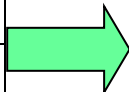


## NHK WORLD-JAPAN is available in High Definition (“HD”) on the Hotbird-13 Satellite in Europe, Middle East, and North Africa

We are pleased to announce that viewers of NHK WORLD-JAPAN in Europe, Middle East, and North Africa are now able to enjoy NHK WORLD-JAPAN in HD on Hotbird-13C (13.0E). As of December 1<sup>st</sup>, 2019, this new HD signal replaces the previous SD signal. All NHK WORLD-JAPAN viewers who used to downlink the SD signal from Hotbird-13C are requested to transition to the new HD signal.

To do so, viewers’ set-top-boxes must be compatible with new HD signal, and must be tuned to the new downlink frequency.

1. NHK WORLD-JAPAN Satellite (HD): Hotbird-13C (13.0E)
2. Configuration of NHK WORLD-JAPAN on Hotbird-13C at 13.0E

	SD (PREVIOUS)		HD (NEW)
Satellite	Hotbird-13C (13.0E)		Hotbird-13C (13.0E)
Downlink Frequency	11137.41MHz (H)		11372.96MHz (H)
Signal	SD PAL (16:9)		HD 1080@50i
Modulation	DVB-S (QPSK)		DVB-S2 (8PSK)
Symbol Rate	27.5 Msym/s		27.5 Msym/s
FEC	3/4		3/4
Video Compression	MPEG-2		MPEG-4/H.264

### <IMPORTANT POINTS>

- SD signal is terminated as of December 1<sup>st</sup>, 2019.
- Transponder changes, polarization stays the same.
- Modulation for the new HD is **DVB-S2**.
- Video compression for the new HD is **MPEG-4/H.264**.