



EBU .stl Subtitle File Checks

Header Checks

- Check all header values are within allowed limits

Compare Actual Data with Header

- Check that the number of subtitles in the header matches the number in the file.
- Check that the number of TTI blocks in the header matches the number in the file.
- Check that the number of subtitle groups in the header matches the number in the file (warning only)
- Check that the first subtitle timecode in the header matches the one in the file

Check Data block sequence

- Check for empty file (no subtitles) – raise warning
- Verify subtitle number sequence
- Verify extension block sequence
- Check cumulative number sequences

Check individual data blocks

- Verify that timecodes are valid numbers (not spaces, letters, etc)
- Check that out timecode is greater than in timecode (raise warning if they are equal)
- If minimum duration is set check that $T_{out} - T_{in} \geq \text{MinDuration}$
- If maximum duration is set check that $T_{out} - T_{in} < \text{MaxDuration}$
- Check that the vertical position is within the allowed range (different for open and closed subtitling)
- Check that the Cumulative status is an allowed value
- Check that Justification setting is an allowed value
- Check that Comment Flag is an allowed value
- Check that last TTI block of the subtitle ends with the $\$8f$ termination character
- Closed captions – verify Teletext data: control characters, characters per row, and so on

Format of a typical HTML report

Isis7 Subtitle QC Processing STL EBU file: 100 subtitle test.stl

Info	Programme Title : Drowning by Numbers
Info	Episode Title :
Info	File Reference :
Info	Subtitle Language : English
Info	Subtitle Character Code Table : Latin (default)
Info	Subtitle Type : Level-1 Teletext
Info	Frame Rate : 25 Frames per second
Info	Programme Start Timecode : 00:00:00:00
Info	First Subtitle Timecode : 00:00:00:00
Info	Total Number of Subtitles : 100
Info	Total Number of TTI Blocks : 100

Starting Header Block Checks...

Success	Code Page Number is OK
Success	Disk Fomat Code is OK
Success	Display Standard Code is OK
Success	Character Code Table number is OK
Success	Language Code is OK
Success	Creation Date is OK
Success	Revision Date is OK
Success	Creation Date is before or the same as Revision Date - OK
Success	Revision Number is OK
Success	Number of TTI Blocks is valid
Success	Number of Subtitles is valid
Success	Number of Subtitle Groups is valid
Success	Max Displayable Characters Per Row is valid

Success	Max Rows is valid
Success	Timecode Status is OK
Success	Timecode: Start of Programme is valid
Success	Timecode: First Subtitle is valid
Success	Timecode: First Subtitle is later than Start of Programme - OK
Success	Total Number of Disks is valid
Success	This Disk Number is valid
Success	This Disk Number not greater than Total Number of Disks - OK
Success	Country of Origin is valid

Header Block Checks PASSED OK

Comparing Header Block value with actual File Data

Success	The header reports correct number of subtitles
Success	The header reports correct number of TTI Blocks
Success	The header reports correct number of subtitle groups
Warning	The header reports first subtitle timecode 00:00:00:00 Groups, but the file contains first subtitle timecode 00:02:46:20

Header matches file data - checks PASSED OK

Checking File Data block sequences

Success	Subtitle Number Sequence is OK
Success	Extension Block numbering is OK
Success	Cumulative Status values are OK

File Data block sequence checks PASSED OK

Checking Individual TTI Data Blocks

Error	Duration is less than the minimum allowed. Actual Duration: 00:00:00:21 minimum valid duration: 00:00:00:22 for subtitle 1
Error	Duration is less than the minimum allowed. Actual Duration: 00:00:00:21 minimum valid duration: 00:00:00:22 for subtitle 6
Error	Duration is less than the minimum allowed. Actual Duration: 00:00:00:21 minimum valid duration: 00:00:00:22 for subtitle 95

Individual TTI Data Blocks checks FAILED

QC process FAILED for STL EBU file: 100 subtitle test.stl