

Application of Legal Texts in the Migration from Analog to Digital Television in the Republic of Guinea

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Abstract: The application of legal texts in the context of digital television is a process that relies on several normative instruments, ranging from international treaties, such as those of the ITU (International Telecommunications Union), to national regulations defining the obligations of audiovisual operators and the modalities of consumer support. Many countries have introduced specific laws and regulations to organize the gradual switch-off of analog broadcasting and encourage the adoption of new digital standards. Consequently, the digitization of Guinea's broadcasting network cannot be carried out without taking into account the legal framework: allocation of resources and broadcasting players. Analog and digital broadcasting, according to regulatory texts, shows the relationships between the different communication management structures. As for digital broadcasting, we note the appearance of a new service, multiplex.

Key words: Application, texts, legal, migration, television, analog, digital, Republic Guinea.

1. Introduction

The transition from analog to digital television represents a major turning point in the history of audiovisual communications. This process, which is part of a worldwide dynamic, aims to improve transmission quality, optimize the use of the radio spectrum and diversify the television offering. However, this technological change is accompanied by a number of challenges, not least legal ones. States have had to adopt specific regulatory frameworks to oversee this transition, guarantee compliance with technical standards and ensure a fair transition for all concerned, including viewers [1].

This study aims to analyze the impact of legal texts on the migration from analog to digital television by examining the main legislation in place, its implications for the various players and the challenges encountered in its effective application [2].

The Republic of Guinea has embarked on a process of migration from analog to DTT (digital terrestrial television), in line with the recommendations of the

ITU (International Telecommunications Union). This transition aims to improve broadcast quality, optimize use of the radio spectrum and diversify the television offering [3].

On the legal front, Guinea has benefited from the assistance of the OIF (Organisation Internationale de la Francophonie) to develop a legal framework adapted to this transition. In 2014, an OIF expert was dispatched to Guinea to help develop this framework, stressing the importance of preparing citizens for this transition and avoiding exposure to electronic waste [4, 5].

The application of legal texts in this context relies on the adoption of specific laws and regulations to organize the gradual extinction of analog broadcasting and encourage the adoption of new digital standards. These measures are designed to guarantee a fair transition for all concerned, including viewers, and to ensure compliance with established technical standards [6].

Consequently, to study the conditions for optimizing the migration from analog to digital television in the Republic of Guinea, two legal aspects among many

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others will be addressed: resource allocation and broadcasting players.

2. Methodologies

The application of legal texts in the transition from analog to digital television relies on specific methodological approaches. These methods ensure effective implementation of the legislative and regulatory framework, while taking into account the country's technical, economic and social realities.

2.1 Stakeholder Involvement in the Legal Framework for Broadcasting

For analog broadcasting, and in accordance with regulatory texts, the synoptic diagram shows the relationships between the various communication management structures (Fig. 1).

In this scheme, program producers buy the specifications for radio and television broadcasting (commercial or community) from the MIC (Ministry of Information and Communication); draw up the plans for the creation of the radio and television station (technical and financial study with appendices); send the MIC requests for authorization to set up the radio and television station, accompanied by the plans and receipts for the purchase of the specifications.

The double arrow between the MIC and the program editors indicates that the latter's requests can be

accepted or rejected according to the recommendations in the specifications.

As for the double arrow between the HAC (High Authority for Communication) and the MIC (Ministry of Information and Communication), the latter requests the opinion of the HAC, which gives or withholds its approval on the report of the Ministry's commission, which examined the application for authorization to set up a radio and television station, provided by the program publishers.

If the opinion of the HAC is favorable, the MIC draws up the "Site authorisation approval", which it sends to the ARPT (Regulatory Authority of Post and Telecommunications) for assignment of frequencies to the program editors. Program editors then choose their broadcasters (DNSD for RTG (National Broadcast Service Management for Guinean Radio and Television), for example).

2.2 Technical Multiplex Operators

When it comes to digital broadcasting (Fig. 2), a new service has appeared: "technical multiplex operators", responsible for signal assembly and dynamic management of the multiplex's technical capacity.

In the same way as for program editors, the MIC has the power to authorize them after a call for applications, or to approve proposals from editors present on the same multiplex.

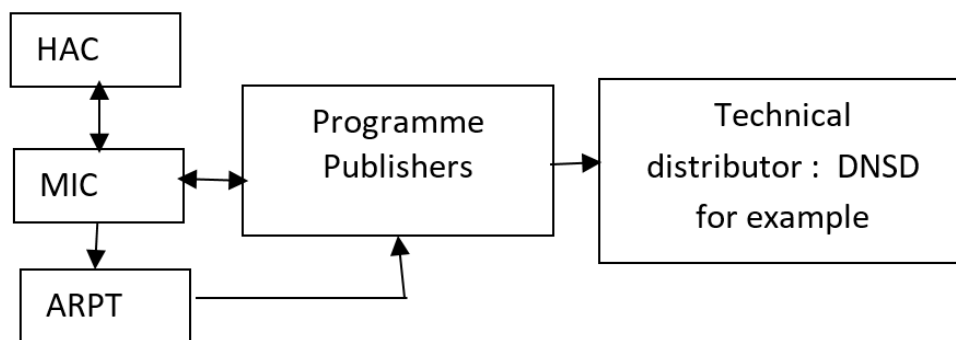


Fig. 1 Relationships between the various analog communication management structures.

