenues - Nandhiosa et al (2015)

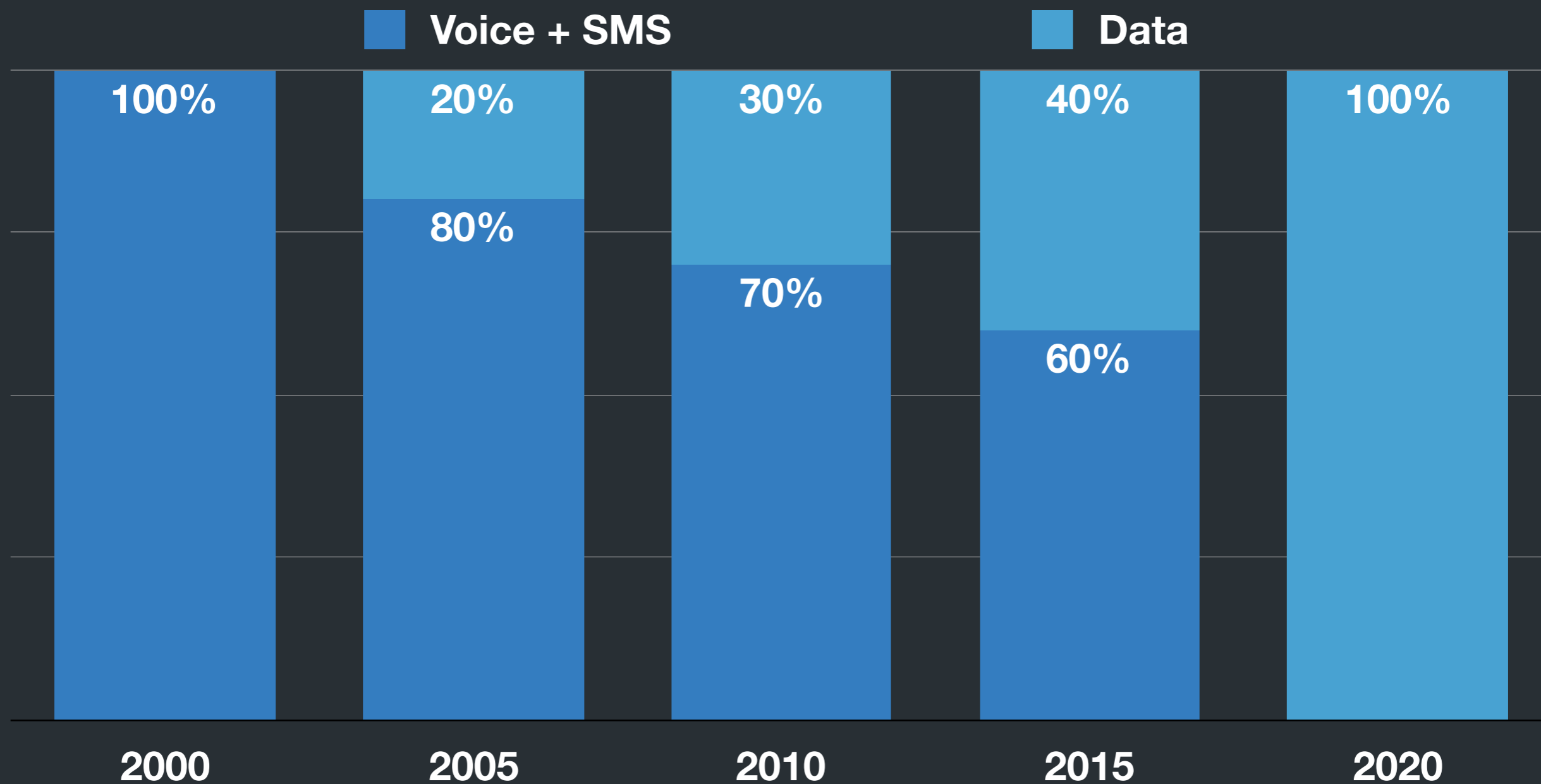
/SOURCES OF MNO REVENUES

- Number of subscribers, subscriber profiles, product design, retail prices, level of competition in the sector, regulation...
 - **Economic factors:** population, GDP per capita, exchange rates;
 - **Regulatory environment:** number of MNOs, fairness of competition and transparency and predictability of regulatory interventions;
 - **Operator strategies:** product design, response to other operators and business model.

/REGULATORY INTERVENTION

- Should a regulator protect mobile operators against technological change?
- Should an operator with declining revenues and market share be protected against those with increasing revenues and market share?

TRENDS TOWARDS "ACCESS" ONLY BUSINESS MODELS



/DATA REVENUES WILL REPLACE VOICE AND SMS REVENUES

Mobile operators will eventually become “access” providers, distinguishing their products by speed and quality of service, and competing with other forms of access, such as Public WiFi and connectivity in places of work, study and home.

