

# **HSSG Continuation Analysis and WG Chair's Opinion**

## **REFERENCES**

### **LMSC P&P**

#### **7.4 Study Groups**

Study groups are formed when enough interest has been identified for a particular area of study, such as a new access method or modified use of an existing access method. Two types of Study Groups are specified:

a) An Executive Committee Study Group (ECSG) is initiated by vote of the Executive Committee and the ECSG Chair is appointed and approved by the Executive Committee. The ECSG Chair has the same responsibilities as a Working Group Chair as specified in subclause 7.2.4.1 but does not have Executive Committee voting rights.

b) A Working Group Study Group (WGSG) is initiated by vote of the Working Group or TAG and approved by the Executive Committee. The WGSG Chair is appointed and approved by the Working Group or TAG.

The Study Group shall have a defined task with specific output and a specific time frame established within which it is allowed to study the subject. It is expected that the work effort to develop a PAR will originate in an ECSG or WGSG. A Study Group shall report its recommendations, shall have a limited lifetime, and is chartered session-to-session. A study group is expected to submit a PAR to the EC for consideration within two plenary sessions of its initiation. After the Study Group recommendations have been accepted by the parent body, the Study Group will be disbanded no later than the end of the next Plenary Session.

The decision of whether to utilize an existing Working Group or TAG, or to establish a new Working Group or TAG to carry out recommended work items shall be made by the Executive Committee with due consideration of advice from the Study Group.

### **802.3 Rules**

#### **4.1 Function**

The function of a Study Group is to complete a defined task with specific output and in a specific time frame established within which they are allowed to study the subject. Once this task is complete the function of the SG is complete and its charter expires.

The normal function of a IEEE 802.3 Study Group (SG) is to draft a complete PAR and five criteria (see 7.2) and to gain approval for them at the WG, LMSC EC, IEEE-SA New Standards Committee (NesCom) and the IEEE Standards Board. The decision of whether to utilize the WG, or to establish a new Working Group or Technical Advisory Group (TAG) to carry out work items recommended by a SG is be made by the EC with due consideration of advice from the WG.

### **HSSG charter motion**

Move the IEEE 802.3 Working Group requests formation of a "Higher Speed Study Group" to evaluate definition of greater than 10 Gb/s MAC data rate and related PHY capability to IEEE Std 802.3. The Study Group may recommend one or more PARs.

## ANALYSIS

I've discussed this topic with Mr. D'Ambrosia, Mr. Law and others. My opinion is that SG continuation while recommending PARs at different plenary sessions is not anticipated (i.e., clearly allowed) by either the LMSC P&P, the 802.3 Rules or the chartering motion. This produces a significant permutations and combinations of alternative rules interpretations. From these discussions, I have produced a list of four general options for the HSSG to produce project documents with total scope covering current proposed objectives with heavy or significant support (e.g., 40 Gb/s, 100 Gb/s, OM3 MMF, 10km SMF, 40km SMF). The options are:

A. Super Project – Do everything in one PAR. Select capabilities through PAR scope and objectives to potentially include more than one speed of MAC data rate and multiple physical layer options.

This has been a working model in previous higher speed efforts. This approach raises no new procedural issues.

B. Option to Split a Super Project – Start a super project and if a part significantly lags in schedule, split it into a separate projects.

The higher level groups have authorized this in the past, probably the most relevant one being splitting 1000BASE-T (P802.3ab) from the remainder of Gigabit Ethernet (P802.3z) when TF consensus determined that 1000BASE-T would be ready for ballot a year later than the remainder of Gigabit Ethernet. Again, this approach raises no new procedural issues.

C. Multiple Projects -- More than one PAR requested by the HSSG for consideration at the same Plenary.

This is clearly allowed by the chartering motion and is not prohibited by either LMSC or 802.3 rules. Expiration of the Study Group is not a procedural issue.

D. Serial Projects – The HSSG requests a PAR (or PARs) be considered at a plenary and also requests SG continuation with the intent to be able to request an additional PAR at a subsequent plenary.

Most of HSSG already knows the above three are relatively simple from a procedural point of view, and would conclude that this option is the most complex alternative. About the only thing that produced unanimous agreement from those that discussed this options, is that it is as stated above that the rules do not anticipate this alternative (i.e., it isn't specifically allowed). The second agreement would be that there are multiple interpretations of the three cited references (LMSC P&P, 802.3 Rules and chartering motion).

I'll use an example wher the HSSG requests consideration of a PAR at the July plenary session. The normal schedule would have the PAR approved at the September IEEE-SA Standards Board meeting.

