Competition study in the broadcasting sub-sector; and signal distribution pricing framework in Kenya

Presentation to industry stakeholders

23 November 2023

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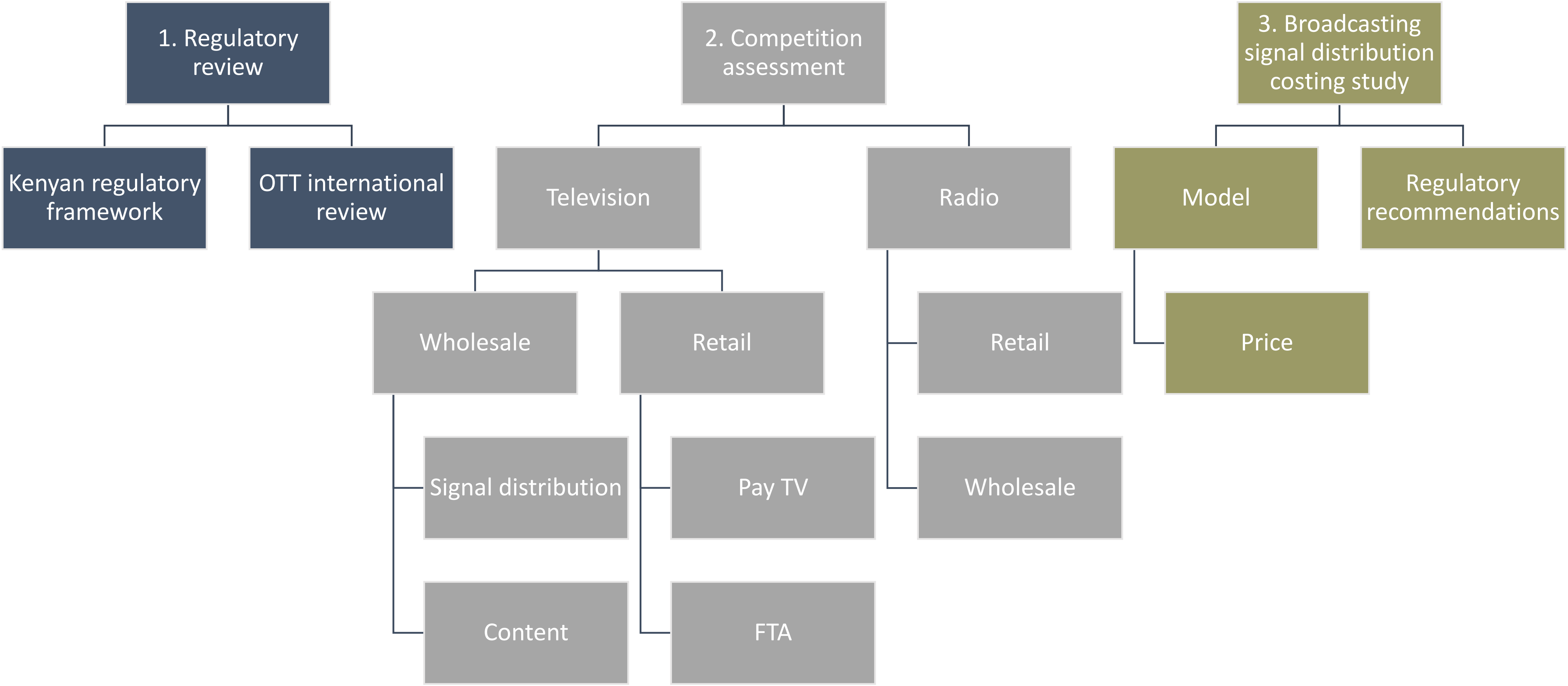
Project overview



Terms of reference: competition study

To identify **the relevant markets (sub-markets) within the broadcasting sub-sector**, the number of players that exist and their respective market shares;

To identify and review **the impact of Over-the top services (OTTs)** on the broadcasting sub sector, level of adoption of the OTTs, impact of OTTs on competition in the sector and business models of traditional service providers.

