

DCI Subtitle Specification

There are two subtitle formats defined in both DCI specifications:

- **DCI InterOP XML** - also called: DCI Interop or CineCanvas XML, D-Cinema interop, SMPTE 428-7, etc.
- **DCI SMPTE XML** - also called: DCI SMPTE 2010 XML, DCI SMPTE 2014 XML, D-Cinema SMPTE 2010, etc.

We usually require subtitles in **InterOP XML** format, but for more complex DCPs, we also require subtitles in **SMPTE XML** format.

Important: We will not accept SRT, STL or other subtitle formats for DCP authoring

Please note:

1. The filenames of the subtitle files need to be short, e.g. **MyMovie_R1_EN.xml**
2. The timecodes in **all** subtitle files must start at **00** hours, e.g. **TimeIn="00:01:33:031"** and **TimeOut="00:01:36:125"**.
If not, please search and replace with 00: hours in your favourite text editor.
3. The subtitle files must be in sync with the film or individual reels and must not differ in length or have an offset. If necessary, we can provide reference MP4 files to ensure the timing is correct.
4. The font used must be located in the same directory and must **not be larger than 512 KB**; for example: the DCI font **arial.ttf** is approximately 380KB in size. Please also avoid long file names. We do have a suitable arial.ttf font available here.
5. Please check that the path to the font is specified correctly in the XML, e.g., `<LoadFont Id="theFont" URI="arial.ttf" />`. No subdirectories allowed here, as some projections don't support them.
6. The font setting should follow this standard: **Color="FFFFFFF" Weight="normal" Effect="border" EffectColor="FF000000" Size="40"**
Please inform us if you need special settings.
7. The above requirements also apply to hard-of-hearing subtitles (**CCAP** or **OCAP**), as these are shown as regular subtitles in most cinemas. Please note that in certain regions, e.g. Germany, the maximum number of characters per line is limited to 32 with a maximum of 3 rows.

Example of an InterOP Subtitle File:

```
<?xml version="1.0" encoding="UTF-8"?>
<DCSubtitle Version="1.0">
  <SubtitleID>1DFFC769-8091-423F-8E73-B34F4513737B</SubtitleID>
  <MovieTitle>MeinFilm_EN</MovieTitle>
  <ReelNumber>1</ReelNumber>
  <Language>English</Language>
  <LoadFont Id="theFont" URI="arial.ttf"/>
  <Font Id="theFont" Color="FFFFFFFF" Weight="normal" Spacing="0em" Effect="border" EffectColor="FF000000" Size="40" Italic="no">
    <Subtitle SpotNumber="1" TimeIn="00:00:20:177" TimeOut="00:00:26:188" FadeUpTime="0" FadeDownTime="0">
      <Text Direction="horizontal" HAlign="center" HPosition="0.0" VAlign="bottom" VPosition="8.0">This film was shot from 2007 to 2012</Text>
    </Subtitle>
    <Subtitle SpotNumber="2" TimeIn="00:01:18:177" TimeOut="00:01:21:177" FadeUpTime="0" FadeDownTime="0">
      <Text Direction="horizontal" HAlign="center" HPosition="0.0" VAlign="bottom" VPosition="8.0">No rubbish in our village!</Text>
    </Subtitle>
    <Subtitle SpotNumber="3" TimeIn="00:01:33:031" TimeOut="00:01:36:125" FadeUpTime="0" FadeDownTime="0">
      <Text Direction="horizontal" HAlign="center" HPosition="0.0" VAlign="bottom" VPosition="14.0">We'll walk all the way to Ankara</Text>
      <Text Direction="horizontal" HAlign="center" HPosition="0.0" VAlign="bottom" VPosition="8.0">if we have to!</Text>
    </Subtitle>
    .
    .
    .
    <Subtitle SpotNumber="110" TimeIn="00:14:57:000" TimeOut="00:15:02:198" FadeUpTime="0" FadeDownTime="0">
      <Text Direction="horizontal" HAlign="center" HPosition="0.0" VAlign="bottom" VPosition="14.0">Camburnu is a lovely place</Text>
      <Text Direction="horizontal" HAlign="center" HPosition="0.0" VAlign="bottom" VPosition="8.0">and we come from there...</Text>
    </Subtitle>
  </Font>
</DCSubtitle>
```

Further information is available here:

- Digital Cinema Initiatives (DCI) System Requirements and Specifications for Digital Cinema <https://www.dcimovies.com>
- ISDCF Industry Recommended Practice Technical Documents <https://www.isdcf.com>
- SMPTE DCP Published and Draft Standards <https://www.smppte.org>