

BROADCASTING DIGITAL MIGRATION FREQUENTLY ASKED QUESTIONS

South Africa has embarked on a process of migrating its analog broadcasting signal to digital. This process is known as Broadcasting Digital Migration (BDM).

Universal Service and Access Agency of South Africa (USAASA) is involved in the BDM process and is required to assist poor TV-owning households by subsidising the cost to acquire Set-Top Boxes and antennas, as well as provide installation services, through the Universal Services and Access Fund (USAF).

FREQUENTLY ASKED QUESTIONS

1. What is Broadcasting Digital Migration?

Broadcasting Digital Migration refers to the broadcasting of terrestrial television in a digital format. Currently, terrestrial broadcasting in South Africa is transmitted in an analogue format. The country is in the process of implementing migration from analogue to digital broadcasting.

2. What is the difference between terrestrial television and satellite television?

Terrestrial television uses a network of transmission towers to relay the signal across the country. Each transmission tower has a specific area of coverage, and it is the network of coverage that provides television signals across the country. The broadcast signal is sent to the various towers and if you are within the area covered by a tower, you will be able to receive the broadcast services via a terrestrial aerial which is usually placed on your roof or on your television set. Satellite television broadcasts uses a satellite in the sky. The broadcast signal is sent to the satellite and you receive a signal via a satellite dish. A single satellite covers a large area.

3. What is the difference between analogue TV and digital TV?

In analogue TV, one channel uses a dedicated frequency to broadcast. This is because of the large amount of bandwidth the analogue signal requires. In digital the signals can be compressed to allow for more channels to be broadcast in the same bandwidth as one current analogue channel uses.

4. Why are we migrating from analogue to digital?

The main reason for the migration is to release valuable Radio Frequency (RF) spectrum (bandwidth) which can be used for other services, such as Broadband mobile services. Spectrum is a limited commodity thus making more efficient use of available spectrum is necessary to allow more for telecommunications and broadcasting services.

5. Has this been done elsewhere around the world?

Yes – all countries around the world will do the migration to digital television to ensure ongoing co-ordination and protection from interference.

6. What is a Set Top Box (STB)?

The STB is a device that will decode the digital signal to enable the channels to be displayed on your television set. This STB will plug-in to your TV set, it is also often referred to as a decoder. There are two types of technologies to be used for the process namely: DTT (Digital Terrestrial Television) and DTH (Direct to Home) via satellite.

7. Why do I need a STB?

Although you will be able to receive the signal through your aerial, without the STB you will be unable to display the digital services on your television set. The STB decodes the digital signal received via a standard aerial antenna and supplies the TV set with a video signal.

8. Will I need a satellite dish to receive DTT / DTH?

Only in certain regions of the country, such as some parts of the Northern Cape, will receive DTH broadcast via satellite. This is to prevent RF interference with the SKA project. It is also needed in other parts of the country that are not covered by low-power signal transmitters.

9. Will I need a new aerial to receive DTT?

Most viewers of terrestrial broadcasters will not require a new aerial to receive DTT. However, some viewers may require new aerials, or may need to upgrade existing aerials. In some instances aerials may have to be adjusted.

10. Will I need any other additional equipment to receive DTT / DTH?

You will need to have a DTT/ DTH STB (also referred to as a decoder).

11. Where can the STB be purchased?

Qualifying beneficiaries will apply through Post Office. Those that don't qualify for the subsidy can purchase STB's from participating commercial outlets.

12. If I have more than one TV sets in the house, will I need multiply STB's?

Yes – if you want each TV set to individually view different channels at the same time.

13. Will I need to pay a subscription fee every month like existing Satellite Broadcasters?

No – the purchase of the STB is a once-off cost. There will be no monthly subscription cost to receive the free-to air services. However, you still need to continue paying TV license fees.

14. What are the benefits of digital TV?

With digital TV you will have access to more channels on a free-to-air basis, in addition to the current free-to air services. The STB can also be used for additional services such as Video-on-Demand and access to internet.

15. Will I need to buy a new television set to receive DTT / DTH?

No – most current analogue television sets will be able to receive DTT / DTH. You do not need a high definition (HD) TV, LCD TV or Plasma TV to receive DTT.

16. How does a person establish whether their TV will be compatible to the STB?

The TV set must have audio and video inputs or alternatively must have a RF input (used to connect the TV aerial to), or alternatively a HDMI input.



GLOSSARY

1. **BDM - Broadcasting Digital Migration**

It refers to the policy process currently underway by the Department of Communications. The migration is in line with international standard and trends.

2. **BSD - Broadcast Signal Distribution**

Broadcasting signals that are intended for general reception.

3. **DTT - Digital Terrestrial Television**

It refers to the broadcasting of terrestrial television in a digital format. The digital signals can be received using a standard aerial for TV.

4. **DTH - Direct To Home (satellite transmission)**

It refers to the broadcasting of the digital television signal via satellite. DTH will be used in areas where the terrestrial television signal is very poor or non-existent.



5. **DVB - Digital Video Broadcasting**

Consortium of more than 300 organisations and manufacturers committed to making global standards for delivery of digital television and data services.

5. **EPG - Electronic Program Guide**

A guide showing programmes that can be displayed on a TV set using an STB. It displays the now and next programmes or TV schedule for a day or more at a time.

6. **FTA - Free To Air**

Television and / or radio services provided by broadcasters that does not require the viewer to pay a subscription fee to view the TV or radio services.

7. **HDTV - High Definition Television**

HDTV in widescreen format (16:9) provides the highest resolution and picture quality of all digital broadcast formats. Combined with digitally enhanced sound technology,

HDTV sets new standards for sound and picture quality in television.

South Africa has to adopt MPEG4 as the compression standard for TV broadcasting in South Africa.

8. **RF - Radio Frequency**

A signal that is used to carry all the information through the air towards the receiver or the STB. The signal is normally in electromagnetic waves which can create a conductive path through the air.

9. **SDTV - Standard Definition Television**

Is the basic level of quality display, and resolution for both analogue and digital. Transmission of SDTV may be either the traditional (4:3) or widescreen (16:9) format. SDTV typically does produce better quality images than that of traditional analogue TV. However, its images are not nearly as sharp as the images from high definition digital television.

10. **STB - Set top box**

A device that converts digital signals received either via a terrestrial means or via satellite to normal analogue video and audio for presentation on a normal television set.



Broadcasting Digital Migration Frequently Asked Questions



USAASA

Universal Service and Access Agency of South Africa