It is my opinion that this first PAR fulfills the HSSG chartering motion. The chartering motion does not directly define the SG task, so it is arguable if the task is only defined in the first sentence or in both sentences. The SG has in my opinion today already evaluated definition of greater than 10 Mb/s, so it has fulfilled the minimum requirements of the first sentence. The charter does not require an exhaustive evaluation. Once one PAR is recommended, the second task (optional because of the "may") has been completed.

If the PAR documents were the only HSSG recommendation then, it is my opinion that the SG expires with the conclusion of the next plenary meeting.

The LMSC P&P do not define what constitutes approval by the parent body, but independent of any language in motions or rules, the only body that can approve a PAR is the Standards Board, thus any other PAR approvals are simply a recommendation to a higher body. This includes a NesCom "approval" being just a recommendation to the Standards Board. The language of the LMSC P&P also allows for recommendations other than a PAR, with those recommendations being approved at a lower level parent body.

So, now the sticker issue. What if the SG recommendations include a recommendation to continue SG operation to be able to propose an additional PAR? Continuing with the example, with first PAR approved in September, Under LMSC rules it can be argued that all of the "recommendations" have not been approved, and therefore SG continuation would be allowed. The contrary argument is that the expectation in the LMSC rules is submission of a PAR for approval, implying that the PAR and supporting Five Criteria would be the expected recommendations. The sentence placing the deadline for disbanding the SG reinforces the second interpretation. I personally believe the expectation argument has weight, thus triggering the disbanding requirement.

Some might not want to split hairs on what the recommendations are allowed to be for PARs. Ignoring the above reading of the language, another viable interpretation produces essentially the same result. It can also be argued that the SG disbanding sentence of the LMSC rules is only to allow for the different phasing of LMSC plenary meetings and Standards Board meetings. For example, a PAR approved at a July plenary meeting may be after the September NesCom submittal deadline, and if there is no continuous processing cycle (which was probably the case when this rule was written), the next Standards Board meeting would be December. Thus, the language is constructed to allow dissolving the SG at the end of November but forming a TF with PAR approval in December. This though similarly disallows SG continuation past November for an additional PAR.

In consultation with others, there are clearly different opinions on which set of rules has a loophole to allow SG continuation. Does the chartering motion implicitly allow continuation under 802.3 rules because the motion mentions more than one PAR? Does the LMSC P&P allow continuation because all recommendations have not been accepted? Pragmatically, it would be unwise to assume the HSSG could count on one of these loopholes to allow SG continuation as there are very strong arguments that SGs aren't intended to continue beyond approval of the first PAR.

My personal opinion is that neither would allow HSSG continuation to produce serial PARs. I also read these rules with the tighter termination requirements of the 802.3 rules causing the SG charter to expire upon approval of the first PAR. So, my interpretation for my example is that the September first PAR approval expires the HSSG charter, and an HSSG meeting in November would be invalid under the 802.3 rules even though allowed under the LMSC rules.

I also read the language of the LMSC rules as not being contradictory and therefore not having precedence because LMSC rules do not specify a time certain but only a deadline for dissolving the SG. The time certain of the 802.3 rules is within the deadline of the LMSC P&P.

## **Recommendations**

The HSSG does not have to decide on Option B right now. If Option A is taken, the possible time to completion does not have to be a matter of long range speculation but can be deferred until it becomes a shorter range assessment of actual progress.

Options A or C do not seem to have any procedural issues and either is a viable course under the rules.

The HSSG Chair's primary question though is really about Option D. I can't find a clear path through current rules for this option. Relying on loopholes by choosing the course as described to me in the HSSG Chair's summary of the July discussion would in my opinion be ill advised. I'd recommend consideration of two alternatives mechanisms for "serial" PARs that I believe provide a bit more certainty in the interpretation of rules.

The first alternative is to get explicit approval to suspend the rules (something the WG Chair's current opinion would require), with the recognition that a similar evaluation at the EC would possibly be interpreted as also requiring a suspension of the LMSC P&P. Please note that such a suspension of the rules requires approval by the same majority required to adopt the rules.

Alternatively, fulfill the requirements of a CFI by submitting a CFI request on continued study of proposed higher speed capabilities. Such a CFI would not need to be as formal as our recent practice but could be discussed within HSSG time, with the CFI rules requirements addressed in opening and closing 802.3 plenary meetings. An evening presentation session would be an alternative, but is not required, as there are no rules governing when the actual discussion for the proposed SG is to be held, only that a Call for Interest in the topic be presented at the opening plenary. Though an evening discussion would be redundant for many HSSG participants, it would be helpful to participants in the other 802.3 subgroups.