

Draft Digital Sound Broadcasting Licensing Framework

October 2023

Consultation Version

Abbreviations and acronyms				
DAB	Digital Audio Broadcasting			
DRM	Digital Radio Mondiale			
DSB	Digital Sound Broadcasting			
DSO	Digital Switchover			
DTT	Digital Terrestrial Television			
DVB-T	Digital Video Broadcasting - Terrestrial			
EEP	Equal Error Protection			
EPG	Electronic Programme Guide			
FM	Frequency Modulation			
HD Radio	High Definition Radio			
ITU	International Telecommunications Union			
Kbps	Kilobits per second			
MHz	MegaHertz			
MP2	File extension for MPEG-1 Audio Stream, Layer II file format			
MPEG	Moving Picture Experts Group			
PSB	Public Service Broadcasting			
RF	Radio Frequency			
SFN	Single-frequency network			
SI	Service Information			

Abreviations

1. Are there any other abreviations you would like to be included? Provide proposals

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Definitions

In this framework, it is proposed that unless the context otherwise indicates, a word or expression to which a meaning has been assigned in the Act, has the meaning so assigned as follows.

"Act" means the Kenya Information and Communications Act, Cap 411A any successor legislation and any subsequent amendments made thereto;

"Analogue sound broadcasting" means terrestrial broadcasting where the sound broadcast signal is in analogue format and "analogue sound broadcast" shall be construed accordingly;

"Applicant" means a person applying to provide a broadcasting service in terms of the Processes and Procedures Regulations;

"Broadcasting Signal Distribution" means the process whereby the output signal of a broadcasting service is taken from the point of origin, being the point where such signal is made available in its final content format, from where it is conveyed, to any broadcast target area, by means of electronic communications and includes multi-channel distribution;

"Digital Sound Broadcasting (DSB)" means an audio broadcasting technology intended to deliver superior quality sound using digital communications technology. It is a digital signal delivery system capable of delivering sound and data;

"Digital sound broadcasting services" means a broadcasting service delivered over a DSB platform.

"Multi-channel distributor" has the same meaning as defined in the Act;

"Multiplexer" means a device or unit that combines multiple analogue or digital signals into a single data stream over a shared medium or platform;

"Licensee" has the same meaning as defined in the Act;

"Radio Frequency Spectrum Licence" has the same meaning as defined in the Act;

"Simulcast" means a simultaneous transmission of the same sound broadcasting service on two or more channels or media;

"Sound broadcasting service" has the same meaning as defined in the Act;

Definitions

- 1. Do you agree with the proposed definitions? If not, propose improved definitions
- 2. Do you think there are other terminologies that need to be defined? If yes, list the new terminologies to be defined and propose the definitions of the terms
- 3. *Provide any other applicable comments in this section*

1. Introduction

The Communications Authority of Kenya is responsible for facilitating the development of the information and communications technology sector. In order to facilitate development of broadcasting services, one of the key activities under the Authority's 2018- 2023 Strategic Plan was the development and adoption of a digital sound broadcasting framework. This initiative has been carried forward to be finalised during the current strategic plan 2023-2028.

Currently, mainstream radio broadcasting in Kenya is exclusively analogue and dominated by services using Frequency Modulation (FM), with an evident increasing demand for sound broadcasting services. In the major cities, including Nairobi, Nakuru, Mombasa, and Kisumu, the FM analogue band (VHF Band II) is at saturation, yet there are over 2,000 requests for FM sound broadcasting frequency assignments across the country. Reception quality of FM services suffers due to mutual interference between closely packed broadcast services within these areas where the band is either saturated or approaching saturation. The introduction of complementary radio broadcasting services using digital sound broadcasting therefore presents an opportunity to accommodate the growing demand for new services, with anticipated benefits of improved spectrum and power efficiency, improved quality and reduced costs.

