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2005 Jan 24
opening: 0915 hrs

Welcome and introductions

0925 Secretary turn over

Study group sign in overview

Goals:
IEEE process and general RESG info
Presentations will be given - 3
To build consensus

Reflector and web
email list
	subscribe stds-802-3-re <yourfirstname> <yourlastname> to ListServ@ieee.org

Resendential Ethernets Sutdy group web page
	http://www.ieee802.org/3/re_study

802.3 Rules apply
	Robert's Rules of Order

Anyone may speak and vote
NO product pitches, corporate pitches, prices (includes costs, ASPs, etc.; regarless of currency)
NO restrictive notices

IEEE Standards Structure overview

Bylaws and Rles
	Bylaws of IEEE Std
	http://standards.ieee.or/sa/sa-bylaws.p[df
Bylaws of IEEE-SA
	http://standards.ieee.org/gides/bylaws/sb-bylaws.pdf
others on the study web site

Patents may be involved. Section 6 was read.

Inappropriate topics for IEEE WG meetings
	Don't discuss licensing terms or conditions
	don't discuss product pricing, territorial restrictions or market share
	don't discuss ongoing litigation or threatened litigation
	don't be silent if inappropriate topics are discussed... do formally object
	if you have questions, contact the IEEE Patent Committee
	administrator at patcom@ieee.org

Standards Process

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        Call for Interest
        Study Group meetings
                work on objectives PAR and criteria
                when the PAR is completed, it is presented to the working group
        Then to committee and NESCOM, etc.

Approved PAR
        Task group meetings create first draft
        Task group reviews 1st draft and comments which leads to draft #2
        Working group reviews and comments and probably goes back to task group for update.
        Once past working group, it moves on eventally to ANSI public review.
                ANSI is a group composed of mfgrs and users.
        Eventually past this it can lead to a standard
process can take 18 months minimum.

Study Group
        function is to draft a PAR and 5t criteria and objectives
        gain approval at WG802.3, 802 SEC, IEEE NesCom and IEEE Stds. Board
        SG only exists for 6 months
                extensions can be requested... voted on by 802.3 ratified by SEC
        development of objectives helps set the goals for the task force
        developing consensus
                education helps build consensus
        consensus (>75%) required to move forward

SCOPE from CFI (Call for interest)
        Residential synchronous Ethernet provieds time-sensitive deliver between non.... (on web site)

PAR (Project Authorization Request)
        Title - what are we calling this
        Scope - Focus: Ethernet as a ??
        Purpose - why do we want to do this

5-Criteria
        Broad set of applications
                multiple vendors, multiple users
                balanced cost (LAN vs. attached stations)
        Compatibility with IEEE Std. 802.3
                conformance w/ CSMA/CD MAC, PLS
                conformance w/ 802.2
                conformance w/ 802 functional requirements
        distinct identy
                substantially different from other 802.3 spec
                one niqe soln for problem
                easy for document reader to select relevant spec
        technical feasibility
                demonstrated system feasibility
                proven technology, reasonable testing
                confidence in reliability
        economic feasibility
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cost factors know, reliable data
reasonable cost for performance
total installation costs considered

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Presentations:
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"Range of Applications for Residential Ethernet", Eric HS Ryu, Samsung Electronics

can be used for backbone and bridging - a more general soln

is 15.3 sufficient? Yes, but it is designed for a single room.
is it primarily for audio component connection? Yes
key issue is .15.3 being supported - MAC bridging not defined is an 802.1 requirement.
	bridging is not an 802.3 requirement, but 802.1
a new isochronous service is an 802.1 project
the only option we have is to raise an option to get their (802.1) attention
.11 and .15.3 should get together to support .1
	.15.3 people are positive to get this done
.1 did something along the same lines years ago, but did not complete since they did not get outside assistance
this is directed at real-time applications (audio, video, etc.)
we need to focus this on residential applications, but surely it can be expanded to industrial apps.
	we need to keep this low-cost focused
not our job to pick the solution for the .1
	we need to see what approaches there are to make this work
	there is coordination issues w/ the .1 culture

"Residential Ethernet (access control considerations)"
	joint presentation: Beliaev, Claseman, Dineen, James, Teener

"conversation" vocabulary should be redefined. This is shown as a "distribution". "Stream" may be better since this is a one-way data flow. "conversation" is actually more than just data - it includes control information. This needs to be addressed later. We need to define what this should completly be before selecting a word. Assemble terminologies and have group select the best. *** ACTION

"discovery" needs to be addressed
"admission" control may be .3 issue since there is a MAC
Entertainment industry will have to adopt the acceptance of a delay for synchronization
there will be a "ping" (time-out) so that resources are recycled
The stream is a DUI w/ a CAT number. Thus cannot run out of ID numbers

Additional notes were taken by the presenters (Michael & .

there can be a contention problem, but not a race problem
	2 TVs cannot watch different shows if only one tuner available

networking has been source selection and not destination selection based. This proposal is a destination-based.

"MPCP Model for ResE", Haran & Algie

Return back to 2nd presentation...
developed notion for a "house" synchronous clock, say 8kHz
	there is a master and each bridge will have a reference (slave)
	bridge and source delays must be accounted for
		this is across links and distributions

Objectives 11/7/2004

Update item 3 of second page (desirable's, but out of scope) - see chairman's updated presentation.

If to have this considered by the Executive in Mar'05, you will need a tutorial. And thus a sponsor for the tutorial.

Next interim meeting in May'05
	Barcelona, Spain is possible location
	in proximity of 802.1
	week of May 9 is being discussed

Market potential
	moves Ethernet into big new markets w/ the potential to eventually dominate consumer electronics - AV, etc.
	current home Ethernet ports are in the millions;

Compatibility
	fully 802.3 (full-duplex)
		compliant w/ existing frame format
		802.3 in best-effort MAC services
		may require augmentation of MAC w/ time-sensitive MAC services
		RE will have to augment the MAC-client interface to exchange time information
	fully 802.1 compatible
		anticipated that it will be fully compatible for best-effort service w/ possible 802.1 work to add time-sensitive service
	RE features may need to be auto-negotiated
		time sensitive mode is a highest-common denominator
	based on existing PHYs
	compatible w/ PoE

There were specific 802.1 and .3 versions that need to be addressed.

Technical Feasibility
	proven by existing 802.3 technologies
		add clock to MAC (already done for EPON)
	mostly adding a set of rules for sending time-sensitive in addition to best-effort frames on existing MAC

requires some coordination w/ 802.1 for provisioning extensibility

Economic Feasibility
development investments is relative low
high product value dur to increased capabilities
significantly reduces system cost
removes many connections cables, etc.
etc.

Need to ensure that we work with the .11, .3, .1, & .15 groups

Work on Tuesday is recorded in the PAR, 5 Criteria and Agenda documents, along with the votes.