As devices such as smartphones and tablets have spread and the speed of the internet has increased, ways of viewing video have diversified. It has become commonplace to watch broadcast television programs over the internet, with broadcasters also offering video on demand (VOD) and catch-up services.

On the other hand, as ways of viewing have diversified, they have become more complex. Each viewing device (terminal) and distribution service has its own application that operates differently. Viewers must select the medium and viewing method just to view a program over the internet. A distribution service can have a range of information such as what device functions and communication environments are available, and it can be difficult to find the best method available at a given time. As a result, we might overlook programs that we should have been able to watch, or watch video at low quality when it might have been available at higher quality.

NHK STRL is conducting research to implement a media-unifying platform that will enable users to view content easily without having to select a different application for each distribution medium (broadcast or broadband) or viewing device (Fig. 1).

The media-unifying platform is a system comprising a server, which manages the content distribution status on each medium, and a processing engine on the device, and unifies and handles the content provided through broadcasting or broadband.

The system automatically decides whether to use broadcasting or broadband on the basis of the distribution status of the content on the management server and the user conditions obtained by the processing engine, with the same usability irrespective of the distribution medium (Fig. 2). Regardless of the device they are using, users need only click a link to watch the video content in a manner suited to their situation.

In the future, as video distribution and media environments continue to advance, we will continue R&D to implement new ways of viewing contents using the internet.