The Authority has already developed a digital sound broadcasting framework to guide the introduction of digital radio broadcasting services in Kenya and the same has been approved for implementation. The digital sound broadcasting framework outlines the strategies, approaches, requirements, and critical factors for successful implementation of digital sound broadcasting in the country. One of the critical success factors is an adequate regulatory framework for licensing digital sound broadcasting services. This licensing framework is expected to provide the licensing requirements for DSB systems and services, the technical operational requirements of DSB stations, the market structure for DSB services including applicable licensing fees, and obligations of the players in the DSB ecosystem among other regulatory requirements.

Digital sound broadcasting services have been adopted in several countries worldwide as an add-on to FM radio services. These include the United Kingdom, Denmark, Norway, Germany, the Netherlands, Italy, France and Switzerland, and Australia. Additionally, many countries are carrying out DAB trials, including in Central and Eastern Europe, the Gulf States and South-East Asia. On the African continent, Tunisia has had a regular DAB service for several years while South Africa and Algeria have conducted DAB trials. Various DSB licensing models have been adopted across these jurisdictions depending on demand for the digital services, spectrum availability and existing regulatory frameworks and policies, among others.

This DSB licensing framework is being developed as part of the strategy to implement the DSB framework in Kenya and is proposed to be applicable for all current and future technologies, unless otherwise as may be prescribed by the Authority from time to time.

Introduction

- 1. Do you agree that the proposed DSB licensing framework should be generic enough to be applicable to current and future digital sound broadcasting technologies? If no, give reasons
- 2. Do you believe there is any other country apart from the ones listed above that has implemented DSB licensing framework that Kenya can benchmark with? If yes,

indicate which country and reasons why you believe Kenya can benefit from their experience.

3. Provide any other applicable comments in this section

2. Objectives of the Framework

The objective of this licensing framework is to provide a regulatory mechanism for licensing of digital sound broadcasting services in Kenya and in particular:

- i. defines the market structure for DSB services
- ii. prescribes the licensing procedure for DSB services
- iii. prescribes the licensing requirements for an applicant seeking to provide DSB services
- iv. prescribes the licence terms and conditions for DSB services

Objectives of Framework

- 1. Is there any other objective(s) that the DSB licensing framework should address? If yes, please explain.
- 2. Provide any other applicable comments in this section

3. Overview of Digital Sound Broadcasting

There are several DSB Systems recommended by the International Telecommunications Union (ITU) that operate in frequencies ranging from below 30MHz to 3000MHz. These systems include Digital Audio Broadcasting (DAB), ISDB-TSB, IBOC, Digital Radio Mondiale (DRM), Convergent Digital Radio (CDR) and Real-time AudioVisual Information System (RAVIS). While all these systems are intended for vehicular, portable and fixed reception, they have varying technical and operational characteristics relating to audio quality range, spectrum efficiency, channel capacity among others. DAB and DRM are of particular relevance to Kenya as they are recommended by the East African Communications Organisation, and are being considered as relevant DSB standards in the African Telecommunications Union strategy on introduction and implementation of DSB in Africa.

The adoption of the DAB standard in Kenya is based on the availability of spectrum in Band III (174-230MHz), the suitable band for its deployment. DAB is a mature technology with over 30 years of development from early trials in the 1990s to the rollout of regular services. Affordable DAB domestic receivers are already widely available as a mass-market product, enabling Kenya to benefit from economies of scale. Additionally, the country will benefit from best practices in respect of implementation, customer awareness, and financial savings as the digital systems offer cost efficiency for broadcasters.

Digital Audio Broadcasting systems are designed for delivery of high-quality digital audio and video programmes and data services for mobile, portable and fixed reception from terrestrial transmitters in the Very High Frequency (VHF) frequency bands as well as for distribution through cable networks. These systems are designed to provide spectrum and power efficiency

in terrestrial transmissions through techniques such as the use of Single Frequency Networks (SFN) or Multi-Frequency Networks (MFN).

