

REPORT ITU-R BT.2043

Analogue television systems currently in use throughout the world

(2004)

This Report provides information on analogue television systems currently in use throughout the world. An explanation of the signs used in the Table is provided following the Table. The figures in brackets refer to the Notes also following the Table.

Television systems used in different countries/geographical areas

Country/Geographical area	System used in bands:	
	I/III VHF broadcasting (Band 8)	IV/V UHF broadcasting (Band 9)
Afghanistan	D/SECAM	—
Albania (Republic of)***	B/PAL	G/PAL
Algeria (People's Democratic Republic of) (1)	B/PAL	G/PAL (1)
Germany (Federal Republic of) (2)	B/PAL	G/PAL (2)
Angola (Republic of) (1)	I/PAL	I/PAL* (1)
Antigua and Barbuda		
Saudi Arabia (Kingdom of)	B/PAL	G/PAL
Argentine Republic	N/PAL	N/PAL
Armenia (Republic of)	D/SECAM, D/PAL	K/SECAM, K/PAL
Aruba**	M/NTSC	M/NTSC
Australia (3)	B/PAL	B/PAL (3)
Austria** (2)	B/PAL	G/PAL (2)
Azerbaijani Republic		
Bahamas (Commonwealth of the)		
Bahrain (Kingdom of)**	B/PAL	G/PAL
Bangladesh (People's Republic of)	B/PAL	—
Barbados		
Belarus (Republic of)***	D/SECAM	K/SECAM
Belgium** (4)	B/PAL	H/PAL (4)
Belize**	M/NTSC	—
Benin (Republic of) (1)	K1/SECAM	K1/SECAM (1)
Bermuda	M/NTSC	—
Bhutan (Kingdom of)		
Bolivia (Republic of)	M/NTSC	M/NTSC
Bosnia and Herzegovina		

Television systems used in different countries/geographical areas

Country/Geographical area	System used in bands:	
	I/III VHF broadcasting (Band 8)	IV/V UHF broadcasting (Band 9)
Botswana (Republic of) ⁽¹⁾	I/PAL	I/PAL* ⁽¹⁾
Brazil (Federative Republic of)	M/PAL	M/PAL
Brunei Darussalam	B/PAL	—
Bulgaria (Republic of)***	D/SECAM, D/PAL*	K/SECAM, K/PAL
Burkina Faso ⁽¹⁾	K1/SECAM	K1*SECAM ⁽¹⁾
Burundi (Republic of) ⁽¹⁾	K1/SECAM*	K1/SECAM* ⁽¹⁾
Cambodia (Kingdom of)	B/PAL	G*/PAL
Cameroon (Republic of)	B/PAL	G*/PAL
Canada	M/NTSC	M/NTSC
Cape Verde (Republic of) ⁽¹⁾	K1/SECAM*	K1/SECAM* ⁽¹⁾
Central African Republic ⁽¹⁾	K1/SECAM*	K1/SECAM* ⁽¹⁾
Chile	M/NTSC	M/NTSC
China (People's Republic of)	D/PAL	D/PAL
Cyprus (Republic of)**	B/PAL	G/PAL
Vatican City State		
Colombia (Republic of)	M/NTSC	M*
Comoros (Union of the) ⁽¹⁾	K1/SECAM*	K1/SECAM* ⁽¹⁾
Congo (Republic of the) ⁽¹⁾	K1/SECAM*	K1/SECAM* ⁽¹⁾
Korea (Republic of)	M/NTSC	M/NTSC
Costa Rica	M/NTSC	M/NTSC
Côte d'Ivoire (Republic of) ⁽¹⁾	K1/SECAM	K1/SECAM* ⁽¹⁾
Croatia (Republic of)**	B/PAL	G/PAL
Cuba	M/NTSC	M/NTSC
Denmark ⁽⁴⁾	B/PAL	G/PAL ⁽⁴⁾
Djibouti (Republic of) ⁽¹⁾	B/SECAM	— ⁽¹⁾
Dominican Republic		
Egypt (Arab Republic of) ⁽¹⁾	B/PAL	G/PAL ⁽¹⁾
El Salvador (Republic of)	M/NTSC	
United Arab Emirates	B/PAL	G/PAL
Ecuador	M/NTSC	M/NTSC
Eritrea		
Spain ⁽⁴⁾	B/PAL	G/PAL ⁽⁴⁾

