Section 4 Trends in Broadcasting Policy

1. Summary

(1) Initiatives so far

Broadcasting is a basis of democracy. It has fulfilled the role of social capital to share disaster information, community information, and other basic social information.

Television broadcasting switched completely from analog to digital at the end of March 2012. Since then, broadcasting services have been upgraded with HD quality and data broadcasting. In order to promote 4K/8K broadcast services with higher definition and picture quality even compared with HD, MIC, in cooperation with broadcasters, home appliance manufacturers, and others, implemented necessary projects following a roadmap revised in July 2015, so that many people across the country could enjoy the 2021 Tokyo Olympic and Paralympic games through lively and powerful 4K/8K pictures.

The overseas expansion of content is expected to have a large ripple effect, such as an increase in the number of foreign visitors to Japan and an increase in exports of agricultural, forestry, fishery, and regional products, as Japan's appeal spreads overseas through content. MIC has promoted efforts to expand broadcast content overseas in cooperation with relevant ministries, agencies, and organizations.

Furthermore, with focus on radio broadcasting, the usefulness of which was recognized when earthquakes occurred, MIC has promoted initiatives that contribute to the resilience of broadcasting networks, which includes countermeasures against poor reception of radio broadcasting and protection of transmitting equipment from disasters so that broadcasting can continue to appropriately provide people with disaster information and other information. In order to equalize information access opportunities through broadcasting, MIC has promoted the spread of broadcasting for the visually challenged and those with hearing impairments by formulating "Guidelines for Information Accessibility in Broadcasting" and other measures.

Both a "receiver" and "sender" are important for broadcasting programs, so MIC has been working to improve literacy in broadcast media, especially for elementary, junior high, and high school students, and has been developing, disseminating, and lending educational materials.

(2) Future challenges and directions

With the spread of broadband, the growth of Internet video streaming services, and the diversification of viewing devices, the environment surrounding broadcasting has changed drastically, with how viewers view content changing and increasingly shifting away from television. As viewers increasingly obtain information not only from broadcasting but also from the Internet, advertising costs for terrestrial television broadcasts may continue to decline in the long term, requiring structural changes to be made. Meanwhile, issues such as fake news are also emerging in Internet spaces. It is important to ensure information health, and broadcasting plays an important role in disseminating reliable information, guaranteeing freedom of knowledge, sharing basic social information, and promoting a mutual understanding of diverse values. In fact, expectations for its role are increasing in this digital age.

In response to these changes, it is necessary to tackle issues including strengthening the foundation of broadcasting businesses, promoting the distribution of broadcast content, and strengthening the resilience of broadcasting networks and their disaster resistance, while at the same time considering how broadcasting and broadcasting systems should function from a medium-to-long term perspective.