According to the ETSI EN 300 401 Standard, the DAB system provides a signal which carries a multiplex of several digital services simultaneously. The system bandwidth is about 1.5 MHz, providing a total transport bit rate capacity of just over 2.4 Mbit/s. The Standard describes the principle features of a digital audio broadcasting system as follows:

- i. Audio bit rates from 8 kbit/s to 384 kbit/s. This enables the multiplex to be configured to provide typically 10 to 20 audio programmes;
- ii. Programme Associated Data (PAD), embedded in the audio bit stream, for data which is directly linked to the audio programme;
- iii. Data services, whereby each service can be a separately defined stream or can be divided further by means of a packet structure;
- iv. Service Information (SI) for service selection, information and control functions of the receiver.

Terrestrial analogue radio broadcasting consists of a vertical structure or value chain in which content production and broadcast distribution are within the same organisation. However, digital radio broadcasting involves a more complex value chain in which infrastructure providers offer carriage for multiple content services, similar to digital terrestrial television. DSB consists of three main sub-systems: content generation, signal distribution, and consumer reception, as shown in Table I below.

Content generation	Signal Distrib	Reception		
Broadcaster	Head end	Distribution network	Broadcast transmitter sites	Consumer Receiver Set
Radio Station 1 Radio Station n	Encoder and Multiplexer	Various technologies: Satellite, Microwave, Optical Fibre	Transmission Equipment	Integrated Receiver

Table I: DAB Network Structure

Content generation consists of the production of content in a studio and converting it into a digital format required at the head-end of the signal distribution subsystem. The signal distribution sub-system comprises of all network components from the head-end up to the broadcast transmitter sites. The last element is the reception of the radio programme at the consumer end. These functions can be executed by distinct entities such that the broadcasters focus on content generation, while the signal distributors transmit and distribute the signal to the radio audiences. In this respect, this licensing framework shall consider the various players in the value chain and the obligations to be met by each of them.

The number of multiplexes to be deployed in a DSB network depends on spectrum availability and the demand for services. The number of national, regional and local layers to be deployed depends on the coverage demands for DSB services. Several countries that have already implemented DSB have adopted various models of licensing operators, with the majority having licensed up to three national DSB signal and several regional and local DSB signal distributors. In digital television, the main challenge with licensing of the national signal was inadequate provision for local insertion facilities, therefore there was little flexibility for small broadcasters since they were required to be carried in a package of a minimum number of sites even when they did not have the interest or capacity to cover all the broadcast areas in the prescribed packages. In order to avoid similar challenges, it is therefore important to license local DSB signal distributors. This may be undertaken after national DSB operators have implemented their networks, and specific gaps identified so as to minimise the risk of fragmenting the market to levels that are not sustainable.

A key factor in the development of this regulatory framework is that the introduction of digital sound broadcasting services that will not necessarily require to replace FM or AM sound broadcasting but permits its adoption as an add-on technology that can coexist with existing analogue FM services in the long term. This is due to the fact that these technologies mostly operate on different frequency bands. For instance, in the UK, where DAB was launched in the year 1999, FM is expected to continue until at least 2030 according to the Digital Radio and Audio Review commissioned by the UK Department for Digital, Culture, Media and Sport. Norway is the only country that has already switched off analogue FM radio in 2017 while Switzerland has set 2024 for analogue FM switch off date.

Overview of Digital Sound Broadcasting

- 1. Do you have any comments on appropriateness of DAB+ and DRM technologies that Kenya has choosen to introduce as the initial DSB technologies?
- 2. Do you agree with the approach of introducing DSB as a complementary service and not a replacement of FM broadcasting in the short and medium term? If no, provide your views and justification.
- 3. Do you have any comments on how eventual transition from analogue to digital sound broadcasting in the future should be handled in Kenya and after how many years do you consider appropriate to begin migrating from FM to DSB.
- 4. Provide any other applicable comments in this section.

4. Proposed DSB Licensing Framework

The Kenya Information and Communications Act (KICA) 1998 mandates the Authority to promote and facilitate the development of broadcasting services, in keeping with the public interest, of a diverse range of broadcasting services in Kenya. The KICA mandates the Authority to license all systems and services in the communications industry, including broadcasting, and to manage the use of radiofrequency spectrum resources. The Authority has therefore developed this licensing framework to provide guidance on the licensing of the DSB systems and services in Kenya.

