

Meeting Minutes

Group: IEEE P802.3bn Channel Model Ad Hoc committee.

Event: Teleconference

Date: 20 Dec 2012 from 5:30 PM to 6:10 PM EST

Recorded by Duane Remein

Summary: The ad Hoc discussed progress on the channel model and the order of priorities on topology/frequency range combinations. It is clear that a complete, well verified channel model will not be ready for the January meeting. However, a great deal of parametric data will be provided in that timeframe allowing the Task Force to progress on high level PHY definition.

Opening

The group reviewed the agenda.

The group reviewed IEEE Patent Policy and a Call for Patents was made, no responses were received.

Discussion

The group discussed progress on the parameter list. It was noted that completion of this task has been prioritized by topologies at several frequency ranges. Highest priority is being given to the N+3 topology at frequencies of $\leq 1\text{GHz}$. Other frequency ranges are $1 - 1.2\text{ GHz}$ and $1.2 - 1.7\text{ GHz}$. The N+0 topology will be the second priority. The team expects to have the $N+3 \leq 1.0\text{ GHz}$ range essentially complete by mid-January with other topologies/ranges to follow shortly so the full downstream model should be done by mid February. It was mentioned that very good data is available on echo return and SNR, especially below the 1 GHz band. So information on these parameters is likely to be available before the complete channel model is available. **It was noted that, high priority parameters should be identified by the Task Force so these can be worked on first.**

There are two tasks being worked on to complete the entire channel Model. First a linear Impulse analysis is being done. Secondly a non-linear analysis is being done. These two task are being accomplished in parallel. It is expect that this will be the first coaxial network channel model to so exhaustively analyze these aspects of the network.

It was noted that some data on high frequency ($>1\text{GHz}$) passive components is available and was presented (see [klinger_01a_0912](#)). However this data is on a very limited set of components from a vendor that is no longer in business. The results may adversely highlight minor anomalies of the components. It was mentioned that at least one vendor has plans on producing components specified to operate in the 1.2-1.7GHz range. However, public data on these components may not be available as soon as may be desired.

There was a discussion on upstream path channel. It was noted that the 5-15MHz range is particularly difficult to operate in due to very high SNR and modulation levels in this range may not be able to reach the 64-QAM level. It may be advisable to exclude this band from the "baseline channel" but keep

information on it in the channel model. It is known that at least one MSO wants to operate in the range so it may not be possible to exclude this range from the “baseline channel”.

Action Items

No new action items were taken.

Item	Date	Assigned to	Status	Description	Response/Update
9	121018		O	Capture static model in Excel	Need an author if a this model is needed
10	121128	D Remein	O	Get channel model data template completed for Chinese MSOs	from EPoC SIG 11/19/12
12	121128	Hal Roberts / Saif Rahman	C	Align CH Model Tables presented in San Antonio.	

Detailed presentation material:

All presentations will be available at [the p802.3bn private web site](#).

Attendees:

Name	Affiliation
Roberts, Hal	Calix
Solomon, Joe	Comcast
Montreuil, Leo	Broadcom
Howald, Rob	Motorola
Rahman, Saifur	Comcast
Shellhammer, Steve	Qualcomm
Remein, Duane	Huawei