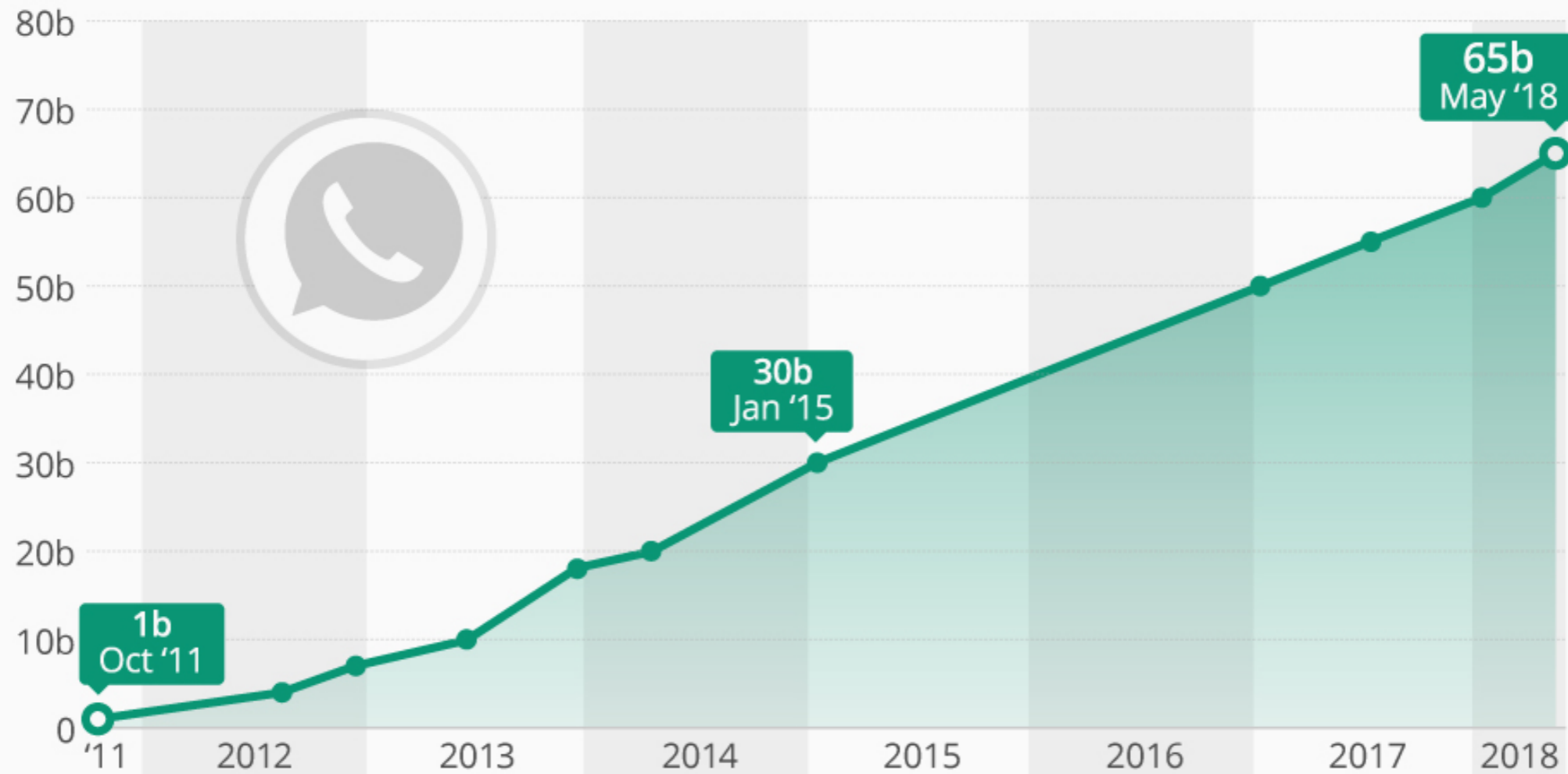
Drivers of data usage

- Competition
- Smartphone penetration and 3G+ network coverage
- User driven content (Facebook, Instagram)

SEPARATION OF SERVICE & ACCESS PLATFORMS

WhatsApp Usage Shows No Signs of Slowing Down

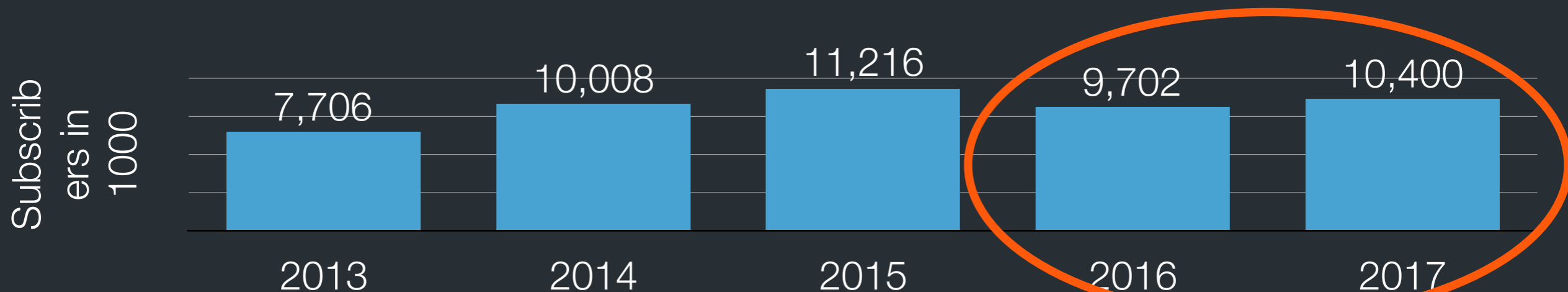
Number of WhatsApp messages sent worldwide per day*



/MOBILE REVENUE TRENDS IN AFRICA - VODACOM GROUP

VODACOM

Service revenues		2016	2017	2018
Tanzania	TSH million	923,347	933,292	977,994
	YoY		1.1%	4.8%
DRC	USD '000	429,605	407,413	428,169
	YoY		-5.2%	5.1%
Mozambique	MZN million	11,896	14,641	17,635
	YoY		23.1%	20.4%
Lesotho	LSL millions	1,027	1,116	1255
	YoY		8.7%	12.5%