4.1. Market Structure

It is proposed that the DSB market structure to consist of Broadcasting Signal Distribution and Digital Sound Broadcasting services.

4.1.1. Digital Sound Broadcasting Signal Distribution services

It is proposed that Digital Sound Broadcasting Signal Distribution services be licensed under the following categories.

4.1.1.1. National Broadcasting Signal Distribution Services

It is proposed that existing already licensed common carrier national BSDs be eligible to offer DSB services, in addition to the existing DTT services if interested without the need to obtain a new licence. A holder of this category of licence will be required to apply directly to the Authority for assignment of DSB and STL frequencies necessary for the broadcast signal distribution infrastructure, subject to payment of applicable frequency fee as per schedule in section 4.4. The existing BSDs will however require to also apply for modification of their current licences to accommodate the DSB frequencies and related requirements.

It is also proposed that existing Self-provisioning BSDs wishing to provide digital sound broadcasting services may upgrade to national common carrier BSD to provide both DTT and DSB. The applicable fees are proposed to be as per the market structure in section 4.3 and an existing BSD licensee wishing to upgrade their licence to this category will be required to pay the fee difference.

4.1.1.2. National Digital Sound Broadcasting Signal Distribution services

Distribution of the digital sound broadcasting services on a national level will require a national signal distribution licence. The services under this licence will consist of setting up of infrastructure at the designated transmission sites across the country and the carriage of broadcasters' content on the distribution platform at a national level. It is proposed that this category of DSB signal distributor will only carry broadcast content from licensed digital sound broadcasting service providers and will be required to provide information to the Authority on the operations on their platform as may be prescribed. The licence duration is proposed to be 15 years renewable upon satisfactory performance. Initial and annual operating licence fee is proposed to be harmonised with the fees for existing DTT Self-provisioning BSD licence category (see Table 1 under section 4.3).

4.1.1.3. Local/regional Signal Distribution Services

Local/Regional signal distribution service licence will allow for the distribution of digital sound broadcasting services within restricted location(s) in the country, as defined by the Authority. It is proposed that this category of DSB signal distributor will only carry broadcast content from licensed digital sound broadcasting service providers and will be required to provide information to the Authority on the operations on their platform as may be prescribed. The licence duration is proposed to be 15 years renewable upon satisfactory performance. Initial and annual operating licence fee for local and regional DSB signal distributors is proposed to be harmonised with that of existing Network Facility Provider-Tier 3 (NFP-T3) Licence under the Unified Licensing Framework (see Table 1 under section 4.3). A holder of

this category of licence will be required to apply directly to the Authority for assignment of DSB and STL frequencies necessary for the broadcast signal distribution infrastructure in authorised sites.

It is proposed that Local/Regional BSD will operate with coverage within one county to a maximum of six (6) adjacent counties.

Market Structure-DSB signal distribution

- 1. Do you agree with the proposed market structure for digital sound broadcasting signal distribution categorisation? If no, provide your proposals
- 2. Do you agree with the proposed scope of coverage and area of coverage that will define local / regional BSD? If no, provide your suggestions including the proposed expanse of each region to be covered.
- 3. Provide any other applicable comments in this section.

4.1.2. Digital Sound Broadcasting services

It is proposed that applicants for Digital Sound Broadcasting services be licensed to provide digital radio broadcasting content services under the following categories:

4.1.2.1. Public digital sound broadcasting services

This category is proposed to be limited to the entity designated by KICA as public broadcaster (Kenya Broadcasting Corporation for the time being). Public DSB services will be provided by the designated public broadcaster as provided in the Act, and the applicable licence fees are as proposed in the market structure in Table 1 under section 4.3.

The Authority proposes to require the licensed Broadcast signal distributors to reserve capacity on their platforms for public broadcasting services as may be prescribed under 'must carry' rules.

