

International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

T.800

Corrigendum 4
(10/2014)

SERIES T: TERMINALS FOR TELEMATIC SERVICES
Still-image compression – JPEG 2000

Information technology – JPEG 2000 image coding
system: Core coding system

**Technical Corrigendum 4: Miscellaneous
corrections**

Recommendation ITU-T T.800 (2002) – Technical
Corrigendum 4

ITU-T



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Information technology – JPEG 2000 image coding system: Core coding system

Technical Corrigendum 4

Miscellaneous corrections

Summary

Recommendation ITU-T T.800 specifies the image coding format known as JPEG 2000. This corrigendum contains miscellaneous small corrections to this Recommendation.

History

Edition	Recommendation	Approval	Study Group	Unique ID*
1.0	ITU-T T.800	2002-08-29	16	11.1002/1000/5281
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1.2	ITU-T T.800 (2002) Cor. 1	2007-01-13	16	11.1002/1000/9048
1.3	ITU-T T.800 (2002) Cor. 2	2007-08-29	16	11.1002/1000/9231
1.4	ITU-T T.800 (2002) Amd. 2	2009-03-16	16	11.1002/1000/9719
1.5	ITU-T T.800 (2002) Amd. 3	2010-06-22	16	11.1002/1000/11002
1.6	ITU-T T.800 (2002) Amd. 4	2011-05-14	16	11.1002/1000/11313
1.7	ITU-T T.800 (2002) Amd. 5	2012-01-13	16	11.1002/1000/11469
1.8	ITU-T T.800 (2002) Amd. 6	2013-03-16	16	11.1002/1000/11882
1.9	ITU-T T.800 (2002) Cor. 3	2014-10-14	16	11.1002/1000/12301
1.10	ITU-T T.800 (2002) Cor.4	2014-10-14	16	11.1002/1000/12302
1.11	ITU-T T.800 (2002) Amd. 7	2014-10-14	16	11.1002/1000/12300

* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

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INTERNATIONAL STANDARD
ITU-T RECOMMENDATION

Information technology – JPEG 2000 image coding system: Core coding system

Technical Corrigendum 4

Miscellaneous corrections

1) Clause A.2

In clause A.2 (Table A.2, 16th to 21st row) change:

Pointer marker segments	TLM	0xFF55	optional	not allowed
Tile-part lengths	PLM	0xFF57	optional	not allowed
Packet length, main header	PLT	0xFF58	not allowed	optional
Packet length, tile-part header	PPM	0xFF60	optional	not allowed
Packed packet headers, main header ^{c)}	PPT	0xFF61	not allowed	optional
Packed packet headers, tile-part header ^{c)}	TLM	0xFF55	optional	not allowed

to

Pointer marker segments				
Tile-part lengths	TLM	0xFF55	optional	not allowed
Packet length, main header	PLM	0xFF57	optional	not allowed
Packet length, tile-part header	PLT	0xFF58	not allowed	optional
Packed packet headers, main header ^{c)}	PPM	0xFF60	optional	not allowed
Packed packet headers, tile-part header ^{c)}	PPT	0xFF61	not allowed	optional

2) Clause B.2

In clause B.2 (Figure B.3, description of sample coordinate) change:

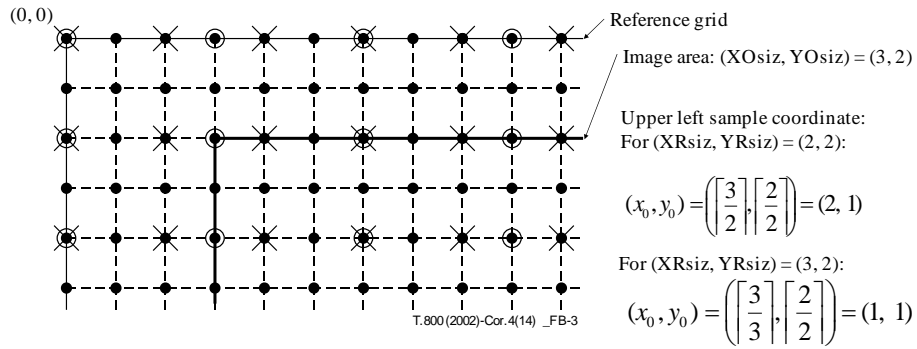
For (XR_{siz}, YR_{siz}) = (3,2):

$$(x_0, y_0) = \left(\left\lceil \frac{3}{2} \right\rceil, \left\lceil \frac{2}{2} \right\rceil \right) = (1, 1)$$

to

For (XR_{siz}, YR_{siz}) = (3,2):

$$(x_0, y_0) = \left(\left\lceil \frac{3}{3} \right\rceil, \left\lceil \frac{2}{2} \right\rceil \right) = (1, 1)$$



