



Digital Switchover Transmitter Details

Central Region

Issued: Issue 4.0
25 May 2011

Digital Switchover Transmitter Details: Central Region

This document contains details of the transmission characteristics which the television transmitter network will adopt at digital switchover. Details for pre-switchover digital transmitters are available on the Ofcom website (www.ofcom.org.uk).

This information is primarily intended to help systems installers make initial preparations for switchover by highlighting those transmitters where frequency allocations and aerial group requirements are likely to change.

A key to column headings is provided in the Glossary.

Please note that although we anticipate that this frequency plan will remain relatively stable in the run-up to switchover, it may prove necessary to make changes to some aspects of the plan with the aim of maximising coverage across the UK. If you would like to be kept informed of any changes, please join our digital transmitter mailing list by sending an email to broadcast.technical@ofcom.org.uk, with the word 'subscribe' as the message subject.

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Bromsgrove transmitter group - Public Service Broadcaster (PSB) Multiplexes

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Bromsgrove^a	SO947730	26	400W	23	400W	30-	400W	K/WV	AV	31	27	24	21	

Bromsgrove Transmitter Group - Commercial (COM) Multiplexes

Site Name	NGR	SDN		Arqiva A		Arqiva B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Bromsgrove^{ab}	SO947730	41+	400W	44	400W	47	400W	K/WV	AV	31	27	24	21	

Lark Stoke transmitter group - Public Service Broadcaster (PSB) Multiplexes

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Lark Stoke^a	SP187426	26	1.26kW	23	1.26kW	30-	1.26kW	K/WV	AV	33	26	23	29	

^a Bromsgrove, Lark Stoke and The Wrekin operate as a single frequency network (SFN).

^b At Bromsgrove, Arqiva A will remain on its pre-switchover channel (33) until September 2011. Arqiva A and Arqiva B will temporarily operate on channels 29 and 34 respectively from the first stage of switchover at Bromsgrove until September 2011.

Lark Stoke transmitter group - Commercial (COM) Multiplexes

Site Name	NGR	SDN		Arqiva A		Arqiva B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Lark Stoke^{ac}	SP187426	41+	1.26kW	44	1.26kW	47	1.26kW	K/WV	AV	33	26	23	29	

Nottingham transmitter group - Public Service Broadcaster (PSB) Multiplexes

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Nottingham	SK503435	27	400W	24	400W	21+	400W	WV	AV	21	27	24	31	34

^c Following switchover at Lark Stoke, Arqiva A and Arqiva B will remain on their existing frequencies, and the SDN multiplex will use a temporary frequency. All three multiplexes will adopt their final frequencies and powers during September 2011. During this transition period the following frequencies will be used: SDN ch31 (50W), Arqiva A ch57 (50W), Arqiva B ch60 (50W).

Nottingham transmitter group - Commercial (COM) Multiplexes

Site Name	NGR	SDN		Arqiva A		Arqiva B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Nottingham^d	SK503435	51	400W	52	400W	48	400W	WV	AV	21	27	24	31	34

Oxford transmitter group - Public Service Broadcaster (PSB) Multiplexes

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Oxford	SP567105	53+	100kW	60-	100kW	57	100kW	C/DH	C/DH	57	63	60	53	49
Ascott under Wychwood	SP287193	27	6W	24	6W	21+	6W	AV	AV	21	27	24	31	
Charlbury	SP344197	44	10W	41	10W	47	10W	BV	BV	51	44	41	47	
Guiting Power	SP101233	44	5W	41	5W	47	5W	BV	BV	51	44	41	47	
Icomb Hill	SP201228	28	22W	25	22W	22	22W	AV	AV	22	28	25	32	
Over Norton	SP309282	48	31W	56-	31W	52	31W	C/DV	C/DV	65	48	55	67	

^d The commercial multiplexes at Nottingham will use temporary frequencies for some months after switchover before adopting their final frequencies and powers during September/October 2011. During this transition period, the commercial multiplexes will use the following frequencies: SDN ch67 (40W), Arqiva A ch63 (40W), Arqiva B ch59 (40W). Arqiva A and Arqiva B's temporary frequencies will be used from the first stage of switchover at Nottingham.