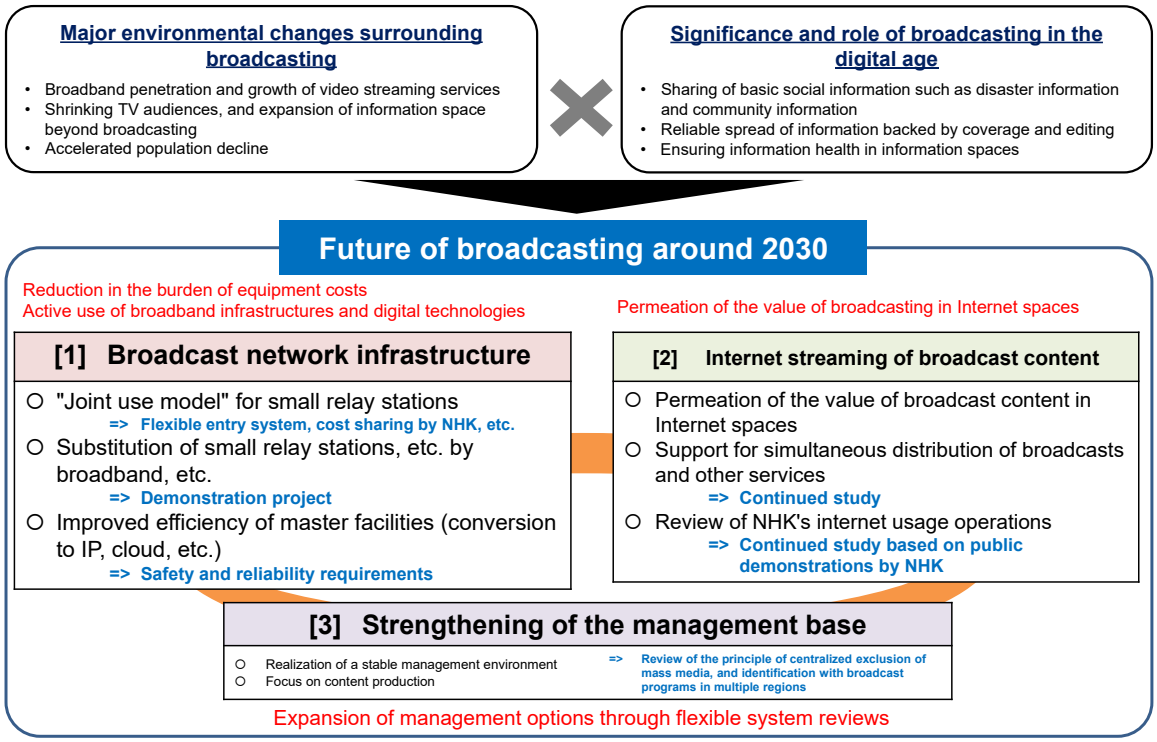
2. Consideration of how the broadcasting system should function in the digital age

In order to examine the future of broadcasting and how the broadcasting system should function as times change over the medium-to-long term in order to increase management options instead of being trapped in the existing framework, MIC held the "Study Group on the Ideal Broadcasting System in the Digital Age" ("Broadcast System Study Group") in November 2021, and published its "Summary of the Future of Broadcasting and the Ideal Broadcasting System in the Digital Age" in August 2022 [1](**Figure 5-4-2-1**). This report proposes three main issues: (1) the future of the broadcast network infrastructure, (2) how to distribute broadcast content on the Internet, and (3) strengthening the management foundation of broadcasters. Based on the recommendations of this report, the Act Partially Amending the Broadcast Act and Radio Act was enacted in May 2023 (Act No. 40 of 2023) to establish a system for domestic basic broadcasters in multiple broadcasting re-

[1] "Summary of the Future of Broadcasting and the Ideal Broadcasting System in the Digital Age" (August 5, 2022): https://www.soumu.go.jp/menu_news/s-news/01ryutsu07_02000236.html

gions to simultaneously broadcast the same program under certain conditions and to take measures such as enabling multiple specified terrestrial basic broadcasters to jointly use relay station equipment in a single broadcasting region. MIC will make preparations for its smooth implementation, and will continue to study ways to replace small-scale relay stations with broadband and other services and to promote broadcast content policies and distribution.

Figure 5-4-2-1 Overview of report by the "Study Group on the Ideal Broadcasting System in the Digital Age" (published on August 5, 2022)



3. Future vision of public broadcasting

Based on the report of the Broadcast System Study Group, the "Public Broadcasting Working Group" has met since September 2022 to discuss how NHK should distribute content on the Internet. Specific discussions are now underway on several topics, including (1) the role of public broadcasting in the Internet era, (2) how public broadcasting should utilize the Internet, (3) how to cooperate with private broadcasters on using the Internet, and (4) how to finance Internet utilization and the subscription fee system. Based on discussions at the working group, MIC will consider how to implement public broadcasting in response to the demands of the times.

