New Ethernet Applications

Industry Connections Activity Initiation Document (ICAID)

Version: 1.0, 07-Sep-2016

# 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

1. 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

1. Purpose
	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 requires new standards to be developed at a rapid pace. This is evident by recent standardization activities related to 2.5Gb/s, 5Gb/s and 25 Gb/s Ethernet, as well as subsequent conversations related on introducing new Ethernet solutions at these rates. Furthermore, with recent decisions in the IEEE P802.3bs 400GbE Task Force on 50Gb/s and 100Gb/s electrical and optical signaling, there is growing discussion of how to leverage these new signaling technologies for new Ethernet projects. Additional examples include new projects targeting automotive and industrial applications, which are indicators of the growing expansion of Ethernet.

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.

* 1. 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.

* 1. Previously Published Material

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

None

* 1. 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.

1. 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:** 11/2018

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.

1. 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.

1. 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.

1. Management and Procedures
	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: + 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@avagotech.com

Vice-Chair’s Phone: + 610 712-3508

* 1. 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

* 1. 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

1. Participants
	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.

* 1. 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

* 1. 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 NameEmail AddressPhone Number | Name, Email AddressName, Email Address |
|  |  |  |

Use the following table for an individual-based activity:

|  |  |  |  |
| --- | --- | --- | --- |
| **Individual** | **Contact Information** | **Employer** | **Affiliation** |
| John D’Ambrosia | jdambrosia@ieee.org+ 1 717 503 4512 | Futurewei | Huawei |
| Mark Nowell | mnowell@cisco.com+1 613 254 3391 | Cisco | Cisco |
| Jon Lewis | Jon\_lewis@dell.com | Dell | Dell |
| Pavel Zivny | pavel.zivny@tek.com+1(503)627-4755 | Tektronix | Tektronix |
| George Zimmerman | George@cmephyconsulting.com  | CME Consulting | Consulting |
| Mick McCarthy | Mick.mccarthy@analog.com | Analog Devices, Inc | Analog Devices, Inc  |
| Dale Murray | dale@lightcounting.com+1 717 653 5929 | LightCounting | LightCounting |
| Tom McDermott | tom.mcdermott@us.fujitsu.com+1 541 773 2688 | Fujitsu Network Communications, Inc. | Fujitsu Network Communications, Inc. |
| Alexander Umnov | umnova@corning.com+ 1 817 431 7111 | Corning | Corning |
| Paul Vanderlaan | Paul.vanderlaan@nexans.com | Nexans | Nexans |
| Martin Bouda | Martin.bouda@us.fujitsu.com | Fujitsu | Fujitsu |
| Tom Palkert | Tom.palkert@molex.com |  | Molex |
| Dylan Walker | dylanwal@cisco.com512-378-1645 | Cisco | Cisco |
| Yan Zhuang | Zhuangyan.zhuang@huawei.com | Huawei Technologies | Huawei Technologies |
| David Malicoat | David.malicoat@hpe.com | HPE | HPE |