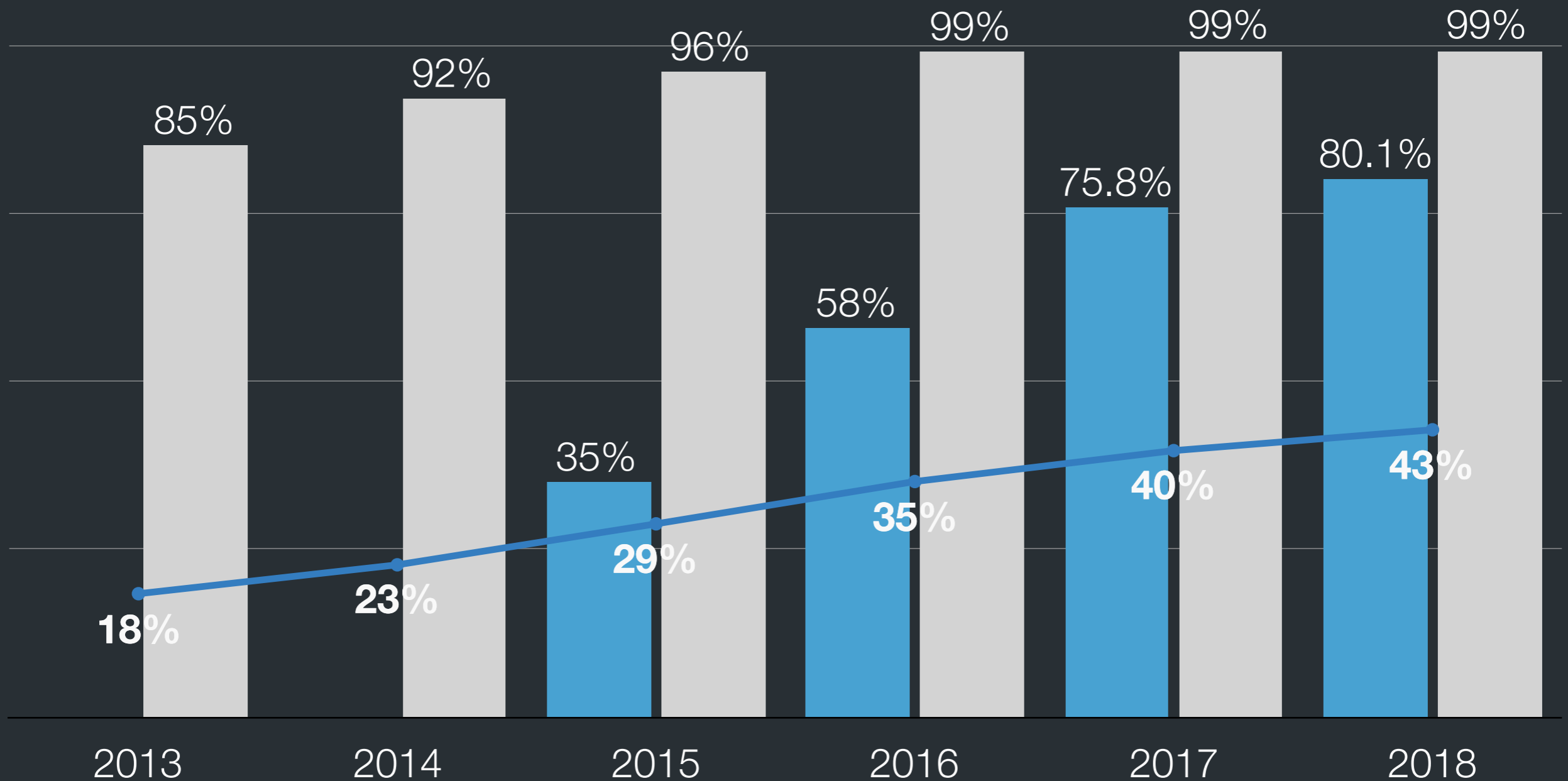


VODACOM SOUTH AFRICA

● data as % of service revenues

■ 4G coverage

■ 3G coverage



VODACOM GROUP

Vodacom Service revenues		2013	2014	2015	2016	2017	2018
South Africa	R million	56,821	59,314	59,203	62,279	64,729	69,967
	YoY		4.4%	-0.2%	5.2%	3.9%	8.1%
Group	R million	68,131	73,219	74,500	80,077	81,278	86,370
	YoY		7.5%	1.7%	7.5%	1.5%	6.3%

- Overall revenues on group level increased for each year since 2013. There is no reason to suspect that Vodacom is adversely affected by OTTs.

/MOBILE REVENUE TRENDS IN AFRICA - ORANGE

Orange mobile revenues		2013	2014	2015	2016	2017
Cote d'Ivoire ¹	Euro million	623	680	760	798	821
	YoY		9.1%	11.8%	5.0%	2.9%
Guinea	Euro million	133	216	249	246	280
	YoY		62.4%	15.3%	-1.2%	13.8%
Mali	Euro million	347	415	456	494	569
	YoY		19.6%	9.9%	8.3%	15.2%
Niger	Euro million	91.0	104.0	103.0	94.0	88.0
	YoY		14.3%	-1.0%	-8.7%	-6.4%
Senegal ²	Euro million	439	442	454	464	
	YoY		0.7%	2.7%	2.2%	
Cameroon	Euro million	287	285	284	278	281
	YoY		-0.7%	-0.4%	-2.1%	1.1%
Burkina Faso	Euro million				195	246
	YoY					26.2%
DRC	Euro million	62	105	149	257	239
	YoY		69.4%	41.9%	72.5%	-7.0%

