

TITLE **Resolving the AbC of SpM-2 (revision 1)**

PROJECT SpM-2

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STATUS for decision, and inclusion into SpM-2

ABSTRACT Proposals to resolve the comments that were raised during the AbC of Spectral Management part 2 (TR 101 830-2)
 This revision 1 includes valuable feedback from BT, that was received after the first version was send out. This also resulted in another update of the draft (see m06p06a04_SpM-2_DR.pdf)

Below you will find the suggestions from the Rapporteur on how to resolve the editorial issues raised during the AbC of Spectral Management part 2 (see also TD08 from Swisscom). The proposed suggestions have been incorporated in a revised draft (**m06p06a04_SpM-2_DR.pdf**), so that you can check for yourself how the result will look like (all editorial changes are highlighted in color).

1 Comments raised during the AbC

1.1 Swisscom comments

Nr		Par	Comment	Resolution, proposed by Swisscom
S1	M	2	Reference 13: with this referencing Amendment 1, which is heavily used in this document, is not included similar problem with references 5, 6 and 16	Delete month and year for reference 13 and 16 exact referencing of SDSL references 5 and 6 should be investigated as well RAP: Agree, resolved in updated draft
S2	E	4.11	“EC ADSL over POTS” is not in line with naming in SpM-1	Replace “EC ADSL over POTS” in the whole document by “ADSL over POTS(EC)” (incl. changes to Chapt. 6.4) RAP: I am hesitating, TM6 to decide.. The current naming has been the result of various TM6 discussions in the past. I agree that both the SpM-1 and SpM-2 names aren't perfect, and therefore <u>TM6 should decide on this in the full context</u> of the problem. If TM6 remains inconclusive on this, I propose to publish SpM-2 with its current names, and to solve it in an update. See also the clarification in section 2.2 Note that Part 1 and 2 are dealing with very different matters. Multiple SpM-2 models (templates) can easilv complv with a common

				SpM-1 mask. Therefore it is not a problem if the SpM-2 names are different from SpM-1.
S3	E	4.12	“FDD ADSL over POTS” is not in line with naming in SpM-1	Replace “FDD ADSL over POTS” in the whole document by “ADSL.FDD over POTS” (incl. changes to Chapt. 6.5) RAP: TM6 to decide, see issue 2
S4	E	4.13	“EC ADSL over ISDN” is not in line with naming in SpM-1	Replace “EC ADSL over ISDN” in the whole document by “ADSL over ISDN (EC)” (incl. changes to Chapt. 6.6) RAP: TM6 to decide, see issue 2
S5	E	4.14	“FDD ADSL over ISDN” is not in line with naming in SpM-1	Replace “FDD ADSL over ISDN” in the whole document by “ADSL.FDD over ISDN” (incl. changes to Chapt. 6.7) RAP: TM6 to decide, see issue 2
S6	E	4.17	VDSL	Replace “VDSL” in the whole document by “VDSL1”(as proposed by the rapporteur in 073t25r1), where it is not VDSL2 specific or where the statement belongs not to both VDSL1 and VDSL2 RAP: Agree, resolved in updated draft
S7	T	4.17 (1st paragraph)	The ETSI VDSL standard (TS 101 388 [7]) has foreseen the ..	Replace by “The ETSI VDSL1 standard (TS 101 270-1 [11]) has foreseen the...” RAP: Agree, resolved in updated draft
S8	E	4.17.1 and 4.17.2	Tables 23 to 30: (kHz)	Replace “()” to use for units by “[]” to be consistent throughout the document RAP: Agree, resolved in updated draft
S9	E	4.17.1 and 4.17.2	Tables 25, 26, 28 to 30: (kHz)	Replace “(kHz)” by “[kHz]” to be consistent throughout the document RAP: Agree, resolved in updated draft
S10	E	4.18 (2nd paragraph)	First bullet point got lost: “... Each block has its own set of controlling parameters, to control one or more aspects of the output spectrum of VDSL2.A baseline “noise floor” being defined for all frequencies of interest, as input for the first building block.”	Insert a bullet before the second sentence as was in 073t25r1: “... Each block has its own set of controlling parameters, to control one or more aspects of the output spectrum of VDSL2. • A baseline “noise floor” being defined for all frequencies of interest, as input for the first building block.” RAP: Agree, resolved in updated draft
S11	E	4.18.2(2nd paragraph on p.35)	broken link to table 44	Add link to table 44 RAP: Problem solved in updated draft
S12	E	4.18.2(2nd paragraph on p.35)	For the purpose of VDSL2 modelling pre-defined PSD bands are provided by means of breakpoint tables, as specified in table 35 to 44, and by a naming convention	In order to add the upstream Tables as well, replace the text by “For the purpose of VDSL2 modelling pre-defined PSD bands are provided by means of breakpoint tables, as specified in tables 35 to 44 and tables 46 to 54 , and by a naming convention summarized