To establish **the levels and extent of competition in the various broadcasting sub-markets** identified; and identify players with significant market power;

Identify the **market barriers**, if any, that prevent or restrict entry, competition and the growth of the players in the era of changing technologies;

Provide a proposal on the best ways by which **the identified barriers and factors acting as a hindrance to growth can be considerably minimized or eliminated**;

To **establish any anti-competitive behaviour** and evaluate the extent this has helped players entrench dominance in the broadcasting sub-sector;

Identify **specific stimulus that can be injected** in order to ensure that there is effective competition, accessibility, affordability and growth.

Recommend **the optimal or appropriate and proportionate regulatory response to the competition issues identified** within the existing regulatory and legal framework;

Recommend **the best regulatory approaches that may be applied to address the co-existence of OTTs with traditional service providers** in the sector and enhance effective management of competition in the sector, while ensuring the growth of both services; and

Recommend any **other relevant intervention(s)** that would go along towards enhancing effective management of competition in the broadcasting subsector in Kenya;

Terms of reference: BSD

Review the **current BSD pricing framework** in Kenya, taking into account the latest market developments and providing a comparative analysis of the current situation with international best practice

Reviewing and evaluating the **signal distribution network architecture** rolled out by the signal distributors in the country and defining network elements for each signal distributor with a view to coming up with the optimal pricing structure for the BSD

Identify related **concerns raised by broadcasting service providers** in Kenya and make appropriate recommendations

Develop a **reference access offer** template to be shared with BSD's incumbent players as a guide for transparency and non-discrimination obligations.

Knowledge transfer to staff so that they can fully understand the ingredients in the development of the models, develop and update these models if and when necessar

Regulatory Review

Competition Review

Broadcasting Signal Distribution Cost Study

Legal matters

- The KICA and the Regulations are the starting point for a review of the regulatory framework for broadcasting and signal distribution in Kenya, as they have been for previous reviews
  - Sections 5B, 46A, 46C, 46I, 46O, 82, 84S, 84T
- In the context of the market review we also reviewed:
  - Broadcasting Regulations
  - Fair Competition Regulations
  - Tariff regulations
  - Terrestrial Broadcast Signal Distribution ("BSD") Pricing and Access Framework Determination
  - Competition Act
- We considered the Kenyan Constitution, specifically in relation to freedom of expression
- Incidentally and with reference to OTTs, we considered the Media Council Act and the Film Classification Act in Kenya

Potential concerns about OTTs

- National identity (culture, language, news, way of life)
  - How can this be protected and advanced?
- Digital safety (privacy, data protection, cybersecurity, identity theft, deep fakes, AI…)
  - How can this be managed?
- Content (inappropriate/violent/hate speech/political propaganda)
  - Should this be regulated?
  - Who/what should be regulated?
- Digital platform power
  - Is this a concern?

RELEVANT INTERESTS:

- CONSUMERS
- COMPETITION
- CONTENT

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Approach and conclusion on legal matters in relation to OTTs

- Approach taken:
  - Benchmarking 6 countries' regulatory approach to OTTs (Argentina, Canada, Nigeria, Oman/UAE, South Africa, UK)
  - Reviewing definitions in law or policy, and powers and duties of regulatory authorities
  - Considering legal and non-legal options available to the Authority at this time in relation to OTTs
  - Discussing the way forward with the Authority
- Conclusions reached in relation to OTTs:
  - The KICA does not presently enable OTTs to be admitted as "broadcasters" or "media" and therefore does not provide the necessary tools if monitoring was considered to be appropriate
  - Options for the future in relation to treatment of OTTs range from very light touch, to more firm or formal regulation, if this is considered desirable

Recommendations on OTTs

These 4 options begin with the least formal, and move towards possible light-touch regulation but any one or more of these could be combined:

1. Collaborative approach:
   - Engagement with OTTs from time to time, in particular to gain access to information to enable monitoring of the market and interaction with/effect on broadcasters
2. Concurrent jurisdiction agreement:
   - Recommended between the Authority and other ‘media’ and ‘content’ authorities (MC and KFPB)
3. Review of the framework for “media” and “content”:
   - This is necessary to harmonise/clarify the approach (which may result in legislative changes)
4. Legislative changes:
   - The KICA and regulations must keep up with market changes, appropriate amendments may be needed

