
TITLE	Position of several operators on RFI tones for SDSL		
PROJECT	SDSL		
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STATUS	for decision		
ABSTRACT	With this contribution, several operators express their view not to delete any of the RFI tones that are currently specified in the SDSL standard, until improved numbers have been agreed.		

Performance tests under noisy conditions provide vital information for operators that are deploying xDSL products. The more these tests approximate the disturbance in real access networks, the better an operator can decide how to deploy these systems.

Currently, adequate performance tests based on synthetic crosstalk noise have been specified in the SDSL standard. Unfortunately, the extension of these test based on synthetic ingress noise has not been completed. To complete such a test, the following three requirements are to be solved.

- (a) well defined RFI tones,
- (b) a method of injecting these tones into a test loop (common and differential mode),
- (c) reduced reach numbers when ingress noise is injected on top of crosstalk noise.

One of the reasons that this issue is still under study, is that adequate test equipment is not available, especially equipment to implement requirement (b). The result is that requirement (c) cannot be studied and that improving the current levels of the RFI tones (a) cannot be studied.

Our Position

The published ETSI SDSL Technical Specification TS 101 524 has specified synthetic ingress noise by means of RFI tones, since it was first published (april 2000). We are aware of the fact that concerns have been raised that these numbers are not perfect, but they are much more realistic than no tones at all and better than the RFI tones defined years ago for ADSL. The fact that improvement of these numbers cannot be progressed should not be used as an argument to delete them all from the current TS 101 524.

➔ *do not delete the current numbers for RFI tones published in TS 101 524*

The way these RFI tones are to be modulated with noise has been discussed and agreed in the past for ADSL and SDSL (see contribution 011t04a1 February 2001). The proposed text was for unknown reasons not included in the SDSL revision v1.1.2 (Aug 2001) nor in revision v1.1.3 (Nov 2001). We would like to have this included in the next revision of TS 101 524.

➔ *extend the current RFI tones with the agreed modulation method.*

Why this Position?

- Keeping the current numbers does not harm anybody, since the ETSI performance test with ingress noise has never been completed.
- Deleting the current numbers will be a significant step backward, and will discourage manufacturers of test equipment to develop test solutions based on RFI tones. This will prevent future studies on reach under ingress noise conditions and will block all progress on this topic.

We would like to have the issue of RFI tones being solved, and would like to have the current or improved tone levels stable by the end of 2002. This preference holds for ADSL and VDSL as well.