Task 5.4: Assess Options for Embedding Metadata in WAVE Files and Plan the Audio Metadata File Header Tool Development Project | Assessment Report and Initial Recommendations | June 12, 2009

declares necessary technical information about the raw audio contained in the data sub-chunk to be properly interpreted. The fmt sub-chunk expresses the encoding standard, number of channels, average bit rate, and bits per sample.

The bext sub-chunk (also known as Broadcast WAVE extension) is a 602 byte string plus an extendable value called 'coding history'. The bext chunk contains a short defined list of fields of fixed length. The data section of bext chunk contains these following values:

Byte Position	Value Name	Maximum Length (in bytes or ASCII characters)
001 - 256	description	256
257 - 288	originator	32
289 - 320	originator reference	32
321 - 330	origination date	10
331 - 338	origination time	8
339 - 342	time reference	8
347 - 348	version	2
349 - 412	UMID (according to SMPTE 330M)	64
413 - 602	reserved	190
603	coding history	extendable (often padded to 256 bytes)

Excepting 'coding history' which is able to be extended in length as needed, all fields within a bext chunk must not be longer than the length listed in the table above. If the value of that field is less than the maximum length the field is "padded" (null characters are added) so to reach the maximum length for that field. The values within a bext chunk are designed to be parsed out according to their position within the bext chunk. As a visual example, here is an ASCII and hexadecimal representation of the beginning of a sample bext chunk: