

The Television Will Be Revolutionized

Internet distribution services are changing the face of television in Japan. **Waichi Sekiguchi** looks at the latest developments and the difficulties confronting broadcasters as they look to expand their reach.

You can now use the Internet to watch any TV program you want, any time you want, regardless of the TV timetable." With this catchphrase, NHK launched its new Internet distribution service for television programs, NHK on Demand, on December 1, 2008. Private broadcasters such as the Nippon Television Network and Fuji Television have also started working on Internet distribution services. The long-awaited "fusion of telecommunications and broadcasting" has finally started to get going in Japan. Sixty years after NHK's first test television broadcasts in 1948, television broadcasting is about to undergo a radical transformation.

"In the first week of operation, the NHK on Demand website received more than 200,000 visitors, with more than 10,000 people registering as members," reports a delighted Minoru Kida, the person responsible for the new service as head of the NHK on Demand department, describing the smooth start to the new system. The early response has been solid. "It's interesting to note that—unlike most websites—the number of users does not drop off during the daytime." To view NHK on Demand, users need a computer or a digital television that can connect to the Internet, as well as a high-speed Internet connection, such as an optical fiber connection. Because setting everything up requires some technical knowledge, "We suspect that many of our viewers are men from the television generation of baby-boomers who have just retired."

The programs available on NHK on Demand include news and other major programs that have been broadcast during the previous week, including popular television dramas such as *Taiga*. Viewers can also access a "special library" of programs that have been broadcast further back in

the past. Altogether there are more than 1,500 programs available. Each program costs between 105 yen and 315 yen to view or, for 1,470 yen per month, users can subscribe to a package that allows them to watch as many news programs or major programs as they want. Being able to watch programs that you missed (because you forgot to record them or because you were traveling, for example) is a particularly convenient feature.

Video content has been provided over the Internet before, via services such as GyaO and Yahoo!Streaming, but the biggest feature of the NHK on Demand service is the fact that broadcast programs can be viewed on high-definition television screens. In order to view programs in high-definition, users need to have a contract with either the Hikari TV Internet distribution service that uses the optical fiber network provided by the NTT Group, or a video distribution service, such as J:COM TV (provided by the Jupiter Telecommunications cable television company) or acTVila (provided by major electrical appliance manufacturers). The quality of the video images is almost indistinguishable from normal terrestrial high-definition broadcasts.

The motivation behind NHK's moves to distribute television programs over the Internet is an attempt to achieve "the fusion of telecommunications and broadcasting," which has been a topical issue since it began being advocated by Internet companies such as Livedoor. As a public broadcaster that is supported by the viewing fees paid by Japanese citizens, NHK has a responsibility to have as many people as possible view the programs that it broadcasts. Until recently, this was only possible via terrestrial and satellite broadcasts, but with the widespread adoption of broadband networks, NHK has decid-

ed to use Internet distribution as a new transmission method. NHK's new management plan also calls for "NHK on three screens," referring to the policy of making programs available on computers and mobile telephones, as well as on television screens.

The Ministry of Internal Affairs and Communications, which has been encouraging the creation of broadband infrastructure and digital broadcasting, is also supporting this new experiment by NHK. The NHK on Demand service was made possible as a result of the legislative changes in the Broadcast Act Revision that was passed in April 2008, which allowed NHK to distribute broadcast programs over the Internet.

Private broadcasters, who had been distancing themselves from the fusion of telecommunications and broadcasting since Livedoor's attempted takeover of Nippon Broadcasting System and Rakuten's acquisition of TBS shares, are now beginning to work towards distributing programs over the Internet, almost as if they were responding to the start of NHK's new service. The Nippon Television Network has provided Nippon Television 2, a distribution service that delivers content to computers via the Internet, since 2005 but since the end of October they have changed from a subscription-based model to a model where program distribution is basically free. This is because they have decided that it is more profitable to provide content using an advertising model and to gain a greater audience share by increasing their program menu.