Supporters to be confirmed

|  |  |  |  |
| --- | --- | --- | --- |
| David Ofelt | ofelt@juniper.net +1 650 544 8401 | Juniper | Juniper |
| Adam Healey | adam.healey@avagotech.com+1 610 712-3508 | Avago Technologies | Avago Technologies |
| Jonathan King | Jonathan.king@finisar.com+1 408 368 3071 | Finisar | Finisar |
|  |  |  |  |
| Xinyuan Wang | wangxinyuan@huawei.com | Huawei | Huawei |
| Tongtong Wang | Tongtong.wang@huawei.com+86 18701432789 | Huawei | Huawei |
| Yu Xu | Helen.xuyu@huawei.com | Huawei | Huawei |
| Scott Kipp | skipp@brocade.com+1 805 888-9752 | Brocade | Brocade |
| David Chalupsky | david.chalupsky@intel.com+1 503 730 6957 | Intel | Intel |
| Hesham Elbakoury | Hesham.elbakoury@huawei.com+1 408 330 4942 | Huawei | Huawei |
| Rob Stone | rob.stone@broadcom.com+1408 202 6676 | Broadcom | Broadcom |
| Thananya Baldwin | thananya@ixiacom.com+1 818 634 8080 | Ixia | Ixia |
| Jerry Pepper | gpepper@ixiacom.com+1 818 216 1900 | Ixia | Ixia |
|  |  |  |  |
| Paul Kolesar | pkolesar@commscope.com+1 972 762 7784 | CommScope | CommScope |
| Kapil Shrikhande | kapils@ieee.org+1 650 387 6537 | Dell | Dell |
| David Lewis | David.lewis@lumentum.com+1 408 546 5448 | Lumentum | Lumentum |
| Henry Chen | chenyan@broadcom.com+1 949 926 3466 | Broadcom | Broadcom |
| Andre Szczepanek | aszcepanek@inphi.com+44 1604 289822 | Inphi | Inphi |
| Andrew Zambell | Andrew.zambell@ieee.org+1 717 938 7179 | FCI | FCI |
| David Law | dlaw@hpe.com+44 7711 502962 | Hewlett Packard Enterprise | Hewlett Packard Enterprise |
| James Fife | James.fife@etopus.com+1 949 910 0710 | eTopus Technology | eTopus Technology |
| Sam Sambasivan | sam\_sambasivan@labs.att.com+1 512 372 5809 | AT&T | AT&T |
| Steve Swanson | swansonse@corning.com+1 828 901 5328 | Corning | Corning |
|  |  |  |  |
| Vineet Salunke | vineets@cisco.com+1 408 525 3479 | Cisco | Cisco |
| Mark Gustlin | mgustlin@xilinx.com | Xilinx | Xilinx |
| Bharat Tailor | btailor@semtech.com+1 289 707 0905 | Semtech | Semtech |
| Steve Carlson | scarlson99@gmail.com+1 503 626 4206 | High Speed Design | High Speed Design |
| Joel Goergen | jgoergen@cisco.com+1 408 525 2309 | Cisco | Cisco |
| Ali Ghiasi | aghiasi@gmail.com+1 408 352 53426 | Ghiasi Quantum LLC | Ghiasi Quantum LLC |
| Kohichi Tamura | kohichi.tamura@oclaro.com+81 90 4064 2514 | Oclaro | Oclaro |
| William Szeto | William.szeto@xtera.com+1 972 649 5182 | Xtera Communications | Xtera Communications |
| Mike Dudek | Mike.dudek@qlogic.com+1 949 389 6269 | QLogic | QLogic |
| Matt Brown | mbrown@apm.com | Applied Micro | Applied Micro |
| Hideki Isono | isono@jp.fujitsu.com+81 44 754 3135 | Fujitsu Optical Components | Fujitsu Optical Components |
| Gary Nicholl | Gnicholl@cisco.com+1 613 254 3535 | Cisco | Cisco |
| Dan Dove | Dan.dove@dovenetworking.com | Dove Networking Solutions | Dove Networking Solutions |
| Brian Teipen | bteipen@advaoptical.com+1 404 789 1486 | ADVA Optical Networking | ADVA Optical Netwoking |
| Peter Jones | petejone@cisco.com+1 408 525 6952 | Cisco | Cisco |
| Vipul Bhatt | vbhatt@inphi.com+1 408 461 8521 | Inphi | Inphi |
| Kiyoto Takahata | Takahata.kiyoto@lab.ntt.co.jp+81 46 240 2844 | NTT | NTT Device Innovation Center |
| Scott Irwin | sairwin@MoSys.com  | MoSys | MoSys |
| Mike Li | mpli@altera.com+1 408 544 8312 | Altera | Altera |
| Phil Sun | Phil.sun@credosemi.com | Credo | Credo |
| Greg McSorley | Greg.mcsorley@amphenol-highspeed.com+1 508561 2903 | Amphenol | Amphenol |
| Jacky Chang | Jacky.chang@hpe.com+1 916 748 2513 | Hewlett Packard Enterprise | Hewlett Packard Enterprise |
