New Ethernet Applications
Industry Connections Activity Initiation Document (ICAID)
Version: 1.0, 06-Sept-2018

Instructions

- Instructions on how to fill out this form are shown in red. It is recommended to leave the instructions in the final document and simply add the requested information where indicated.
- Shaded Text indicates a placeholder that should be replaced with information specific to this ICAID, and the shading removed.
- Completed forms, in Word format, or any questions should be sent to the IEEE Standards Association (IEEE-SA) Industry Connections Committee (ICCom) Administrator at the following address: industryconnections@ieee.org.
- The version number above, along with the date, may be used by the submitter to distinguish successive updates of this document. A separate, unique Industry Connections (IC) Activity Number will be assigned when the document is submitted to the ICCom Administrator.

1. Contact

Provide the name and contact information of the primary contact person for this IC activity. Affiliation is any entity that provides the person financial or other substantive support, for which the person may feel an obligation. If necessary, a second/alternate contact person's information may also be provided.

Name: John D'Ambrosia
Email Address: jdambrosia@ieee.org
Phone: +17175034512
Employer: Futurewei
Affiliation: Huawei

2. Participation and Voting Model

Specify whether this activity will be entity-based (participants are entities, which may have multiple representatives, one-entity-one-vote), or individual-based (participants represent themselves, one-person-one-vote).

Individual-Based

3. Purpose

3.1. Motivation and Goal

Briefly explain the context and motivation for starting this IC activity, and the overall purpose or goal to be accomplished.

The growing diversity of applications for Ethernet is driving the development of a multitude of new standards to be developed. Recent examples of standardization activities that utilized the current New Ethernet Applications Industry Connections ICAID include optical solutions targeting 40 km at 50/200/400 Gb/s, optical solutions targeting 80 km at 100/400 Gb/s, 400 Gb/s over multi-mode fiber, electrical interfaces based on 100 Gb/s signaling, bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs, and Physical Layers for increased-reach Ethernet optical subscriber access (Super-PON) Study Group.

Additional topics are also being considered by the IEEE 802.3 Ethernet Working Group, such as an industry-wide Ethernet bandwidth assessment, or potential examples targeting DWDM technology. These potential topic areas might fuel the continuing expansion of the Ethernet family through new standards efforts.

The goal of this activity is to assess requirements for new Ethernet-based applications, identify gaps not currently addressed by IEEE 802.3 standards, and facilitate building industry consensus towards proposals to initiate new standards development efforts.

3.2. Related Work

Provide a brief comparison of this activity to existing, related efforts or standards of which you are aware (industry associations, consortia, standardization activities, etc.).

There are no known open standards / IEEE 802.3 based activity for Ethernet projects to compare against this Industry Connections activity proposal.

3.3. Previously Published Material

Provide a list of any known previously published material intended for inclusion in the proposed deliverables of this activity.

None

3.4. Potential Markets Served

Indicate the main beneficiaries of this work, and what the potential impact might be.

Ethernet is employed in a number of market applications, which are exhibiting a growing diversity in terms of the Ethernet rates and features needed. Solutions spanning these different application spaces and rates will be best addressed by leveraging common technology investments. This activity will enable industry consensus building on the market/application requirements and identify gaps not currently addressed by IEEE 802.3 standards of new solutions, which will help to foster industry interest in new Ethernet study groups.

4. Estimated Timeframe

Indicate approximately how long you expect this activity to operate to achieve its proposed results (e.g., time to completion of all deliverables).

Expected Completion Date: 12/2020

IC activities are chartered for two years at a time. Activities are eligible for extension upon request and review by ICCom and the IEEE-SA Standards Board. Should an extension be required, please notify the ICCom Administrator prior to the two-year mark.

5. Proposed Deliverables

Outline the anticipated deliverables and output from this IC activity, such as documents (e.g., white papers, reports), proposals for standards, conferences and workshops, databases, computer code, etc., and indicate the expected timeframe for each.

There will be multiple types of deliverables. The first type of deliverable will be the records of the meetings, including minutes and supporting presentations. The second type of output may be the creation of one or more consensus presentations that are used as the basis for one or more Call-for-Interests to study new areas. A third possible type of deliverable may be the creation, as appropriate, of white papers documenting the findings of the IC activity.

6. Funding Requirements

Outline any contracted services or other expenses that are currently anticipated, beyond the basic support services provided to all IC activities. Indicate how those funds are expected to be obtained (e.g., through participant fees, sponsorships, government or other grants, etc.). Activities needing substantial funding may require additional reviews and approvals beyond ICCom.