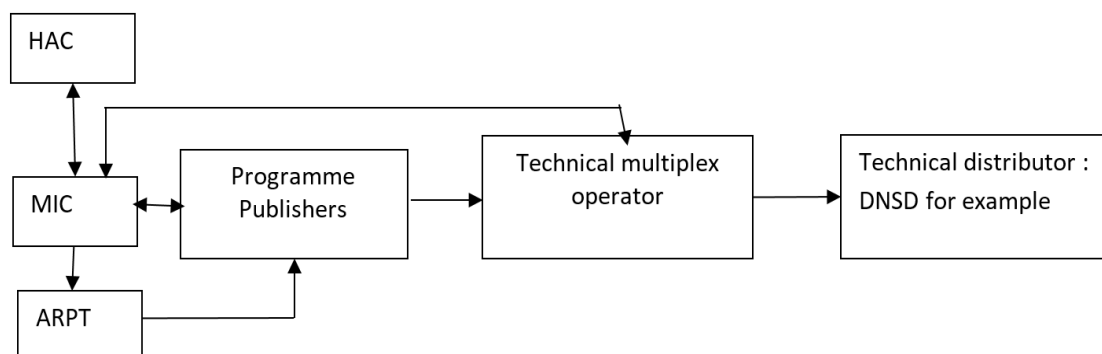


Fig. 2 Relationships between the various digital communication management structures.

The HAC retains its role as regulator of broadcast content and media, through the assignment of terrestrial resources.

These methodologies ensure a smooth transition in line with international standards, while protecting the rights of citizens and audiovisual operators.

3. Results and Discussion

Resources are allocated by multiplex or by service. Most current channels, technical operators and manufacturers recommend multiplex-by-multiplex allocation. A digital multiplex corresponds to an 8 MHz channel; on each site, six (6) multiplexes are planned, corresponding to six (6) digital channels usable in the UHF (Ultra High Frequency) band.

Each multiplex can broadcast up to six programs (broadcast channel) in SD or 3 programs in HD, representing a maximum of 36 programs in SD or 18 programs in HD. Allocation of the resource by multiplex makes it possible to designate operators with overall responsibility, capable of assuming the heavy, long-term investments.

On the other hand, a service-by-service licensing system must comply with the principles of diversity and pluralism. A service-by-service authorization system, following a call for tenders, avoids market foreclosure.

The following digital broadcasters are directly involved in terrestrial broadcasting:

- The historical publishers (RTG1 and RTG2);
- The other private publishers (Gangan TV; Evasion;

Diversity TV; Espace TV, etc.);

- The technical broadcasters (DNSD (National Broadcast Service Management), ...);
- The service distributors (Soditev; Startimes; Canal+; ...).

The originality of our work “Application of Legal Texts in the Migration from Analog to Digital Television in the Republic of Guinea” lies in the legal assessment of the migration of analog television channels to DTT in the Republic of Guinea, through the establishment of a single broadcasting company. The latter facilitates public-private partnerships, and optimizes the investment required for the transition to digital television.

The company must be independent of the content channels (program publisher) in order to be neutral in its treatment of customers.

4. Recommendations

The application of legal texts within the framework of the migration from analog to digital television in the Republic of Guinea requires a set of recommendations adapted to the country’s technical, regulatory and socio-economic challenges.

4.1 Strengthening the Legal and Regulatory Framework

4.1.1. Adoption of Specific Laws

- Draw up a law on digital transition in the audiovisual sector, specifying the obligations of public and private players;

- Integrate international and regional standards (ITU, ECOWAS).

4.1.2. Strengthening the Powers of the Regulatory Authorities

- Grant greater powers to the ARPT and the HAC to oversee the transition.
- Implement sanctions against players who fail to respect the legal framework.

4.1.3 Setting Up a Digital Transition Support Fund

- Finance migration via public-private partnerships;
- Support local media in adopting new technologies.

4.2 Infrastructure and Technology Development

4.2.1 Deployment of DTT throughout the Country

- Ensure national coverage by installing DTT transmitters at all planned sites in the country;
- Use the DVB-T2 standard with MPEG-4 compression, for better image quality and optimum frequency utilization.

4.2.2 Equitable Access to Equipment

- Subsidize DTT-compatible decoders and TV sets for low-income households;
- Encourage local production of digital equipment.

4.2.3 Training Audiovisual Professionals and Technicians

- Organize training for engineers and technicians to ensure proper maintenance of digital infrastructures;
- Update the curricula of journalism and communications schools.

5. Public Awareness and Support

5.1 Launch a National Information Campaign

- Explain the advantages of digital television (better picture and sound quality, channel diversity);
- Provide information on the analogue switch-off deadline.

5.2 Setting Up a Public Assistance Center

- Offer technical support to help households install their digital equipment;
- Create a website and hotline to respond to citizens' concerns [1, 7].

6. Conclusion

The application of legal texts in the migration from analog to digital television in the Republic of Guinea is an essential process for guaranteeing an effective transition in line with international standards. This change aims not only to modernize the Guinean audiovisual landscape, but also to ensure better management of the radio spectrum, diversify the television offering and improve the quality of services provided to citizens.

To make this transition a success, it is imperative to adopt a methodical approach based on a clear and appropriate legal framework, the strengthening of regulatory institutions, the development of digital infrastructures and increased public awareness. The commitment of public authorities, the media and technical and financial partners is a key factor in ensuring a migration that is inclusive and beneficial to all.

By drawing inspiration from international best practice and ensuring progressive, inclusive implementation, Guinea will be able to successfully make the transition digital, while guaranteeing equitable access to the new technologies. This modernization represents a major opportunity for the country to fully enter the digital era and strengthen its audiovisual sector.

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