3) Clause B.3

In clause B.3 (Equation B-6) change:

$$p = \text{mod}(t, \text{numXtiles}) \qquad q = \left\lceil \frac{t}{\text{numXtiles}} \right\rceil$$

to

$$p = \text{mod}(t, \text{numXtiles}) \qquad q = \left\lfloor \frac{t}{\text{numXtiles}} \right\rfloor$$

4) Clause C.2.5

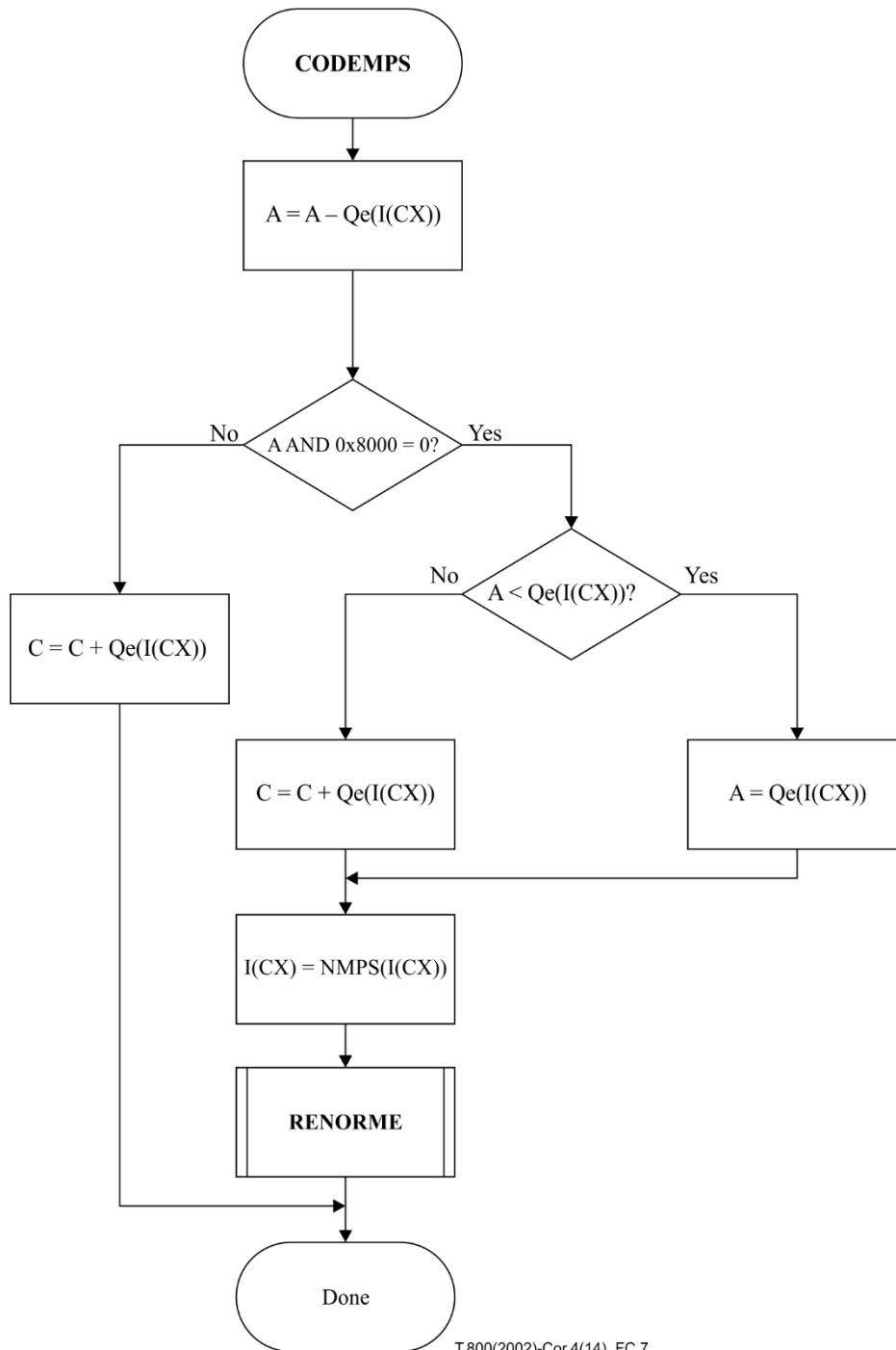
In clause C.2.5 (Figure C.7, second conditional symbol) change:

"A < Qe(I(CX))"

to

"A < Qe(I(CX))?"

Thus, new figure C.7:



5) Clause C.2.7, Figure C.9, second and fourth generic processing steps

In clause C.2.7, Figure C.9, second processing step, change:

"C=C AND 0x7FFFFFFF?"

to

"C=C AND 0x7FFFFFFF"

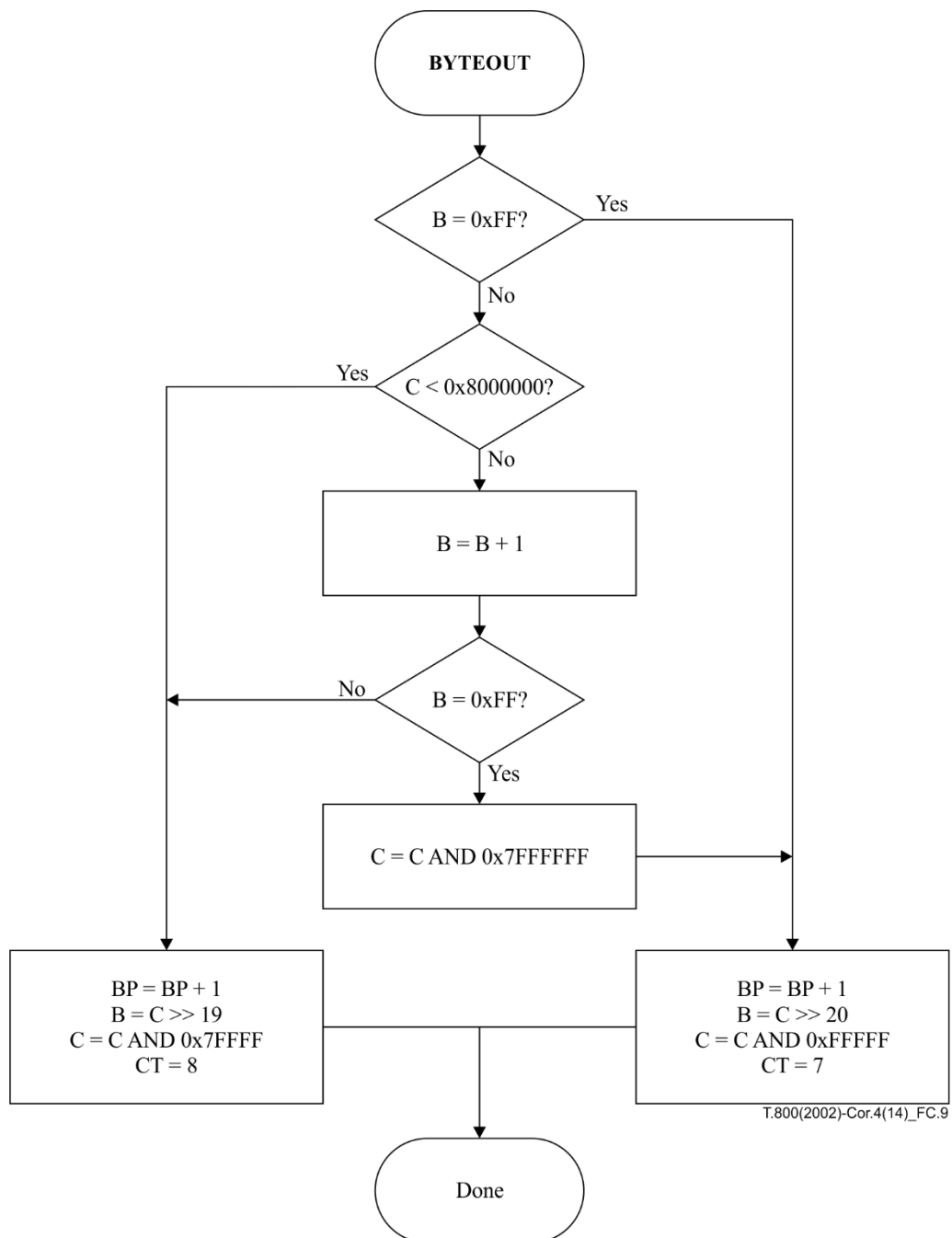
and in the fourth generic processing step (on the right-hand side) change:

