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

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	Carlson	Steve	High Speeed Design	High Speeed Design
9	Cassidy	Derek	IET/ICRG	IET/ICRG
10	Cates	Ron	Marvell	Marvell
11	Chabot	Craig	UNH-IOL	UNH-IOL
12	Chalupsky	David	Intel	Intel
13	Cole	Chris	FInisar	Finisar
14	D'Ambrosia	John	Futurewei	Futurewei, Subsidiary of Huawei
15	DeAndrea	John	Finisar	Finisar
16	DeSanti	Claudio	Google	Google
17	Diminico	Chris	MC Communications	MC Communications/Panduit
18	Dudek	Mike	Marvell Technologies	Marvell Technologies
19	Effenberger	Frank	Futurewei	Futurewei, Huawei
20	Estes	David	Spirent	Spirent
21	Fazlollahi	Amir	Futurewei	Futurewei, Huawei
22	Ferretti	Vince	Corning	Corning
23	Ghiasi	Ali	Ghiasi Quantum	Ghiasi Quantum
24	Grow	Bob	RMG Consutling	Consulting
25	Guo	Qiang	Huawei	Huawei
26	Gustlin	Mark	Xilinx	Xilinx
27	He	Xiang	Huawei	Huawei
28	Healey	Adam	Broadcom	Broadcom
29	Holden	Brian	Kandou Bus	Kandou Bus
30	Isono	Hideki	Fujitsu	Fujitsu
31	Issenhuth	Tom	Issenhuth Consulting LLC	Issenhuth Consulting LLC, Huawei
32	Jackson	Kenneth	Sumitomo Electric	Sumitomo Electric
33	Jones	Pete	Cisco	Cisco
34	Jones	Chad	Cisco	Cisco
35	King	Jonathan	Finisar	Finisar
36	Knittle	Curtis	CableLabs	CableLabs
37	Kochuparambil	Elizabeth	Cisco	Cisco
38	Kolesar	Paul	CommScope	CommScope
39	Lapak	Jeffery	UNH-IOL	UNH-IOL
40	Laubach	Mark	Broadcom	Broadcom
41	Law	David	HPE	HPE
42	LeCheminant	Greg	Keysight	Keysight

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

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