Television systems used in different countries/geographical areas

Country/Geographical area		System used in bands:	
		I/III VHF broadcasting (Band 8)	IV/V UHF broadcasting (Band 9)
Estonia (Republic of)***	(14)	D/SECAM, B1/PAL	K/SECAM, G/PAL
United States of America**		M/NTSC	M/NTSC
Ethiopia (Federal Democratic Republic of)	(1)	B,G/PAL	G/PAL* (1)
Russian Federation ***		D/SECAM	K/SECAM
Fiji (Republic of)			
Finland	(4)	B/PAL	G/PAL (4)
France	(5), (6)	L/SECAM	L/SECAM (5), (6)
Gabonese Republic	(1)	K1/SECAM	K1/SECAM* (1)
Gambia (Republic of the)	(1)	I/PAL	I/PAL* (1)
Georgia			
Ghana	(1)	B/PAL	B/PAL* (1)
Gibraltar		B/PAL	G/PAL
Greece		B/SECAM	G/SECAM
Grenada			
Guatemala (Republic of)			
Guinea (Republic of)	(1)	K1/SECAM, PAL	K1/PAL* (1)
Equatorial Guinea (Republic of)	(1)	B/PAL	G/PAL* (1)
Guinea-Bissau (Republic of)	(1)	I/PAL	I/PAL* (1)
Guyana			
Haiti (Republic of)			
Honduras (Republic of)			
Hong Kong		—	I/PAL
Hungary (Republic of)***		D/PAL, B1/PAL* (16)	G/PAL* (4)
India (Republic of)		B/PAL	—
Indonesia (Republic of)		B/PAL	G/PAL
Iran (Islamic Republic of)		B/PAL	G/PAL
Iraq (Republic of)	(1)	B,G/SECAM	G/SECAM* (1)
Ireland	(7)	I/PAL	I/PAL (7)
Iceland	(4)	B/PAL	G* (4)
Israel (State of)		B/PAL	G/PAL (8)
Italy	(2)	B/PAL	G/PAL (2)
Socialist People's Libyan Arab Jamahiriya	(1)	B,G/PAL	B,G/PAL* (1)
Jamaica		N	—

Television systems used in different countries/geographical areas

Country/Geographical area	System used in bands:	
	I/III VHF broadcasting (Band 8)	IV/V UHF broadcasting (Band 9)
Japan	M/NTSC	M/NTSC
Jordan (Hashemite Kingdom of)	B	G*
Kazakhstan (Republic of)		
Kenya (Republic of) ⁽¹⁾	B/PAL	B,G/PAL* ⁽¹⁾
Kiribati (Republic of)		
Kuwait (State of) ⁽¹⁾	B/PAL	G/PAL* ⁽¹⁾
The Former Yugoslav Republic of Macedonia		
Lao People's Democratic Republic		
Lesotho (Kingdom of) ⁽¹⁾	I*/PAL	I*/PAL ⁽¹⁾
Latvia (Republic of)*** ⁽¹⁴⁾	D/SECAM, D/PAL*	K/SECAM, K/PAL*
Lebanon		
Liberia (Republic of) ⁽¹⁾	B/PAL	G/PAL* ⁽¹⁾
Liechtenstein (Principality of)**	B/PAL	G/PAL
Lithuania (Republic of)*** ⁽¹⁴⁾	D/PAL*	K/PAL*
Luxembourg	B/PAL	G/PAL, L/SECAM
Macau**	—	I/PAL
Madagascar (Republic of) ⁽¹⁾	K1/SECAM	K/SECAM* ⁽¹⁾
Malaysia	B/PAL	G/PAL
Malawi ⁽¹⁾	I/PAL	I/PAL* ⁽¹⁾
Maldives (Republic of)	B/PAL	—
Mali (Republic of) ⁽¹⁾	B/SECAM	G/SECAM* ⁽¹⁾
Malta	B/PAL	—
Morocco (Kingdom of) ⁽¹⁾	B,G/SECAM	G/SECAM ⁽¹⁾
Mauritius (Republic of) ⁽¹⁾	B,G/SECAM	B,G/SECAM* ⁽¹⁾
Mauritania (Islamic Republic of) ⁽¹⁾	B/SECAM	B/SECAM* ⁽¹⁾
Mexico	M/NTSC	M/NTSC
Micronesia (Federated States of)		
Moldova (Republic of)***	D/SECAM	K/SECAM
Monaco (Principality of)	L/SECAM	G/PAL, G/SECAM
Mongolia	D/SECAM	—
Montserrat	M/NTSC	—
Mozambique (Republic of) ⁽¹⁾	G/PAL*	G/PAL ⁽¹⁾
Myanmar (Union of)**	M/NTSC	—

