

Commissioned Research Report 2021

**Commissioned Report on Purchase
Case for Establishment of a
Mechanism for Checking the Number
of Subscribers of the Cable Radio and
Television in the Digital Age**

**Project Commissioning Agency:
National Communications Commission
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I. Motivation and Objectives of this Report

According to the “Cable Radio and Television Act,” system operators shall report their number of subscribers for the previous three months to the National Communications Commission (NCC) in January, April, July, and October of each year. Such data will be announced to various industries for reference after a compilation of statistics. In addition, the number of subscribers can be used as a reference for discussing the authorization terms between system operators and channel providers. Therefore, the accuracy of the number of subscribers is an important basis for the supervisory work of the central regulatory agency, the NCC, so as to perfect orderly transactions in the cable radio and television market as well as protect the rights and interests of consumers.

This report found that the current system related to the number of subscribers of the cable radio and television in Taiwan might have faced the following problems, including: 1) The reported number of subscribers might be slightly lower. 2) System operators have institutional incentives for underreporting the number of subscribers. 3) Technological progress and market growth make it impossible to effectively grasp the correct number of subscribers. 4) The market survey and statistical methods need to be updated. 5) Administrative inspection has not been properly implemented, and a mechanism has yet to be established. 6) Accounting systems and audit reports should keep pace with the times.

In light of the above, this report will not only conduct a complete

survey of the development status of the industrial market for cable TV in Taiwan and analyze the operational problems and pending issues of the current mechanism of statistics on the number of subscribers, but also focus on the checking, application, checking mechanism, and other items for the pay TV number of subscribers of major countries around the world to conduct observation and analysis, as well as to collect operational methods and procedures in practice, and other information. Opinions from industry, academia, and research communities will be incorporated to explore the governance model and legal system policy under the application and development of digital technology, and ensure overall consideration of the industrial development, remedies for infringement upon rights and interests, implementation efficiency and other aspects of Taiwan, so as to further put forward specific recommendations for legal system reforms and policies suitable for Taiwan's communications convergence for the reference of the regulatory agency in order to converge with the international supervision trend.

II. Operational Problems and Pending Issues of the Number of Cable TV Subscriber Statistics and Checking System in Taiwan

As far as the market operation in practice is concerned, when cable radio and TV system operators negotiate content terms of authorization with channel providers, their pricing is mostly based on the number of subscribers of the system as an important reference. Thus, the number of subscribers that system operators get a hold of will affect the licensing fee

that channel providers receive. Also, when the system operators and the channel provider cannot reach a consensus, it could even lead to the disconnection of communications as a result of such disputes, which has occurred once in recent years. Such occurrences will have a further negative impact on the orderly commercial market as well as on the rights and interests of consumers. The problems and pending issues arising from the current checking mechanism on the number of cable TV subscribers are summarized as follows:

(1) The current reporting system cannot effectively grasp the correct number of subscribers

Article 24 of the current “Cable Radio and Television Act” provides a mechanism of reporting the number of subscribers of cable radio and TV systems; Article 66 of the same Act also provides that the system operators of failure to report or reporting the false number of subscribers shall be fined an amount of NT\$100,000 or more, up to NT\$2 million; in addition, the NCC may conduct administrative inspections of system operators in accordance with Article 74 thereof, and impose a fine of NT\$100,000 or more up to NT\$2 million on operators that evade, obstruct, or refuse administrative inspections in accordance with Article 68 thereof.

However, due to the fact that there have been few practical cases from applying the relevant mechanism for a long time, and the inspection methods are relatively simple but unsophisticated. The number of subscribers is in practice reported by cable TV system operators themselves and then

announced forthwith, which also leads to the facts that the competent authority lacks a grasp of the industry development trends, and it is easy for the industry to distrust such information.

(2) Reduction of content purchase costs, underreported revenue, and tax avoidance

Article 36, Paragraph 2 of the “Cable Radio and Television Act” stipulates that: If the system operator and channel provider have taken household as the calculation basis for discussing the authorization terms, their discussion shall be based on the number of household announced by the central regulatory agency. However, system operators can indirectly avoid paying for the “Broadcasting Development Foundation” and other taxes and expenses by under-reporting their operating income, and thus obtain favorable conditions and licensing fees with channel providers. The current system still tends to allow system operators to underreport the number of subscribers and revenue. According to past research, the possibility of underreporting the number of subscribers by the cable radio and TV system operators in Taiwan is extremely high.