			summarized in table 34.	in tables 34 and 45.” RAP: Agree, resolved in updated draft in a slightly different manner
S13	T	4.18.6	Table 34: Band plan 997, DS1: wrong separation frequency	Replace “2.2M” by “1.622MHz” to be consistent with tables 36 and 38 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
S14	E	4.18.6	Table 34: not consistent naming for “DS1L.A_997”	Replace “DS1L.A_997” by “DS1L.A.M1_997” to be consistent with naming of “DS1L.A.M2_997” RAP: Valid point, but resolved in a different manner. It is update it in table 32 as well. See the common clarification in section 2.1
S15	E	4.18.6	Table 34: “DS1L.M.M1_997” and “DS1L.M.M2_997” are identical (see Table 36)	Merge “DS1L.M.M1_997” and “DS1L.M.M2_997” to “DS1L.M._997” and change corresponding remarks of naming convention RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
S16	E	4.18.6	Table 34: wrong naming for “DS1U.M_997”	Replace “DS1U.M_997” by “DS1U.M1_997” and change corresponding remarks of naming convention RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
S17	E	4.18.6	Table 34: wrong naming for “DS3_997.E”	Replace “DS3_997.E” by “DS3_997.E17” \ RAP: Disagree. The name applies to both 17 and 30 MHz spectra, so extending the “E” by “E17” makes it too restrictive. I propose to leave it unchanged., and to add a note in table 34. (See also the clarification in section 2.1)
S18	E	4.18.6	Table 36: “DS1L.M.M1_997” and “DS1L.M.M2_997” are identical	Delete “DS1L.M.M1_997” and rename “DS1L.M.M2_997” to “DS1L.M._997” according to issue S15 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
S19	E	4.18.6	Table 38: wrong naming for “DS1U.M_997”	Replace “DS1U.M_997” by “DS1U.M1_997” and change corresponding remarks of naming convention RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
S20	E	4.18.6	Table 42: wrong naming for “DS3_997.E”	Replace “DS3_997.E” by “DS3_997.E17” according to issue S17 RAP: Disagree, as explained in issue S17.
S21	E	4.18.7	Table 45: wrong reference to Table 49 for 998	Replace “49” by “48”

				RAP: Agree, resolved in updated draft
S22	T	4.18.8	Table 55: wrong PSD Power restrictor value for VDSL2 profile 8d	Replace “17.5dBm” by “14.5dBm” RAP: Agree, resolved in updated draft
S23	E	6.4-6.7	Tables 66-69: Bad formatting in row “SNR-Gap in Parts”	Fix the formatting of these rows RAP: Fixed horizontal alignment of rows in table 66-69
S24	E	7	VDSL (TS101 270-1)	Replace “VDSL (TS101 270-1)” by “VDSL1 (TS101 270-1)” RAP: Agree, resolved in updated draft
S25	T	8.5	3rd paragraph, second bullet: The formula says “times 2” instead of “power of 2”	Replace “*2” by “^2” RAP: Agree, resolved in updated draft in a slightly different manner.
S26	E	9.1.3	1st paragraph: wrong reference	Replace “(see clause 8.5)” by most likely “(see clause 8.6)” RAP: Agree, resolved in updated draft
S27	E	9.1.4	Table 78: 3rd row: wrong reference	Replace “See clause 8.3.2)” by “See clause 8.1.2” RAP: Agree, resolved in updated draft in a slightly different manner.
S28	E	9.1.4	Table 78: 4th row: wrong reference	Replace “See clause 8.3.3)” by most likely “See clause 8.2.2” RAP: Agree, resolved in updated draft in a slightly different manner. In addition, I updated it in the text above table 76 as well. The old phrase “attenuated crosstalk” was undefined, and is now replaced by a full chapter on crosstalk modelling
S29	E	9.1.4	Table 78: 5th row: wrong reference	Replace “See clause 8.3.4)” by “See clause 8.3.1” RAP: Agree, resolved in updated draft in a slightly different manner.

