JPEG 2000 profiles – examples from a range of institutions (footnotes on reverse)

Parameter	BL[1]	LoC[2]	NLM[3]	Wellcome[4]	WAMCP[5]	Czech NL[6]	Czech NL	Czech NL	TNA[7]
Used for	Newspapers	Newspapers	Book page images	Wide variety (masters)	Manuscripts (production)	Wide variety (masters)	Books, periodicals (production)	Maps, manuscripts (production)	Digital surrogates
Conversion software used	Leadtools	Kakadu	Kakadu	LuraWave	Kakadu	Kakadu	Kakadu	Kakadu	LuraWave & IntoPIX
File format	Part 1 (.jp2)	Part 1 (.jp2)	Part 1 (.jp2)	Part 1 (.jp2)	Part 1 (.jp2)	Part 1 (.jp2)	Part 1 (.jp2)	Part 1 (.jp2)	Part 1 (.jp2)
Lossy or lossless	Lossy	Lossy	Lossless	Lossy	Lossy	Lossless	Lossy	Lossy	lossy
Typical compression			9:1	6:1	10:1	2:1 to 3:1	20:1 to 30:1	8:1 to 10:1	10:1
Tiling	none	1024 x 1024	none	1024 x 1024	1024 x 1024	4096x4096	1024x1024	1024x1024	none
Progression order	RPCL	RLCP	RPCL	RLCP	RPCL	RPCL	RPCL	RPCL	RPCL
Number of decomp.levels	6	6	6	5	5	5 or 6	5	5 or 6	7
Number of quality layers	Multiple	25	6	8	3	1	12 /logarithmic/	12 /logarithmic/	7
Code block size (xcb = ycb)	6	6		6		6	6	6	
Transformation	9-7 irreversible filter	9-7 irreversible filter				5-3 reversible	9-7 irreversible	9-7 irreversible	9-7 irreversible
Precinct size	256x256 for first two decomp. levels, 128 by 128 for lower levels	Not used	256x256 for first two decomp. levels, 128 by 128 for lower levels	Not explicitly specified	Not explicitly specified	256x256 for first two decomp. levels, 128 by 128 for lower levels	256x256 for first two decomp. levels, 128 by 128 for lower levels	256x256 for first two decomp. levels, 128 by 128 for lower levels	Not explicitly specified
Regions of Interest	No	No		No	No	No	No	No	No
Code block size	64x64	64x64	32x32	64x64	64x64	64x64	64x64	64x64	64x64
TLM markers	No		No	Yes	No	Yes “R”	Yes “R”	Yes “R”	No
Bypass				No		Yes	Yes	Yes	Not specified

[1]British Library
[2]Library of Congress report – see http://www.loc.gov/ndnp/pdf/NDNP_JP2HistNewsProfile.pdf
[3]National Library of Medicine, USA
[4]Wellcome report - see http://library.wellcome.ac.uk/assets/wtx056572.pdf
[5]Wellcome Arabic Manuscripts Cataloguing Project - JPEG 2000's stored at Bibliotheca Alexandrina, Egypt
[6]National Digital Library, http://ndk.cz/narodni-dk
[7]The National Archives, Kew (more info chris.owens@nationalarchives.gsi.gov.uk)