4. Strengthening of the foundation of broadcasting businesses

(1) Initiatives regarding AM radio broadcasting

Much of the AM transmission equipment used by private AM radio broadcasters is more than 50 years old, and deterioration has become a serious issue. Meanwhile, private AM radio broadcasters have been burdened with costs related to both AM and FM equipment due to the launch of FM complementary broadcasting, which was introduced for the purpose of eliminating poor reception of AM radio broadcasting. Due to decreasing business revenue, paying to update this AM radio broadcast equipment has become an issue for management.

In light of these severe business conditions, when private AM radio broadcasters consider changing from AM to FM broadcasting (FM conversion) or abolishing AM broadcasting relay stations without going through FM conversion, MIC will establish a special measure to allow AM stations to be suspended for a period of six months or longer during the simultaneous relicensing of broadcasters in November 2023. In March 2023, MIC published its "Basic Policy on Special Measures Pertaining to Suspension of Operation of AM Stations," which describes information such as the details, requirements, and procedures related to these special measures, and now plans to examine the impact of the suspension of AM stations on residents and local governments based on the application of special measures.

(2) Strengthening of efforts to spread new 4K8K satellite broadcasting

The "Report by the Working Group on the Future Image of Satellite Broadcasting" (**Figure 5-4-4-1**) released in October 2021 covers several issues to tackle in the future, including (1) improving the reception environment to spread new 4K8K satellite broadcasting and enhance 4K content, (2) utilizing vacant spectrums of BS dextrorotation and unused spectrums of BS levorotation, and (3) reducing the infrastructure usage fee and flexible platform operation in response to changes in the business environment.

Based on this recommendation, MIC published its "Basic Concept of Allocating Vacant Bandwidth of BS Dextrorotation to 4K Broadcasting Based on the Report of the Working Group on the Future Image of Satellite Broadcasting" in August 2022. It summarizes concepts such as the following:

- If a certain amount of vacant bandwidth can be ensured for BS dextrorotation, it would be appropriate to allocate the bandwidth to 4K broadcasting in order to popularize 4K broadcasting
- It is appropriate to position 4K and other ultra-high definition television broadcasting as transmission lines, similar to dextrorotation and levorotation
- Bearing in mind the possibility of operators voluntarily advancing the sophistication of the video coding system for 2K broadcasting, an environment that allows 2K and 4K broadcasting to coexist in the same transponder could be developed following necessary verification

Based on this basic concept, MIC revised its basic broadcasting dissemination plan in November 2022, and then in March of the same year launched an open call for satellite broadcasters to broadcast in 4K through BS dextrorotation (by the end of May), with the aim of being certified by around the summer of 2023. In cooperation with groups such as broadcasters, manufacturers, and relevant organizations, MIC will continue to work toward further enhancing and expanding 4K broadcasting.

Figure 5-4-4-1 Summary of the report by the Working Group on the Future Image of Satellite Broadcasting

Current state and challenges

- ○ After the start of the "new 4K8K satellite broadcasting" in December 2018, the number of receivers that can receive the broadcasting reached 10.3million in total. (*) However, there is a need for further promotion of improvement in reception environments, enhancement of 4K content and public relations targeting viewers. *As of the end of August 2021.
- ○ Some vacant spectrums are expected in BS dextrorotation in the future. In addition, there are still significant unused spectrums in BS and CS levorotation
- ○ Due to the spread of online video streaming and the impact of the COVID-19 pandemic, the business environment of broadcasters is increasingly severe. In this contest, there is a new task to reduce their burden of usage fee of infrastructure including satellite relay units.

Tasks to be tackled in the future

1. Popularization of the new 4K8Ksatellite broadcasting

(1) Improvement of the reception environment
Promote the following initiatives in industry-government collaboration
[1] Strengthen public relations regarding reception methods
- ○ Publicity considering the difference in reception environment between dextrorotation and levorotation
- ○ Publicity for utilization of services using cable television and optical communication link

[2] Support for facility modification
- ○ Project to improve the environment for reception of satellite broadcasting
- ○ Project to promote conversion of cable television networks to fiber optics

[3] Development of simple modification methods using new technologies
- ○ Use of plastic optical fiber (POF) and local 5G