"BP=B+1
 B=C>>20
 C=C AND 0xFFFF
 CT=7"

to

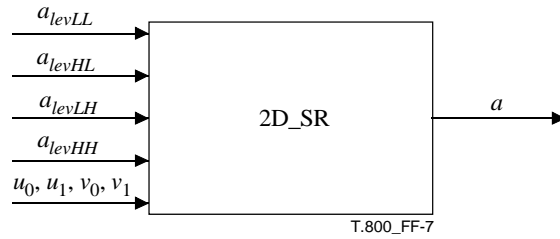
"BP=B+1
 B=C>>20
 C=C AND 0xFFFFF
 CT=7"

Thus, new figure C.9:

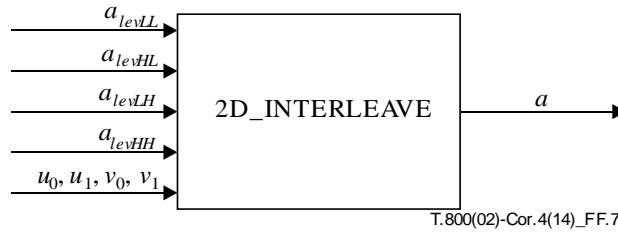


6) Clause F.3.3

In clause F.3.3 (Figure F.7) change:



to



7) Clause F.3.6

In clause F.3.6 (second paragraph) change:

"For signals of length one (i.e., $i_0 = i_1 - 1$), the 1D_SR procedure sets the value of $X(i_0)$ to $X(i_0)$ if i_0 is an even integer, and to $X(i_0) = Y(i_0)/2$ if i_0 is an odd integer."

to

"For signals of length one (i.e., $i_0 = i_1 - 1$), the 1D_SR procedure sets the value of $X(i_0)$ to $Y(i_0)$ if i_0 is an even integer, and $X(i_0)$ to $Y(i_0)/2$ if i_0 is an odd integer."

8) Clause F.3.7

In clause F3.7 (last paragraph) change:

"Values equal to or greater than those given in Tables F.2 and F.3 will produce the same array X at the output of the 1D_IFILTR procedure of Figure F.14."

to

"Values equal to or greater than those given in Tables F.2 and F.3 will produce the same array X at the output of the 1D_FILTR procedure of Figure F.14."

9) Clause F.3.8

In clause F.3.8 (Figure F.16, title) change:

"Figure F.16 – Parameters of the ID_FILTR procedure"

to

"Figure F.16 – Parameters of the 1D_FILTR procedure"

10) Clause F.3.8.1

In clause F.3.8.1 (first paragraph) change:

"The 1D_FILT_{5-3R} procedure uses lifting-based filtering in conjunction with rounding operations."

to

"The 1D_FILT_{5-3R} procedure uses lifting-based filtering in conjunction with rounding operations."

11) Clause F.3.8.2

In clause F.3.8.2 (last paragraph) change:

"The values of $X(k)$ are such that $i_0 \leq k < i_1$ form the output of the 1D_FILTR_I procedure."

to

"The values of $X(k)$ are such that $i_0 \leq k < i_1$ form the output of the 1D_FILTR_{9.71} procedure."