The Authority is consulting on the findings and the possible approaches to regulation of OTTs if this is considered to be necessary

Regulatory Review

Competition Review

Broadcasting Signal Distribution Cost Study

Key components of Competition Analysis

Define relevant markets (1) → Assess market power and competition → Remedies and intervention

Define relevant markets (1)

- Number of players
- Market shares

Assess market power and competition

- Barriers to entry (4)
- Significant market power (3)
- Levels and extent of competition (3)
- Anti-competitive behaviour (6)

Remedies and intervention

- How to minimize barriers (5)
- Stimuli for competition (7)
- Regulatory response to competition issues (8)
- Regulatory response to OTTs (9)
- Other interventions (10)

Impact of OTT services on broadcasting and competition (2)

Market definition

- Market delineations considered
  - the type of broadcaster (pay tv versus FTA);
  - premium vs basic pay TV;
  - the type of premium content (premium sport and film channels);
  - distribution infrastructure (cable, satellite, digital terrestrial, etc);
  - linear and non-linear; and
  - the type of non-linear (pay-per channel, pay-per-view, video-on-demand, digital interactive broadcasting)

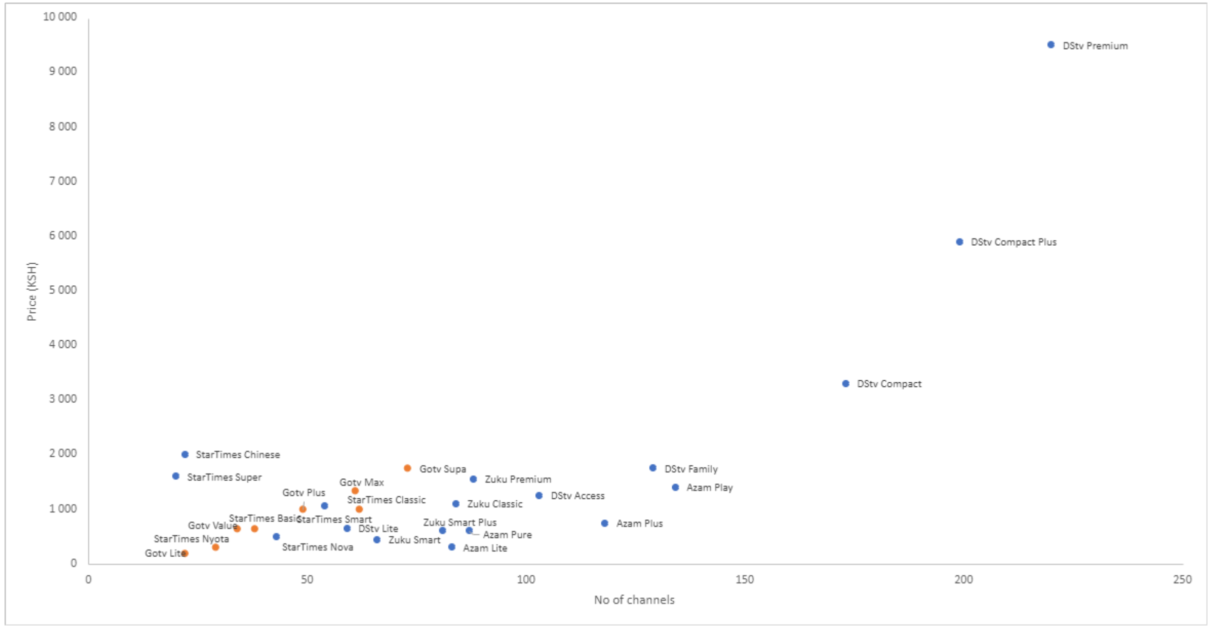
- Information and analysis used
  - observed market characteristics or practical indiciae (such as industry or customer recognition of a separate subgroup, or product characteristics);
  - price levels and patterns of price changes;
  - business models;
  - evidence of substitution;
  - consumer preferences and views; and
  - the SSNIP test