4.1.2.2. Commercial digital sound broadcasting services

The Authority proposes to licence entities to provide digital radio broadcasting services on a commercial basis as guided by the Act and the Authority's licensing procedures. These services will be provided within the parameters of commercial free to air broadcasting services as provided in the Act and the licence terms and conditions.

Licensed commercial digital broadcasting service providers will be required to sign service level agreements with the licensed broadcast signal distributors for the transmission of their digital radio broadcast signals within authorized coverage areas.

It is proposed that Licensed commercial service providers be allowed to provide more than one broadcast service on the DSB platform and will be required to obtain a licence for every distinct service offered. The licensee may provide authorized services in more than one designated transmitter site or coverage area, subject to availability of channels on the signal distributor's platform.

The applicable licence fees are proposed in the market structure Table 1 under section 4.3.

4.1.2.3. Community digital sound broadcasting services

The Authority proposes to licence entities to provide community broadcasting services as prescribed by the Act and the Authority's licensing procedure. These services will be provided within the parameters of community free to air services as provided in the Act and the licence terms and conditions.

It is proposed Community broadcasting services be restricted to the geographical areas of the community of interest. The licensees will be required to sign service level agreements with licensed signal distributors for the transmission of their broadcast content within the authorized coverage area. Community broadcasters will not acquire additional channels on the DSB platform without approval from the Authority.

The proposed applicable licence fees are provided in the market structure Table 1 under section 4.3.

Market Structure-DSB Services

- 1. Do you agree with the proposed market structure for digital sound broadcasting services categorisation? If no, provide your proposals
- 2. 2.Do you agree with the proposed scope of coverage of DSB service providers? If no, provide your suggestions including the proposed expanse of coverage.
- 3. 3. Provide any other applicable comments in this section

4.2. Determination of Signal Distribution tariffs

It is proposed that the Authority will determine the tariffs that DSB broadcast signal distributors shall charge DSB service providers accommodated on the DSB platform. The tariffs for transmission and distribution of the DSB signals are expected to be cost based and will be reviewed from time to time. However, for the first one or two years, it is proposed that BSD providers use market forces to determine their DSB signal distribution tariffs before the Authority eventually determines the cost based tariffs.

BSD Tariffs

1. What are your views with regard to determination of DSB tariffs that broadcasters will be charged by signal distributors

4.3. Licensing Fees

The applicable license fees for the license categories are proposed as follows:

- Licence application fees
- Initial licence fees
- Annual operating licence fees
- Annual Frequency fees, where applicable

The Authority proposes to adopt the applicable licence fees for DSB system and service licences from the existing market structure.

License category	Duration (years)	Application fees (KSHs)	Initial license fees (KSHs)	Annual Operation- fees (KSHs)
National common carrier Broadcast Signal Distribution	15	5,000	Determined by tendering process, where applicable (baseline bid price-Kes. 45 million)	0.4% of annual gross turnover or 800,000 whichever is higher
National Digital Sound Broadcast Signal Distribution	15	5,000	15,000,000	0.4% of annual gross turnover or 400,000 whichever is higher
Local/Regional Sound Broadcast Signal Distribution	15	5,000	200,000	0.4% of annual gross turnover or 160,000 whichever is higher
Public Digital Sound Broadcasting service	10	2,500	50,000	40,000
Public Digital Sound Broadcasting service (Commercial)	10	5,000	100,000	0.4% Of annual gross turnover or 80,000 whichever is higher

Table 1. Broadcasting Market Structure applicable to DSB services

Commercial Digital Sound Broadcasting service	10	5,000	100,000	0.4% Of annual gross turnover or 80,000 whichever is higher
Community Digital Sound Broadcasting service	10	1,000	15,000	15,000

Licence fees

- 1. What are your views with regard to the proposed durations of various licences?
- 2. What are your views with respect to the proposed levels of application fees, initial and annual operating fees?
- 3. Any other comments in this section

4.4. Frequency Utilisation Fees

It is proposed that DSB frequencies be only assigned to licensed DSB signal distributors upon application in prescribed format and subject to availability. However, any licensee providing DSB services may apply for signal transmitter link frequency for linking their studio signal to appropriate insert or termination point of the DSB signal distributor's platform.