1.2 BT comments, and suggestions for naming

BT suggested several corrections, during the AbC. They have all been included in the updated draft. Additionally BT also proposed a way forward to resolve the naming issues raised by Swisscom. The suggestions are all valid, but the result will not be convincing. Therefore a complete other approach is followed to resolve this (see clarification in section 2.1)

Nr		Table No.	Comment	Proposed Resolution
B1	E	34	“DS1L.A_997”	Replace “DS1L.A_997” with DS1L.A.M1c_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B2	E	34	“DS1L.M.M1_997”	Replace “DS1L.M.M1_997” with DS1L.M_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B3	E	34	“DS1L.M.M2_997”	Remove “DS1L.M.M2_997” RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B4	E	34	“DS1U.A_997”	Replace “DS1U.A_997” with DS1U.M1c_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B5	E	34	“DS1U.M_997”	Replace “DS1U.M_997” with DS1U.M1x_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B6	E	34	“DS2.A_997”	Replace “DS2.A_997” with DS2.M1_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B7	E	34	“DS2.M_997”	Replace “DS2.M_997” with DS2.M2_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B8	E	36	“DS1L.A_997”	Replace “DS1L.A_997” with DS1L.A.M1c_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B9	E	36	“DS1L.M.M1_997”	Replace “DS1L.M.M1_997” with DS1L.M_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B10	T	36	Column “DS1L.M.M2_997”	Remove column DS1L.M.M2_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B11	E	38	“DS1U.A_997”	Replace “DS1U.A_997” with DS1U.M1c_997 RAP: Agree, and changed in updated draft See also the clarification in section 2.1

B12	E	38	“DS1U.M_997”	Replace “DS1U.M_997” with DS1U.M1x_997 RAP: Agree, and changed in updated draft See also the clarification in section 2.1
B13	E	40	“DS2.A_997”	Replace “DS2.A_997” with DS2.M1_997 RAP: Agree, and changed in updated draft See also the clarification in section 2.1
B14	E	40	“DS2.M_997”	Replace “DS2.M_997” with DS2.M2_997 RAP: Valid point, but resolved in a different manner. See the common clarification in section 2.1
B15	T	42	Whole table	Replace whole table with Table 42 below RAP: Agree, and changed in updated draft See also the clarification in section 2.1

f [Hz]	DS3 997.E	DS3 997.HPE17	DS3 997.HPE30
	P [dBm/Hz]	P [dBm/Hz]	P [dBm/Hz]
11825000	-112		
11999999	-83.5		
12000000	-60		
13825000	interp	-112	-112
13999999	-60	-83.5	-83.5
14000000	-83.5	-60	-60
14175000	-112	interp	interp
17664000		-60	interp
21000000		-83.5	interp
21450000		-112	-60
21450001			-83.5
21625000			-112

2 Clarifications

2.1 Clarification on the DS1L and DS1U names of VDSL2 templates for bandplan 997

The current naming convention for the first downstream band (DS1L.xxxx and DS1U.xxxx) isn't fully consistent. However, if it isn't clear what the names are to represent, and how they should be used to build-up templates that fit beneath the predefined ITU masks, then the topic may be very confusing. Therefore this clarification links these DS1L.xxxx and DS1U.xxxx PSD values with the values being defined by the ITU.

The problem was that none of the names being proposed so far (original text, Swisscom, BT) for the first downstream band (DS1) are convincing. This is all caused by the fact that the first downstream band (DS1) is subdivided in a lower part (DS1L) and upper part (DS1U), at an arbitrary frequency of 1.6MHz. Such a subdivision worked well for bandplan 998, but apparently not for bandplan 997. However, if we keep all fragments of the first downstream band together, we get something that is much better in consistency and elegance.