Oxford transmitter group - Commercial (COM) Multiplexes

Site Name	NGR	SDN		Arqiva A		Arqiva B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Oxford^e	SP567105	62	50kW	59-	50kW	55	50kW	C/DH	C/DH	57	63	60	53	49

Ridge Hill transmitter group - Public Service Broadcaster (PSB) Multiplexes

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Ridge Hill	SO630333	28	20kW	25	20kW	22+	20kW	AH	AH	22	28	25	32	35
Andoversford	SP002183	50	11W	59	11W	55	11W	C/DV	C/DV	55	62	59	65	
Eardiston	SO706682	54	2W	49	2W	58	2W	C/DV	C/DV	58	64	61	54	
Ewyas Harold	SO390269	44	2W	41+	2W	47	2W	BV	E/WV	51	44	67	47	
Garth Hill HP	SO273726	53	7W	60	7W	57	7W	C/DH	C/DH	57	63	60	53	
Garth Hill VP	SO273726	53	5W	60	5W	57	5W	C/DV	C/DV	57	63	60	53	
Hazler Hill	SO464928	45	5W	42	5W	39	5W	BV	BV	51	44	41	47	
Hereford	SO524365	44	7W	41+	7W	47	7W	BV	BV	51	44	41	47	
Hope Under Dinmore	SO504525	57	2W	60	2W	53	2W	C/DV	C/DV	63	57	60	53	
Kington	SO290552	44	20W	41+	20W	47	20W	BV	BV	39	45	49	42	
Knucklas	SO270747	39	2W	42	2W	45	2W	BV	BV	39	45	42	49	
Ludlow	SO498741	45	5W	42	5W	39	5W	BV	BV	39	45	42	49	

^e Arqiva A will temporarily use channel 34 (10kW) between the first and second stages of switchover at Oxford.

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
New Radnor	SO269623	44	25W	41+	25W	47	25W	BV	BV	51	44	41	47	
Oakeley Mynd	SO346875	45	10W	49	10W	42	10W	BV	BV	39	45	49	42	
Peterchurch	SO360380	53	15W	60	15W	57	15W	C/DV	C/DV	57	63	60	53	
Presteigne	SO337661	45	3W	42	3W	49	3W	BV	C/DV	48	56	52	66	
Ridge Hill West ^f	SO630333			29	20kW			AH	AH			30		
Ross On Wye	SO605243	50	2W	59	2W	55	2W	C/DV	C/DV	55	62	65	59	
St Briavels	SO557049	46	5W	43	5W	40	5W	BV	BV	40	46	43	50	
Upper Soudley	SO662101	46	2W	43	2W	50	2W	BV	BV	40	46	43	50	

Ridge Hill transmitter group - Commercial (COM) Multiplexes

Site Name	NGR	SDN		Arqiva A		Arqiva B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Ridge Hill	SO630333	21+	10kW	24	10kW	27	10kW	AH	AH	22	28	25	32	35

^f Carries the ITV West regional service targeted at Cheltenham and north Gloucestershire.

Sutton Coldfield transmitter group - Public Service Broadcaster (PSB) Multiplexes

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Sutton Coldfield	SK113003	43	200kW	46	200kW	40+	200kW	BH	BH	46	40	43	50	
Allesley Park	SP296796	25	7W	22	7W	28	7W	AV	AV	22	28	25	32	
Brailes	SP319379	24	8W	21+	8W	27	8W	AV	WV	30	52	34	59	
Bretch Hill	SP438400	56	87W	48	87W	52	87W	C/DV	C/DV	65	48	55	67	
Bridgnorth	SO719914	59	3W	50	3W	55	3W	C/DV	C/DV	62	68	56	66	
Brierley Hill	SO916856	60-	2kW	57+	2kW	53	2kW	C/DV	C/DV	57	63	60	53	
Cheadle	SK030435	56	5W	48	5W	52	5W	C/DV	C/DV	48	66	56	68	
Earl Sterndale ^g	SK090666	49	40W	58	40W	54	40W	C/DV	C/DV	58	64	61	54	
Edgbaston	SP058851	24	4W	21+	4W	27	4W	AV	AV	21	27	24	31	
Fenton ^h	SJ902451	24	2kW	27	2kW	21+	2kW	AV	AV	31	27	24	21	35
Gib Heath ⁱ	SP056883	50	3W	59	3W	55	3W	C/DV	C/DV	56	66	62	68	
Gravelly Hill ^j	SP109899	50	3W	59	3W	55	3W	C/DH	C/DH	66	56	62	68	
Haden Hill	SO967846	48	16W	52	16W	56	16W	C/DV	BV	39	52	49	42	
Hamstead	SP044931	24	2W	21+	2W	27	2W	AV	AV	21	27	24	31	
Harborne	SP016836	56	40W	52	40W	48	40W	C/DV	WV	30	48	34	67	
Hartington	SK117601	56	7W	48	7W	52	7W	C/DV	C/DV	66	48	56	68	
Ipstones Edge	SK043506	60-	6W	57	6W	53	6W	C/DV	C/DV	57	63	60	53	