Applicable Frequency fees are proposed to be charged as per the approved frequency fee schedule (or any revisions thereof) available on the following web link:

https://www.ca.go.ke/sites/default/files/CA/Frequency%20Procedures/Frequency-Fee-Schedule-Effective-1st-July-2018-_0.pdf

Frequency utilisation fees

- 1. What are your views with respect to the level of fees charged for frequencies to be assigned to DSB signal distributors?
- 2. Provide any other comments in this section.

4.5. Licensing of Digital Sound Broadcasting Signal Distribution

Broadcasting Signal Distribution for DSB services will be provided by a BSD licensee as defined in the Act.

It is proposed that the Broadcast signal distribution service licensing categories be as follows:

4.5.1. National Common Carrier BSD

Existing licences for DTT common carrier national BSD licensees namely Signet Signal Distributors Ltd and Pan Africa Networks (K) Group Ltd provide for signal distribution services for DSB. The Authority will therefore designate the existing common carrier BSD licensees, who explicitly demonstrate interest to rollout DSB platforms, to provide these services under their current licences that already include authorisation to provide radio services. Where necessary, amendments shall be made to the existing licences to ensure that all requirements of DSB are sufficiently provided for, including assignment of DSB frequencies.

The Authority may also make provisions for the DTT self-provisioning BSDs (SBSD) licensees to provide national DSB signal distribution services in cases where the current providers are interested. This shall include the review of the existing SBSD licence to include provisions for DSB signal distribution and thereafter invite interested SBSDs licensees to submit applications. The criteria for consideration of these applications will include availability of DSB frequencies, their compliance to the SBSD licence conditions during the licence term and payment of initial fees to match the fee paid by Common Carrier BSDs. The Authority will develop the criteria to be met for upgrading the SBSD licensees.

4.5.2. National Digital Sound Broadcast Signal Distribution

The Authority may also consider licensing of new entrants to provide DSB signal distribution services subject to availability of spectrum. The Authority proposes to advertise for interested entities to submit applications to operate as National DSB signal distributors based on spectrum availability.

The applications are proposed to be evaluated competitively based on the prescribed criteria, including:

- The ability of the entity to commence operations of the BSD services and to achieve the rollout targets.
- the ability of the entity to establish the DSB services and maintain the services through the licence term.
- The capacity of digital broadcasting services available to be carried on the BSD platform that will appeal to diverse tastes and interests.
- The proposed rollout plan with timelines from the entity

4.5.3. Local/Regional Broadcast Signal Distribution

The Authority proposes to licence regional/ Local DSB signal distribution services to operate within restricted location(s) in the country, as defined by the Authority. The Authority proposes to advertise for interested entities to submit applications to operate as local DSB multiplexes based on spectrum availability. Licensing of local BSD may be implemented after the licensing of common carrier BSDs and rollout of the national DSB network in order to address identified gaps.

The Authority proposes to apply the following criteria, among others while considering the applications for issuance of DSB multiplexes to local BSDs:

- The ability of the entity to commence operations of the BSD services and to achieve the rollout targets.
- the ability of the entity to establish the DSB services and maintain the services through the licence term.
- The capacity of digital broadcasting services available to be carried on the BSD platform that will appeal to diverse tastes and interests.
- The proposed rollout plan with timelines from the entity.
- The extent to which there is demand for DSB services in the proposed coverage area.

To be eligible for assignment of DSB frequency, an applicant will be required to be in possession of a digital broadcast signal distribution.

4.6. Licensing of Digital Sound Broadcasting services

The DSB services licence applications are proposed to be considered on a first come first served basis in line with the existing licensing regime.