(2) Enhancement of 4K contents
[1] It is essential to enhance both quality and quantity of pure 4K content
[2] Promote public relations with strong customer appeal

2. Promotion of effective use of frequencies

(1) Utilization of vacant spectrums of BS dextrorotation
[1] When certain vacant spectrums are secured in the future, the spectrum will be allocated to 4Kbroadcasting to spread the broadcasting
[2] Establish necessary systems for allocation
- ○ Revision of the basic broadcasting dissemination plans
- ○ Putting together an approach to cost allocation

(2) Utilization of unused levorotation spectrums
[1] Improve the reception environment steadily.
[2] Consider possibilities of use for new services other than 4K8K broadcasting
- ○ Verification of technical feasibility of using the HEVC method for 2K broadcasting

3. Response to changes in the business environment

(1) Reduction in burden of infrastructure usage fee
[1] Infrastructure operators (B-SAT and SKY Perfect JSAT) make efforts to lower the usage fee by reviewing their cost structure.
- ○ Streamlining of systems, minute examination of the operation costs
- ○ Joint operation /use of earth station equipment, etc.
- ○ Consideration of hybrid satellite procurement

[2] Setting up a place for opinion exchange of infrastructure operators, broadcasters, etc.

(2) Flexible platform operation
- ○ It is necessary for pay broadcast management business (SKY Perfect JSAT) to promptly and flexibly respond to changes in the market environment, which includes revision of th ePlatform Guideline.

5. Promotion of the production and distribution of broadcast content

(1) Promotion of the production and distribution of broadcast content

a Initiatives to effectively distribute broadcast content and other programs on the Internet

The report of the Broadcast System Study Group mentioned that it is important to reduce the equipment burden on local stations and other broadcasters and to create an environment in which they can focus on content production.

In order to create such an environment, it is necessary to continue to promote the distribution of broadcast content on television and the Internet so that it can be viewed more widely, in addition to promoting the production of content by broadcasters. In particular, local broadcasters are expected to play a major role in the dissemination of community information.

As the environment surrounding broadcasting changes, such as the expansion of Internet video streaming services and the diversification of how content is viewed, Japan's broadcast content must be widely distributed in Japan and overseas by promoting the use of various platforms on the Internet including broadcasting, in order for broadcasting to continue to play its role as a social infrastructure.

With this in mind, the "Working Group on Promoting the Production and Distribution of Broadcast Content" has been meeting since December 2022 under the Broadcast System Study Group. The working group has been studying measures to promote the production and distribution of broadcast content in the Internet era with the cooperation of related business operators and others.

b Utilization of viewing data in the broadcasting field and how privacy should be protected

By collecting and analyzing the viewing history and other information about broadcast programs from television receivers connected to the Internet, for example, programs can be produced that closely match the detailed viewing needs of viewers in each region and disaster information can be provided. However, there is a problem in that it is technically possible to derive sensitive personal information including political beliefs and medical history of individual viewers.

Considering the public nature of broadcasting, MIC has established rules specific to the broadcasting field, which should be observed by every person handling personal information of broadcast recipients and others in the "Guidelines on Personal Information Protection of Broadcast Recipients etc." in addition to the minimum rules under the Act on the Protection of Personal Information. The "Study Group on the Utilization of Viewing Data in the Broadcasting Field and the Ideal State of Privacy Protection" has also been meeting since April 2021. The study group revised these guidelines in 2022 and 2023 based on the revised Act on the Protection of Personal Information, and has been discussing appropriate rules for handling the distribution history of broadcast content on the Internet, in addition to appropriate rules on handling viewing data collected in the process of broadcasting, in order to develop rules that balance data utilization and privacy protection.

c Facilitating the processing of rights pertaining to simultaneous distribution of live broadcast programs

In response to changes in the viewer environment due to the spread of smart devices, broadcasters are advancing online simultaneous distribution of broadcast programs on the Internet (refers to simultaneous distribution, repeat broadcasts and time-limited repeat broadcasts; the same applies hereinafter) and similar initiatives. These initiatives expand opportunities to view high quality content and are important for improving viewers' convenience, promoting the content industry, and securing international competitiveness. On the other hand, a large amount of various copyrighted works are used in broadcast programs, and there are problems in processing rights, such as the possibility of "masking" due to the inability to process copyrights during simultaneous distribution. In promoting simultaneous distribution, it was necessary to create an environment where copyrighted works could be used more quickly and easily.

