# RTÊ

# Raidió Teilifís Éireann

# FAST: On-boarding IPU suppliers to electronic file delivery

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# **1** Introduction

# 1.1 Overview

FAST (File Acquisition Server Technology) is part of the overall RTÉ digital strategy moving from tape to server based technology. RTÉ is replacing its video tape-based broadcast systems with a system based on the acquisition, management and storage of material as electronic files. FAST also creates an environment where HD material can be delivered in electronic form, prepared for transmission, broadcast and stored for further use. It will enable transmission of commissioned and acquired programmes which are delivered in file format and will allow RTÉ to increase the level of content broadcast in HD format.

The purpose of this document is to specify the procedure for suppliers of commissioned programmes to deliver HD files which adhere to RTÉ's file specification. This document provides the details of the delivery mechanism through which RTÉ will receive files from suppliers and will be used to assist stakeholders through the process to successful on-boarding.

# 2 **On-boarding Process**

# 2.1 Delivering electronic content to RTÉ

Step 1: Independent Producer agrees delivery dates/time for all episodes with Genre Head. RTÉ Business/Legal Affairs confirms full delivery details in contract.

Step 2: At least six weeks prior to delivery date, Independent Producer contacts fileonboardingDL@RTE.ie to confirm where programme will be on-boarded from.

Step 3: Independent Producer sends three minute test file as per enclosed RTÉ's file specification and file naming convention via agreed file delivery mechanism as outlined below.

Step 4: On-boarding team will test file and notify Independent Producer with results.

Step 5: In the event of a file failing, Independent Producer sends another test file with changes required as notified by on-boarding team.

Step 6: In the event of a file passing, on-boarding team will sign of on successful process. RTÉ can then receive full programmes on file from Independent Producer.

# **3** Electronic File Format

	RTÉ Preferred HD File standard
File Type	mxf
File Format	OP1-a
File Format Profile	Closed/Complete
Video Compression	MPEG-2 LONG GOP
GOP Format	Fixed, M=3 N=12
Colourspace	4:2:2
Commercial Name	XDCAM HD 422-50
Resolution	1920 x 1080
Video bit rate	50Mbps 8bit
Interlaced	Yes
Field Dominance	Upper Field First – Field 1
Timecode standard	MXF Timecode Track
Programme Start	10:00:00:00
Preferred Aspect Ratio	16:9 FHA
Frame Rate	50i i.e. 25 frames per second interlaced or 50 interlaced fields per second
Time code standard	MXF Timecode Track
Access Services	If there is a requirement to deliver subtitles, audio description and/or Irish Sign Language (ISL), please contact <u>subtitle@rte.ie</u>

All files delivered to RTÉ must adhere to the following specifications:

Audio	RTÉ Preferred HD File standard (TX copy )
General	General Audio should be in stereo, if mono is supplied, ideally

V4.0

	recorded on Track 1 and Track 2 (phase compatible).
Audio Stream	1 Stream up to a max of 8 tracks
Audio Tracks	Track 1 and 2: Audio
	Track 3 and 4 (optional): Music and Effects or Dolby E
	Track 5 and 6 (optional): Audio Description
Audio Spec	Codec: PCM uncompressed
	Wrapped: BWF (Broadcast wav) as preferable but will accept AES
	8 tracks
	24 Bit resolution
	Sample frequency: 48kHz
Audio Levels	Follow guidelines provided by the EBU Recommendation R 128,
	"Loudness normalisation and permitted maximum level of audio
	signals"

Other requirements	RTÉ Preferred HD File standard (TX copy )
Clock and programme	An alignment/identification leader must precede the programme
Identification	recording. This should consist of:
	- Bars and Tone
	- Preferably 30 seconds of countdown clock with tone, minimum
	of ten seconds of countdown clock with tone for first 5 seconds
	- The clock should be circular format when viewed in 16:9 to
	allow positive identification of the programme format
	The following should be included on the leader
	- The Post Production company name and telephone number
	- Series Name
	- Programme Name/Episode Title
	- Series No and/or Episode Number

_	Aspect Ratio and Audio Track Allocation
_	Aspect Ratio and Audio Track Anocation

All files delivered to RTÉ should adhere to the following file naming convention. Any changes must be agreed and documented as part of the on-boarding process.

# **RTÉ File Naming Convention (Programme and Subtitle filenames)**

The filename must be unique and human readable. Subtitle should have the same filename as programme file with a different file extension. There should be no spaces in the name or the delivery mechanism will not work.