| Tom Issenhuth | thomasis@microsoft.com+1 425-704-8655 | Microsoft | Microsoft |
| Kent Lusted | kent.c.lusted@intel.com+1-503-264-3373 | Intel | Intel |
| Paul Brooks | Paul.brooks@viavisolutions.com+49 151 1731 4668 | Viavi Solutions | Viavi Solutions |
| Chris DiMinico | CDimi80749@aol.com | MC Communications | MC Communications |
| Jim Nadolny | jim.nadolny@samtec.com | Samtec | Samtec |
| Nathan Tracy | Ntracy@te.com | TE Connectivity | TE Connectivity |
| Erdem Matoglu | Erdem.Matoglu@amphenol-tcs.com603-879-3334 | Amphenol High Speed Interconnects | Amphenol High Speed Interconnects |
| Paul Mooney | Paul.mooney@spirent.com | Spirent | Spirent |
| Pete Anslow | panslow@ciena.com+44 2070 125535 | Ciena | Ciena |
|  |  |  |  |
| Pat Thaler | Pthaler@broadcom.com | Broadcom | Broadcom |
| Martin Carroll | martin.carroll@verizon.com | Verizon | Verizon |
| Yong Kim | ybkim@broadcom.com | Broadcom | Broadcom |
| Scott Sommers | Scott.sommers@molex.com | Molex | Molex |
|  |  |  |  |
| Qing Xu | Qing.xu@belden.com+1 514 822 7062 | Belden | Belden |
| Yoshiaki Sone | sone.yoshiaki@lab.ntt.co.jp+81 422 59 4502 | NTT  | NTT |
| John McDonough | John.mcdonough@necam.com+1 631 751 0746 | NEC | NEC |
| Mike Bennett | mjbennett@ieee.org | 3MG Consulting | 3MG Consulting |
| Alan Flatman | a\_flatman@tiscali.co.uk | LAN Technologies | LAN Technologies |
|  |  |  |  |
| Peter Stassar | Peter.stassar@huawei.com+31 20 4300 832 | Huawei | Huawei |
| Rick Rabinovich | Rick.rabinovich@al-enterprise.com+1 818 878 4584 | ALE USA | ALE USA |
| Petar Pepeljugoski | petarp@us.ibm.com  | IBM  | IBM |
| Martin White | Martin.White@caviumnetworks.com | Cavium Networks | Cavium Networks |
| Dr. Ed Sayre | ed@teraspeed.com+1 978 3144940 | Teraspeed Consulintg, a division of Samtec | Teraspeed Consulting, a division of Samtec |
|  |  |  |  |
| Upen Reddy Kareti | ureddy@cisco.com | Cisco | Cisco |
| Ron Nordin | Ronald.nordin@panduit.com | Panduit | Panduit |
| Salvatore Rotolo | salvatore.rotolo@st.com | STMicroelectronics | STMicroelectronics |
| Shaohua Li | Shaohual@brocade.com, +1 408 688 4220 | Brocade | Brocade |
| Pirooz Tooyserkani | pirooz@cisco.com+1 408-527-2662 | Cisco | Cisco |
|  |  |  |  |
| David Malicoat | David.malicoat@hpe.com+1 916 785 3092 | Hewlett Packard Enterprise | Hewlett Packard Enterprise |
| Arthur Marris | arthurm@cadence.com | Cadence | Cadence |
| Rita Horner | Rita.horner@synopsys.com | Synopsys | Synopsys |
| Kenneth Jackson | kjackson@sei-device.com | Sumitomo Electric | Sumitomo Electric |
| Phong Pham | phongpham@usconec.com | US Conec | US Conec |
| Tomoo Takahara | Tomoo.takahara@jp.fujitsu.com | Fujitsu | Fujitsu |
| Masood Shariff | mshariff@commscope.com | CommScope | CommScope |
| Amrik Bains | ambains@cisco.com | Cisco | Cisco |
| Matt Traverso | mattrave@cisco.com | Cisco | Cisco |
| Kiyo Hiramoto | kiyohisa.hiramoto@oclaro.com  | Oclaro | Oclaro |
| Venu Balasubramonian | venu@marvell.com  | Marvell | Marvell |
| Ayla Changxin | changxin@huawei.com | Huawei | Huawei |
| Derek Cassidy | Derek.cassidy@bt.com | BT | BT |
| Pete Cibula | peter.r.cibula@intel.com  | Intel | Intel |
| Valerie Maguire | Valerie\_Maguire@siemon.com  | Siemon | Siemon |
|  |  |  |  |
| Steve Trowbridge | steve.trowbridge@alcatel-lucent.com  | Alcatel-Lucent | Alcatel-Lucent |
| Mike Ressl | Michael.Ressl.pg@hca.hitachi-cable.com | Hitachi Cable America | Hitachi Cable America |
| John Ewen | john.ewen@globalfoundries.com | GLOBALFOUNDRIES | GLOBALFOUNDRIES |