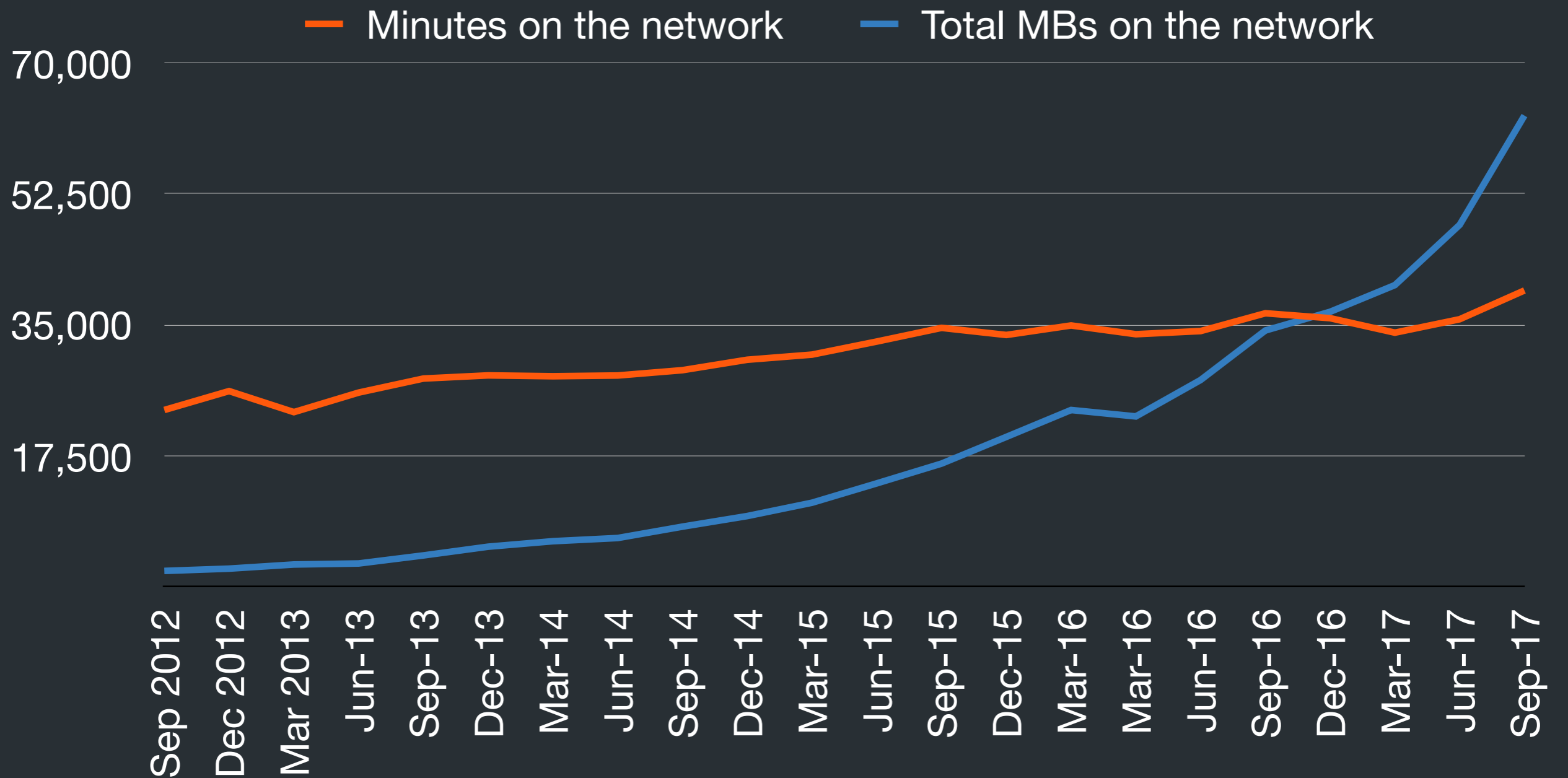
MTN saw decline

/ORANGE CLAIMS

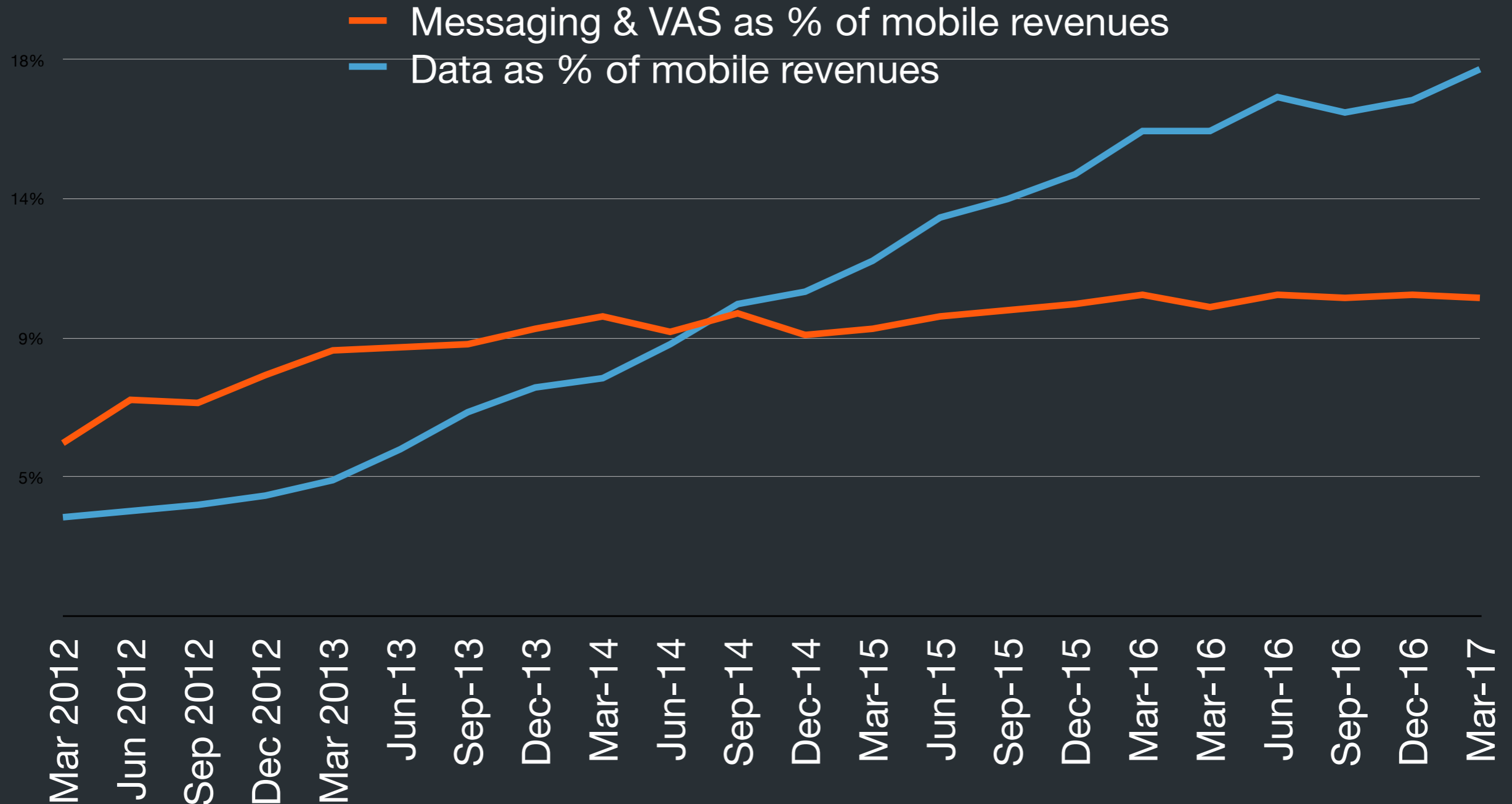
- If the claim that OTTs were negatively affecting revenues were true, then all Orange operators should have experienced consistently declining revenues.
- Of the eight operators, four had consistently increasing revenues, two were subject to revenue volatility.
- Only two had consistently declining revenues and had either macro-economic or sector specific challenges that rule out OTTs as the only explanation for declining revenues.