Markets defined

Television	**Retail**	TV1. Pay TV and OTT	For high income customers (including premium live sport)
		TV2. Pay TV and OTT	For mass market and those who do not require premium live sport
		TV3. Pay TV and OTT	Mobile for mass market
		TV4. FTA	DTT
		TV5. FTA	Mobile
	Wholesale	W1. BSD	DTT- managed transmission (self-provisioning not in market)
		W2. BSD	DTT- facilities
		W3. BSD	Satellite
		W4. BSD	Internet-based
		W5. Content	Locally produced
		W6. Content	Pre-produced international
		W7. Content	Sports
Radio	**Retail**	Radio markets differentiated by target market	
	Wholesale	Terrestrial signal distribution	
		Content	

Competition analysis: Television Market 1: Pay TV and OTTs for higher income customers (packages including premium live sport)

- High income/premium pay with live sports is **dominated by a single company**
- Premium sports rights (e.g. EPL and UEFA Champions league) drive a segment of subscriptions, but are **exclusive**
- Market power is **derived** from upstream rights holders
- BUT changes in market likely including
  - static or falling real prices
  - potential for rights-holders to stream direct to consumer
- Meets 3 criteria test for ex ante regulation
- Suggest no intervention at this stage due to market dynamics and absence of complaints



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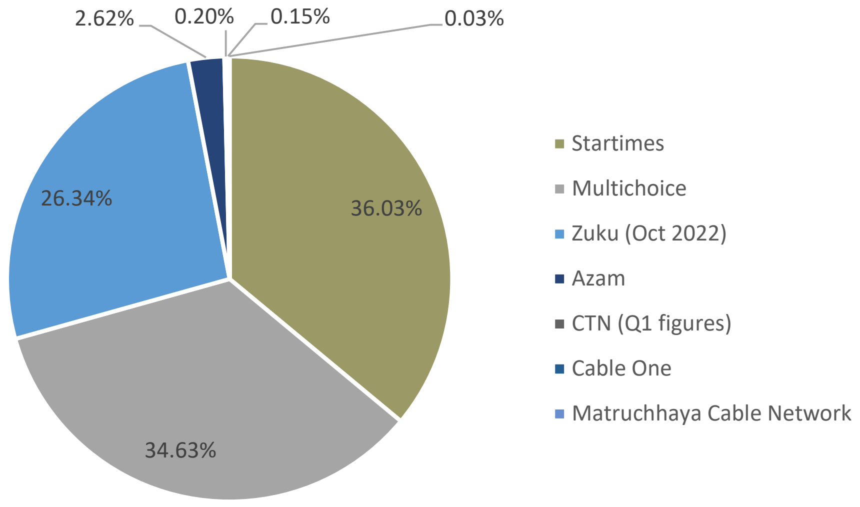
Competition analysis: Television Market 2: Pay TV and OTTs for mass market and those who do not require sport

- Increased competition
  - Digital migration
  - New OTT providers such as Netflix, Showmax and Viusasa
- Lower entry barriers, more competition
- As the data prices comes down, competitive constraints may increase from streaming
- Likely it will continue to be competitive
- Not susceptible to regulation in terms of 3CT
- Suggest no intervention at this stage



Market shares by active subscribers (Multichoice excluding premium) Excluding OTTs

Competition analysis: Television market 3: Pay TV and OTT mass market mobile

- Pay TV availability on mobile phones is fairly new - data is not readily available.
- There are a variety of mobile subscription offerings in the market, many of which are tailored to mobile:

Provider	Package	Characteristics	Price/month (KES)
Netflix	Netflix Mobile	SD, 1 stream, mobile only	200
Baze	Baze without data	SD, 1 stream, mobile only	304
Airtel	Airtel TV	SD, 1 device	Free to subscribers
Showmax	Showmax Mobile	HD, 1 stream, mobile only	299
ViuSasa (2022)	Viusasa Videos	SD, 1 stream	200 (2022)
ViuSasa	KidsViu	SD, 1 stream	150 (2022)

- There are also various streaming options from traditional pay TV broadcasters that can be viewed on mobile devices
- OTTs are not licensees
- This market is new and evolving

Competition analysis: Television Markets 4 and 5: FTA DTT and FTA mobile

- FTA in Kenya appears to be competitive.
- Concentration: a few groups constrain each other
- Minor constraints from pay TV and OTT
- Key challenge is financial difficulties due to a changing landscape that has resulted in reduced and fragmented advertising revenue.
- FTA OTTs compete in Kenya e.g. YouTube as well as streaming options from local FTA companies.
- Likely that FTA OTTs are **not included in the same market as FTA DTT**, particularly given the FTA target market which has more limited access to high speed fibre than the pay television target market and is more likely to stream using mobile.
- However, FTA OTTs may be in the same market as FTA mobile.
- There is no need to define this market as there is no market power on the narrower market definition.