Field required	RTÉ standard (where applicable)
Supplier name	3 letter acronym of Supplier name (e.g. BBC, Highwire)
Distributor (or Post House) name	3 letter acronym of distributor name (e.g. RED for Red Bee; WML for Windmill Lane). " <b>DIR</b> " if direct from supplier
Series name	4 letter acronym
Series number	Number
Episode number	Number preceded by 'e'
File Format	XDCAM for HD
Filename Extension	.mxf for programme files, .stl for subtitle files
Sample Video filenames	
BBCREDeast13e1579XDCAM.mxf	BBC, Red Bee, Eastenders Series 13, Episode 1579, XDCAM, programme file
FOXDIRlost2e12XDCAM.mxf	Fox (Fox delivered direct) Lost, Series 2, Episode 12, XDCAM, programme file

The current preferred mechanism for electronic file delivery is using Aspera web client. Windows compatible, virus checked USB keys are also acceptable. The Signiant transfer mechanism will be available soon.

# 5.1 Aspera Delivery

Please use the following URL, username and password to access the delivery site:

Supported Browsers and system requirements

Aspera URL : <u>http://aspera-connect.rte.ie/aspera/user/</u>

Aspera Usename : rtetvipu

Aspera Password : \$\$Rij3&#90N"\$4;

### 5.1.1 Installing the Aspera web client

Firstly, you will be presented with a logon screen, use the username and password provided

he server http://aspera-connect.rte.ie:80 requires a	
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semanie and password. The server says, Aspera ose	rs.
User Name: rtetvipu	
Password: ***********	

If Java is not enabled you should be asked to enable it.

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Java(TM) needs your permission to run.	Run this time	Always run on this site
less aspera connect server	r	

If you've not installed the aspera client in you browers before you will be prompted to "Install Now"

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🕞 aspera connect server	
aspera-connect.rte.ie Download & Upload File & Upload Folder Delete New Folder	This site requires Aspera Connect. Install Now or <u>click here</u> to download the installer.
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Choose Setup Type	Appon
Choose the setup type that best suits your needs	
Typical	
Installs the most common program features. R	ecommended for most users.
Custom	
Custom	
Allows users to choose which program feature they will be installed. Recommended for advar	es will be installed and where nced users.

Select the Typical Install and Next.

### 5.1.2 Uploading a File via Aspera

Select the Upload File button

🔓 Upload File

Please **DON'T** upload folders.

Which will open a browse window to navigate to the file you want to upload. Once the file is chosen you will be presented with a confirmation and a rquest for the username and password again.



You can remember the "Allow" your connection choice and password to stop the system prompting. This password will change in the future at which point you will be prompted again.

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Transfers - Aspera Connect	Contraction of the second s
🌇 Aspera Install.zip	
	<b>&amp; Q</b> (
Done	
0	Clear List

The transfer window provides a progress of the uploads. You can retry uploads. It is also where you can limit the bandwidth provided to your client.

#### 5.1.3 Aspera Bandwidth usage

The Aspera client is licenses to use 100Mbps per active upload. The client will attempt to use all the available internet bandwidth at a client site. It is advisable to limit the local bandwidth on the Aspera client.

In the Transfer window select the

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gear icon to open the preferences.

In the bandwidth tab allows you to set the transfer rates

ieneral	Transfers	Network	Bandwidth	Security	
ransfer sp	eeds depend	on server set	tings and your	, network connecti	ivity. The
ettings bel	ow allow you	to limit transf	er rates.		
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### 5.1.4 Aspera System Requirements

## 5.1.4.1 Browser

The following requirements are applicable when installing and running the Connect application:

- Windows XP SP2, 2003 SP2, Vista, 2008, 7, 8 (see note below)
- IE 7+, Firefox 4+ (32-bit only) or Google Chrome 5+

### 5.1.4.2 Network Requirements

Your SSH outbound connection may differ based on your organization's unique network settings. Although TCP/22 is the default setting, refer to your IT Department for questions related to which SSH port(s) are open for file transfer. Please also consult your specific Operating System's help documentation for specific instructions on configuring your firewall. If your client host is behind a firewall that does not allow outbound connections, you will need to allow the following:

• Outbound connections for SSH, which is TCP/22 by default, although the server side may run SSH on another port (please check with your IT Department for questions related to which SSH port(s) are open for file transfer).

• Outbound connections for fasp transfers, which is UDP/33001 by default, although the server side may run fasp transfers on one or more other ports (please check with your IT Department for questions related to which port(s) are open for fasp transfers).

#### Reference:

http://d3gcli72yxqn2z.cloudfront.net/connect/docs/win/en/pdf/Connect\_3.3.3\_Windows\_User\_Gui de\_English.pdf