/MOBILE REVENUE TRENDS IN AFRICA - AIRTEL

MINUTES AND MB ON AIRTEL'S AFRICA NETWORKS

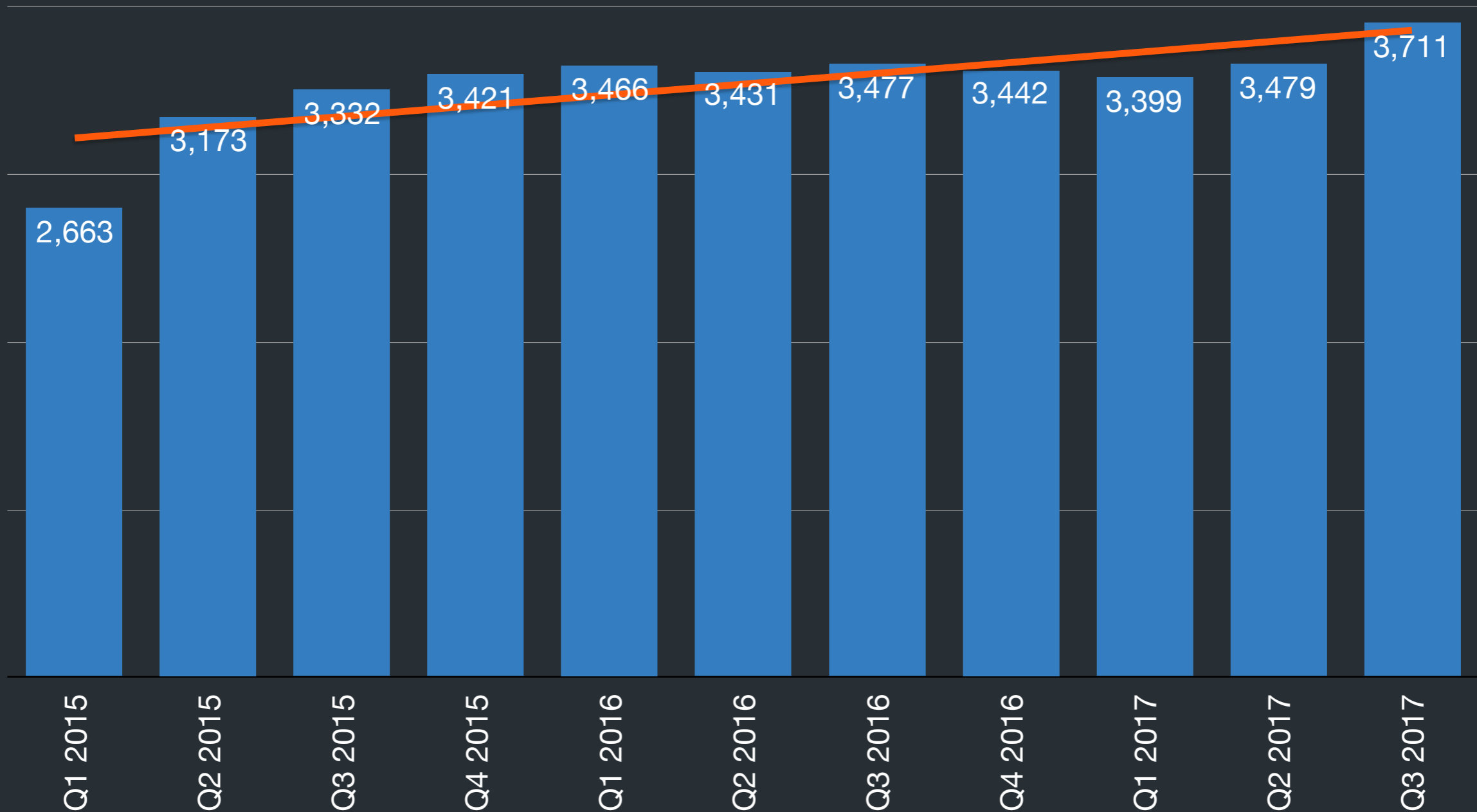


AIRTEL'S DATA AND SMS AS PERCENT OF MOBILE REVENUES



/MOBILE REVENUE TRENDS IN AFRICA - MAROC TELECOM

MAROC TELECOM GROUP

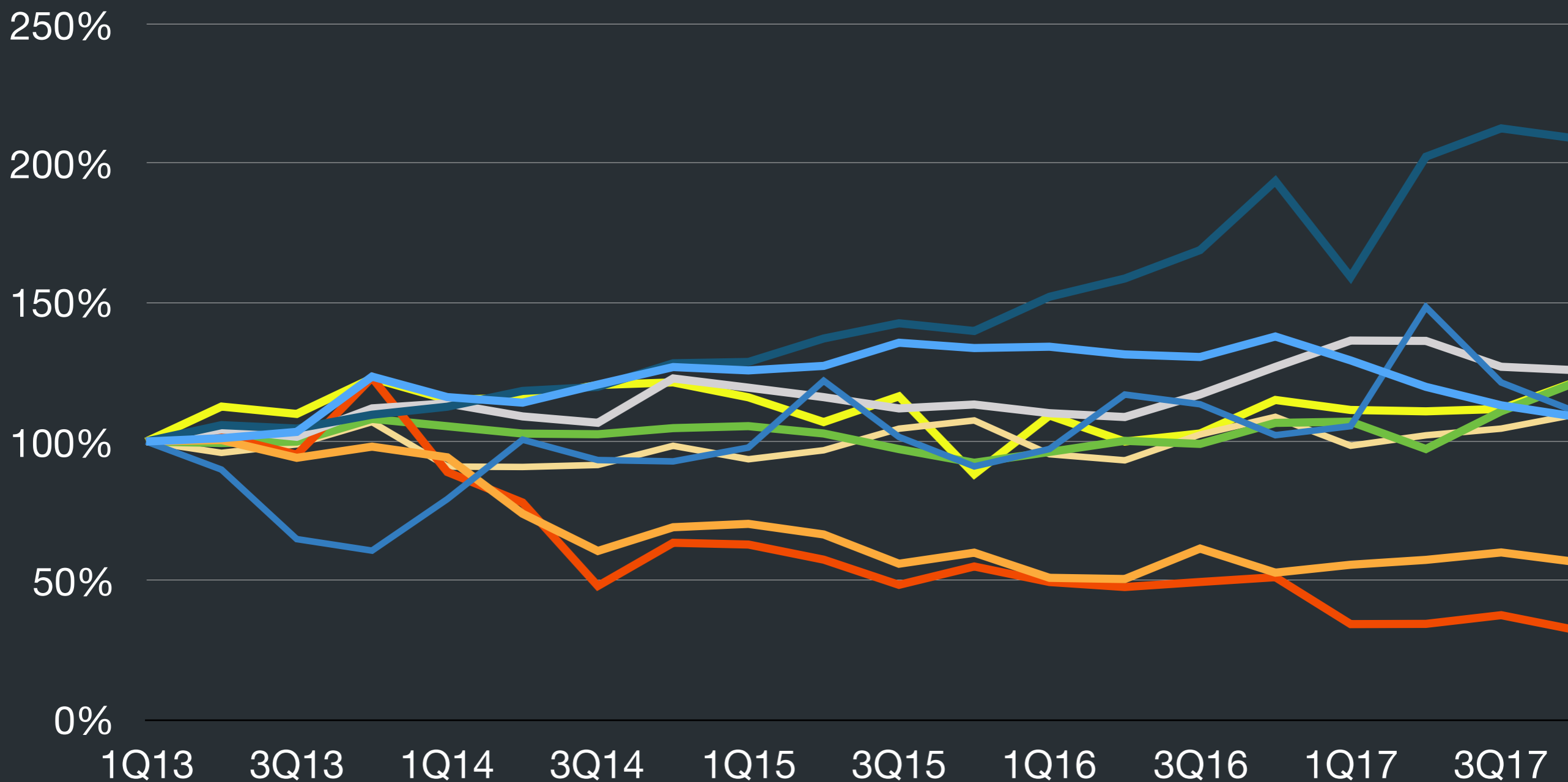


Mobile service revenues (international) of Maroc Telecom in MAD million

/MOBILE REVENUE TRENDS IN AFRICA - MTN

MTN'S REVENUE IN LOCAL CURRENCY EXPRESSED IN % OF Q1 2013 REVENUES