Table 10: Shares and market concentration of FTA TV channels by media house based on ad spend (December 2019)

	Market shares
Royal Media Services	30%
Standard Group	21%
Nation Media Group	11%
Mediamax	16%
Kass Media Group	8%
Switch Media	4%
Other	9%
Total	100%

Source: Communications Authority of Kenya and Kenya Audience Research Foundation (KARF) (2020), Audience measurement and industry trends report for Q2 2019-2020. Available here.

Competition analysis: Radio

- Radio markets are differentiated based on **language and target market**
- There are few large companies with a high market share
- No indications of anti-competitive concerns in the radio market

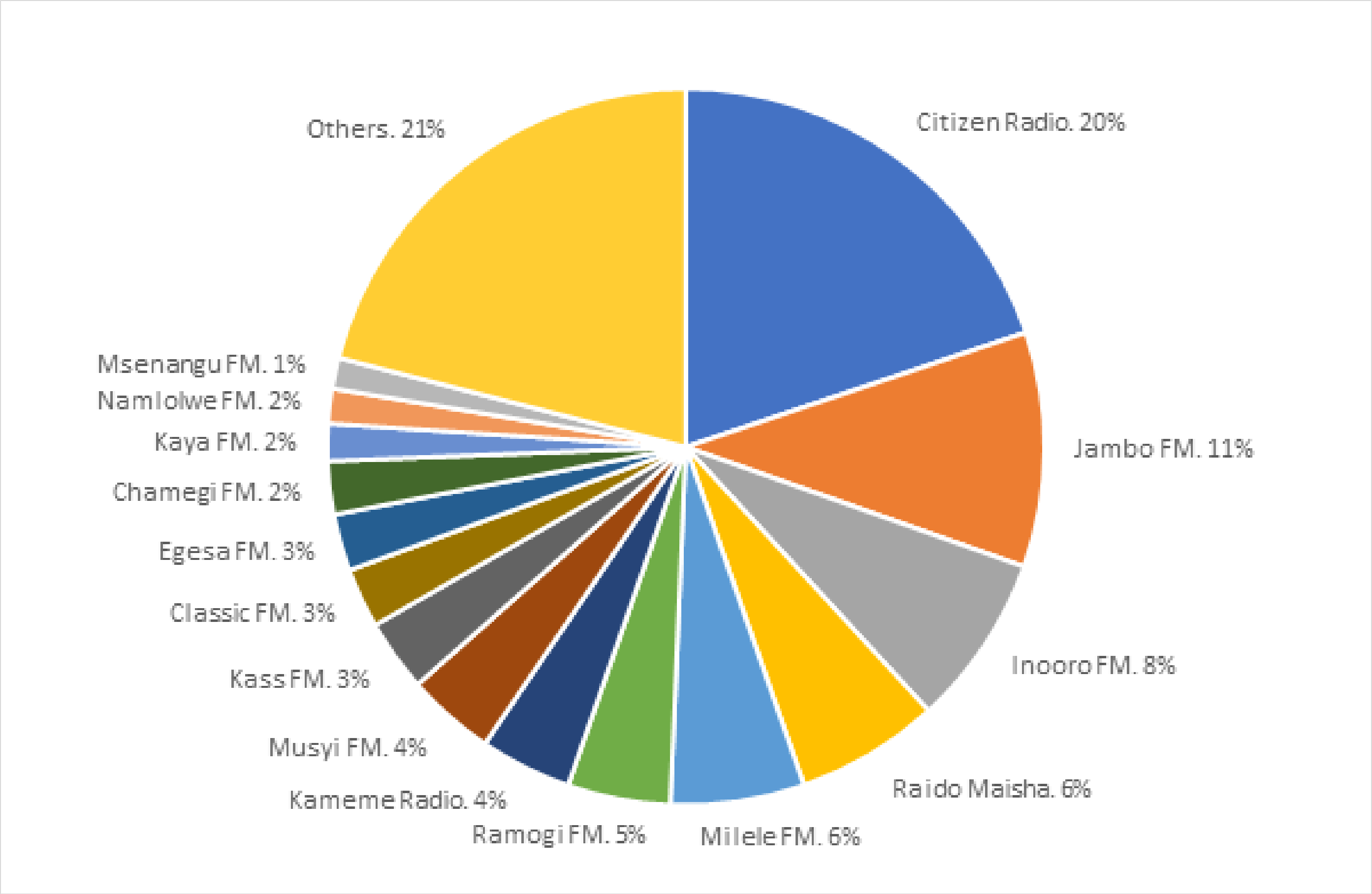


Figure 24: National Daily Share of listeners (Q1-2023)

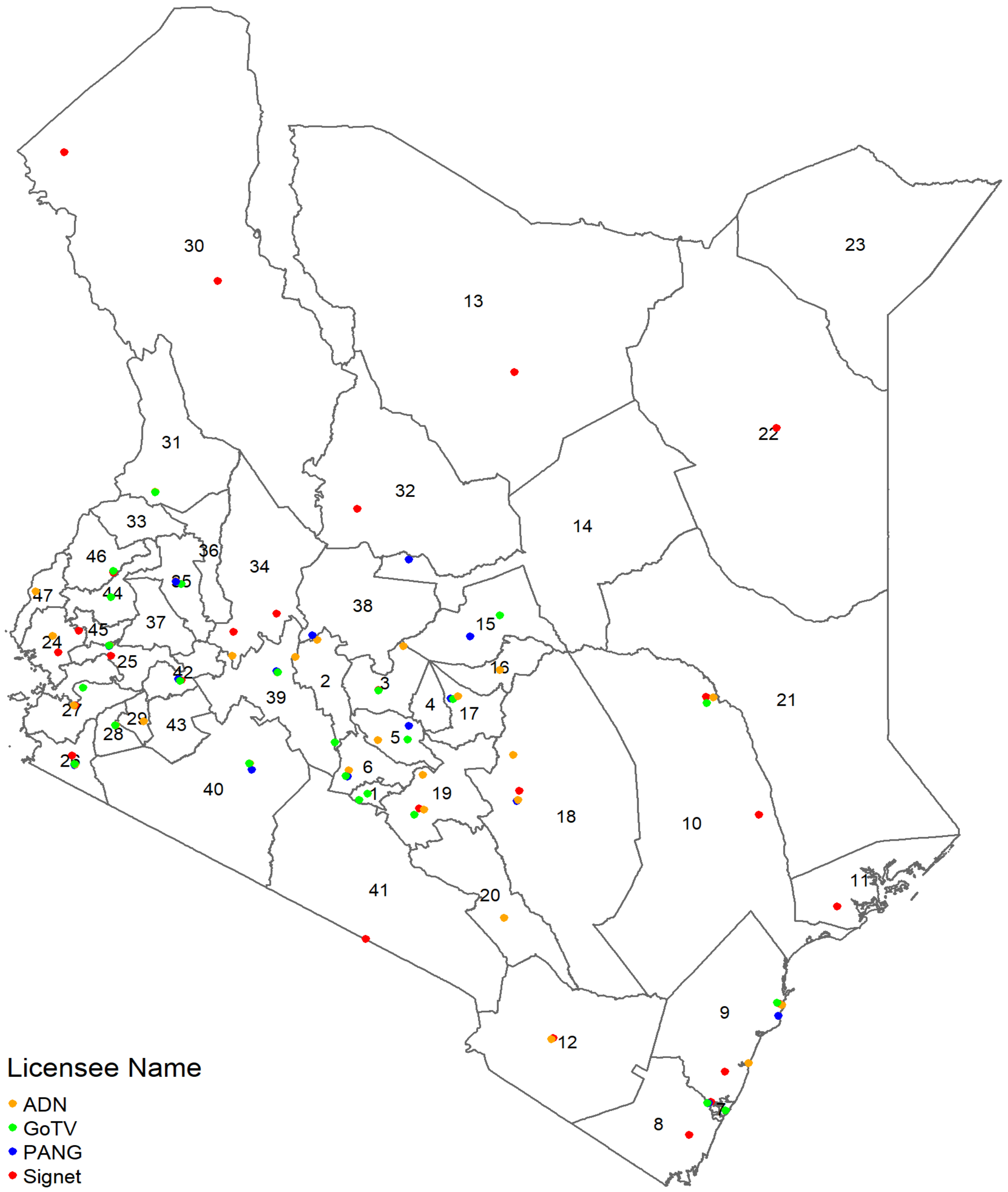
Source: Royal Media Group Submissions. Document: Ipsos_IKAT_Audience Survey_RMS_Q1_23 V1