These categories are as follows:

- Public Digital Sound Broadcasting service licence
- Commercial Digital Sound Broadcasting service licence
- Community Digital Sound Broadcasting service licence

The Authority proposes to consider applications for these licence categories once the DSB platform have been deployed. The Authority proposes to make provisions for existing licensed FM broadcasters who are interested in providing DSB services. These provisions will include the requirements for the FM licensee to apply for DSB service licence and comply with licence conditions on termination of the FM services, including fulfilment of any outstanding obligations to customers on their platform.

Licensing of DSB BSDs and DSB services

- 1. What are your views with respect to the criteria proposed to be used in determining elegibility for each proposed DSB signal distribution licence category?
- 2. What are your views with respect to the criteria proposed to be used in determining elegibility for each proposed DSB service licence category?
- 3. Provide any other comments in this section

4.7. Licensing Procedure

It is proposed that minimum licensing requirements be defined for each license category under the DSB framework. The Authority shall develop the necessary licence application forms for the DSB signal distribution services and the DSB service providers. These forms will contain the requirements that should be met by entities interested in applying for respective DSB licences, including the frequency licence application forms where applicable.

The licensing process for DSB services is proposed to be in line with the existing prescribed licensing procedures. Due to scarcity of radio frequency spectrum, the licensing process for the BSD services will depend on spectrum availability.

The licensing requirements for the various categories is proposed to be as captured in Table 2 below:

No.	Licence Category	Licensing requirements	
1.	Existing common-carrier BSD licence interested in providing DSB signal	i. Common-carrier BSDs interested in providing DSB signal distribution will be required to apply for frequency spectrum in areas of interest through	
	distribution	the prescribed application forms.	
		ii.	Subject to availability of DSB frequencies, the Authority proposes to invite self-provisioning BSDs interested in providing DSB signal distribution to submit applications through the prescribed application forms, subject to payment of initial fees to match the fee paid by Common Carrier BSDs. The Authority will review the applications against the licensing criteria and due diligence to determine their capacity to provide DSD signal distribution provide
		iii.	DSB signal distribution services.
		iii. The Authority will then require common-carrier and self-provisioning BSDs who have met the threshold set by the Authority, to submit their licences for revision to incorporate additional requirements for DSB including assigned DSE frequencies.	
2.	National Sound BSD	i.	Subject to availability of frequencies, the Authority proposes invite interested parties to apply for national sound BSD licences through prescribed application forms
		ii.	The Authority shall review the submitted applications against the licensing criteria and due diligence to determine their capacity to provide the signal distribution services.
		iii.	The Authority shall issue BSD licences to successful applicants, including the associated DSB frequency licences.
3.	Local/Regional Sound BSD	i.	Subject to the availability of frequencies, the Authority proposes to invite interested parties to apply for local/ragional sound PSD licenses
		ii.	apply for local/regional sound BSD licences The Authority shall review the submitted applications against the licensing criteria and due

Table 2. Licence categories and applicable requirements

			diligence to determine their capacity to provide
		iii.	signal distribution services in the areas of interest. The Authority willl issue BSD licences to successful applicants to operate in the designated coverage areas, including the associated DSB
			frequency licences.
4.	DSB services	i.	The Authority proposes to invite interested parties to apply for commercial and community DSB services subject to completion of the licensing process for DSB signal distribution services and rollout of the signal distribution network.
		ii.	Interested parties will apply for respective licences through prescribed applications forms and shall be required to submit a separate application for each distinct service proposed to be offered.
		iii.	The Authority will review submitted applications against the licensing criteria and due diligence to determine the applicant's capacity to provide the services. The applications shall be considered on a first come first served basis.
		iv.	The Authority will issue licences to successful applicants, enabling their access to the signal distribution platform.
5.	Existing FM services interested in providing DSB services	i.	Subject to availability of capacity on the DSB signal distribution platform, the Authority proposes to consider applications for DSB service licences from licensed FM broadcasters who are interested in providing digital services.
		ii.	The applications will be reviewed against the licensing criteria and due diligence to determine their capacity to provide the service.
		iii.	The Authority will issue licences to successful applicants upon them fulfilling all the applicable requirements.