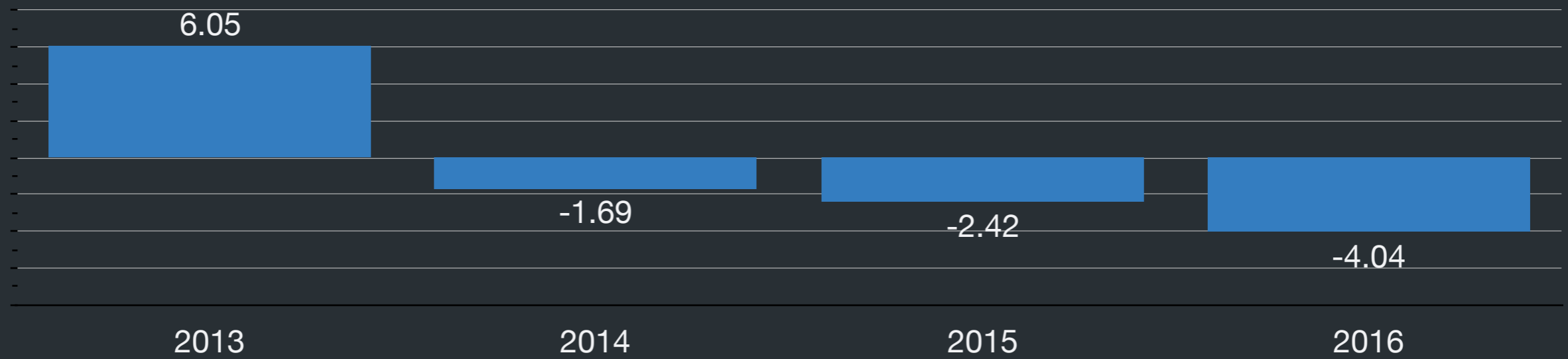
— Benin
 — Bissau
 — Conakry
 — Ghana
 — Ivory Coast
 — Liberia
— Nigeria
— South Africa
— Uganda



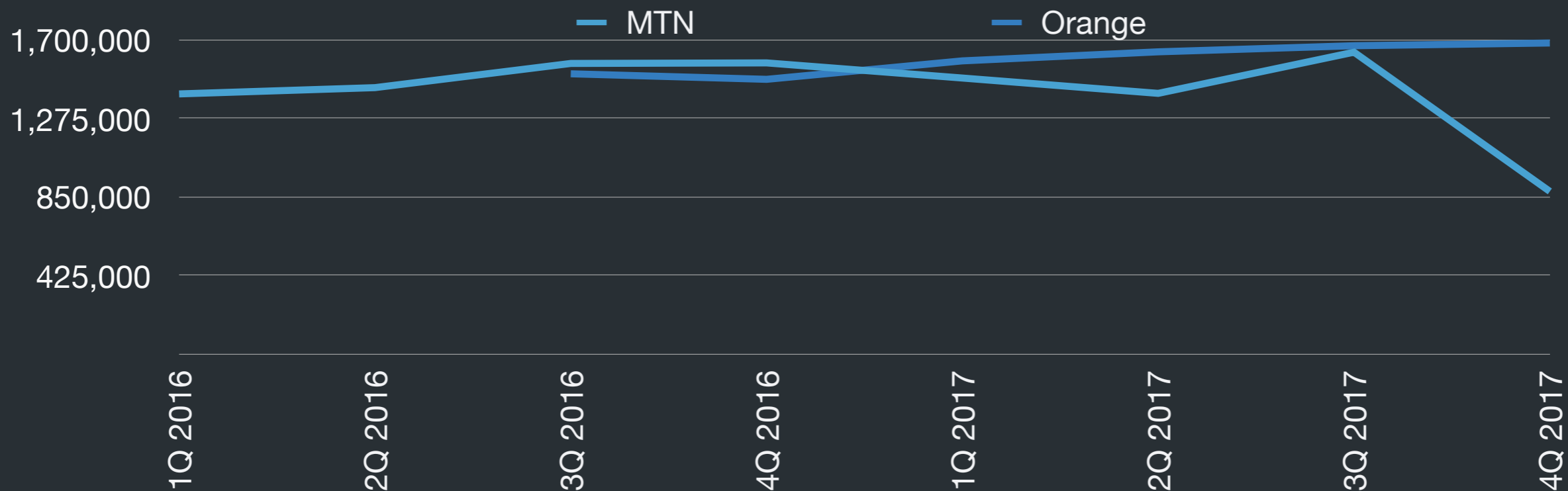
MTN LIBERIA

ECONOMIC SHOCK AND DECLINING SUBSCRIBER NUMBERS

MTN LIBERIA - ECONOMIC SHOCK AND DECLINING SUBSCRIBER NUMBERS



GDP per capita annual growth in %



Subscriber numbers of MTN and Orange in Liberia (Source: annual reports)