Market definition: Broadcasting Signal Distribution

1. Is broadcasting distribution for satellite, terrestrial and OTT services in the same relevant market or in separate markets? **Separate: difference in downstream access, licensing**
2. Is self-provisioning in the same market as common carrier services? **Separate: differences in licences**
3. Are there separate markets for provision of site infrastructure and provision of end-to-end services including multiplexing? **Possibly: not relevant in current market context**

Two common carrier licensees and two self-provisioning licensees

All sites



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Competition analysis: Broadcasting Signal Distribution

- Currently high market shares, barriers to entry (licensing and infrastructure costs)
- Capacity constraints in certain areas
- No potential competition, not likely to change in foreseeable future
- Susceptible to ex ante regulation

- Complaints about quality
- Insufficient rollout in many areas

- Alternative to regulation is enhanced competition
- To consider whether additional competition is feasible?

Licensee name	Number of sites
Signet	36
ADN	31
GoTV	24
PANG	23

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Competition analysis: Content and channel supply

- Whether content produced locally is in the same market as content that is licensed: **Separate markets, different costs and technical requirements**
- Whether content should be segmented by genre: **No, except for premium live sports**
- Whether content should be segmented by exhibition window: **Not necessary for this study, note that there are changes to the market**
- Dynamics for channel supply similar: some exclusive channel arrangements noted.
- Keep monitoring radio

Market disruption with streamers generating own content and content providers going straight to customer

Recommendations: Competition study

Market	3 Criteria	Summary	Recommendation
TV1: Pay TV and OTTs for higher income customers (packages including premium live sport)	✓	• No evidence of exclusionary issues on an ex ante basis despite the existence of exclusive contracts. • Retail prices have fallen in real terms or static. • Market power is derived from that held by the content providers (such as the English Premier League) who are charging high prices that drive the retail prices.	No intervention recommended at present given market dynamics and no complaints. Recommend ongoing monitoring of pricing and potential competition.
TV2: Pay TV and OTTs for mass market and those who do not require sport	×	• Higher levels of competition than in the premium market.	No intervention recommended at present.
TV3: Pay TV and OTT mass market mobile	×	• Moderate concentration and a challenging environment due to loss of customers due to technological evolution.	No intervention recommended at present.
TV4 and TV5: FTA DTT and FTA mobile	×	• Large groups that constrain each other • Fragmentation in ad revenue impacting on finances • No competition issues identified	No intervention recommended at present.

Conclusion on TV1-5 OTTs (pay and FTA)	×	• OTTs cannot be regulated within the current regulatory framework. • Danger that premature regulation of OTTs will impact on innovation in the market • Limited penetration of high-speed broadband which limits the competitive constraint of OTT services.	• No intervention. • Recommend ongoing monitoring.
Terrestrial BSD	✓	Currently concerns over quality of service from some market participants. Slow roll out in certain areas and inadequate investment.	• Continue to monitor previous conditions including pricing, reference offer, accounting separation and transparency. • Given inadequate competition in certain areas consider allowing for new competition.
Content	✓ (premium sport)	For premium sport dominance by the rightsholders (such as the EPL) over the rights to their content, flows to downstream rightsholders. However, the entry into content production and purchase by OTTs is also changing the dynamics of the content market. Other broadcasters have not raised content and channel supply as a concern and it does not appear to be affecting the market	• No intervention recommended at present.
Radio	×	There is differentiation in the market. No major competition concerns raised. Disruption from mobile.	• No interventions recommended at present.