Fuji Television launched a video distribution service called Fuji Television on Demand in November, with the catch-phrase, "Television anywhere, anytime." Like the NHK service, this service allows users to view programs that they have missed, and also redistributes popular programs that have been broadcast in the past. Popular programs such as *Celebrities and Poor Joes* and *Hilarious Red Carpet* have been added to the pro-

Major Events Leading Up to the Internet Distribution of Broadcast Programs in 2008

March	A group of academics proposes the establishment of an "Internet Law" The NTT Group launches the "Hikara TV" service
April	The Revised Broadcasting Act is passed, recognizing the creation of original programs for "one-seg" broadcasts and NHK's Internet distribution service for television programs. Tokyo Metropolitan Television starts distributing programs via YouTube
June	Dwango, the provider behind "Nico Nico Douga" forms a partnership with JASRAC KDDI launches "Lismo Video," a video distribution service for mobile telephones
July	The IPTV Forum meets to discuss the technical specifications for distributing video over the Internet
August	Demonstration test of a "multi one-segment service" at the G8 summit in Toyako, Hokkaido Disney America starts distributing long-running drama series in Japan via satellite and the Internet Various public broadcasters distribute live video from the Beijing Olympics via the Internet
September	The Asahi Broadcasting Corporation starts distributing animation and other programs over the Internet NHK raises capital for its subsidiary that distributes international broadcasts over the Internet by allocating additional shares to third parties
October	JASRAC reaches an agreement with YouTube allowing users to post videos of themselves singing or performing musical compositions managed by JASRAC The Nippon Television Network makes its "Nippon Television 2" Internet distribution service free of charge The Intellectual Property Strategy Headquarters proposes the introduction of a "Japanese Fair Use Provision"
November	FOX America starts distributing television dramas over the Internet in conjunction with USEN
December	Fuji Television starts its "Fuji Television on Demand" service NHK launches its "NHK on Demand" Internet distribution service TV Tokyo establishes a video portal site called "TV Tokyo Watch!" The BBC starts distributing documentary programs etc in Japan via the Internet Nippon Television, Yoshimoto Kogyo and Dentsu start distributing Japanese comedies in the United States via the web

gram menu. Unlike the NHK service, these programs cannot be viewed on digital televisions, but they can be viewed on mobile telephones, as well as on computers.

Shin'ichi Ogawa, the man responsible for the new service as head of the compilation department, emphasizes that "This is the first time that a key private broadcaster has made popular primetime programs immediately available on the Internet." Because people can use mobile telephones to view content while commuting to work or school, "This is an innovative service that sweeps away the restrictions of time and place that have limited how people view television until now." TV Tokyo is also distributing video such as its popular animation products with the launch of a new video portal site called TV Tokyo Watch!

Technical Issues and Copyright Law

However, distributing broadcast programs over the Internet is not as easy as it looks. Traditional broadcasting simply involves beaming television signals out into the air, but Internet

distribution involves sending video along telecommunication lines, which requires special equipment such as servers. "It is difficult for us to invest in a system before the demand for it spreads," says Masamitsu Owara, head of department for NHK on Demand. Because of this, NHK decided to outsource the actual video distribution work to a telecommunications provider. Naturally, the outsourcing costs also weigh heavily on the management of the new system. In particular, programs that have been broadcast in the past need to be converted to digital format, and old programs also need to be "up-converted" to a higher resolution so that they can be made available in high-definition format. "This costs a lot more than viewers probably realize," Owara says.

An even more tedious challenge involves the procedures for processing the rights of the various rights holders, such as scriptwriters and actors. As a public broadcaster, NHK entered negotiations with JAME (the Japan Association of Music Enterprises) and JASRAC (the Japanese Society for the Rights of Authors, Composers and Publishers) from an early stage. By adding a ten percent surcharge to cover

performance fees and so on, NHK was able to receive authorization to distribute programs over the Internet for one week after they were broadcast on normal television. However, for older programs NHK needed to receive authorization from each individual person involved. In some cases, they were not able to contact people in order to gain the necessary authorization.

There is also a common practice in the broadcasting industry known as the "release rule," whereby programs cannot be reused (on the Internet, for example) for three years after they have been broadcast. The broadcasting companies and rights holders seek to maximize their profits by controlling the opportunities for how a product is exposed (through re-broadcasting or conversion to DVD or video, for example) and the aim of this rule is to guarantee these rights. This means that the present service gives users one week to view a program that they might have missed, but after that they will have to wait three years before the program is archived and made available for distribution on demand.