In order to facilitate the handling of rights related to simultaneous distribution, MIC worked together with ACA (responsible for the Copyright Act [Act No. 48 of 1970]) to hear the opinions of concerned parties and studied the direction of the system amendment. As a result, the Act Partially Amending the Copyright Act (Act No. 52 of 2021) was enacted at the 2021 ordinary session of the diet and measures were taken toward this end. Following the revision, simultaneous distribution of all five commercial broadcasters was realized in April 2022. With simultaneous distribution now in full swing, the government is closely monitoring trends with regard to how rights are handled, and is considering further facilitation.

d Promotion of regulation on production and trade of broadcast content

In order to improve the production environment and enhance motivation of producers in the broadcast content field, MIC held the "Study Group on Verification and Review on Promotion of Production and Trade of Broadcast Content" consisting of experts and other members. Based on the discussions of the group, MIC formulated the "Guidelines for Regulation on Production and Trade of Broadcast Content Developed" (seventh edition) and is urging broadcasters and program production companies to regulate production and trade of broadcast content.

Specific measures include conducting regular follow-

up surveys regarding the guidelines to assess the state of production and trade of broadcast content, assessing the actual situation of compliance with the guidelines through interviewing of broadcasters and program production companies, providing guidance on problems based on Article 4 of the Act on the Promotion of Subcontracting Small and Medium-sized Enterprises (Act No. 145 of 1970), holding courses for dissemination of the guidelines, and setting up a legal consultation hotline for produced broadcast content to provide free consultation by lawyers on specific individual issues.

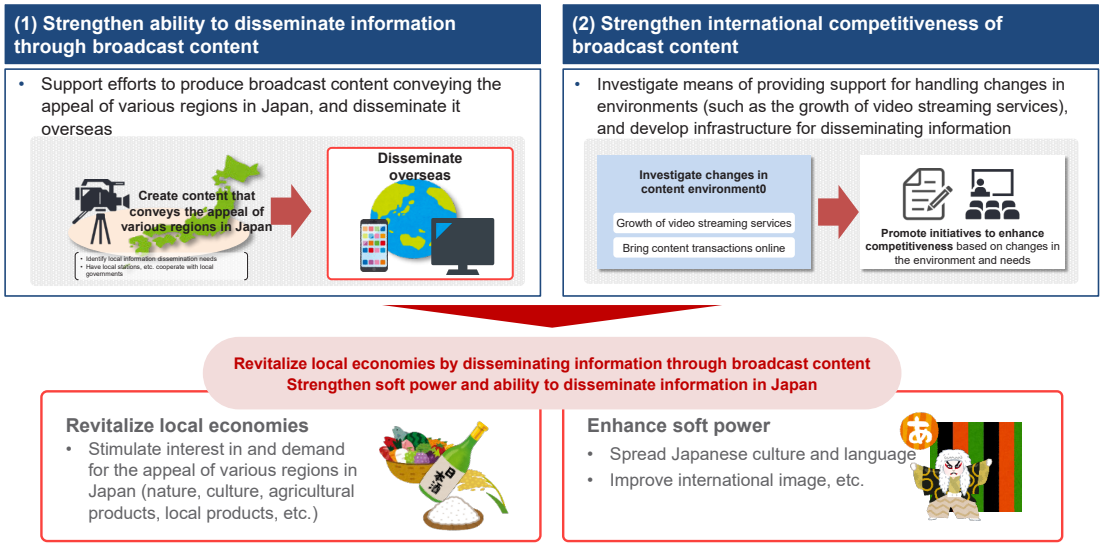
(2) Overseas expansion of broadcast content

Cross-border distribution of content is advancing due to the expansion of video streaming services. There is also more overseas content being distributed in Japan. In order for Japan's content industry to develop, it is necessary to capture the growth of expanding markets by producing high-quality content from a global perspective and actively expanding overseas.