None.

7. Management and Procedures

7.1. IEEE Sponsoring Committee

Indicate whether an IEEE sponsoring committee of some form (e.g., an IEEE Standards Sponsor) has agreed to oversee this activity and its procedures.

Has an IEEE sponsoring committee agreed to oversee this activity?: Yes

If yes, indicate the sponsoring committee's name and its chair's contact information.

Sponsoring Committee Name: IEEE 802 LAN/MAN Standards Committee
Chair's Name: Paul Nikolich
Chair's Email Address: p.nikolich@ieee.org
Chair's Phone: +1 857 205 0050

Working Group Chair : IEEE 802.3 Ethernet Working Group
Chair's Name: David Law
Chair's Email Address: dlaw@hpe.com
Chair's Phone: +44 1631 563729
Contact Information for Working Group Vice-Chair
Vice-Chair's Name: Adam Healey
Vice-Chair's Email Address: adam.healey@broadcom.com
Vice-Chair's Phone: +1 610 712-3508

7.2. Activity Management

If no IEEE sponsoring committee has been identified in 7.1 above, indicate how this activity will manage itself on a day-to-day basis (e.g., executive committee, officers, etc).

N/A

7.3. Procedures

Indicate what documented procedures will be used to guide the operations of this activity; either a) modified baseline *Industry Connections Activity Policies and Procedures,* or b) Sponsor or Working Group policies and procedures accepted by the IEEE-SA Standards Board. The chosen policies and procedures must be reviewed by ICCom

IEEE 802 LMSC Operations Manual, IEEE 802 P&P, IEEE 802.3 Operations Manual

8. Participants

8.1. Stakeholder Communities

Indicate the stakeholder communities (the types of companies or other entities, or the different groups of individuals) that are expected to be interested in this IC activity, and will be invited to participate.

Stakeholders identified to date includes but are not limited to: users and producers of systems and components for servers, network storage, networking systems, data centers, high performance computing, telecommunications carriers, automotive, and industrial applications.

8.2. Expected Number of Participants

Indicate the approximate number of entities (if entity-based) or individuals (if individual-based) expected to be actively involved in this activity.

130 individuals

8.3. Initial Participants

Provide a list of the entities or individuals that will be participating from the outset. It is recommended there be at least three initial participants for an entity-based activity, or five initial participants (each with a different affiliation) for an individual-based activity.

Use the following table for an entity-based activity:

Entity	Primary Contact	Additional Representatives
Entity Name	Contact Name Email Address Phone Number	Name, Email Address Name, Email Address

Use the following table for an individual-based activity:

ID #	Last Name	First Name	Employer	Affiliation
1	Abbott	Justin	Lumentum	Lumentum
2	Anslow	Pete	Ciena	Ciena
3	Bains	Amrik	Cisco	Cisco
4	Bouda	Martin	Fujitsu	Fujitsu
5	Braun	Ralf-Peter	Deutsche Telekom	Deutsche Telekom
6	Brillhart	Theodore	Fluke Electronics	Fluke Electronics
7	Brooks	Paul	Viavi	Viavi
8	Brown	Matt	MACOM	MACOM
9	Carlson	Steve	High Speeed Design	High Speeed Design
10	Cassidy	Derek	IET/ICRG	IET/ICRG
11	Cates	Ron	Marvell	Marvell
12	Chabot	Craig	UNH-IOL	UNH-IOL
13	Chalupsky	David	Intel	Intel
14	Cole	Chris	FInisar	Finisar
15	D'Ambrosia	John	Futurewei	Futurewei, Subsidiary of Huawei
16	DeAndrea	John	Finisar	Finisar
17	DeSanti	Claudio	Google	Google
18	Diminico	Chris	MC Communications	MC Communications/Panduit
19	Dudek	Mike	Marvell Technologies	Marvell Technologies
20	Effenberger	Frank	Futurewei	Futurewei, Huawei
21	Estes	David	Spirent	Spirent
22	Fazlollahi	Amir	Futurewei	Futurewei, Huawei
23	Ferretti	Vince	Corning	Corning
24	Ghiasi	Ali	Ghiasi Quantum	Ghiasi Quantum
25	Grow	Bob	RMG Consutling	Consulting
26	Guo	Qiang	Huawei	Huawei
27	Gustlin	Mark	Xilinx	Xilinx
28	He	Xiang	Huawei	Huawei
29	Healey	Adam	Broadcom	Broadcom
30	Holden	Brian	Kandou Bus	Kandou Bus
31	Isono	Hideki	Fujitsu	Fujitsu
32	Issenhuth	Tom	Issenhuth Consulting LLC	Issenhuth Consulting LLC, Huawei
33	Jackson	Kenneth	Sumitomo Electric	Sumitomo Electric
34	Jones	Pete	Cisco	Cisco
35	Jones	Chad	Cisco	Cisco
36	King	Jonathan	Finisar	Finisar
37	Knittle	Curtis	CableLabs	CableLabs
38	Kochuparambil	Elizabeth	Cisco	Cisco
39	Kolesar	Paul	CommScope	CommScope
40	Lapak	Jeffery	UNH-IOL	UNH-IOL
41	Laubach	Mark	Broadcom	Broadcom
42	Law	David	HPE	HPE