Licensing Procedure for DSB BSDs and DSB Services

- 1. What are your views with respect to the proposed procedure to be used in processing of applications for the various DSB signal distritution and DSB service licence categories ?
- 2. Provide any other comments in this section

4.8. Reserved Capacity for Public and Community Broadcasters

The National ICT policy stipulates the requirement to ensure universal access and viability of public broadcasting services. The ICT policy also requires the regulator to reserve broadcast frequencies to promote the development of community broadcasting services.

The Authority will require that the BSDs reserve some capacity on their platform for public and community radio broadcasters. The reserved capacity level will be reviewed after specific timelines to release reserved channels that are not utilised.

Reservation of Capacity

- 1. What are your views in terms of what % of a DSB signal distribution platform should be reserved for public broadcaster and community broadcasting respectively? Please justify your proposals
- 2. Provide any other views in this section.

4.9. Access to DSB Signal Distribution Platform by Broadcasters

By its nature, the signal distribution market is non-competitive, hence regulatory intervention is necessary in order to ensure that the cost of providing the service is in line with the principles of economic efficiency, and avoid the imposition of arbitrary high carriage charges to the broadcasters. As is the case in digital television, the tariffs signal distributors charge broadcasters to be accommodated on the digital platform will be regulated by setting maximum limits.

Access to DSB BSD Platform

- 1. Do you have any proposals on what criteria should be used by DSB BSD providers to charge broadcasters? Please provide details.
- 2. At what point do you propose the regulator should make determination on the tariffs to be charged by BSDs? Explain your justification.
- 3. Provide any other comments on this section.

4.10. Technical Standards

The Licensing framework for DSB shall include technical standards that broadcasters must comply with in order to ensure a high quality of sound transmission. These standards may include requirements for sound quality, signal strength, and coverage area.

4.11. Public Interest Obligations

The Authority proposes to require the DSB broadcasters meet certain public interest obligations, such as providing local news and information, promoting cultural diversity, and supporting education and public health initiatives.

Public Interest Obligations

1. Do you have any proposals on what other public interest obligations DSB service providers should be required to provide? Please provide details and justification.

2. *Provide any other comments on this section.*

4.12. Ownership and Control Rules

The Authority shall, within the DSB licenses, provide for rules and restrictions on ownership and control on DSB broadcasters to promote competition and prevent concentration of ownership in the media sector.

5. Roadmap

The proposed roadmap on key implementation and action items is as detailed in Table 3 below:

Table 3. Proposed Roadmap for operationalisation of DSB services

No	Activity	Status/Proposed Target
1.	Development of draft licensing framework for DSB including public consultation process	FY 2023/24 -Ongoing
2.	Development of DAB+ minimum receiver specifications	FY 2023/24 -Done
3.	Replanning of VHF band 174-230 MHz exclusively for DAB+ and modification of GE06 Plan through conversion of planned DVB-T2 TV channel into Band III into DAB+ channels;	FY 2023/24
4.	Development of DRM minimum receiver specifications	FY 2024/25
5.	Development of DSB transmitter technical standards and parameters for Type Approval	FY 2024/25
6.	Possible Development of DSB signal distribution tariffs (access charges)	FY 2028/29
7.	Licensing of existing BSDs interested in providing DSB signal distribution	FY 2025/26
8.	Licensing of DSB content providers / broadcasters	FY 2027/28
9.	Licensing of new DSB signal distributors	FY 2028/29
10.	Consumer awareness/Education	FY 2025/26

Proposed Roadmap

- 1. Do you have any other elements that you feel should be included in the roadmap? If yes, provide the details and proposed timelines
- 2. Do you have any views about the proposed DSB roadmap? Provide detailed comments and any justification to support your views.

Other General consultation Questions

1. Are there other areas in your view that should be included in the DSB Licensing Framework? If yes, provide relevant proposals and justifications for the same