The tables below show the originating ITU table (with PSD masks) and how it was grouped to create a *template* description for SpM-2

- The first table shows how it is currently implemented in the SpM2-draft. The colors identify what fragments of the table were grouped to create a *template* description for SpM-2. Same color means same data.
- The second table offers an alternative grouping of the first band (by removing the subdivision around 1.6 MHz). The result is now something that can be named in a consistent manner

ITU Table B-5/G.993.2 (downstream PSD Mask), taken from amendment 1, page 73, 04/2007)

Grouping of bands, as currently implemented in draft SpM2

	Name	B7-1	B7-2	B7-3	B7-4	B7-5	B7-6	B7-7	B7-8	B7-9	B7-10
	Long Name	997-M1c-A-7	997-M1x-M-8	997-M1x-M	997-M2x-M-8	997-M2x-A	997-M2x-M	HPE17-M1-NUS0	HPE30-M1-NUS0	997E17-M2x-A	997E30-M2x-NUS0
	kHz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz
DS1L	0	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5
	4	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5
	4	-92.5	-92.5	-92.5	-92.5	-92.5	-92.5	-97.5	-97.5	-92.5	-92.5
	80	-72.5	-92.5	-92.5	-92.5	-72.5	-92.5	-97.5	-97.5	-72.5	-72.5
	101.2	Interp	-92.5	-92.5	-92.5	Interp	-92.5	-97.5	-97.5	Interp	Interp
	138	-49.5	Interp	Interp	Interp	-44.2	Interp	-100	-100	-44.2	-44.2
	138	-49.5	Interp	Interp	Interp	-36.5	Interp	-100	-100	-36.5	-36.5
	227.11	-49.5	-62	-62	-62	-36.5	-62	-100	-100	-36.5	-36.5
	276	-49.5	-48.5	-48.5	-48.5	-36.5	-48.5	-100	-100	-36.5	-36.5
	276	-49.5	-36.5	-36.5	-36.5	-36.5	-36.5	-100	-100	-36.5	-36.5
	1104	-49.5	-36.5	-36.5	-36.5	-36.5	-36.5	-100	-100	-36.5	-36.5
1622	-49.5	-46.5	-46.5	-46.5	-46.5	-46.5	-100	-100	-46.5	-46.5	
DS1U	2208	-49.5	-48	-48	interp	interp	interp	-100	-100	interp	interp
	2236	-49.5	Interp	Interp	interp	interp	interp	-100	-100	interp	interp
	2249	-49.5	-49.5	-49.5	Interp	Interp	Interp	-100	-100	Interp	Interp
	2423	-56.5	Interp	Interp	Interp	Interp	Interp	-100	-100	Interp	Interp
	2500	-56.5	-56.5	-56.5	Interp	Interp	Interp	-100	-100	Interp	Interp
	3000	-56.5	-56.5	-56.5	-49.6	-49.6	-49.6	-100	-100	-49.6	-49.6
	3000	-80	-80	-80	-80	-80	-80	-100	-100	-80	-80
	3175	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
DS2	4925	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
	5100	-80	-80	-80	-80	-80	-80	-100	-100	-80	-80
	5100	-56.5	-56.5	-56.5	-52.6	-52.6	-52.6	-100	-100	-52.6	-52.6
	5200	-56.5	-56.5	-56.5	Interp	Interp	Interp	-100	-100	Interp	Interp
	6875	-56.5	-56.5	-56.5	Interp	Interp	Interp	-100	-100	Interp	Interp
	7050	-56.5	-56.5	-56.5	-54	-54	-54	-80	-80	-54	-54
	7050	-80	-80	-80	-80	-80	-80	-56.5	-56.5	-80	-80
	7225	-100	-100	-100	-100	-100	-100	-56.5	-56.5	-100	-100
	10125	-100	-100	-100	-100	-100	-100	-56.5	-56.5	-100	-100
	10125	-100	-100	-100	-100	-100	-100	-80	-80	-100	-100
10300	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	