/GUINEA

**FOREIGN EXCHANGE AND
COMPETITIVE FACTORS**

MTN GUINEA - FOREIGN EXCHANGE AND COMPETITIVE FACTORS

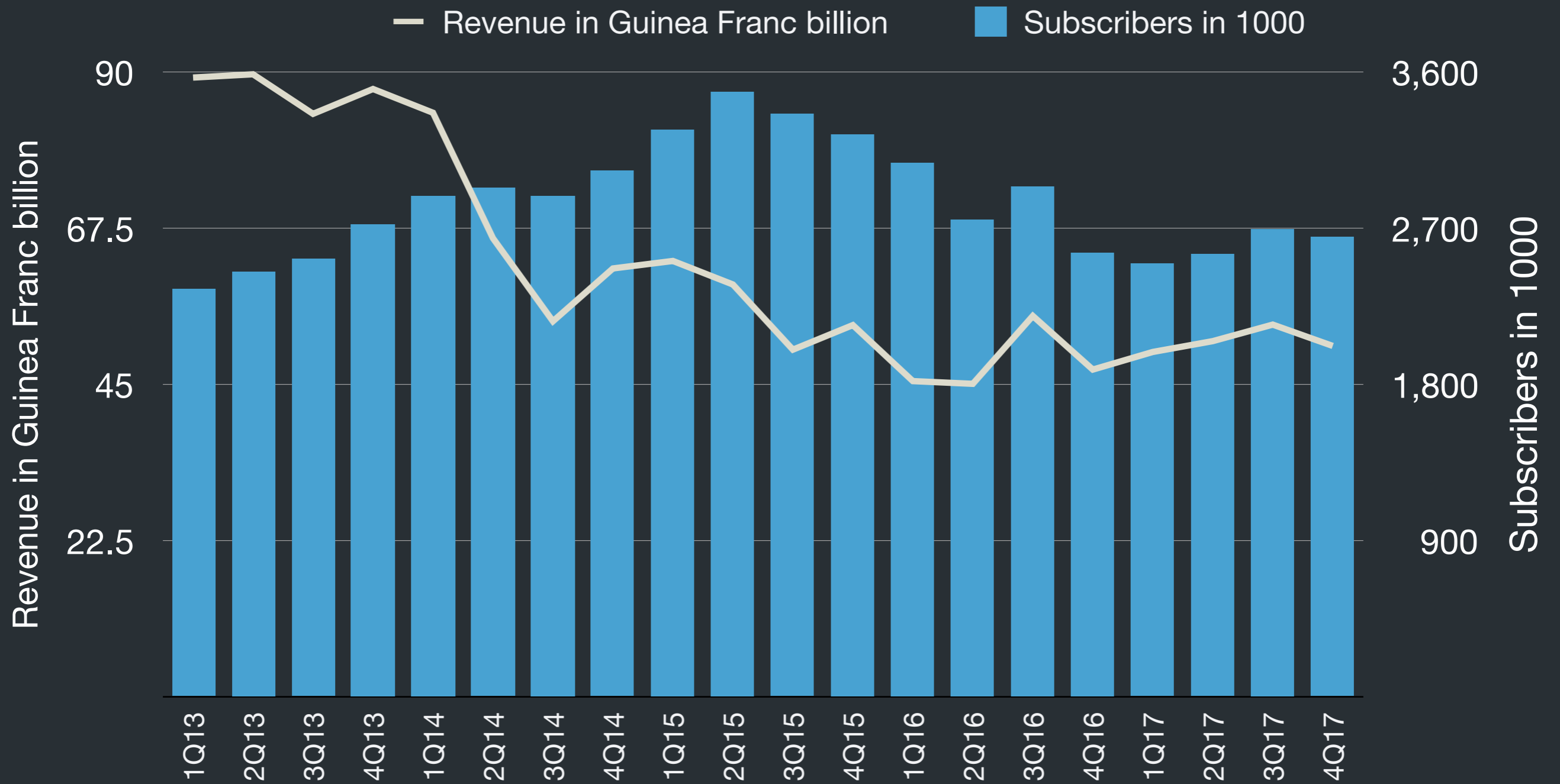
MTN Guinea		2013	2014	2015	2016	2017
Total Revenues	R million	1,501	1,274	1,203	1,032	932
	YoY		-15%	-6%	-14%	-10%
EBITDA	R million	447	193	121	-169	39
EBITA Margin	%	30%	15%	10%	-16%	4%
Subscribers Q4	in 1000s	2,723	3,035	3,244	2,563	2,648
Cost	R million		1,081	1,082	1,201	892



Orange recorded 13.5% increase

MTN GUINEA

NOT JUST FX BUT ALSO CHURN TO ORANGE



SONATEL'S GUINEA KPIS

	2014	2015	2016	2017
ARPU	29,570	25,500	26,006	26,448
Subscribers in 1000	4,506	5,276	6,033	6,783
Revenues (local) billion	133.2	134.5	156.9	179.4
YoY		1.0%	16.6%	14.4%
Source	Sonatel Financial year 2017 presentation			

 **MTN NIGERIA**

**REVENUE IMPACT OF
REGULATORY INTERVENTIONS**

MTN NIGERIA - REVENUE IMPACT OF REGULATORY INTERVENTIONS

- SIM registration in a permanent building
- 330 billion Naira (USD 1.67 billion) fine for contravening SIM registration regulations
- Lost 8.8 million subscribers
- Implemented and withdrawn price floor regulations (twice)

