Bandwidth

The necessary bandwidth is expressed by three digits and a letter.

The letter occupies the position of the decimal point, representing the unity of bandwidth. This expression may not begin with zero nor K, M or G.

Between 0001 and 999 Hz shall be expressed in Hz (letter **H**)
Between 1.00 and 999 kHz shall be expressed in kHz (letter **K**)
Between 1.00 and 999 MHz shall be expressed in MHz (letter **M**)
Between 1.00 and 999 GHz shall be expressed in GHz (letter **G**)

Examples:

100 Hz: 100H
2.7 KHz: 2K70
8.5 KHz: 8K50
16.0 KHz: 16K0
2.0 MHz: 2m00

Class:

Emissions are classified and symbolized according to their essential characteristics, and optionally with any additional features.

The essential features are:

* First symbol: type of modulation of main carrier
• Second symbol - nature of the signal (or signals) that modulates (n) the main carrier
· Third Symbol - type of information to be transmitted

Additional features for the classification of emissions

To describe more fully a particular issue should add two features that are optional. These additional optional features are:

• Fourth symbol - Details of the signal (or signals)
· Fifth symbol - Nature of multiplexing or multiplexing.

When not using the fourth or the fifth symbol, it is indicated by a line in the place where each symbol had appeared.

1 - First Symbol type of modulation of the carrier, which is entered in

Double Side Band. **A**
Independent Side Band. **B**
Residual Sideband. **C**
Single Sideband and Complete Carrier. **H**
Single Sideband and Suppressed Carrier. **J**
Single Sideband and Reduced Carrier. **R**
Unmodulated carrier. **N**
Frequency Modulation. **F**
Phase Modulation. **G**
Amplitude and Angular modulated carrier. **D**
Unmodulated pulses. **P**
Amplitude modulated pulses. **K**
Duration and pulse width modulated. **L**
Phase and Position modulated pulses. **M**
Angle Modulation with Carrier during the Pulse. **Q**
Combining the preceding technique. **V**
Cases not referred to combine two or more of the
Modulation modes: Amplitude, Angular or impulses. **W**
Cases not covered. **X**

2 - Second Symbol nature of the signal (or signals) that modulates the carrier
No modulating signal. **0**
Single Channel without the use of Digital Information
Subcarrier Modulation. **1**
Single Channel Using Digital Information Subcarrier Modulation. **2**
Single Channel Analog Information. **3**
Two or more channels of digital information. **7**
Two or more channels of analog information. **8**
Composed System Digital and Analog Information Channels. **9**
Cases not covered. **X**

3 - Third Symbol
Lack of Information. **N**
Telegraph c / Acoustic Reception. **A**
Telegraph c /Automatic Reception. **B**
Fax. **C**
Tx. Data, Telemetry and Remote Control. **D**
Phone (including broadcasting). **E**
Television (Video). **F**
A combination of these. **W**
Cases not covered. **X**

4 - Fourth Symbol - Signal Detail
Two States Code with elements that differ in Number and / or duration. **A**

Two States Code with identical elements in Number and / or duration without error correction. **B**
Two States Code with identical elements in Number and / or duration, with error correction. **C**
Four States Code, each one of which represents a signal element (of one or more bits). **D**
Multiple States Code, each one of which represents a signal element (of one or more bits) **E**
Multiple States Code, each one of which or a Combination of them represents a character. **F**
Broadcasting Sound Quality (Mono). **G**
Broadcastig Sound Quality (stereo or Quadraphonic). **H**
Commercial Sound Quality (Excluding K and L). **J**
Commercial Sound Quality with use of Phase Inversion and Band Division **K**
Commercial Sound Quality Separate signals Frequency Modulated p / Signal Level Control Mo dulated.
L
Black and White signal. **M**
Color signal. **N**
Combination of the above. **W**
Cases not covered. **X**

5 - Fifth Symbol - Nature of multiplexing
No multiplexing. **N**
Code division multiplexing for distribution. **C**
Frequency division multiplexing for distribution. **F**
Time division multiplexing. **T**
Combination of multiplexing by Frequency Distribution, with Distribution in Time. **W**
Other types. **X**

Examples:

100HA1AAN: Telegraphy in Morse code, 100 Hz bandwidth
10K0A3EGN: Telephony amplitude modulation, double sideband, 10.0 KHz bandwidth, broadcast-quality sound
2K70J3EJN: amplitude modulation telephony, single sideband with suppressed carrier, 2.7 KHz bandwidth, quality commercial sound
8K50F3EJN: Telephony modulation frequency, 8.5 kHz bandwidth, quality commercial sound
16K0G3EJN: Mobile phase modulation, 16.0 KHz bandwidth, quality commercial sound

Marcelino J. Garcia LU7DSU

Source: ITU and several articles on the web.