DS3	11825	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
	12000	-100	-100	-100	-100	-100	-100	-100	-100	-80	-80
	12000	-100	-100	-100	-100	-100	-100	-100	-100	-56.5	-56.5
	13825	-100	-100	-100	-100	-100	-100	-100	-100	-56.5	-56.5
	14000	-100	-100	-100	-100	-100	-100	-80	-80	-56.5	-56.5
	14000	-100	-100	-100	-100	-100	-100	-56.5	-56.5	-80	-80
	14175	-100	-100	-100	-100	-100	-100	-56.5	-56.5	-100	-100
	17664	-100	-100	-100	-100	-100	-100	-56.5	-56.5	-100	-100
	19325	-100	-100	-100	-100	-100	-100	Interp	-56.5	-100	-100
	19500	-100	-100	-100	-100	-100	-100	Interp	-56.5	-100	-80
	19500	-100	-100	-100	-100	-100	-100	Interp	-56.5	-100	-56.5
	21000	-100	-100	-100	-100	-100	-100	-80	-56.5	-100	-56.5
	21450	-100	-100	-100	-100	-100	-100	-100	-56.5	-100	-56.5
	21450	-100	-100	-100	-100	-100	-100	-100	-80	-100	-56.5
21625	-100	-100	-100	-100	-100	-100	-100	-100	-100	-56.5	
DS4	24715	-100	-100	-100	-100	-100	-100	-100	-100	-100	-56.5
	24890	-100	-100	-100	-100	-100	-100	-100	-80	-100	-56.5
	24890	-100	-100	-100	-100	-100	-100	-100	-56.5	-100	-56.5
	27000	-100	-100	-100	-100	-100	-100	-100	-56.5	-100	-56.5
	27000	-100	-100	-100	-100	-100	-100	-100	-56.5	-100	-80
	27175	-100	-100	-100	-100	-100	-100	-100	-56.5	-100	-100
	30000	-100	-100	-100	-100	-100	-100	-100	-56.5	-100	-100
	30000	-110	-110	-110	-110	-110	-110	-110	-80	-110	-110
	30175	-110	-110	-110	-110	-110	-110	-110	-110	-110	-110
	≥30175	-110	-110	-110	-110	-110	-110	-110	-110	-110	-110

Alternative grouping of first band, as proposed by the Rapporteur

	Name	B7-1	B7-2	B7-3	B7-4	B7-5	B7-6	B7-7	B7-8	B7-9	B7-10
	Long Name	997-M1c-A-7	997-M1x-M-8	997-M1x-M	997-M2x-M-8	997-M2x-A	997-M2x-M	HPE17-M1-NUS0	HPE30-M1-NUS0	997E17-M2x-A	997E30-M2x-NUS0
	kHz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz	dBm/Hz
DS1	0	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5
	4	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5	-97.5
	4	-92.5	-92.5	-92.5	-92.5	-92.5	-92.5	-97.5	-97.5	-92.5	-92.5
	80	-72.5	-92.5	-92.5	-92.5	-72.5	-92.5	-97.5	-97.5	-72.5	-72.5
	101.2	Interp	-92.5	-92.5	-92.5	Interp	-92.5	-97.5	-97.5	Interp	Interp
	138	-49.5	Interp	Interp	Interp	-44.2	Interp	-100	-100	-44.2	-44.2
	138	-49.5	Interp	Interp	Interp	-36.5	Interp	-100	-100	-36.5	-36.5
	227.11	-49.5	-62	-62	-62	-36.5	-62	-100	-100	-36.5	-36.5
	276	-49.5	-48.5	-48.5	-48.5	-36.5	-48.5	-100	-100	-36.5	-36.5
	276	-49.5	-36.5	-36.5	-36.5	-36.5	-36.5	-100	-100	-36.5	-36.5
	1104	-49.5	-36.5	-36.5	-36.5	-36.5	-36.5	-100	-100	-36.5	-36.5
	1622	-49.5	-46.5	-46.5	-46.5	-46.5	-46.5	-100	-100	-46.5	-46.5
	2208	-49.5	-48	-48	interp	interp	interp	-100	-100	interp	interp
	2236	-49.5	Interp	Interp	interp	interp	interp	-100	-100	interp	interp
	2249	-49.5	-49.5	-49.5	Interp	Interp	Interp	-100	-100	Interp	Interp
	2423	-56.5	Interp	Interp	Interp	Interp	Interp	-100	-100	Interp	Interp
	2500	-56.5	-56.5	-56.5	Interp	Interp	Interp	-100	-100	Interp	Interp
	3000	-56.5	-56.5	-56.5	-49.6	-49.6	-49.6	-100	-100	-49.6	-49.6
3000	-80	-80	-80	-80	-80	-80	-100	-100	-80	-80	
3175	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	

DS2	4925	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100

The tables below show what we have gained from the alternative grouping.