(3) Causing disorder in upstream and downstream cable TV transactions

Currently, when it comes to negotiations over program authorization fees between system operators and channel providers, both parties have had a strong sense of distrust for a long time in the reported number of subscribers announced by the competent authority without going through the

checking. Therefore, one of the negotiation parties might argue against using the announced number of subscribers as the calculation basis. Consequently, the authorization controversies often occur in the industry, which not only leads to disputes over commercial negotiations between upstream and downstream operators in the industry, but even results in the disconnection of communications and other issues; it also increases the administrative cost of mediation by the competent authority, which makes the mechanism work in vain and yet creates more problems.

(4) Increasing difficulties in cable TV fee review

According to Article 44 of the “Cable Radio and Television Act”: “System operators shall report subscription fees to special municipality or county (city) government within a month after the 1st of August every year. The special municipality or county (city) government will examine it in accordance with the standards of service fees enacted by the central regulatory agency and then make an announcement accordingly. Special municipality and county (city) government shall establish fee review committee to approve abovementioned subscription fees. If special municipality or county (city) government has not established fee review committee, it shall then be exercise by the central regulatory agency.

According to the “Guidelines for Establishing the Taipei City Cable Radio and Television System Fee Review Committee,” the primary reference materials for the fee review include: the fee calculation method and adjustment range, cost analysis and return on investment for various fees, as

well as the balance sheet, profit and loss statement, etc. Therefore, in the event that the number of subscribers and revenue data are not reported by system operators correctly, it will increase difficulties in the review of cable radio and TV fee.

(5) Rendering it difficult to implement anti-media concentration clauses

The implementation of anti-media concentration clauses in Article 24 of the “Cable Radio and Television Act” is currently based on the number of subscribers reported by cable TV system operators. Therefore, in the event that the cable TV system operator falsely reports or the NCC fails to obtain the actual numbers of subscribers of cable TV system operators, anti-media concentration clauses will be functioning in vain and will not be able to bring themselves into full play as a result thereof.

III. Overview of pay TV the number of subscribers checking regulations and practices of various countries around the world

This report targets the United Kingdom, the United States, Canada, and Japan for analysis. It can be seen that governments in these countries with exception to the United States require pay TV operators to regularly report their operating information. However, it can be drawn from the experience of legal systems and policies of countries such as the United Kingdom, the United States, and Canada that it is not the data reported by operators themselves that can truly allow the competent authorities to grasp the actual

market situation, but rather through the market survey conducted by industry guilds or associations and market survey institutions commissioned in order to thoroughly and effectively grasp the market pulse as well as to facilitate the formulation of appropriate industrial and competition control policies.

As for the means to ensure the accuracy of the data reported by operators, the governments of various countries usually impose relevant penalties for operators' failure to report or falsely reporting information on their operations. Such specific measures include fines, suspensions and revocation of radio and television licenses, or even regarding them as a criminal offence of forgery of documents, and other various forms; however, the part of administrative inspections is not found in the legal systems of various countries.

Taking account of the concept and orientation for grasping market dynamics of the four countries with advanced legal systems, such as the United Kingdom, the United States, Canada, and Japan, it has been gradually shifted from the traditional method of relying on operators' reporting in conjunction with inspections thereof to the mode of mainly commissioning institutions to conduct market surveys to be supported by checking or completely abolishing the reporting of data by operators. The rationale in the digital age can probably serve as an example for the legal system and policy reform in Taiwan.

Table: Comparison Table of the Cable TV Number of Subscriber Survey
and Inspection Regulations of Countries Researched

	Operational data reporting obligation	Operational data market survey mechanism	Operational data checking mechanism	False reporting penalty mechanism	Operational data application mechanism
UK	The obligation is imposed on operators with radio and TV licenses to report basic operational data.	The Broadcasters Audience Research Board (BARB) is in place to regularly conduct market surveys.	Ofcom may initiate an inspection on its own or upon whistle blowing.	Failure to report or falsely reporting data can be punished with a fine of GBP £250,000 or equivalent to 5% of the turnover; and the license can be suspended and revoked.	1. Ofcom is obliged to publish a report on the radio and TV market every year, namely the Media Nation reports. 2. It serves as a basis for competition control by Ofcom.
USA	Before 2018, business operators were obliged to report their operational data.	Industry guilds or associations and market survey companies are commissioned to conduct market surveys.	No dedicated checking mechanism of operational data has been developed.	Intentional forgery, concealment, or cover-up of operational data can be punishable by imprisonment for a term of no more than 5 years.	1. The FCC is obliged to submit an annual report to Congress on the competitive status in the video streaming market. 2. It is the basis for the FCC to review the integration of media businesses.
Canada	The obligation is imposed on program broadcasting operators to report relevant operational data.	Market survey companies are commissioned to conduct a market survey.	No dedicated checking mechanism of operational data has been developed.	No penalties are imposed for reporting false data.	1. The communications industry monitoring report is announced every year.
Japan	The number of subscribers from April 1 of the previous year to March 31 of the current year should be reported at the end of June each year.	None	No dedicated checking mechanism of operational data has been developed.	The Ministry of Internal Affairs and Communications may order operators to suspend broadcasting for 3 months if they fail to report or falsely report their data.	1. The Ministry of Internal Affairs and Communications will regularly announce industrial data. 2. It is the basis for writing the information and communications white paper.

