

# 7. DIGITAL TERRESTRIAL TRANSITION AND USE OF DIGITAL DISTRIBUTION METHODS

INTRODUCTION

**KEY POLICY ISSUES** 

INTERNATIONAL STANDARDS

RECOMMENDATIONS

**POLICY CHECKLIST** 

#### AT A GLANCE

- The digital terrestrial transition has significant implications for community broadcasting. The principle of equitable access by community broadcasters to broadcasting frequency spectrum, which is underpinned by the need to promote media diversity, applies equally in the analogue and digital environments.
- States need to adapt their policy tools to protect space for community broadcasters in the new environment, taking into account the vast differences in the way they have gone about the digital transition. What is important is that all States put in place appropriate arrangements to ensure that community broadcasters have access to and can afford digital distribution opportunities.
- In the radio sector, where the transition is far less advanced, consideration should be given to allowing community radios to continue to distribute using analogue transmitters for at least the short- to medium-term.
- Digital broadcast transition is not just about how broadcasting signals are distributed; it also requires audiences to have digital receiving devices i.e. television and radio sets.
- Consideration should also be given to providing technical and financial support, as needed, to community broadcasters to help them distribute their content online.

#### INTRODUCTION

The world is moving toward switching off analogue terrestrial transmission of broadcasting signals and replacing that with digital terrestrial transmission. In the television sector, **many countries have already fully switched off analogue transmission** and the International Telecommunication Union (ITU) has set 2020 as the deadline for all countries to switch over. **Movement is significantly slower in the radio sector**, but important changes are taking place there as well.

There are important benefits of the digital transition, in terms of **more efficient use of the frequency spectrum** but also in terms of the **quality of broadcasting**, including picture and sound quality but also secondary services. But it is bringing about profound changes in the broadcasting environment and also has costs, for example in terms of new equipment and accessing new broadcast distribution systems.

It is essential that community broadcasting not get left behind in the digital terrestrial transition. The principle of **equitable access to frequency spectrum**, outlined in *Policy Brief Four: Reserving Spectrum for Community Broadcasting*, applies with equal force in the digital environment, although there are some specific implications of this. The way digital transmission takes place, and the associated costs of this, in particular, pose a challenge to community broadcasters. There is, furthermore, the **wider challenge of digital convergence** which implies that broadcasters must be present not only on the airwaves but also on other digital platforms, such as online and via mobile phones.



United Nations Educational, Scientific and Cultural Organization

# **KEY POLICY ISSUES**

As noted above, a key issue here is ensuring that community broadcasters have access to the same 'equitable' portion of the frequency spectrum that they had in the analogue world. However, transmission works in fundamentally different ways in the digital environment, at least with most modern technologies, and this requires **more carefully tailored regulatory approaches**. One of the challenges with the switchover, in particular, is the additional

© UNESCO/A. Cairola

costs it imposes on broadcasters, and so a second issue is **how to adapt financial and funding rules and approaches** so as to ensure that community broadcasters are still able to operate in the new environment.

The digital transition is far less advanced in the radio sector than it is for television. As a result, where the community radio sector is already fairly developed in the analogue space, there are advantages to allowing these radios to continue to use that technology, while also allowing new entrants to decide whether they wish to go digital or analogue. A number of issues also face broadcasters who wish to distribute over the Internet, and appropriate regulatory arrangements for this are also required.

# 1. Reserving spectrum

A key issue here is that while analogue transmission consists of giving one frequency (or set of frequencies) to one broadcaster, who then uses one transmitter (or set of transmitters) to distribute its signals, **digital transmission bundles a set of stations** which are then distributed

over one frequency by one transmitter. In many cases, distribution is done by an entirely separate business operation from content production (stations).

As a general principle, it is clear that the driver for reserving an equitable portion of the spectrum for community broadcasters in an analogue environment – namely promoting media diversity – **applies equally in a digital environment**. But very different policy tools are required to achieve this given that spectrum is distributed and used in a very different way. This is complicated – for example involving questions of standard and high definition allocations, differences between radio and television, and whether the primary systems for distribution of signals are terrestrial, cable or satellite – and the precise approach will depend on how digital frequencies and distribution rights have been allocated in a particular country. Possible options here include:

- Requiring the public broadcaster to carry a certain number of community stations within its digital transmission system.
- Requiring commercial digital distributors, either collectively or on an individual basis, and taking into account whether they are terrestrial, cable or satellite operators, to carry a certain number of community stations.

#### 2. Mitigating costs

Beyond ensuring that 'space' on digital platforms – whether terrestrial, cable or satellite – is available to community broadcasters, there is the question of **ensuring that pricing systems are realistic in the sense of being affordable** for these broadcasters. It is very expensive to set up and run a digital terrestrial television distribution network and community televisions are most unlikely to be able to afford the costs of accessing such a network. There may also be **costs associated with obtaining digital production equipment** (i.e. to ensure that content may be provided in appropriate digital formats in the first place), although there can also be savings here.



Beyond the issues addressed in *Policy Brief Five: Providing Public Funding for Community Broadcasting*, consideration should be given to establishing special financial arrangements for digital community broadcasters. Once again, which specific measures are appropriate depends on all of the circumstances. Some options here include:

- Mitigating the costs of distribution for community broadcasters, for example by requiring distributors – whether public or commercial – to provide them with lower cost or free distribution.
- Providing dedicated funding for the purchase of digital equipment.
- Reallocating some of the financial surpluses generated by the digital dividend –
  for example the often enormous public windfalls generated by selling off 'liberated'
  frequencies to telecommunications providers to support the digital distribution of
  community broadcasters.