The overseas development of content is also extremely important from a diplomatic perspective, as it will convey the appeal of Japan to foreign countries and heighten interest in Japan's nature and culture. This is expected to have economic effects such as increasing the number of foreign visitors to Japan and expanding sales channels for agricultural, forestry, fishery, and regional products. It will also contribute to improving impression of Japan and strengthen its soft power.

In cooperation with the "Broadcast Program Export Association of Japan" (BEAJ), which promotes the overseas expansion of broadcast content, and relevant ministries, agencies, and organizations, MIC continues to support efforts by Japanese broadcasters in cooperation with local governments to produce broadcast content that demonstrates the appeal of Japan's regions and disseminate it through overseas broadcasters. The public and private sectors also cooperated at international content trade fairs such as MIPCOM (Cannes, France) and TIFFCOM (Tokyo) in October 2022 and at ATF (Singapore) in December of the same year, in order to conduct PR activities and hold seminars to promote Japanese content overseas. In fiscal 2023, MIC began to develop an online platform to disseminate information on Japanese broadcast content overseas in cooperation with broadcasters and production companies that are actively engaged in overseas expansion. Including these initiatives, MIC will continue to promote the overseas expansion of content toward the goal of reaching a 1.5-fold increase in overseas sales (compared with fiscal 2020) by fiscal 2025 (**Figure 5-4-5-1**).

Figure 5-4-5-1 Promotion of the overseas expansion of broadcast content



6. Promotion of broadcasts for the visually challenged and those with hearing impairments

In February 2018, MIC formulated the "Guidelines on Information Accessibility in the Broadcasting Sector," which set targets for the spread of closed-caption broadcasting, explanation broadcasting, and sign language broadcasting, in order to enable visual and hearing impairments and others to obtain information smoothly through TV broadcasting, and has encouraged broadcasters to make voluntary efforts. The "Study Group on the Enhancement of Broadcasting for Those with Visual and Hearing Impairments" has also been meeting since November 2022. Consisting of experts, organizations for persons with disabilities, and broadcasters, the study group has been reviewing these guidelines and discussing measures to enhance broadcasting for the visually challenged and those with hearing impairments, based on recent results with subtitled broadcasts, technological trends, and other factors.

MIC also subsidizes production costs for subtitled broadcasts, explanatory broadcasts, and sign language broadcasts, based on the Act on Advancement of Facilitation Program for Disabled Persons' Use of Telecommunications and Broadcasting Services, with a View to Enhance Convenience of Disabled Persons (Act No. 54 of 1993). Due to the fact that subtitling live programs requires a large amount of manpower and costs, as well as human resources with special skills, MIC began to subsidize the maintenance costs of devices for subtitling live programs in fiscal 2020, including systems that utilize cutting-edge ICT.

7. Improvement to the resilience of broadcast networks and enhancement of disaster resistance

(1) Conversion of cable networks to fiber optic

Cable networks are the information and communications infrastructure of communities. In order to enhance disaster resistance through their conversion to fiber optic, MIC is implementing the "Project to enhance the disaster resistance through conversion of cable televisions to fiber optics toward establishment of 'New Normal'," which provides a partial subsidy for the costs necessary to convert cable networks to fiber optic in communities by using the second fiscal 2022 supplementary budget and the fiscal 2023 initial budget (**Figure 5-4-7-1**). Newly introduced from the second supplementary budget in fiscal 2022, the purpose of this program is to provide integrated support for cable TV operators to convert existing service areas to optical, while also converting non-optical communal reception facilities to cable TV areas.