Data source: compiled and prepared by virtue of this report

IV. The number of Cable TV subscribers market survey planning in Taiwan

This study suggests that each county or city government should regularly or randomly conduct the “cable TV service quality and television household satisfaction survey” depending on the financial resource and administrative capacity of different counties and cities, as well as taking account of the cable TV fee review based on the needs of related supervision work. Therefore, when conducting the aforementioned survey, the central regulatory agency should coordinate with county and city governments to formulate the tender specifications for the number of cable TV subscribers with reference to the survey method and process design as specified in the “Standard Operations Manual” proposed by this study.

For the purpose of understanding the current situation of the number of cable TV subscribers in Taiwan, telephone survey is planned to be conducted. The survey method and questionnaire design is modified according to the suggestions made by the participating scholars and experts in the questionnaire expert consultation meeting held on August 6, 2021 so as to improve overall survey quality.

(1) Survey scope, target, and time

This report interviews people who live in Taipei City and New Taipei City and are aware of the installation situation of cable TV in their homes. The survey implementation dates ranged from November 10 to December 5 in 2021, and the interview survey time by landline phone and mobile phone

was from 18:00 to 21:30 on weekdays, and from 14:00 to 17:30 and 18:00 to 21:30 on holidays.

(2) Survey content

The content of the survey includes the current situation of cable TV installations, the name of the installing operators, the installed years of the cable TV, the willingness to continue installation / new installation of cable TV in the future, basic information, and other questions. There were 12 questions in total.

(3) Survey method

The survey methods include landline phone surveys and mobile phone surveys. The survey is conducted by using a computer-assisted telephone interviewing system (hereinafter referred to as a CATI) combined with computer networks, interviewers, and supervisory systems in the quickest and most cost-effective way. The advantage of using CATI is that it can carry out a logical control of questionnaires, survey sampling, and sampling structure design. It can also effectively grasp the quality of interviews, avoid non-sampling errors caused by interviewers' operations, and conduct rapid data analysis.

(4) Survey process

According to the planning of the survey method for this project, the design of the questionnaire should be confirmed by the commissioning unit, and then the questionnaire design should be carried out with the questionnaire editing function of CATI. Meanwhile, the matrices are sorted

out, and sampling is carried out according to the proportion of the population. In addition, interviewer training should be carried out before the implementation of the survey with project interviewers, telephone interview supervisors, and others invited, and the researchers of the research team will explain the concept of the questionnaire questions and the method of asking these questions to control the consistency of the survey process.

When entering a formal survey, in addition to real-time monitoring and supervision operations conducted by the telephone interview supervisors, the implementation team will randomly select audio files from the successful samples executed on the previous day for inspection after the daily survey is concluded, and inform the interviewers of the problems found in the inspection prior to the implementation of that day in order to improve the interview quality in the overall survey process.

V. Suggestions on Legal Systems and Policies for the number of Cable TV Subscribers in Taiwan

Based on the research and analysis results on the legal systems and policies of various countries, it can be seen that currently most of the competent authorities around the world require subscription TV operators to regularly report their operating data, and a few of them, such as the United States, have completely abolished the regular reporting on the number of subscribers. However, from the legal systems and policies of the United Kingdom, the United States, Canada, and other countries, it can be seen that, compared with the data reported by operators themselves, the key for the

competent authorities to thoroughly grasp the market dynamics is through market surveys conducted by industry guilds or associations and market survey institutions.

As for the means to ensure the accuracy of data reported by operators, most of the governments of various countries have imposed fines, suspension or revocation of licenses, and other penalties for the behavior of operators that fail to report or falsely report the operational data, or even have resorted to criminal offences, and other forms. However, there are few relevant plans for administrative inspections in the legal systems of various countries, which once again verifies that the control of market dynamics by the competent authorities in various countries is not based on the number of subscribers reported by operators as the primary means.