### 3. Preserving analogue radio

While the digital transition is well advanced in the television sector – with many countries no longer having any analogue distribution of television and the ITU having set 2020 as a target date for the analogue television switch-off in all countries – **the same is not the case for radio**. This is due to a combination of factors, including the relatively less significant quality benefits of digital radio, the relatively more modest frequency advantages of digital transition of radio, the far lower profits generated by this sector as a whole and the fact that the FM bandwidth does not lend itself to digital usage due to its technical quality.



As a result, countries should consider delaying the digital switch-off of analogue terrestrial radio broadcasting, which remains the primary distribution system for community radio in most countries. This should be without prejudice to community radios that wish to operate digitally, which should be allowed to do so as long as they have the requisite financial and technical capacity.

# 4. The wider challenges of convergence

The previous sub-headings focus on 'traditional' forms of broadcast distribution, namely terrestrially and by cable and satellite. Issues also arise in relation to **getting community broadcasters distributed online** and, even for community radios, this brings opportunities and challenges. The former include reaching a potentially wider audience and offering pull services (such as podcasts). In terms of the latter, however, there are the **technical challenges** of getting online. There are also the **additional costs** this engenders, including es-

calating costs for online streaming as audience increases, due to increased charges from the company hosting the streaming service, ultimately due to increased use of bandwidth (which is not the case for terrestrial distribution). As with other forms of digital distribution, consideration should be given to providing support – both technical and potentially financial – to community broadcasters to enable them to undertake Internet distribution of their content.

Where community broadcast services are distributed by social networks such as Facebook, the content may need to conform to the technical and editorial standards of that platform. An online presence also creates **expectations of audience interaction**, with associated issues of moderation policies and human resource needs for the community broadcaster.

United Nations
Educational, Scientific and
Cultural Organization

#### INTERNATIONAL STANDARDS

A number of international statements refer explicitly to the need to preserve space for community broadcasters in the new digital environment. Principle 7 of AMARC's *Principles for a Democratic Legislation on Community Broadcasting* notes that the call for equitable allocation of frequencies "extends to allocations in digital broadcasting frequencies". Similarly, the 2009 Declaration of the Committee of Ministers of the Council of Europe on the role of community media in promoting social cohesion and intercultural dialogue,

ii. Draws attention to the desirability of allocating to community media, to the extent possible, a sufficient number of frequencies, both in analogue and digital environments, and ensuring that community broadcasting media are not disadvantaged after the transition to the digital environment;

The African Charter on Broadcasting 2001 refers to a more limited idea: "The right of community broadcasters to have access to the Internet, for the benefit of their respective communities, should be promoted."

In 2013, the special international mandates on freedom of expression adopted a *Joint Declaration* specifically on the digital terrestrial transition, which sets out a number of standards for protecting community broadcasters through this process:

States should also ensure that community and local broadcasting services are able to continue through and after the digital terrestrial transition. Consideration should be given to various measures to this end, as necessary, including the following:

- i. Allowing certain types of broadcasters in particular low power local and community services to continue to distribute via analogue terrestrial signals, insofar as this is consistent with international standards.
- *ii.* Allowing certain types of broadcasting services to be provided without a licence in certain designated spectrum bands.
- iii. Regulatory measures to reduce and/or spread the costs of digital terrestrial dissemination, for example by prescribing shared or otherwise more efficient distribution networks.
- iv. The provision of subsidies or other forms of support to assist community and local broadcasters to obtain the necessary equipment to be able to distribute their terrestrial signals digitally, provided that subsidies should be allocated by an independent body, based on objective criteria.
- v. Measures to use the resources generated by the digital dividend to defray infrastructure costs.

AMARC's *Principles for a Democratic Legislation on Community Broadcasting* also include a wider statement about dealing with the digital transition:

**Principle 14: Digital inclusion**: The commitment of States to overcome the digital divide and to involve all sectors in the Information and Knowledge Society, implies the creation of mechanisms to ensure the access and migration of community and other non-commercial media to the new technologies and that enable them to confront the challenges that are envisaged in the processes of media convergence and digitalization.

#### **RECOMMENDATIONS**

- 1. As a general principle, an equitable portion of the broadcasting frequency spectrum should be reserved for community broadcasters for digital terrestrial distribution of their services in the same way and for the same reasons as apply in an analogue environment.
- 2. Careful thought should be given taking into account the very different way that spectrum is used in a digital environment and the enormous differences between different countries in terms of the wider policy rules that have been adopted or will be adopted to how to deliver the above goal in practice.

- 3. Consideration should be given to what measures are appropriate to **ensure that community broadcasters are able to afford the costs** of accessing digital transmission systems, noting that ultimately this is likely to require some sort of **crosssubsidy from other broadcasters or distributors**.
- **4.** For at least the short- to medium-term, consideration should be given to allowing community radios to continue to distribute their signals via analogue terrestrial transmitters.
- **5.** Consideration should be given to **providing support whether of a technical or financial nature or both** to help community broadcasters distribute their content online.
- **6.** Regulation of reach by community broadcasters should not artificially restrict the availability of a station, particularly on satellite or the Internet.

# **POLICY CHECKLIST**



Fair portion of digital broadcasting frequency spectrum reserved for community media

as a cross-subsidy from other broadcasters

Mechanism in place to support community media with digital transition costs, such

Analogue transmission preserved for community radio, at least as a temporary measure

Technical and financial support provided for online content distribution