Figure 5-4-7-1 "Project to enhance the disaster resistance through conversion of cable televisions to fiber optics toward establishment of 'New Normal'"

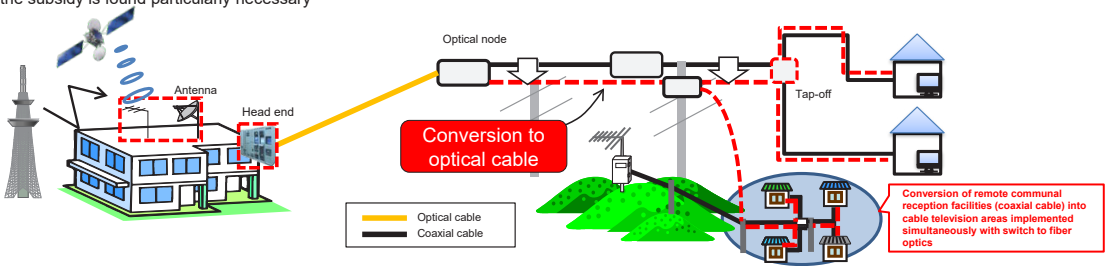
Project illustration

○ Project operator
Municipalities, municipality collaboration entities or a third sector (including entities that continue to fulfill the role pertaining to the provision of cable television services through transfer of the relevant facilities from these entities(Succeeding business operators))

○Target regions
Regions satisfying all of (1) to (3) below:
(1) Municipalities where cable television is positioned in their regional disaster prevention plan
(2) Regions with unfavorable conditions
(3) Municipalities with financial index 0.5 or lower and other regions where the subsidy is found particularly necessary

○Subsidy rate
(1) Municipalities or municipality collaboration entities (Succeeding business operators): 1/2
(2) Third sector (Succeeding business operators): 1/3

○Subsidized costs (shown in red in the figure below)
Optical fiber cable, transmitting/receiving facilities, antennas, etc.
*Includes transmission line equipment necessary for converting remote communal reception facilities (coaxial cable) into cable television areas implemented simultaneously with the switch to fiber optics (expanded from the R4 supplementary budget).



(2) Support for initiatives by broadcasters and others

In order to support initiatives by broadcasters, local governments, and others to improve the resilience of broadcast networks, MIC is now running "projects to support broadcast network development (the project to develop basic terrestrial broadcasting networks and the project to develop regional cable television networks)" (**Figure 5-4-7-2**), the "project to support resolution of poor reception of commercial radio broadcasting," and the "project to support improvement of disaster resistance of basic terrestrial broadcasting, etc." using the fiscal 2023 initial budget.

Figure 5-4-7-2 Projects to support broadcast network development

- In order to reliably provide disaster information, evacuation information, and other information essential for protecting the lives and property of citizens, the projects to support broadcast network development provide partial subsidies for the following maintenance costs, in order to bring resilience to the broadcast networks that serve as important means of transmitting information locally in the event of a disaster.
  [1] Emergency earthquake early warning equipment, such as spare transmitting station equipment and supplementary disaster response transmitting stations involved in new radio and television development
  [2] Redundant routes for cable television trunk lines

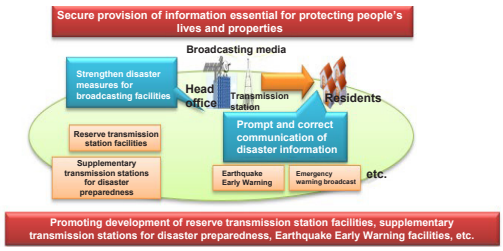
Subsidy rate

- Local governments (*) : 1/2
- Third sector(*), commercial broadcasters, (item [1] only): 1/3

*Item [2] also includes entities that continue to fulfill the role pertaining to the provision of cable television services through transfer of the relevant facilities from these entities (succeeding business operators).

Project name/image

[1] Project to develop basic terrestrial broadcasting networks



[2] Project to develop regional cable television networks