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Satellite Digital Broadcasting

This is the result of a study on how to effectively use the bandwidth allocated to satellite broadcasting. For the modulation method that puts a signal on a carrier wave, a digital modulation method called trellis 8PSK that integrates error correction and modulation was adopted, and the transmission capacity in the same bandwidth was expanded. This achievement has enabled high-quality and diversified broadcasting such as 2 high-definition programs and data programs per BS channel.

PSK: Phase Shift Keying

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Digital Terrestrial Broadcasting

Japan's first terrestrial digital broadcasting OFDM (Orthogonal Frequency Division Multiplexing) experimental device was developed, and the world's first mobile reception experiment of OFDM-transmitted television images was successfully completed. A BST-OFDM scheme that makes the best use of frequency resources has been proposed and developed, and in cooperation with the Next Generation Digital Television Broadcasting System Research Institute Co., Ltd., the development of Japan's terrestrial digital broadcasting transmission system was promoted, playing a central role in the development of a ISDB-T system based on BST-OFDM.

BST: Band Segmented Transmission

ISDB-T: Integrated Services Digital Broadcasting-Terrestrial

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Next-generation IPTV Technology

Media linking technology that integrates digital broadcasting and IP transmission and efficient transmission technology were developed, and the basic technology of the next-generation IPTV was established. Alliances with broadcasters and home appliance manufacturers were promoted, which contributed to the realization and spread of IPTV, including the retransmission of terrestrial digital broadcasting. NTT's video distribution services, including the representative service "Hikari TV," surpassed 4.5 million contracts (as of the end of FY2017), which contributed to this popularization.