Television systems used in different countries/geographical areas

Country/Geographical area	System used in bands:	
	I/III VHF broadcasting (Band 8)	IV/V UHF broadcasting (Band 9)
Namibia (Republic of) ⁽¹⁾	I/PAL	I/PAL ⁽¹⁾
Nauru (Republic of)		
Nepal		
Nicaragua		
Niger (Republic of the) ⁽¹⁾	K1/SECAM	K1/SECAM ⁽¹⁾
Nigeria (Federal Republic of) ⁽¹⁾	B/PAL	G/PAL* ⁽¹⁾
Norway ⁽⁴⁾	B/PAL	G/PAL ⁽⁴⁾
New Zealand ^{(4), (9)}	B/PAL	G/PAL ^{(4), (9)}
Oman (Sultanate of)	B/PAL	G/PAL
Uganda (Republic of) ⁽¹⁾	B/PAL	— ⁽¹⁾
Uzbekistan (Republic of)		
Pakistan (Islamic Republic of)	B/PAL	G/PAL
Panama (Republic of)	M/NTSC	M*/NTSC
Papua New Guinea	B/PAL	G/PAL
Paraguay (Republic of)		
Netherlands (Kingdom of the) ⁽²⁾	B/PAL	G/PAL ⁽²⁾
Peru	M/NTSC	M/NTSC
Philippines (Republic of the)		
Poland (Republic of) ⁽⁴⁾	D1/PAL ⁽¹⁵⁾	D1/PAL
Portugal	B/PAL	G/PAL
Qatar (State of)**	B/PAL	G/PAL
Syrian Arab Republic	B/PAL	G/PAL
Democratic Republic of the Congo ⁽¹⁾	K1/SECAM	K1/SECAM* ⁽¹⁾
Democratic People's Republic of Korea	D/PAL	K/PAL
Slovak Republic*** ⁽¹⁴⁾	D/PAL, B1/PAL	K/PAL, G/PAL
Czech Republic***	D/PAL	K/PAL
Romania***	D/PAL	G/PAL
United Kingdom of Great Britain and Northern Ireland	— ⁽¹⁰⁾	I, I1/PAL, ⁽⁴⁾
Rwandese Republic ⁽¹⁾	B/PAL	K1/SECAM* ⁽¹⁾
St. Kitts and Nevis	M/NTSC	—
San Marino (Republic of)		
Saint Vincent and the Grenadines		
Solomon Islands		

Television systems used in different countries/geographical areas

Country/Geographical area		System used in bands:	
		I/III VHF broadcasting (Band 8)	IV/V UHF broadcasting (Band 9)
Samoa (Independent State of)			
Sao Tome and Principe (Democratic Republic of)	(1)	B/PAL	— (1)
Senegal (Republic of)	(1)	K1/SECAM	K1/SECAM* (1)
Serbia and Montenegro		B/PAL	G/PAL
Seychelles (Republic of)	(1)	B/PAL	— (1)
Sierra Leone	(1)	B/PAL	G/PAL* (1)
Singapore (Republic of)		B/PAL	G*/PAL (11)
Slovenia (Republic of)**		B/PAL	G/PAL
Somali Democratic Republic	(1)	B/PAL	G/PAL* (1)
Sudan (Republic of the)	(1)	B/PAL	G/PAL* (1)
Sri Lanka (Democratic Socialist Republic of)		B/PAL	G/PAL
South Africa (Republic of)		I/PAL	I/PAL
Sweden	(4)	B/PAL	G/PAL (4)
Switzerland (Confederation of)**		B/PAL	G/PAL (12)
Suriname (Republic of)		M/NTSC	—
Swaziland (Kingdom of)			
Tanzania (United Republic of)	(1)	I/PAL	I/PAL (1)
Chad (Republic of)	(1)	K1/SECAM*	K1/SECAM* (1)
Thailand		B/PAL	G/PAL*
Togolese Republic	(1)	K1/SECAM	K1/SECAM* (1)
Tonga (Kingdom of)			
Trinidad and Tobago			
Tunisia	(13)	B/SECAM, PAL	G/SECAM, PAL (13)
Turkmenistan			
Turkey**		B/PAL	G/PAL
Ukraine***		D/SECAM, D1/PAL	K/SECAM, D1/PAL
Uruguay (Eastern Republic of)		N/PAL	—
Vanuatu (Republic of)**		B/PAL	—
Venezuela (Bolivarian Republic of)		M/NTSC	M/NTSC
British Virgin Islands		M/NTSC	—
Viet Nam (Socialist Republic of)		D/SECAM	K/SECAM
Yemen (Republic of)	(1)	B/PAL	G/PAL* (1)
Zambia (Republic of)**	(1)	G/PAL*	G/PAL* (1)
Zimbabwe (Republic of)	(1)	G/PAL*	G/PAL* (1)

