
TITLE **SpM-1 & SpM-2 meeting report.**

PROJECTS SpM-1 & SpM-2

SOURCE: Rapporteur

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STATUS for inclusion in the TM6 meeting report

4.8 Spectral Management (TR 101 830)

The rapporteur of part 1 and part 2 compiled the partial report of this section in WD14r1

4.8.1 DTS/TM-06042 Spectral Management (TR 101 830-1 Part 1: Definitions and Signal Library)

The most recent version is V1.4.1, and was published by ETSI in march 2006.

4.8.1.1 Work Plan

The Rapporteur, Rob van den Brink (TNO/KPN), chaired this session and presented his work plan in WD04. There were no objections raised against this work plan.

- TD07 KPN/TNO Description of "VDSL2-NL1" signals

4.8.1.2 Contributions

In **TD07**, KPN/TNO proposes to add full spectral management descriptions of VDSL2 signals to SpM-1, and provides a first elaboration of it. They invite other operators to do the same. KPN/TNO believe that adding several of these descriptions to SpM-1 is the only way to handle these signal descriptions because combining the numerous options in the VDSL2 standard, with adequate PSD shaping (power back-off) will be too complicated for an algorithmic approach valid for all over Europe. A signal description for SpM-1 purposes has to be far more detailed than such a signal description for a product standard.

The contribution was well appreciated, and in-spite of sheets written in Dutch, it was requested to upload both the sheets as well as a "movie" showing the change in PSD shape as a function of attenuation length. (uploaded as *063t07_Sheets.pdf* and *063t07_Shapes.avi* respectively).

4.8.1.3 Discussion on opening a new work item

After a discussion, about the benefits of having these signal descriptions included in SpM-1 it was decided to open a work item to revise SpM-1. Target date for working group approval: dec 2007. The following list of supporters will be added to that work-item sheet.

- KPN+TNO (Rob van den Brink), Operator
- DTAG (Marko Löffelholz), Operator
- Telefonica O2 Czech Republic (Milan Meninger), Operator (former Cesky Telecom)
- Magyar Telekom (Jozsef Bakos), Operator
- Federal Network Agency (Thomas Schott), Regulator
- IAEI (Amit Priebatch), Vendor

4.8.1.4 Status of Living List for Spectral Management part 1

A first living list will be created for the next meeting, with as first studypoint a "full VDSL2 signal description, as being used in NL"

4.8.1.4 Status of Draft deliverable for Spectral Management part 1

A draft will be created as soon as the first study points are being agreed.

4.8.2 DTS/TM-06043 Spectral Management part 2, (revision of TR 101 830-2 Technical methods for performance evaluations)

4.8.2.1 Work Plan

The Rapporteur, Rob van den Brink, chaired this session and presented his work plan in WD04. There were no objections raised against this work plan.

<transmitter models, SP2-6>

- TD11 Swisscom Text proposal on 998 VDSL2 PSD template for profiles 8b, 12a and 17a
<crosstalk models, SP2-4 and SP2-5>
- TD12 TNO/KPN Evaluating the crosstalk for multi-node topologies
- WD22 Czech Telc. Comments to TD12R2
<crosstalk models, new studypoints>
- TD18 Czech Telc. Modeling of xDSL conditioners
- TD21 Czech Telc. Modeling of indirect crosstalk
- TD30 LEA Modeling of background noise in splitter tests

4.8.2.3 Contributions

TD11, from Swisscom, proposes PSD templates for three variants of VDSL2 (without shaping). An update is scheduled for the next meeting to fix (a) bands with log and linear interpolation according to the ITU specification, and (b) to remove a meaningless notch near 5MHz if the ITU decides to remove that as well. Therefore the topic has been left for further study.

TD12, from TNO, and co-signed by many parties, proposes to replace significant portions of chapter 8, to incorporate the modeling of cross talk from multiple locations. The description has become very consistent and detailed. Although this kind of cross talk is evaluated in many VDSL2 studies, it was (to the knowledge of TM6) never specified in the same detail. Therefore TM6 was invited to give it a careful scientific cross-check and to prepare for "provisional agreement" during next meeting.

WD22, from Telefonica O2 Czech Republic, proposes a few editorial improvements. Several of them were considered as useful refinement, but the order of topics will remain unchanged.

TD18+TD21, from Telefonica O2 Czech Republic, was to create awareness about indirect crosstalk, caused by so called "xDSL conditioners". Since these devices are currently not deployed, and there was no indication that such will occur in the future, it was decided to accept this contribution for information only.

TD30, from LEA, asked for an expert opinion on defining a reference noise level for transient tests for splitters. After some discussion, it became clear that TD30 was not asking for defining a realistic topology representative for such a noise level. Therefore the topic was not considered as an SpM-2 issue, and was moved forward to be discussed during the splitter testing project.

4.8.2.4 Status of Living List for Spectral Management part 2

The living list was uploaded before the meeting as m06p05a02.pdf, and reviewed during the meeting. SP2-3 was deleted, and no new study points were added. The table below summarizes the status of the Study Points for this Work item, at the end of the meeting.

SP	Title	Owner	Status
2-1	Performance model for ADSL2	Bernd Heise (Infineon)	US
2-2	Performance model for ADSL2plus	Bernd Heise (Infineon)	US
-3	Modelling sidelobe pick-up in DMT Receivers	Olivier van de Wiel (Broadcom)	Deleted (sept 2006)
2-4	Multi node crosstalk models, restricted to the case that all LT nodes are co-located, and NT distributed	Czech Telecom (Milan Meninger)	US
2-5	Multi node crosstalk models, with both LT nodes and NT nodes distributed	Czech Telecom (Milan Meninger)	US
2-6	Basic transmitter/disturber model for VDSL2	Swisscom (Andreas Thöny)	US
2-7	Model for VDSL2 PSD template variations	Swisscom (Andreas Thöny)	US
2-8	Model for VDSL2 PSD shaping for remote deployment	Swisscom (Andreas Thöny)	US

(PA - Provisionally Agreed; PD - Provisionally Deleted; US – Under Study.
The meeting number indicates the meeting at which the study item was created or the status last changed or confirmed.)

4.8.2.5 Status of Draft Deliverable

A first draft will be created as soon as the first items on the living list are being agreed.

4.8.2.6 Liasons

No liaisons were demanded during this meeting