ETSI WG TM6

(ACCESS TRANSMISSION SYSTEMS ON METALLIC CABLES)

Permanent Document

TM6(99)08

Revision 2

Living List for updating TR 101 830-1 Spectral Management

This document is the living list of current issues connected with the updating of ETSI's spectral management report TR 101 830-1, which is dedicated to "Part 1" issues;
The issues labeled as "Part 2" form an informal living list containing items for further study, either as a revision of part 1 or as a potential new part 2 work item. This has not been decided yet by ETSI-TM6.

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1. STUDY POINTS PART 1

SP	Title	Owner	Status
1-1	Complete signal description for ADSL FDD over POTS	Lorenzo Magnone	Under Study
1-2	Complete signal description for ADSL FDD over ISDN	Lorenzo Magnone	Under Study
1-3	Complete signal description for ISDN-PRA	Marco Loeffelholz DTAG	Under Study
1-4	Improvement of scope and legal status of report	George Eisler	Deleted
1-5	Review of peak amplitudes of all signals in the library	Bill Pechey - Paradyne	Under Study
1-6	Complete signal description for SDSL	Ragnar.Jonsson - Conexant	Under Study
1-7			
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1-19			

2. STUDY POINTS POSSIBLE PART 2 (SCOPE NOT YET DEFINED)

SP	Title	Owner	Status
2-1	Spectral management rules for non-stationary signals.	Rami Verbin (Orckit)	under study
2-2	Limits for noise that may leak into the local loop wiring	Rob Kirkby (BT)	under study
2-3			
2-4			
2-5			
2-6			
2-7			
2-8			
2-9			

The current agreed procedure for changing the status of living list items is in Annex A of TM6 working methods.

Part 1 study points

SP 1-1.   Complete signal description for ADSL FDD over POTS
The ADSL standard is dedicated to echo cancelled systems, using signals with frequency overlap. FDD versions of ADLS, with no frequency overlap, do exist as proprietary systesm, but are not covered by ETSI standards. As a result a signal description for Spectral Management purposes is lacking.
This study point is dedicated to define the description of a "proprietary" signal category for FDD versions of ADSL over POTS, or a "standard" signal description when these systems are included in the ADSL standard.
Status: Under study (this issue has to be solved for the ADSL report first)

SP 1-2.   Complete signal description for ADSL FDD over ISDN
Similar to study point 1-1, but dedicated to ADSL over ISDN.
Status: Under study (this issue has to be solved for the ADSL standard first)

SP 1-3.   Complete signal description for ISDN PRA.
A signal category, dedicated to systems using HDB3 line coding, has been included in Part 1. They hold for sine shaped transmit pulses when a randomized bit sequence is transmitted. In other cases the signal description is assumed to be inadequate. This study point is dedicated to define additional means to cover the full signal space of these kind of legacy systems.
Status: Under study

SP 1-4.   Improvement of scope and legal status of report.
Concerns about the way some sentences are phrased in Part 1, from a legal point of view.
Status: Deleted

SP 1-5.   Review of peak amplitudes of all signals in the library
The Peak Amplitude definition has been refined. On several places, however, the current numbers are not accountig for continuously transmitted stream of filters that has passed output filtering. The Peak Amplitude values of all signal descriptions need to be checked (and updated) if they are correct and in line with the updated peak amplitide definition.
Status: Under study
Related Contributions:
- *TD21, Vienna 2000 - Definition of Peak Amplitude - Paradyne*

SP 1-6.   Complete signal description for SDSL
This study point is dedicated to define the spectral management description of the "SDSL" signal category, derived from what is written in the SDSL standard. The text in TD15 (Vienna) has been incorporated after an editorial change, but some refinement is still required.
Status: Under study
Related Contributions:
- *TD15, Vienna 2000 - Proposed spectral management text - Conexant*

Part 2 study points

SP 2-1.   Spectral management rules for non-stationary signals.
It was observed that the combined impairment from modems that are rapidly switching on and off over a period of time is much more destructive to ADSL then when these modems are continuously transmitting their signals. This is identified as "non stationairy noise". The effect of non-stationairy transmission in general on ADSL modems has not been fully understood. Is it a performance issue, related to the way a victim xDSL modem is implemented, or is it a spectral management issue that requires a way to bound the amount of non-stationairy behaviour of signals that are injected into the Local Loop Wiring.
This study point is dedicated to the analysis of the impact of non-stationary cross talkers on legacy systems, and to find a way to <u>bound</u> the amount of non stationary noise.
Status: Under study
Related Contributions:
- *TD25, TD26,TD35,TD53, Montreux 2000 - Alcatel*
- *TD24, Helsinki 2000, Impact of non-stationary crosstalk on legacy ADSL modems - Orckit*
- *TD53, Vienna 2000, Stationarity requirements for spectral compatibility - Tioga*

SP 2-2.   Limits for noise that may leak into the local loop wiring
The signal library of the Spectral Management report Part 1 is intended to be refered to when transmitting signals through unbundled access networks. This scope is restricted to transmission <u>through</u> the local loop wiring, and does not cover signals that leak by accident into the loocal loop wiring from one <u>end side</u> . This may occur for signals that flow through in house networks, such as home PNA systems, that are not isolated in a proper way from the LLW (e.g. by means of low-pass filters). This study point is dedicated to defining proper limits for the amount of signals that my leak into the LLW to prevent impairment of xDSL systems that make use of the LLW.
Status: Under study
Related Contributions:
- *TD40, Helsinki 2000, Consideration if ITU-T G.pnt.f in ETSI Spectral Management Plan*