

Encoding in text file context (such as XML file) is a map between *Binary code* and *Character*. For example character a is presented with same binary value in the common encodings as the table below shows:

Binary value	Encoding	Character
0110 0001	ISO 8859-1	a
0110 0001	ISO 8859-15	a
0110 0001	UTF-8	a
110 0001	US-ASCII	a

Problems can emerge when in different encodings same binary code represents different characters. As the table below shows the file might contain invalid binary values if actual encoding is something else than the one given in XML declaration.

Binary value	Encoding	Character
1010 0100	ISO 8859-1	α
1010 0100	ISO 8859-15	€
1010 0100	UTF-8	invalid sequence alone
1010 0100	US-ASCII	invalid

ISO 20022 has decided to restrict character set usage to only UTF-8 on the fact that it is the most efficient (length-wise) way to transport characters <http://www.iso20022.org/FAQ.page>.