^g Between the first and second stages of switchover at Earl Sterndale, BBC A will use channel 61

^h D3&4 at Fenton will move to ch33 (100W) in advance of switchover during April 2011. The final frequency, ch27, will be adopted at switchover.

ⁱ Between the first and second stages of switchover at Gib Heath, BBC A will use channel 62

^j Between the first and second stages of switchover at Gravelly Hill, BBC A will use channel 62

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Ironbridge ^k	SJ678032	49	2W	58	2W	54	2W	C/DV	C/DV	58	64	61	54	
Kenilworth	SP298726	60-	10W	57	10W	53	10W	C/DV	C/DV	57	63	60	53	
Kidderminster ^l	SO808739	49	400W	58	400W	54	400W	C/DV	C/DV	58	64	61	54	
Kinver	SO855831	48	5W	56	5W	52	5W	C/DH	C/DH	66	48	56	68	
Leamington Spa	SP329663	59	40W	50	40W	55	40W	C/DV	C/DV	56	62	66	68	
Leek	SJ999561	25	200W	22	200W	28	200W	AV	AV	22	28	25	32	
Long Compton	SP285338	25	4W	22	4W	28	4W	AV	AV	22	28	25	32	
Malvern	SO774464	53	400W	57	400W	60-	400W	C/DV	C/DV	56	62	66	68	
Oakamoor	SK057446	24	2W	21+	2W	27	2W	AV	AV	21	27	24	31	
Perry Beeches	SP066932	25	2W	22	2W	28	2W	AV	AV	22	28	25	32	
Queslett ^m	SP063948	49	3W	58	3W	54	3W	C/DV	C/DV	58	64	61	54	
Redditch	SP028683	25	2W	22	2W	28	2W	AV	AV	22	28	25	32	
Repton	SK307261	60-	8W	57	8W	53	8W	C/DV	C/DV	48	68	56	66	
Rugeley	SK034178	56	8W	52	8W	48	8W	C/DV	C/DV	66	48	56	68	
Tenbury Wells	SO588691	60-	3W	57	3W	53	3W	C/DV	C/DV	57	63	60	53	
Turves Green ⁿ	SP022784	50	2W	59	2W	55	2W	C/DV	C/DV	56	66	62	68	
Whittingslow	SO429886	60-	11W	57	11W	53	11W	C/DV	C/DV	57	63	60	53	
Winchcombe ^o	SP036287	49	2W	58	2W	54	2W	C/DV	C/DV	58	64	61	54	

^k Between the first and second stages of switchover at Ironbridge, BBC A will use channel 61

^l Between the first and second stages of switchover at Kidderminster, BBC A will use channel 61

^m Between the first and second stages of switchover at Queslett, BBC A will use channel 61

ⁿ Between the first and second stages of switchover at Turves Green, BBC A will use channel 62

^o Between the first and second stages of switchover at Winchcombe, BBC A will use channel 61

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Winshill	SK272241	60-	60W	57	60W	53	60W	C/DV	C/DV	66	48	56	68	
Woodford Halse	SP540530	25	2W	22	2W	28	2W	AV	AV	22	28	25	32	

