



## Technical Requirements for All Recorded Programmes (Media Management)

<b>DQ Status</b>	Live	Policy	
<b>DQ Content Authority</b>	Intake and Media Manager (Steve Jupe)		
<b>Contact(s) for Help</b>	Steve Jupe		
<b>Description</b>	<p><b>Intended Audience:</b> For all those involved in the management of archives and information services across the BBC. Also available on <a href="http://bbc.co.uk">bbc.co.uk</a>.</p> <p><b>Use:</b> This document describes minimum technical quality standards for programmes to be archived by BBC Information &amp; Archives. This is to ensure that the media is reusable and is of archival quality.</p>		
<b>DQ Reference</b>	<b>Version</b>	<b>Date</b>	<b>Last Reviewed</b>
i&a_09	01.00	29/09/2000	June 2005
<b>Key Words</b>	technical, archive, programmes		
<b>DQ Location</b>	Internal: <a href="http://guidelines.gateway.bbc.co.uk/dq/media_management/infax_tech_req.shtml#Tech_req">http://guidelines.gateway.bbc.co.uk/dq/media_management/infax_tech_req.shtml#Tech_req</a> External: <a href="http://www.bbc.co.uk/guidelines/dq/contents/archives.shtml">http://www.bbc.co.uk/guidelines/dq/contents/archives.shtml</a>		

**BBC Archive: Television & Radio Programmes  
Technical Requirements for all Recorded Programmes**

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**BBC ARCHIVE: TELEVISION & RADIO PROGRAMMES**

**TECHNICAL REQUIREMENTS FOR ALL RECORDED PROGRAMMES**

**INTRODUCTION**

The enclosed documents specify the minimum technical quality standards for programmes recorded currently and in the past, which are to be archived by BBC Information & Archives. This is to ensure that the media is reusable and is of archival quality. There are a number of mediums on which a media asset can be provided, depending on the nature of how it is to be used. E.g. VHS medium would be acceptable for browse purposes but not for publication

**POLICY**

It is the policy of BBC Information & Archives to archive and issue television and radio programmes of an appropriate technical quality, for today and the future.

**PROGRAMMES RECORDED IN THE PAST**

For programmes that have been recorded in the past the technical standards are met by the formats listed below.

<b>FORMAT</b>	<b>VALUE CODES</b>
Quad Low Band	Q0
Quad High Band	Q1
High Band 2 (7½ ips)	Q2
Slant Track	S
Format A (VPR 1)	HA
Format B (BCN)	HB
Format C (e.g VPR2)	HC
1" HDTV Digital	HD
1" HDTV Analogue	HE
Betacam (Component)	BC
Betacam SP (Component)	BS
Digital Betacam (Component)	BD
Digital D1 (Component)	D1
Digital D2 (Composite)	D2
Digital D3 (Composite)	D3
Digital D5 (Component)	D5
MII (Component)	M2
DVCAM (Component)	DM
DVC Pro (Component)	DP
DVC Pro50 (Component)	DP
Digital S/D9 (Component)	DS

Date :29<sup>th</sup> September, 2000  
Version: :1.0  
Design Authority :Sue Malden  
CI Reference :n/a  
Document :ii&a\_programmes\_technical.doc

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DV (Component)	DV
Mini DV (Component)	
Betacam SX (Component)	SX
High Band U-Matic	HU
U-Matic SP	SU
Low Band U-Matic (N = Non Broadcast)	NU
S-VHS	NS
VHS	NV
Phillips N1500	NP
Hi-8	
Digital Audio Tape	DAT
Digital Video Disc	DVD
Mini Disc	MD
Compact Disc	CD
¼ inch Tape	
Vinyl	
Server	
16 mm film	
35 mm film	
Wax cylinder and 78 rpm macro groove records in archive	
Analogue Cart (based on US 8 track)	
½" multi track analogue tape	
1" multi track analogue tape	
2" multi track analogue tape	
Mini Nagra analogue tape usually red or green type	
Akai DA88 digital 8 (or more) tracks	
Sony DASH digital multi track (2488?)	
Dart (digital cart using MO drives or special high density 3.5" floppies)	
The Bush house JAZ drive version of Dart	
DSS (very uncommon Phillips rival to MD)	
Sony Scoop man mini DAT	
SCSI drives in SADiE, sonic & Protools format all quite common	
Other Hard Disc systems including Dcart, AudioVAULT etc	
Fairlight & Audiofile editor	

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### CURRENT RECORDED PROGRAMMES

The archive accepts programme material in the format and to the technical standard in which it is commissioned for transmission by the BBC.

Where the material is available in different formats the least compressed version is required.

For browse or viewing VHS , MPEG1 and MPEG4 standards are accepted.

### STANDARDS FOR PRESERVATION WITHIN THE ARCHIVES

As part of the preservation programme there are there additional standards which are primarily for use only within the Archive and to generate copies for issue.

These standards are listed below:

OLD FORMAT	NEW FORMAT
Acetate Film Soundtrack tapes	Polyester based stock Audio CD-R, with timecode
1" C Format	D3 (digital composite) tape Digital Betacam (component) tape VHS viewing tape MPEG1 browse copy on CD-R
U-Matic	DVC pro/DVcam MPEG2 compressed on DVD-ROM
Reversal Film (Ektachrome	Digital Betacam (component) tapes MPEG1 browse copy on CD-R VHS viewing tape
Shellac (78)and Vinyl Discs	Audio CD BWAVfiles on DVD
Radio 1 tape/DAT	Audio CD BWAVfiles on DVD Real Audio for browse

Notes:

The sampling rate used for all audio CD-Rs and BWAV files shall be 44.1kHz.

The BWAV files are to EBU standard with USID.

The CDs are of archival quality i.e. Gold reflective layer, and have over a 50 year life.

Any digital editor or other digital production system used in audio CD-R programme production or compilation must be set to use linear recording throughout.

The MPEG1 for browse will change to MPEG4 when encoders which include timecode are available.

Date :29<sup>th</sup> September, 2000  
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**Appendix A – Document History**

<b>Version</b>	<b>Date</b>	<b>Comment</b>	<b>Author</b>
1.0	29/09/2000	Issue	Judith Evans

Date :29<sup>th</sup> September, 2000  
Version: :1.0  
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