- The first table show the current grouping with the names being proposed. Introducing a name like “DS1L.A.M1c” is fully valid to indicate that it can only be combined with “DS1U.M1c_997”, but looks very inconsistent with the other names.
- The second table shows the alternative: it is simpler and consistent because the subdivision between a lower and upper part has been removed

Naming, being proposed so far, but inconsistent in the first downstream band (DS1L and DS1U)

Issue	SpM-2 name (during AbC)	Proposal 1 (Swisscom)	Proposal 2 (BT)	Implemented in m06p06a03 (Rapporteur)	Implemented in m06p06a04 (Rapporteur)	To be used for ITU name (short)	To be used for ITU name (long)
S14,B1	DS1L.A_997	DS1L.A.M1_997	DS1L.A.M1c	DS1L.A.M1_997		B7-1	997-M1c-A-7
	DS1L.A.M2_997			DS1L.A.M2_997		B7-5 B7-9 B7-10	997-M2x-A 997E17-M2x-A 997E30-M2x-NUS0
S15,B2,B3 S18	DS1L.M.M1_997	DS1L.M_997	DS1L.M_997	DS1L.M.Mc_997		B7-2	997-M1x-M-8
	DS1L.M.M2_997					B7-3 B7-4 B7-6	997-M1x-M 997-M2x-M-8 997-M2x-M
B4	DS1U.A_997		DS1U.M1c_997	DS1U.A.M1_997		B7-1	997-M1c-A-7
S16,B5 S19	DS1U.M_997	DS1U.M1_997	DS1U.M1x_997	DS1U.M.M1_997		B7-2 B7-3	997-M1x-M-8 997-M1x-M
	DS1U.M2_997			DS1U.c.M2_997		B7-4 B7-5 B7-6 B7-9 B7-10	997-M2x-M-8 997-M2x-A 997-M2x-M 997E17-M2x-A 997E30-M2x-NUS0
B6	DS2.A_997		DS2.M1_997	DS2.A_997	DS2.M1_997	B7-1 B7-2 B7-3	997-M1c-A-7 997-M1x-M-8 997-M1x-M
B7	DS2.M_997		DS2.M2_997	DS2.M_997	DS2.M2_997	B7-4 B7-5 B7-6 B7-9 B7-10	997-M2x-M-8 997-M2x-A 997-M2x-M 997E17-M2x-A 997E30-M2x-NUS0
	DS2_997.HPE			Unchanged	DS2_997.HPE	B7-7 B7-8	HPE17-M1-NUS0 HPE30-M1-NUS0
S17	DS3_997.E	DS3_997.E17	DS3_997.E	DS3_997.E17	DS3_997.E	B7-9 B7-10	997E17-M2x-A 997E30-M2x-NUS0
	DS3_997.HPE17			Unchanged	DS3_997.HPE17	B7-7	HPE17-M1-NUS0
	DS3_997.HPE30			Unchanged	DS3_997.HPE30	B7-8	HPE30-M1-NUS0
	DS4_997.E30			Unchanged	DS4_997.E30	B7-10	997E30-M2x-NUS0
	DS4_997.HPE30			Unchanged	DS4_997.HPE30	B7-8	HPE30-M1-NUS0

**Alternative naming for DS1 templates, as proposed by the Rapporteur.
DS1 is no longer subdivided in a DS1L and DS1U**

Issue	SpM-2 name (during AbC)	Proposal 1 (Swisscom)	Proposal 2 (BT)	Implemented in m06p06a03 (Rapporteur)	Implemented in m06p06a04 (Rapporteur)	To be used for ITU name (short)	To be used for ITU name (long)
					DS1.A.M1_997	B7-1	997-M1c-A-7
					DS1.M.M1_997	B7-2 B7-3	997-M1x-M-8 997-M1x-M
					DS1.M.M2_997	B7-4 B7-6	997-M2x-M-8 997-M2x-M
					DS1.A.M2_997	B7-5 B7-9 B7-10	997-M2x-A 997E17-M2x-A 997E30-M2x-NUS0
B6	DS2.A_997		DS2.M1_997	DS2.A_997	DS2.M1_997	B7-1 B7-2 B7-3	997-M1c-A-7 997-M1x-M-8 997-M1x-M
B7	DS2.M_997		DS2.M2_997	DS2.M_997	DS2.M2_997	B7-4 B7-5 B7-6 B7-9 B7-10	997-M2x-M-8 997-M2x-A 997-M2x-M 997E17-M2x-A 997E30-M2x-NUS0
	DS2_997.HPE			Unchanged	DS2_997.HPE	B7-7 B7-8	HPE17-M1-NUS0 HPE30-M1-NUS0
S17	DS3_997.E	DS3_997.E17	DS3_997.E	DS3_997.E17	DS3_997.E	B7-9 B7-10	997E17-M2x-A 997E30-M2x-NUS0
	DS3_997.HPE17			Unchanged	DS3_997.HPE17	B7-7	HPE17-M1-NUS0
	DS3_997.HPE30			Unchanged	DS3_997.HPE30	B7-8	HPE30-M1-NUS0
	DS4_997.E30			Unchanged	DS4_997.E30	B7-10	997E30-M2x-NUS0
	DS4_997.HPE30			Unchanged	DS4_997.HPE30	B7-8	HPE30-M1-NUS0