Sutton Coldfield transmitter group - Commercial (COM) Multiplexes

Site Name	NGR	SDN		Arqiva A		Arqiva B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Sutton Coldfield^P	SK113003	42	200kW	45	200kW	39+	200kW	BH	BH	46	40	43	50	
Brierley Hill	SO916856	50	2kW	59-	2kW	55	2kW	C/DV	C/DV	57	63	60	53	
Fenton	SJ902451	25	1kW	22+	1kW	28	1kW	AV	AV	31	27	24	21	35
Malvern	SO774464	50	400W	59-	400W	55	400W	C/DV	C/DV	56	62	66	68	

The Wrekin transmitter group - Public Service Broadcaster (PSB) Multiplexes

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
The Wrekin^a	SJ629082	26	20kW	23	20kW	30-	20kW	K/WH	AH	26	33	23	29	35
Bucknell	SO358734	45	2W	49	2W	42	2W	BV	BV	39	45	49	42	

^P Between the first and second stages of switchover at Sutton Coldfield, SDN will use channel 41 (8kW).

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Clun	SO324799	55	11W	59	11W	50	11W	C/DV	C/DV	55	62	59	65	
Coalbrookdale	SJ671042	50	2W	43	2W	46	2W	BV	BV	51	44	47	41	
Halesowen	SO971826	58	2W	61	2W	54	2W	C/DV	C/DV	58	64	61	54	

The Wrekin transmitter group - Commercial (COM) Multiplexes

Site Name	NGR	SDN		Arqiva A		Arqiva B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
The Wrekin^{aq}	SJ629082	41+	10kW	44	10kW	47	10kW	K/WH	AH	26	33	23	29	35

Waltham transmitter group - Public Service Broadcaster (PSB) Multiplexes

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Waltham^f	SK809233	61	50kW	54-	50kW	58	50kW	WH	C/DH	58	64	61	54	35
Ambergate	SK351513	25	37W	28	37W	22	37W	AV	BV	51	44	41	47	
Ashbourne	SK181460	25	50W	28	50W	22	50W	AV	AV	22	28	25	32	

^q After the PSB multiplexes switch at The Wrekin, the Arqiva multiplexes will remain on their pre-switchover frequencies and powers, and SDN will use a temporary frequency, for a short period before all three multiplexes adopt their final frequencies and powers during September 2011. During this transition period the commercial multiplexes will use the following frequencies: SDN ch49 and ch31 (both 2kW), Arqiva A ch57 (1kW), Arqiva B ch53 (1kW).

^fFrom late March 2011 until the second stage of switchover at Waltham, D3&4 will operate on ch31 at 8kW.

Site Name	NGR	BBC A		D3&4		BBC B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Ashford in the Water	SK189691	23	3W	26	3W	30-	3W	AV	AV	33	26	23	29	
Belper ^s	SK337462	59+	6W	62	6W	55	6W	C/DV	C/DV	66	56	68	62	
Birchover	SK241616	49	5W	45	5W	42	5W	BH	BH	39	45	49	42	
Bolehill	SK294553	53-	100W	57-	100W	60-	100W	C/DV	C/DV	63	57	53	60	
Darley Dale	SK275642	44	3W	41	3W	47	3W	BV	K/WV	30	48	34	52	
Derby ^t	SK329342	48	40W	51-	40W	52	40W	E/WH	K/WH	48		30		
Eastwood	SK463470	23	2W	26	2W	30-	2W	AV	AV	33	26	23	29	
Leicester	SK585033	25	2W	28	2W	22	2W	AV	AV	22	28	25	32	
Little Eaton	SK371419	23	4W	26	4W	30-	4W	AV	AV	33	26	23	29	
Matlock	SK297589	24	3W	27	3W	21+	3W	AV	AV	21	27	24	31	
Parwich	SK185542	24	2W	27	2W	21+	2W	AV	AV	21	27	24	31	
Stamford	TF032067	47	2W	41	2W	44	2W	BV	BV	39	45	49	42	
Stanton Moor ^u	SK245637	59+	400W	62	400W	55	400W	C/DV	C/DV	55	62	59	65	

^s BBC B at Belper will temporarily use channel 65 from switchover until October 2011

^t D3&4 at Derby will temporarily use channel 30 from switchover until October 2011. BBCB will not come into operation until October 2011.