Taking into account the concept and orientation to grasp market dynamics of the countries with advanced legal systems such as the United Kingdom, the United States, Canada, and Japan, which have gradually turned to the mode of commissioning institutions to conduct market surveys to be supplemented by checking or completely abolishing the data reporting by operators. The rationale in the digital age may as well be used as an example for the legal system and policy reform of Taiwan. Based on this orientation, in addition to the above-mentioned various suggestions and planning proposed by this report as well as having gone through communications with people from all walks of life in multiple sessions of focus interviews and symposiums with experts, suggestions for the short-, medium-, and long-

term are hereby proposed as follows in terms of legal systems and policies.

(1) Short-term feasible solutions

The so-called short-term feasible solution, namely refers to the administrative action that can achieve results without amending the “Cable Radio and Television Act,” which is described as follows.

1. Formulating the Procedural Guidelines for Checking the Number of Subscribers of Cable radio and TV system Operators

Although the current “Cable Radio and Television Act” stipulates relevant regulations for administrative inspections, authorizing NCC to conduct administrative inspections of cable TV system operators, and requiring operators to provide relevant information, which operators shall not evade, hinder or refuse. However, if this article is cited as the basis for the administrative inspection of the number of subscribers, there are still deficiencies in the implementation thereof. Thus, this report recommends that the “Procedural Guidelines for Checking the Number of Subscribers of Cable radio and TV system Operators” should be separately formulated as the basis for legitimate implementation of the operation process at various stages in the administrative inspection of the number of subscribers. As to the design of the administrative inspection targets, this report mainly focuses on the unearned revenue allocation statement as well as the digital set-top box property inventory as the main inspection targets for the time being. The information on channel licensing or on/off-the-shelf agreements, advertisement broadcasting contracts, etc., are listed as important

information for auxiliary inspections. The foregoing materials are related to the financial information of cable television system operators, and fall within the scope of account books, documents and other necessary information under the “Cable Radio and Television Act.” Therefore, it is beyond doubt to have them incorporated into the inspection target.

However, agreements on contract conditions are mostly based on commercial negotiations and coordination, which may not reflect the actual number of subscribers of the cable TV system operator. Additionally, as the relevant information involves the operator’s trade secrets, it may lead to excessive interference with the operator’s freedom of operation. Therefore, according to the final recommendation of this research, the unearned revenue allocation statement and the digital set-top box property inventory should be prioritized for the checking. Only when a major dispute arises and the above-mentioned information is still insufficient to serve as a reference for administrative dispositions, can the cable TV system operator be requested to provide the aforementioned contract materials.

2. Creating a new type of CPA audit report

In order to save the administrative cost of the competent authority to check the number of subscribers of cable radio and TV system operators, this report suggests that a new audit report of accountants can be created, requiring cable TV system operators to appoint accountants to issue audit reports and opinions on the number of subscribers, and thereby the authenticity of the number of subscribers reported by operators can be

improved. Based on the foregoing scenario, this report recommends that the “Regulations Governing the Accounting Systems and Standard Formulas of the Cable Radio and Television System Operators” should be amended.

Secondly, the advantage of this approach lies in that it can be uniformly applied to both public and private cable TV system operators at the same time, regardless of the amount of capital. The report contends that the review of competent authority can also be flexibly adjusted for all cable TV system operators. This report believes that the method not only reduce the administrative cost to verify the authenticity of the data, but also reduce the cost of regulatory compliance for operators to cooperate.

(2) Mid- and long-term feasible solutions

The so-called mid-to-long-term solution can only be achieved by amending the “Cable Radio and Television Act.” Since it involves legislative action, it takes a long time, and the uncertainty is high. Since it cannot be achieved immediately, it is so classified within this type of solution.

1. Clearly define the meaning of “the number of subscribers” in the Cable Radio and Television Act

In light of the fact that the current “Cable Radio and Television Act” does not have a clear definition for the “the number of subscribers” of the cable TV system, as industry representatives have repeatedly mentioned in the foregoing focus interviews and symposiums with experts, cable TV system operators have applied the diverse category of general users, honorary users, power supply users, group users, public relations group

users, etc. in business practices; there are even bundled services (sometimes translated as “tying sales”) such as “buy broadband and get cable TV free,” and other business models and promotion methods, resulting in different operators interpreting differently when reporting, which leads to doubts about false reporting as well as disputes between cable TV system operators and channel providers having points of contention when trying to reach a channel licensing agreement.