2.2 Clarification on the names of ADSL transmitter models

The naming of ADSL has been subject of delicate discussions in the past. The SpM-2 names aren't perfect, and the same applies for SpM-1. So as Rapporteur, I am quite hesitating to change the SpM-2 names (published!) to the SpM-1 names (also published!) as Swisscom proposed. It requires a TM6 decision in the *full context* of the problem, to solve it for both.

The problem is as follows: The word "echo-canceled" wasn't used in the past, since it was the only option in the beginning. Since the ADSL standards have been updated with FDD concepts, the word "EC" has been used as an addition. This was added to SpM-1 after significant debate in TM6, and finally closed with a consensus decision. The same applied for SpM-2 in the past, and the names were different.

But "Echo-canceled" is an invalid addition. The ITU terminology ("frequency overlapped") is more accurate, since an FDD modem can still have an echo-canceller on board (to suppress echo from out-of-band signals). Moreover, additions like "annex A", "annex B" came also into use.

So if we change names for SpM-2, TM6 should not simply borrow the current SpM-1 names, but do something that is much more consistent (and change them for both parts if needed).

Below you will find a list of names that have been used so far:

Current SpM-2 name (as published) of PSD template	Related SpM-1 name (As published) of PSD masks	Current Swisscom proposal	Alternative suggestion from Rapporteur
EC.ADSL over POTS	ADSL over POTS	ADSL over POTS(EC)	ADSL/POTS (FO)
FDD.ADSL over POTS (in two flavours) • Adjacent FDD • Guardband FDD	ADSL.FDD over POTS	ADSL.FDD over POTS	ADSL/POTS (FDD)
EC.ADSL over ISDN	ADSL over ISDN	ADSL over ISDN(EC)	ADSL/ISDN (FO)
FDD.ADSL over ISDN (in two flavours) • Adjacent FDD • Guardband FDD	ADSL.FDD over ISDN	ADSL.FDD over ISDN	ADSL/ISDN (FDD)
ADSL2/J			ADSL2/J (FDD) An FO version exists as well but not yet in SpM-2
ADSL2/M			ADSL2/M (FDD) An FO version exists as well but not yet in SpM-2
	ADSL2plus/A		ADSL2plus/A (FO)
	FDD.ADSL2plus/A		ADSL2plus/A (FDD)
	ADSL2plus/B		ADSL2plus/B (FO)
	FDD.ADSL2plus/B		ADSL2plus/B (FDD)
	ADSL2plus/I		ADSL2plus/I (FO)
	FDD.ADSL2plus/I		ADSL2plus/I (FDD)
	ADSL2plus/M		ADSL2plus/M (FO)
	FDD.ADSL2plus/M		ADSL2plus/M (FDD)

Add the following to the list of abbreviations:

FO Frequency Overlapped, previously referred to as Echo Cancelled (EC)

FDD Frequency Division Duplexing/Duplexed

EC <check if this is still used in the text>

TM6 decides to do this change simultaneously for SpM-1 and SpM-2

Delete in title of 4.15 "All digital mode, FDD, annex J" by "(FDD)", since "(FDD)" has become part of the full name

Delete in title of 4.16 “over POTS, FDD, annex M” by “(FDD)”), since “(FDD)” has become part of the full name

2.3 Input from FTW (e-mail has been copied to WD28)

WD28 came in very late, and several of the remarks are subject of discussion. For instance, values of the VDSL2 template, claimed in WD28 as wrong, are considered as correct since the *template* specification is not exactly equal to the mask specification minus 3.5 dB. Therefore it requires a dedicated proposal (as input for a future revision) so that TM6 can make a decision on it.

The following comments from FTW are considered as editorial (and non-controversial). And will be updated in the draft before publication:

- Naming: Change “Water-filling method” into “Level-clipping method” in VDSL2 transmitter model, to avoid confusing with water filling in receiver models
- Naming: Change “P” onto “PSD” in table headers, when appropriated
- ETSI style: Change decimal dots into decimal comma’s in the VDSL2 transmitter tables, when appropriated