^u BBC B at Stanton Moor will temporarily use channel 65 from switchover until October 2011.

Waltham transmitter group - Commercial (COM) Multiplexes

Site Name	NGR	SDN		Arqiva A		Arqiva B		DSO Aerial Group	Pre-DSO Aerial Group	Analogue Frequencies				
		Channel	ERP	Channel	ERP	Channel	ERP			BBC1	BBC2	ITV1	C4	C5
Waltham ^v	SK809233	29	25kW	56	25kW	57	25kW	WH	C/DH	58	64	61	54	35

^v SDN will move to channel 29 (at 8kW) in advance of switchover during March 2011, and will adopt its final power level during October 2011.

Glossary

Site Name:	The name of the transmitter site. Primary transmitters in each transmitter group are highlighted in bold , with their dependent relays listed alphabetically below them. Public Service Broadcaster (PSB) and Commercial (COM) multiplexes are shown in separate tables.
NGR:	The location of the transmitter site, in Ordnance Survey National Grid Reference format.
Multiplex names:	The post-switchover name of the multiplex. See below for more details
Channel	The UHF channel number of the multiplex. The centre frequency, F_c (in Megahertz) of the multiplex can be calculated using $F_c=8n+306$, where n is the UHF channel number. A + or - following the channel number indicates that the frequency is offset by +0.167MHz or -0.167MHz with respect to the channel centre. Channel numbers highlighted in red are likely to be affected in future by the clearance of channels 61 and 62: see the '800 MHz Clearance' section below.
ERP	The Effective Radiated Power of the multiplex, in watts (W) or kilowatts (kW)
DSO	Digital Switchover
DSO Aerial Group:	Suggested aerial group for reception of the 3 PSB multiplexes (and the 3 COM multiplexes, where broadcast) from this transmitter after digital switchover. See below for more information on aerial groups. The final character in this column indicates whether signals are horizontally (H) or vertically (V) polarised.
DSO Aerial Group Colour codes:	All DSO frequencies at this transmitter are re-assigned analogue frequencies. If aerials and cabling are in good condition, viewers should not need to replace them.
	One or more DSO frequencies were previously unused at this transmitter by analogue TV, but all DSO channels fall within the analogue aerial group. If aerials and cabling are in good condition, replacement should not be necessary. Some changes may be required to larger systems which contain channelised components, such as communal aerial (MATV / IRS) systems.
	One or more DSO frequencies were previously unused at this transmitter by analogue TV, and these also fall outside the existing analogue aerial group. Therefore a replacement aerial of a different group may be required. Some changes may be required to larger systems which contain channelised components, such as communal aerial (MATV / IRS) systems.
Pre-DSO Aerial Group:	Suggested aerial group for reception of analogue services from this transmitter. The aerial groups shown are based upon four-channel reception and do not take into account Channel 5's analogue frequencies where these are out of group.
Analogue channels:	The UHF channel numbers of the analogue services currently broadcast from this transmitter site. The nominal analogue vision carrier frequency, F_v (in Megahertz) of the service can be calculated using $F_v=8n+303.25$, where n is the UHF channel number.
Single Frequency networks (SFNs)	In order to maximise digital coverage, some transmitter sites will operate as Single Frequency Networks (SFNs) at switchover. In an SFN, neighbouring transmitters use the same frequencies as each other.

Multiplex Names

The naming convention for the six multiplexes changes at switchover, and the table below compares their pre-switchover and post-switchover designations:

Pre-Switchover Name	Post-Switchover Name	Operator
Multiplex 1	BBC A	BBC
Multiplex 2	D3&4	Digital 3 & 4
Multiplex A	SDN	SDN
Multiplex B	BBC B	BBC
Multiplex C	Arqiva A	Arqiva
Multiplex D	Arqiva B	Arqiva

Aerial Groups

Television aerials are designed to operate most efficiently over a specific range of frequencies, as shown in the table below. For guidance, this document suggests a suitable aerial group for reception of the digital services from each transmitter. Where a transmitter uses a semi-wideband channel grouping (E or K), a wideband (W) aerial is also suggested as an alternative. The colour codes in the table below are often used by aerial manufacturers to aid identification of the aerial's group.