43	LeCheminant	Greg	Keysight	Keysight
44	Lee	Han Hyub	ETRI	ETRI
45	Lewis	Jon	Dell EMC	Dell EMC
46	Lewis	David	Lumentum	Lumentum
47	Lingle	Robert	OFS	OFS
48	Lusted	Kent	Intel	Intel
49	Maki	Jeffery	Juniper Networks	Juniper Networks
50	Malicoat	David	Malicoat Networking Solutions	Malicoat Networking Solutions, Senko Advanced Components
51	Matheus	Kirsten	BMW	BMW
52	McCarthy	Mick	Analog Devices, Inc	Analog Devices, Inc
53	McSorley	Greg	Amphenol	Amphenol
54	Mellitz	Rich	Samtec	Samtec
55	Murray	Dale	LightCounting	LightCounting
56	Nadolny	Jim	Samtec	Samtec
57	Nicholl	Gary	Cisco	Cisco
58	Nicholl	Shawn	Xilinx	Xilinx
59	Nikolich	Paul	Self	Self
60	Nowell	Mark	Cisco	Cisco
61	Ofelt	David	Juniper Networks	Juniper Networks
62	Palkert	Tom	Molex/Macom	Molex/Macom
63	Pardo	Carlos	KD POF	KD POF
64	Parsons	Elwood	CommScope	CommScope
65	Parsons	Earl	CommScope	CommScope
66	Parthasarathy	Vasu	Broadcom	Broadcom
67	Pham	Phong	US Conec	US Conec
68	Powell	Bill	Nokia	Nokia
69	Ran	Adee	Intel	Intel
70	Remein	Duane	Futurewei	Futurewei, Huawei
71	Rotolo	Salvatore	STMicroelectronics	STMicroelectronics
72	Sambasivan	Sam	AT&T	AT&T
73	Sayre	Ed	Teraspeed	Teraspeed
74	Shariff	Masood	CommScope	CommScope
75	Shrikhande	Kapil	Innovium	Innovium
76	Stassar	Peter	Huawei	Huawei
77	Stewart	Heath	Analog Devices, Inc	Analog Devices, Inc
78	Stone	Rob	Broadcom	Broadcom
79	Sun	Phil	Credo	Credo
80	Sun	Liyang (Marcus)	Huawei	Huawei
81	Swanson	Steve	Corning Optical Communications	Corning Optical Communications
82	Tailor	Bharat	Semtech	Semtech
83	Tamura	Kohichi	Oclaro	Oclaro
84	Tooyserkani	Pirooz	Cisco	Cisco
85	Tracy	Nathan	TE Connectivity	TE Connectivity
86	Traverso	Matt	Cisco	Cisco
87	Tremblay	David	HPE	HPE

88	Trowbridge	Steve	Nokia	Nokia
89	Ulrich	Ed	Source Photonics	Source Photonics
90	Umnov	Alexander	Corning Optical Communications	Corning Optical Communications
91	Wang	Xinyuan	Huawei	Huawei
92	Woods	Jordon	Analog Devices, Inc	Analog Devices, Inc
93	Xu	Yu	Huawei	Huawei
94	Young	James	CommScope	CommScope
95	Zhuang	Yan	Huawei	Huawei
96	Zimmerman	George	CME Consulting	CME Consulting, ADI, Aquantia, APL Group, BMW, Cisco, Commscope
97	Zivny	Pavel	Tektronix	Tektronix