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 WD14

4.8.1 DTS/TM-06042 Spectral Management (TR 101 830-1 Part 1: Definitions and Signal Library)
The work item TM-06042, for revising part 1 by adding new signal descriptions, was opened in the meeting of February 2005 (TM6-37). Working group approval of the revisions is scheduled for this meeting (nov 2005).

4.8.1.1 Work Plan
The Rapporteur, Rob van den Brink (TNO/KPN), chaired this session and presented his work plan in WD04a1. There were no objections raised against this work plan.

4.8.1.2 Contributions
No contribution were received for SpM-1

4.8.1.3 Status of Living List for Spectral Management part 1
The living list was updated after the previous meeting, and uploaded before the meeting as m05p05a03.pdf, and reviewed during the meeting. The table below summarizes the status of the Study Points for this Work item.

SP	Title	Owner/Champion	Status
1-1	Alignment of definitions and terminology as adopted in SpM-2 and SpM-3	Rapporteur	agreed (TM6-39)
1-2	Refinement of references in text on “DC Power feeding”	Rapporteur	agreed (TM6-39)
1-3	Signal descriptions for enhanced SDSL	Infineon (Bernd Heise)	agreed (TM6-39)
1-4	Signal descriptions for various variants of ADSL2plus	KPN/TNO (Rob van den Brink)	agreed (TM6-40)

No new study points were created at this meeting (TM6-40)

(**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.)

4.8.1.4 Status of Draft deliverable for Spectral Management part 1
A draft with the revisions being agreed during previous meeting has been uploaded before this meeting as m05p06a01. It has placeholders for the 10 variants of ADSL2plus, and the associated signal descriptions have been agreed during this meeting.

During the meeting, two definitions have been added as well, one for “NT” and one for “LT”. With that addition, TM6 declared it “Working group approved”. The rapporteur will upload a new draft shortly after the meeting, and will forward it to the ETSI secretariat for AbC.

4.8.2 DTS/TM-06030 Spectral Management part 2, (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 WD04a1. There were no objections raised against this work plan.

X Discussion on opening a new work item on revising v1.1.1 of TR 101 830-2 - rapporteur
TD17 US and DS equivalent crosstalk powers at one node/multi-node collocation - Czech Tel.
WD20 Problems with proposed models for crosstalk from multiple locations -TNO/KPN
TD18 Unofficial Living List for revising SpM-2 - Rapporteur

4.8.2.2 Starting a new work item

A first version of SpM-2 has been published in October, and the Rapporteur polled TM6 about starting a new work item on revising this version. Such a revision could include:

- receiver performance models for all variants of VDSL, ADSL2plus, enhanced-SDSL and ADSL2.
- transmitter models for the same modems (PSD templates in stead of PSD masks, PSD shaping parameters)
- models for crosstalk from multiple locations, such as topologies with customers distributed along the line (relevant for VDSL simulations) or branched topologies.
- additional example scenarios
- refining the generic DMT model by accounting for side-lobe pick-up
- etc.

Support for continuing the work was expressed by Swisscom, DTAG, Czech Telecom, KPN, TNO, Alcatel, FTW, and FT.
It is expected that in 4 meeting at least transmitter/disturber models for ADSL2plus and VDSL2 will be achieved. The target date for this revision is to achieve “working group approval” during the first TM6 meeting in 2007. It was desired to specify all models required for VDSL2 simulations of VDSL2 as well (including receiver performance models) but this could be too ambitious within this time frame.
The Rapporteur will contact ETSI support to make an official WI sheet, using the guidelines below:

Title	As in TR 101 830-2
Keywords	As in TR 101 830-2
Objectives	• models for ADSL2plus (receiver and transmitter/disturber) • models for VDSL2 (at least transmitter/disturber models • and further all additional models and revisions that are suitable for spectral management studies
Rapporteur	Rob van den Brink, TNO/KPN R.F.M.vandenBrink@telecom.tno.nl
Support	Swisscom, DTAG, Czech Telecom, KPN, TNO, Alcatel, FTW, FT
Dates	Creation: nov 2005 WI adopted by TM6 nov 2005 Start of work date nov 2005 TOC and Scope nov 2005 Stable draft nov 2005 (current TR 101 830-2) WG approval **feb 2007** Technical Body approval TM6

4.8.2.3 Contributions

TD17, from Czech Telecom, proposes some working text on models for crosstalk from multiple locations. The text is intended to be additional to the current text in the Living List.

WD20, from TNO/KPN, is a response on TD17, and identifies (inconsistency) problems resulting from the model being proposed. After some discussion in TM6, is was concluded that more study is required on this topic.

In TD18, the Rapporteur made a first proposal for a living list for revising TR 101 830-2 version v1.1.1

4.8.2.4 Status of Living List for Spectral Management part 2

A first living list will be created after the meeting, and TD18 served as a starting point for brainstorm. The following study points were created at this meeting (TM6-40), based on what was left from the previous work item:

SP	Title	Owner	Status
2-1	Performance model for ADSL2	Bernd Heise (Infineon)	US
2-2	Performance model for ADSL2plus	Bernd Heise (Infineon)	US
2-3	Modelling sidelobe pick-up in DMT Receivers	Olivier van de Wiel (Broadcom	US
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

(**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.