Aerial Group	Channels	Colour Code
A	21-37	Red
B	35-53	Yellow
C/D	48-68	Green
E	35-68	Brown
K	21-48	Grey
W	21-68	Black

Transmission Mode

It is anticipated that the post-switchover transmission mode for all multiplexes except BBC B, will be 64QAM modulation, coding rate 2/3, & 8K FFT.

The BBC B multiplex will operate using the DVB-T2 standard (256QAM modulation, coding rate 2/3, & 32K FFT). Conversion to DVB-T2 will generally take place at DSO in each region.

Transitional Transmission Characteristics

Transmission frequencies are intensively used in many parts of the UK. To avoid unnecessary interference being caused to viewers, a certain number of multiplexes will need to operate with 'transitional' transmission characteristics for a limited period following switchover at particular transmitters. These transitional characteristics are only likely to affect a small proportion of sites. For example, some channels may need to operate at slightly reduced power levels compared to the final post-switchover allocations shown in this booklet. This is primarily in order to prevent interference being caused to neighbouring transmitters which may not switch over until later in the regional sequence. Full power operation will be adopted when these interference constraints are removed, generally when the neighbouring transmitter or region switches over. Details of known transitional arrangements affecting individual transmitters are provided in footnotes.

800 MHz clearance

In order to align the frequencies released by digital switchover for alternative uses with those released by other European countries, UHF channels 61 and 62 will be 'cleared' of digital TV services over the coming years. UHF channels 39 and 40 (which were previously among the channels due to be released for other uses after switchover) will instead now be retained for TV broadcasting.

In order to minimise changes to domestic aerial groups, the general approach for adopting these changes is that multiplexes using channels 61 or 62 will move to channels 49 or 50, and some multiplexes using channels 49 or 50 will move to channels 39 or 40. Other channels may also be affected in some cases. The changes will either be carried out at digital switchover, or sometime after switchover completes (e.g. during 2013). If the changes are to be carried out at digital switchover, an updated version of this guide will be issued.

Multiplexes using channels 61, 62, 49, or 50 highlighted in **red** in this guide indicate that these allocations are likely to change in the future.

Analogue Channel Changes

For practical engineering reasons, some analogue channel allocations may need to be altered in the period immediately before switchover begins at a particular transmitter. This may involve swapping the frequencies of some programme services. In other cases, a previously unused analogue frequency may need to be used temporarily to allow high-power digital broadcasts to begin. Viewers will be informed of any such channel changes by Digital UK and the broadcasters in the run up to switchover.

Switchover Dates

Up-to-date information on switchover dates is available from Digital UK

www.digitaluk.co.uk.

Transmitter Locations

Maps showing the location of TV transmitters within individual regions are available on Ofcom's website at:

<http://stakeholders.ofcom.org.uk/broadcasting/guidance/tech-guidance/>

Document History

Version	Date	Details
1.0	4/11/2008	Document Issued
2.0	15/6/2009	Oxford transmitter group details added. Malvern becomes part of the Sutton Coldfield transmitter group. Changes to transitional arrangements at The Wrekin and Nottingham. Removal of transitional arrangements for Waltham. SFN details added. Other minor editorial amendments.
3.0	5/1/2011	Sutton Coldfield channels modified. Derby channel allocations modified. Haden Hill moved to Sutton Coldfield transmitter group and channels changed. Malvern and Brierley Hill SDN channels changed. Kinver channel order changed. Changes to transitional arrangements. 800 MHz clearance information added. Offsets added. Editorial changes to explanatory text.
4.0	25/5/2011	Channel changes due to 800 MHz Clearance at: <i>Ludlow, Hazler Hill, St Briavels, Andoversford, Knucklas, Eardiston, Ross on Wye (relays of Ridge Hill); Clun (relay of The Wrekin). Bridgnorth, Earl Sterndale, Gib Heath, Ironbridge, Gravelly Hill, Kidderminster, Leamington Spa, Queslett, Turves Green, Winchcombe (relays of Sutton Coldfield)</i> Belper transitional channel added. Derby D3&4 temporary channel corrected. Bromsgrove & The Wrekin transitional channels amended. Other minor editorial amendments.

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