MTN Nigeria

2013

2014

2015

2016

2017

Total

R million

48,159

53,995

51,942

47,122

36,005

YoY

12%

-4%

-9%

-24%

Voice

R million

39,177

42,405

40,845

36,430

26,756

% of total

81.3%

78.5%

78.6%

77.3%

74.3%

Revenue

SMS

R million

1,166

1,036

840

646

514

% of total

2.4%

1.9%

1.6%

1.4%

1.4%

Data

R million

7,285

10,047

10,113

9,943

8,249

% of total

15.1%

18.6%

19.5%

21.1%

22.9%

% of voice

18.6%

23.7%

24.8%

27.3%

30.8%

EBITDA

R million

27,457

31,620

27,504

21,854

14,041

EBITA Margin

%

57%

59%

53%

46%

39%

Subscribers Q4

in 1000s

56,766

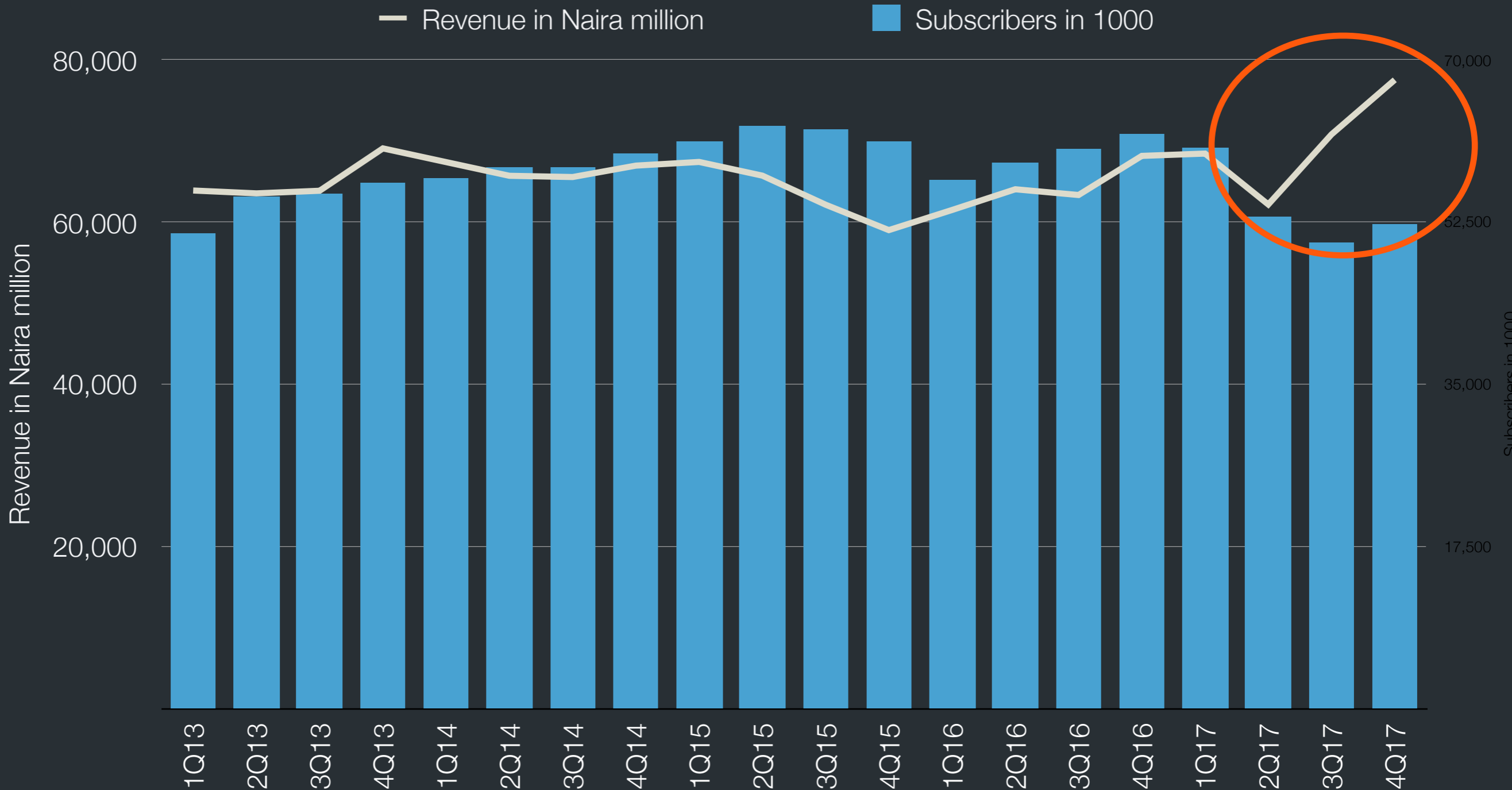
59,893

61,252

61,970

52,273

MTN NIGERIA - REVENUES ESTIMATED BASED ON ARPU MULTIPLIED BY SUBSCRIBERS COMPARED TO SUBSCRIBERS

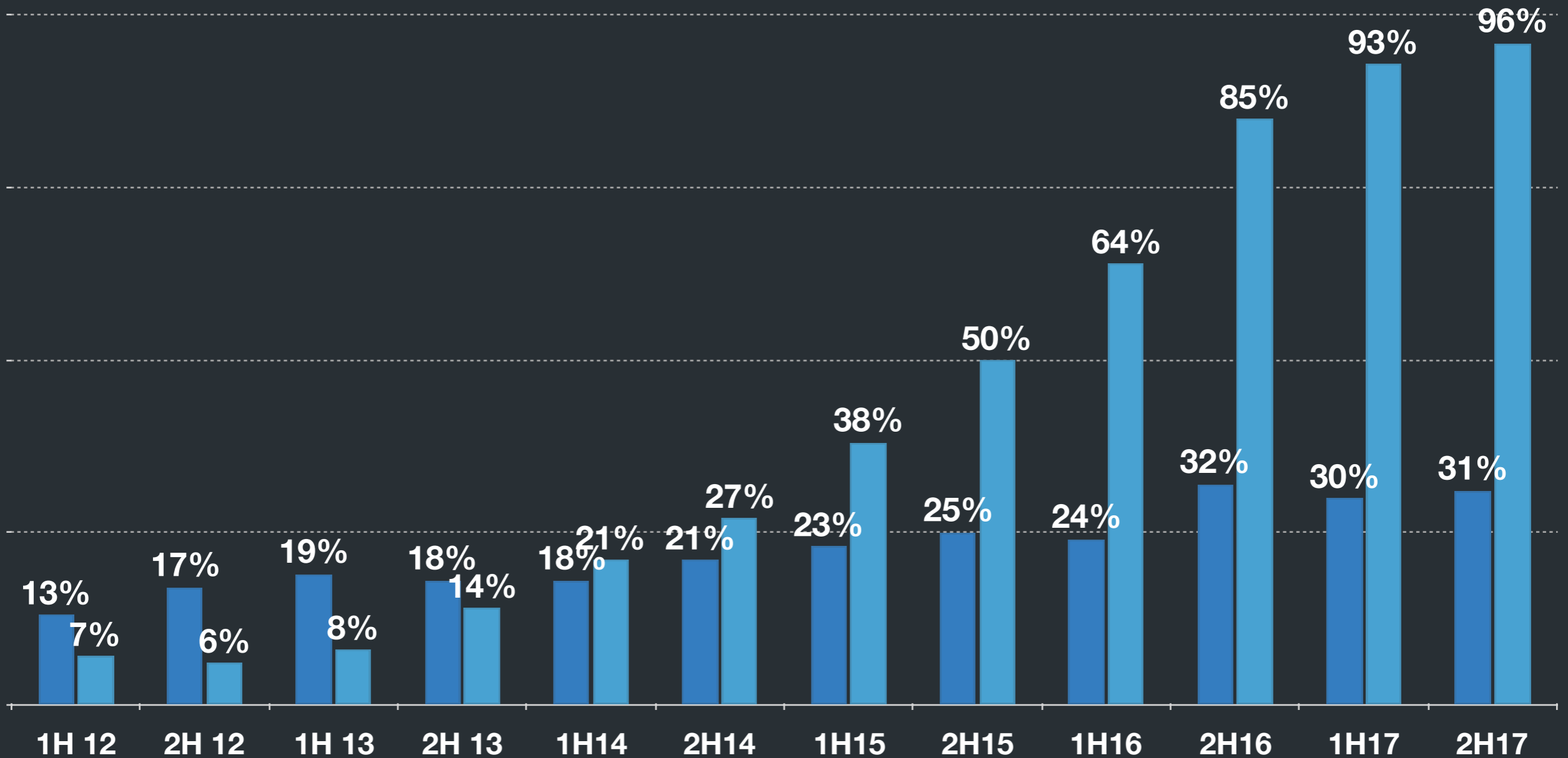


 **MTN GHANA**

**SUCCESS OF A DATA CENTRIC
BUSINESS MODEL**

MTN GHANA - SUCCESS OF A DATA CENTRIC BUSINESS MODEL

■ MTN Nigeria ■ MTN Ghana



Data as % of voice and SMS

MTN Ghana

2013

2014

2015

2016

2017

Total

R million

8,269

7,149

7,903

10,291

10,382

YoY

-14%

11%

30%

1%

Voice

R million

6,966

5,559

5,336

5,794

5,113

% of total

84%

78%

68%

56%

49%

Revenues

SMS

R million

324

82

78

86

86

% of total

4%

1%

1%

1%

1%

Data a)

R million

801

1,343

2,418

4,337

4,924

% of total

10%

19%

31%

42%

47%

EBITDA

R million

3,102

2,674

3,197

4,184

4,116

EBITA Margin

%

38%

37%

40%

41%

40%

Subscribers Q4

in 1000s

12,930

13,852

16,255

19,296

15,667

/CONCLUSION

- Revenue growth = up
- Data revenues = up
- Voice and SMS = steady to gradually declining

Small subset of operators where revenues are declining:

- Insufficient 3G+ network coverage
- excessive regulation
- adverse operating conditions

Operators with extensive 3/4G coverage are able to increase their data revenues, compensates for any losses in voice or SMS

Policy makers and regulators should be more concerned with stimulating network investment into 4G+ and less with attempting to protect operators from the impact of OTTs

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