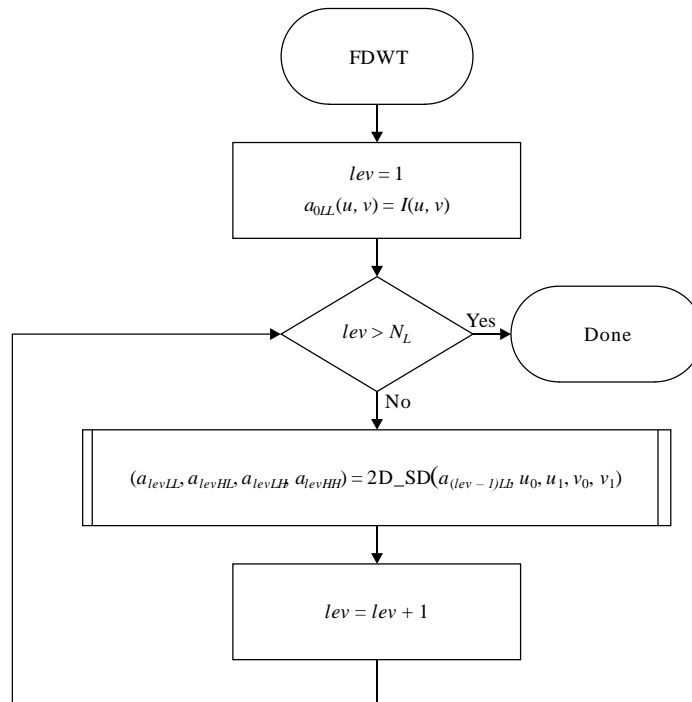
12) Clause F.4.1

In clause F.4.1 (Figure F.19, 1st generic processing step) change:

$$\begin{aligned} lev &= 1 \\ a_{0LL}(u, v) &= I(u, v) \end{aligned}$$

to

$$\begin{aligned} lev &= 1 \\ a_{0LL}(u, v) &= I(u, v) \end{aligned}$$



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13) Clause F.4.8.1

In clause F.4.8.1 (Equation F-9) change:

$$Y(2n+1) = X_{ext}(2n+1) - \left\lfloor \frac{X_{ext}(2n) + X_{ext}(2n+2)}{4} \right\rfloor$$

to

$$Y(2n+1) = X_{ext}(2n+1) - \left\lfloor \frac{X_{ext}(2n) + X_{ext}(2n+2)}{2} \right\rfloor$$

14) Clause F.4.8.1

In clause F.4.8.1 (last paragraph) change:

"The values of $Y(k)$ such that $i_0 \leq k < i_1$ form the output of the 1D_FILTD_R procedure."

to

"The values of $Y(k)$ are such that $i_0 \leq k < i_1$ form the output of the 1D_FILTD_{5-3R} procedure."

15) Clause F.4.8.2

In clause F.4.8.2 (title) change:

"The 1D_FILT_{DI} procedure (informative)"

to

"The 1D_FILTD_{9-7I} procedure (informative)"

16) Clause F.4.8.2

In clause F.4.8.2 (last paragraph) change:

"The values of such that $i_0 \leq k < i_1$ form the output of the 1D_FILTD_I procedure."

to

"The values of $X(k)$ are such that $i_0 \leq k < i_1$ form the output of the 1D_FILTD_{9-7I} procedure."

17) Clause J.4.1

In clause J.4.1 (Table J.7, 3rd row) change:

$a_{2HH}(u, v)$	0	1	2
0	-1	0	0
1	0	1	0
2	0	0	0
3	0	0	0

to

$a_{2HH}(u, v)$	0	1	2
0	-1	0	0
1	0	-1	0
2	0	0	0
3	0	0	0

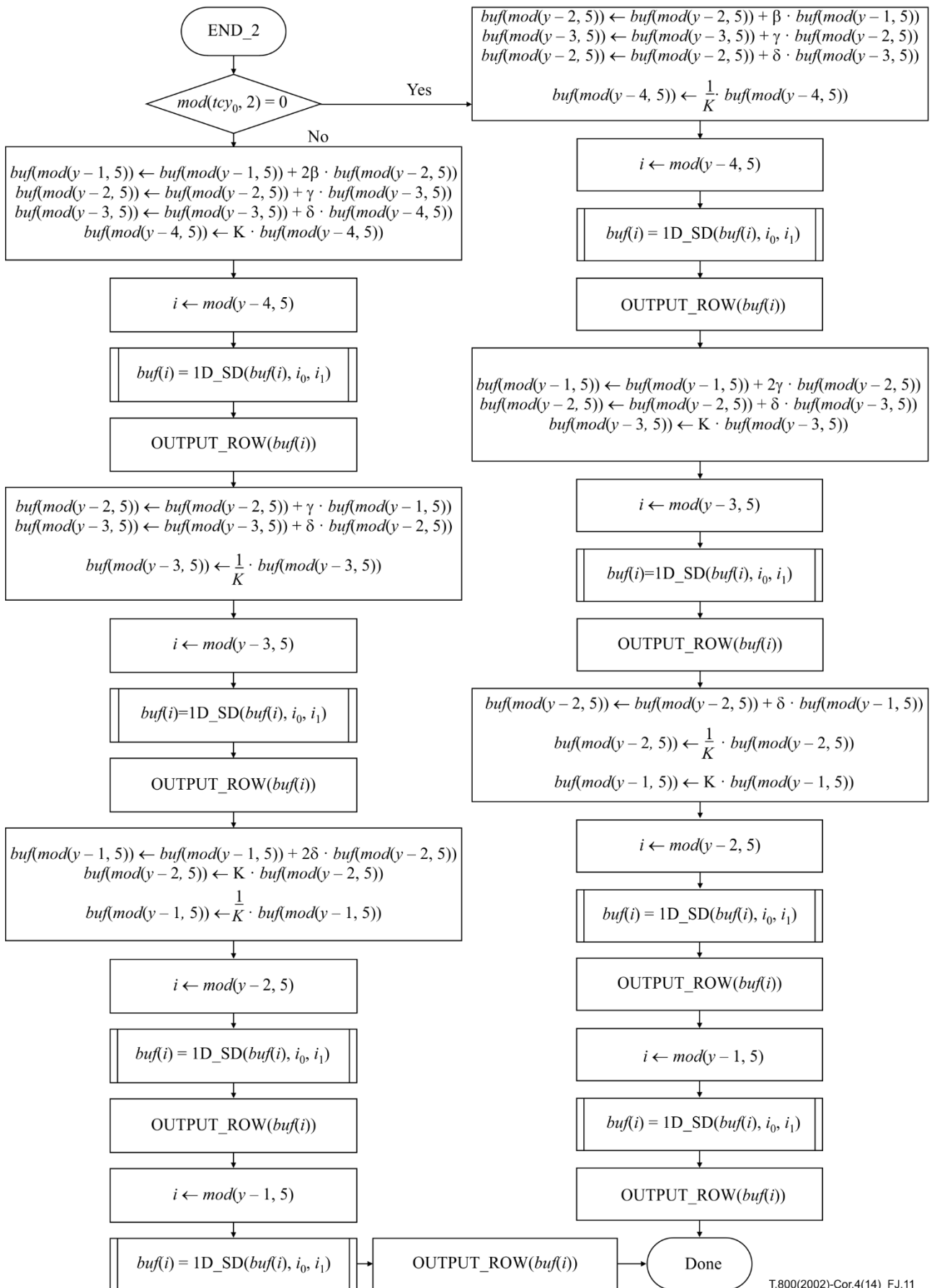
18) Clause J.5.3.4

In clause J.5.3.4 (Figure J.11 5th generic processing step on left side) change:

"3OUTPUT_ROW(buf(i))"

to

"OUTPUT_ROW(buf(i))"