In order to improve the current reporting mechanism for the number of subscribers of the cable TV system, it should be ensured that the reporting by different operators is based on a common benchmark. Therefore, it is suggested that the competent authority should further define the meaning of “the number of subscribers” through the sub-laws of the “Cable Radio and Television Act,” and specifically distinguish the difference between valid users and invalid users so as to complete the current legal system for reporting the number of subscribers, and to assist operators in effectively implementing relevant regulatory compliance work.

2. Prescribing the criteria for the fine range on cases of number of subscribers reported by cable TV system operators

Based on the foregoing, if the cable TV system operator is found to indeed have falsely reported data after the administrative inspection, in order to eliminate disputes as to “what is false reporting” and “how many number of subscribers being underreported will constitute the false reporting,” and others, it is very important for the competent authority to establish a clear

and consistent standard for this purpose; and in the meantime, it should be planned together with the criteria for the fine range.

3. Strengthening penalties for failing to report or falsely reporting the cable TV subscriber count

Considering that the existing subscriber count reporting supervision and punishment mechanism established by Articles 24 and Article 66, Subparagraph 3 of the “Cable Radio and Television Act” still has shortcomings, it’s difficult to effectively deter cable television system operators from falsely reporting the subscriber count. Therefore, this report proposes three proposals for amending the “Cable Radio and Television Act,”:

- A. Simply increasing the amount of the administrative fine for “false reporting” in Article 66, Subparagraph 3 of the “Cable Radio and Television Act.”
- B. Abolishing Article 66 Subparagraph 3 of the “Cable Radio and Television Act” on the penalty of “false reporting,” exempting the competent authority from the obligation to check the data, and resorting to the application to Article 214 of the Criminal Code on the criminal offence that causes public officials to make a false entry in the official document.
- C. The provision in Article 66, Subparagraph 3 of the “Cable Radio and Television Act” concerning “false reporting” shall be penalized, and the special criminal law in this regard should be formulated

simultaneously in the same Act.

4. Guidance and incentive measures

In the current reporting and checking mechanism of the cable radio and TV subscriber count, there are only penalties imposed for non-reporting and false reporting, and there is no institutional incentive for honest and correct reporting of the subscriber count. It is therefore suggested that the corresponding incentives and guidance measures shall be added to increase the willingness of business operators to report the data honestly.

Based on the foregoing, the research from this report assists the competent authority to formulate a standard operation manual for market survey and administrative inspections. In addition to assisting the competent authorities in the promotion of the inspection work, it can also assist the industry in cooperating and implementing the relevant regulatory compliance work.

VI. Proposals for Future Research - Technical Solutions for Checking the Cable Radio and TV number of subscribers

1. Limitations of this report's findings

The sampling method used in this research project is based on the household registration data of the Ministry of the Interior. However, the modern population is highly concentrated in urban areas, and most of the residences are rented without substantial household registration. Thus, the sample extraction may lead to the doubt of not being sufficiently representative.

In light of the above, this report has designed the market survey at the previous stage to be of an auxiliary nature, which will be used only as a tool in the previous stage to screen out potential cable TV system operators that may have falsely reported their number of subscribers. The actual basis for the punishment still needs to rely on the results of the administrative inspection at the later stage as the core. Therefore, if the relevant research in the future intends to analyze the improvement of the cable TV number of subscribers checking system in Taiwan, the design of the dual mechanisms of this report, which are complementary and corresponding to each other, should be taken into consideration, and the conclusions and recommendations of this report cannot be directly applied to a checking mechanism composed entirely of market surveys.

2. Outlook for future research

According to the opinions compiled in the industry focus group forum, some industry representatives indicated that the current number of subscribers reporting system has a problem in which the scope of the reporting is too large. In the future, a “neighborhood check” model may be adopted, requiring system operators to report the number of subscribers from the perspective of each administrative region and each neighborhood on a quarterly basis. It is also checked along with the application details for installation, work orders, bills, and other materials, so that the competent authority can randomly check and compare the data among the neighborhoods, so as to truly implement the checking mechanism of the

number of subscribers. However, as far as the cost of checking the accuracy of the data is concerned, this solution, like the two-stage survey method as proposed in this report, depends on the input of human resources and the official budget. Theoretically speaking, the refined neighborhood data requires even higher inspection costs.

In an era when cable TV has been fully digitalized, most of the digital set-top boxes provided by cable TV system operators for subscribers already have a bidirectional transmission function. This report also suggests that when the “Ministry of Digital Development” and other administrative agencies in Taiwan are reorganized, it may be possible to study and propose the design of the system for the allocation of mobile communication user codes in telecommunication enterprises, and include the cable TV digital set-top box in the current telecommunication network coding scheme.