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## On the Importance of Secure Broadcasting for Radio and Television: Postprint

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### Abstract

In the development of modern society, the primary channels of information dissemination include the internet, newspapers, television, and other media. Among these media, television serves as an important vehicle for information transmission and plays a significant role in information dissemination. In recent years, with the continuous advancement of technology, broadcasting and television have undergone corresponding technological upgrades; however, broadcast safety during television playback warrants our focused attention. Only by ensuring that broadcasting and television maintain a secure and stable state during transmission can information be disseminated efficiently. This paper examines the significant implications of broadcasting and television for information dissemination during program transmission and explores in depth the methodologies for secure television broadcasting.

### Full Text

#### The Importance of Safe Broadcasting for Radio and Television

**Abstract:** In modern society, information dissemination occurs primarily through networks, newspapers, television, and other media. Among these, television serves as a crucial channel for information transmission, playing a significant role in communication. In recent years, technological advancements have driven corresponding improvements in radio and television broadcasting capabilities. However, broadcast security remains a critical concern requiring our focused attention. Only by ensuring that radio and television broadcasting operates in a safe and stable state can information be disseminated efficiently. This paper examines the significance of information transmission during television program broadcasting and explores in depth the methods for achieving secure radio and television transmission.

**Keywords:** Radio and Television; Safe Broadcasting; Importance

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## 1. The Significance of Safe Broadcasting

### 1.1 Ensuring Audio-Visual Quality

Television programs transmit information primarily through audio and visual channels. Only when both elements fully meet audience needs can viewers genuinely obtain required information. Currently, the main problems audiences encounter when watching broadcasts stem from these two transmission pathways. The quality of audio-visual transmission depends on two factors: the quality of broadcast carriers and the quality of signals transmitted from broadcast stations. Only by guaranteeing both factors can safe broadcasting be effectively achieved.

### 1.2 Guiding Correct Ideological Direction

Beyond transmitting current information and data, television programs enable audiences to understand global patterns and major events worldwide. As a society developing rapidly under Communist Party leadership, citizens often lack clarity about their responsibilities and required awareness. Many people develop incorrect perceptions of our Party due to rumors spread by malicious actors. Radio and television thus serve as a communication bridge between the Party and the people, allowing citizens to promptly understand Party directives for societal development and recognize the Party's selfless dedication to our society's progress. The state must also use broadcasting to explain national policies, enabling citizens to first discipline themselves under policy guidance and then contribute to social advancement. All of this depends on broadcasting within a secure environment.

### 1.3 Promoting Detection Technology Development

Given the enormous volume of modern information, improving transmission processes alone is insufficient; ensuring content authenticity and validity is paramount. China has already transitioned from traditional detection methods to automated detection technologies. Under these constraints, effectively enhancing broadcast transmission requires parallel improvements in detection technology for massive information flows. Only then can the government promptly convey policy information to the public through television programs.

## 2. Methods for Safe Broadcasting

### 2.1 Strengthening Infrastructure Construction

To truly protect radio and television broadcasting, the first step involves comprehensively upgrading infrastructure. Key facilities requiring priority development fall into three categories. First, to better serve the public, broadcasters must actively communicate with local governments, as strong government support is essential for broadcast development. The core message should emphasize that urban construction and social development require radio and television for effective advancement, fundamentally changing leadership's perception of television stations' importance. Second, during station upgrades and with government support, broadcasters should adopt more sophisticated and advanced technologies for comprehensive facility improvement, alleviating economic pressures through multi-faceted coordination. Third, existing infrastructure—particularly signal transmission equipment and lines—must be thoroughly improved using cutting-edge materials as transmission media. Television stations should establish backup power transmission channels to address emergency outages, ensuring maximum possible continuity of broadcasting despite external interference.

### 2.2 Scientific Application of Broadcasting Technology

After ensuring broadcast equipment reliability, the next consideration involves using scientific methods and television broadcasting technology to guarantee quality. When implementing broadcasting technology, the first task is constructing a robust system of advanced broadcast equipment. Only by thoroughly understanding each device's function and ensuring proper integration can stable broadcasting be achieved. Second, during equipment operation, objective factors may cause instability, significantly impacting broadcast effectiveness. To prevent accidents during program transmission, equipment stability must be enhanced through advance prediction of environmental impacts and improved risk resistance capabilities, ultimately satisfying viewing demands across countless households.

### 2.3 Enhancing Personnel Competency

The best approach for rapid and stable broadcast development is improving the competency of control personnel. Since machines are merely tools, equipment quality alone cannot determine broadcast outcomes. Personnel competency more significantly affects broadcast quality. Therefore, we must first ensure that broadcasting staff are selected and trained with the commitment to building better radio and television services. On this foundation, we must enhance their professional skills through appropriate training, ensuring mastery of the most advanced broadcasting technologies. After acquiring advanced skills, staff should promptly digest professional knowledge and quickly develop their own working methods, applying these methods to their duties to ensure all learning contributes to improved performance. In professional cultural training centers,

we must also emphasize ideological advancement, implementing the Party's progressive policies to cultivate broadcasting staff with both moral integrity and professional competence, establishing a positive social image.

### 3. Conclusion

Safe broadcasting for radio and television is a highly comprehensive issue that significantly contributes to overall broadcast capability enhancement. Therefore, future improvement efforts should prioritize security enhancement, considering multiple approaches to identify correct and effective pathways.

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*Note: Figure translations are in progress. See original paper for figures.*

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