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Key components of BSD Pricing Analysis

Review framework (11) → Review network architecture (12) → Remedies and intervention

Review network architecture (12)

- Define network elements with view to optimal pricing structure

Knowledge transfer for models (15)

Remedies and intervention

- Identification of related concerns and provide recommendations (13)
- Reference access offer template (14)
- Recommendations for objective of review 16)

Methodology

Hybrid model: Bottom-up model that uses some top-down information (some joint and common costs from operator data)

- Define network architecture and network elements
- Capital costs for the network elements using a **modern equivalent asset approach**
- Capex annualized using a **tilted annuity approach**
- Estimate operations and maintenance costs for infrastructure based on operator information and reasonable assumptions where required.
- Charges for satellite done separately
- Tariff determination is a separate step

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Assumptions

- We assume an operator with:
  - 1 site (plus repeater) in Nairobi, 17 rural and 18 other city sites (this is in line with Signet's *current* footprint).
  - We use the definitions for 'rural' and 'other city' that are currently in use by the CA.
  - Capacity of a site in Mbps is 160 for Nairobi, 80 for Urban and 40 for Rural.
  - Utilization of 0.89. This is based on the industry average.
  - These assumptions can all be changed within the model in the Tab titled "Assumptions".
- We assume sharing of certain elements (e.g. mast, power, civils) in rural and other cities as is practice.
- For costs, we take into account the costs submitted by operators and make reasonable assumptions where necessary.

WACC

- Use CAPM to estimate equity return
- Use PANG actual debt cost
- Calculate nominal pre-tax WACC of 19.18%

Input	Assumption	Source
Asset beta (unlevered beta)	1	
Equity risk premium	5.94%%	Estimate for Kenya from Damodaran Equity Risk Premia 2023 Edition
Company tax rate	30% for resident companies	Kenya Revenue Authority
Risk-free rate (10-year government bond)	15.30%%	World Government Bonds
Proportion of debt	50%	
Proportion of equity	50%	

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Volumes

	Nairobi	Urban	Rural	Total
Sites	1 (+ repeater)	18	17	36.00
Capacity per site	160	80	40	
Capacity per site less 4 must carry	154	74	34	
Total capacity per category	154	1332	578	2064
Utilisation assumed*	0.89	0.89	0.89	1836.96

* Average across all sites based on stakeholder submissions

Tilted annuity formula and assumptions

$$\text{Annualised cost} = \frac{\text{Investment value} \times (r-p) \times ((1+r)^N)}{((1+r)^N)-((1+p)^N))}$$

WACC - nominal pre-tax	19.18%
Inflation	8.52%
Trend	1.00%
Tilt adjustment	9.52%
Dollar to KES	150.00

Capital and operating expenditure

- Sites:
  - Bottom-up site costing per region
  - 3 types of sites, Nairobi, Urban/Other Cities/Rural
- Head-end site costed separately:
  - Elements including encoders, multiplexers, switches, LCD monitors and routers.
- Stakeholder information used for:
  - Depreciation rates and cost trend for equipment
  - Cost of new site based on quotations by stakeholders
  - Opex
  - Sense checks

Tariff setting

- Principles
  - Cost recovery
  - Maintain overall regional tariff structure

	Rate per mbps (KES)
Nairobi	127 030.13
Other city	97 715.49
Rural	68 400.84

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Recommendations BSD Cost

- *Increase in competition:* We believe that the feasibility of expanding competition in the sector further should be considered, particularly if there is potential for increased capacity and competition using existing infrastructure.

- *Accounting separation and transparency*: In order to ensure that there is no cross-subsidisation between own channels and services for 3rd parties it is necessary that:
    - Accounting separation is required
    - Prices are to be submitted to the regulator for signal distribution to 3rd parties
    - Prices charged to internal channels to be submitted to the regulator
    - There should be no difference in prices charged to internal and external customers and transfer pricing in accounts should reflect this transparently.

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Thank you! Questions?