The complexity of these kinds of rights issues has delayed the fusion of telecommunications and broadcasting in Japan. Some academics have expressed the opinion that a new law should be enacted to make it easier to put broadcast programs to secondary uses. This so-called Internet Law proposes to recognize the right to distribute programs over the Internet, in addition to existing rights, and to simplify the procedures related to rights processing by consolidating this new right with broadcasters and so on. However, this proposal has been criticized by rights holders as being "too biased in favor of the telecommunications carriers" according to Yoshitaka Hori, chairman and president of HoriPro Inc. A report published by the government's Intellectual Property Strategy Headquarters contained wording that seemed to suggest support for the Internet Law, which has sparked vigorous debate amongst stakeholders in the industry.

In fact, Internet distribution of broadcast programs is already widespread in places such as South Korea and Europe. Examples include

FASTWEB, developed by an Italian Internet company, and iPlayer, a service for viewing missed programs that the British Broadcasting Corporation (BBC) started in 2007. The BBC has a responsibility to provide broadcast products to British citizens by any means available, and so the BBC was quick to start work on an Internet distribution service as part of that general mandate.

One large factor behind the spread of Internet distribution of broadcast programs around the world has been the emergence of YouTube, a video sharing website that started in the United States. This site consists of video content that has been freely submitted by users, but some of this content includes television programs that have been copied illegally. A number of broadcasters have sought to have YouTube delete videos that infringe copyright, but because of the rapid increase in the number of users, they have reached the decision that a better solution to the original problem is for them to engage in Internet distribution themselves. The four major U.S. networks (ABC, NBC, CBS and FOX) are all actively engaged in Internet distribution, with FOX starting a subscription drama service in Japan in October this year.

This kind of Internet distribution of broadcast programs is an extremely valuable service for viewers, but it is important not to forget the problems and contradictions that this kind of technical revolution brings. There is no technical reason why the services provided by NHK and Fuji Television could not be viewed overseas as well, but they have introduced restrictions so that their services can only be viewed within Japan, because of concerns regarding copyright law, and so on. Similarly, because programs distributed over the Internet can be viewed anywhere in Japan, these kinds

of services could well be a factor in fundamentally undermining the regional licensing system for terrestrial broadcasts. It may also become necessary to reconsider the pros and cons of the “release rule” mentioned earlier.

For the rights holders, their incentive to create new products may well be reduced if their creations can be easily subject to secondary uses without them receiving fair compensation. The concept of “the fusion of telecommunications and broadcasting” was originally raised by the telecommuni-

tion, which can be charged, offers the possibility of a new business model is an issue that cannot be avoided. In actual fact, the emergence of video tape recorders in the 1970s triggered a similar debate about copyright between Sony, who developed the technology, and the American movie companies. In the end, videos have been nurtured into an important source of income for the movie companies, a point which needs to be borne in mind in the current debate about Internet distribution of video products.

With these various issues in mind, the Ministry of Internal Affairs and Communications has started working on establishing new integrated legislation covering both telecommunications and broadcasting that will revise the old vertically segmented broadcasting act and regulate telecommunications and broadcasting on a layer-by-layer basis. Changes are coming in terms of copyright law as well, with the much anticipated introduction by the Intellectual Property Strategy Headquarters of the Japanese Fair Use Provision. If ordinary Japanese people can use videos distributed over



The menu screen for NHK On Demand via the acTVila video distribution service

the Internet free of charge for fair use purposes (such as educational purposes) then this will improve the cultural life of the people, as well as encouraging Internet distribution services. However, over-hasty system reforms run the risk of violating the rights of creators and destroying their motivation to create, so the government needs to do careful groundwork to build consensus. There is no doubt that the Internet distribution of broadcast programs that has been started by NHK on Demand and other services will provide an opportunity for a radical rethink of the very nature of Japan’s broadcasting system. ■

Another disturbing fact for broadcasters is that their advertising income has already started to drop. Private broadcasters work on an advertising model, and if their advertising income drops they will need to find new ways of covering that income. So in this sense, the fact that Internet distribu-

tion, which can be charged, offers the possibility of a new business model is an issue that cannot be avoided. In actual fact, the emergence of video tape recorders in the 1970s triggered a similar debate about copyright between Sony, who developed the technology, and the American movie companies. In the end, videos have been nurtured into an important source of income for the movie companies, a point which needs to be borne in mind in the current debate about Internet distribution of video products.

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