The Palestinian Authority has submitted the following information:

VHF I/III (Band 8)	VHF IV/V (Band 9)
PAL	PAL

- (1) This information has been taken from the preliminary requirements file as submitted by the administrations concerned to the ITU in preparation of the second session of the Regional Administrative Conference for the planning of VHF/UHF television broadcasting in the African Broadcasting Area and Neighbouring Countries (AFBC(2)). In a number of cases transmitters using different systems from those indicated in the requirements file may continue to operate for a transitional period.
- (2) Germany, Austria, Italy and the Netherlands use an additional FM carrier for stereophonic or two-channel sound transmission.
- (3) Australia uses nominal modulation levels as specified for System I. For stereophonic sound transmission, an additional FM carrier is used similar to the system used in Germany.
- (4) Denmark, Spain, Finland, Iceland, Norway, New Zealand, Poland, the United Kingdom, Sweden and Hungary have approved the use of an additional digital carrier for stereophonic or multi-channel sound transmission.
- (5) In the French Overseas departments and territories, the system K1 is used instead of L/SECAM which is used in the metropolitan area.
- (6) In France, the use the NICAM system for stereophonic or multi-channel sound transmission is being investigated for K1/SECAM.
- (7) System I will be used at all stations though with a vision-to-sound ratio of up to 10/1. In addition Ireland reserves the right to the possible use of an additional sound carrier in the band between 5.5 MHz and 6.75 MHz in relation to the vision carrier.
- (8) No final decision has been taken about the width of the residual sideband, but for planning purposes this country is willing to accept the assumption of a residual sideband 1.25 MHz wide.
- (9) In New Zealand the modulation levels are identical to those of System I.
- (10) The United Kingdom has ceased to use Bands I and III for television broadcasting.
- (11) Singapore reserves the right to use additional frequency-modulated sound channels in the band between 5.5 and 6.5 MHz in relation to the picture carrier, for additional sound channels for sound broadcasting.
- (12) The Swiss Administration is planning to use additional frequency-modulated sound carriers, in the frequency interval between the spacings of 5.5 and 6.5 MHz in relation to the picture carrier, at levels lower than or equal to the normal level of the sound carrier, for additional sound-tracks or for sound broadcasting.
- (13) In Tunisia SECAM is used for broadcasting the national programmes; PAL is used for rebroadcasting other programmes.
- (14) It is a case of a gradual transition from the D, K/SECAM System to the B1, G/PAL system. Characteristics are identical to System G. VHF channel numbers remain R1 to R12.
- (15) Poland uses only Band III for television broadcasting in VHF.
- (16) VHF channel numbers remain R1 to R12.

Explanation of signs used in the Table:

- *: Planned (whether the standard is indicated or not);
 - **:
 - ***: Updated in 1993, according to replies received from administrations to Circular-letter 11/CL/3 dated 31 July 1992;
 - ***: Updated in 1996, based on European Broadcasting Union (EBU) Technical Information I-33-1996 “Changes of the Terrestrial Television Systems in the Central and East European countries”;
 - : Not yet planned, or no information received;
 - /: The abbreviation following the stroke indicates the colour transmission system in use (NTSC, PAL or SECAM).
-