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19) Clause J.9.2

In clause J.9.2 (Equation J-4) change:

$$\begin{bmatrix} connection_x \\ connection_y \\ connection_z \end{bmatrix} = \begin{bmatrix} redColorant_x & greenColorant_x & blueColorant_x \\ redColorant_y & greenColorant_y & blueColorant_y \\ redColorant_z & greenColorant_z & blueColorant_z \end{bmatrix} \begin{bmatrix} linear_r \\ linear_y \\ linear_z \end{bmatrix}$$

to

$$\begin{bmatrix} connection_x \\ connection_y \\ connection_z \end{bmatrix} = \begin{bmatrix} redColorant_x & greenColorant_x & blueColorant_x \\ redColorant_y & greenColorant_y & blueColorant_y \\ redColorant_z & greenColorant_z & blueColorant_z \end{bmatrix} \begin{bmatrix} linear_r \\ linear_g \\ linear_b \end{bmatrix}$$

20) Clause J.9.3

In clause J.9.3 (Equation J-6) change:

$$\begin{bmatrix} slinear_r \\ slinear_g \\ slinear_b \end{bmatrix} = \begin{bmatrix} 3,2406_{PT} & -1,5372_{PT} & -0,4986_{PT} \\ -0,9689_{PT} & 1,8758_{PT} & 0,0415_{PT} \\ 0,0557_{PT} & -0,2040_{PT} & 1,0570_{PT} \end{bmatrix} \begin{bmatrix} 0,9554_{BDF} & -0,0231_{BDF} & 0,0633_{BDF} \\ -0,0284_{BDF} & 1,0100_{BDF} & 0,0211_{BDF} \\ 0,0123_{BDF} & -0,0205_{BDF} & 1,3305_{BDF} \end{bmatrix} \begin{bmatrix} connection_x \\ connection_y \\ connection_z \end{bmatrix}$$

to

$$\begin{bmatrix} slinear_r \\ slinear_g \\ slinear_b \end{bmatrix} = \begin{bmatrix} 3,2406_{PT} & -1,5372_{PT} & -0,4986_{PT} \\ -0,9689_{PT} & 1,8758_{PT} & 0,0415_{PT} \\ 0,0557_{PT} & -0,2040_{PT} & 1,0570_{PT} \end{bmatrix} \begin{bmatrix} 0,9554_{BFD} & -0,0231_{BFD} & 0,0633_{BFD} \\ -0,0284_{BFD} & 1,0100_{BFD} & 0,0211_{BFD} \\ 0,0123_{BFD} & -0,0205_{BFD} & 1,3305_{BFD} \end{bmatrix} \begin{bmatrix} connection_x \\ connection_y \\ connection_z \end{bmatrix}$$

21) Clause J.9.3

In clause J.9.3 (Equation J-9) change:

$$\begin{bmatrix} slinear_r \\ slinear_g \\ slinear_b \end{bmatrix} = \begin{bmatrix} 3,1337 & -1,6173 & -0,4907 \\ -0,9785 & 1,9162 & 0,0334 \\ 0,0720 & -0,2290 & 1,4056 \end{bmatrix} \begin{bmatrix} redColorant_x & greenColorant_x & blueColorant_x \\ redColorant_y & greenColorant_y & blueColorant_y \\ redColorant_z & greenColorant_z & blueColorant_z \end{bmatrix} \begin{bmatrix} linear_r \\ linear_g \\ linear_z \end{bmatrix}$$

to

$$\begin{bmatrix} slinear_r \\ slinear_g \\ slinear_b \end{bmatrix} = \begin{bmatrix} 3,1337 & -1,6173 & -0,4907 \\ -0,9785 & 1,9162 & 0,0334 \\ 0,0720 & -0,2290 & 1,4056 \end{bmatrix} \begin{bmatrix} redColorant_x & greenColorant_x & blueColorant_x \\ redColorant_y & greenColorant_y & blueColorant_y \\ redColorant_z & greenColorant_z & blueColorant_z \end{bmatrix} \begin{bmatrix} linear_r \\ linear_g \\ linear_b \end{bmatrix}$$

22) Clause J.14.4.1

In clause J.14.4.1 (Equation J-14) change:

$$v_i^p[m, n] = 2^{-p} v_i[m, n] - 2 \left[\frac{2^{-p} v_i[m, n]}{2} \right]$$

to

$$v_i^p[m, n] = 2^{-p} v_i[m, n] - 2 \left\lfloor \frac{2^{-p} v_i[m, n]}{2} \right\rfloor$$

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