

Minutes
Multi-Gigabit Optical Automotive Ethernet (OMEGA)
Task Force Interim
19 and 26 January 2021

Attendance list as recorded in Webex participant list

Last Name	First Name	Employer	Affiliations	Jan 19th	Jan 26th
Abbott	John	Corning	Corning	X	X
Andrae	Stefan	SEI Antech-Europe GmbH	SEI Antech-Europe GmbH	X	X
Aono	Michikazu	Yazaki	Yazaki	X	X
Araki	Nobuyasu	Yazaki	Yazaki	X	X
Bakronagy	Istvan	EFFECT Photonics	EFFECT Photonics	X	X
Barbero	Fernando	KDPOF	KDPOF	X	X
Bordogna	Mark	Intel	Intel		X
Bhatti	Bakar	Senko Advanced Components, Inc.	Senko Advanced Components, Inc.		X
Bruckman	Leon	Huawei	Huawei		X
Choudhury	Mabud	OFS	OFS	X	X
Cuesta	Emilio	TE Connectivity	TE Connectivity	X	X
Dawson	Fred	Chemours	Chemours	X	
Dittmann	Markus	KDPOF	KDPOF	X	X
Eek	Magnus	Volvo Car Corp.	Volvo Car Corp.		X
Felgenhauer	Alexander	Yazaki	Yazaki		X
Ferretti	Vince	Corning	Corning		X
Fortusini	Davide	Corning	Corning		X
Fukuoka	Takashi	AutoNetworks Technologies Ltd.	AutoNetworks Technologies Ltd.; Sumitomo Electric Industries, Ltd.	X	X
Gianordoli	Stefan	GG-Group	GG-Group		X
Glanzner	Martin	SEI Antech-Europe GmbH	SEI Antech-Europe GmbH		X
Goto	Hideki	Toyota Motor Corporation	Toyota Motor Corporation	X	X
Grow	Robert	Robert M. Grow Consulting	RMG Consulting, KDPOF	X	X
Harshbarger	Douglas	Corning Incorporated	Corning Incorporated	X	X
Hartmann	Stephan	Siliconally GmbH	Siliconally GmbH	X	X
Hess	Dave	Cord Data	Cord Data		
Hayashi	Takehiro	HATLab	HATLab	X	X
HIRASE	Hidenari	AGC	AGC	X	X
Hyakutake	Yasuhiro	Adamant Namiki Precision Jewel	Adamant Namiki Precision Jewel	X	X
Isono	Hideki	FOC	FOC		X
Jiang	Tong	Huawei	Huawei	X	X
Kadry	Haysam	Ford Motor Company	Ford Motor Company	X	X
KAGAMI	Manabu	NI Tech	NI Tech	X	X
Kamino	John	OFS	OFS	X	X
KIKUTA	Tomohiro	Adamant Namiki Precision Jewel	Adamant Namiki Precision Jewel	X	X
Kobayashi	Shigeru	AIO Core	AIO Core	X	X
Koependoerfer	Erwin	Leoni	Leoni	X	X
Kondo	Taiji	MegaChips	MegaChips	X	X
Koppermüller	Daniel	MD Elektronik	MD Elektronik	X	
Kumada	Taketo	YAZAKI	YAZAKI	X	
Law	David	HPE	HPE	X	X
Lee	Bernard	Senko Advanced Components, Inc.	Senko		X
Lee	Sylvanus	Leviton Manufacturing Co	Leviton Manufacturing Co		X
Lingle	Robert	OFS	OFS		X

Malicoat	David	Malicoat Networking Solutions	Senko Advanced Components	X	X
Marques	Flavio	Furukawa Electric	Furukawa Electric	X	X
Masuda	Takeo	OITDS/PETR	OITDA/PETR	X	X
Nakagawa	Hideki	AGC	AGC		X
McMillan	Larry	Western Digital Corporation	Western Digital Corporation		X
Nicholl	Shawn	Xilinx	Xilinx		X
Ogura	Ichiro	PETRA	PETRA	X	X
Pandey	Sujan	Huawei	Huawei	X	
Pardo	Carlos	KDPOF	KDPOF	X	X
Parthasarathy	Raju	Tektronix	Tektronix	X	
Pérez-Aranda	Rubén	KDPOF	KDPOF	X	X
Pimpinella	Rick	Panduit	Panduit	X	X
Pitwon	Richard	Resolute Photonics	Resolute Photonics		X
Powell	Bill	Independent	Independent		X
Preis	Roland	MD Elektronik	MD Elektronik	X	X
Ramesh	Sridhar	Maxlinear	Maxlinear		
Regev	Alon	Keysight	Keysight	X	X
Sambasivan	Sam	AT&T	AT&T	X	X
Savi	Olindo	Hubbell	Hubbell	X	X
Sawano	Hiroshi	OITDS/PETR	OITDA/PETR		X
Shigematsu	Masayuki	Sumitomo Electric	Sumitomo Electric	X	X
Shiino	Matsato	Furukawa Electric	Furukawa Electric	X	X
Silvano de Sousa	Johnathan	Gebauer & Griller	Gebauer & Griller	X	
Sun	Yi	OFS	OFS	X	X
Suzuki	Yasuo	KDPOF Japan	KDPOF	X	X
Swanson	Steve	Corning Inc.	Corning Inc.	X	X
Takahashi	Satoshi	POF Promotion	POF Promotion	X	X
Takahashi	Tadashi	Nitto Denko Corporation	Nitto Denko Corporation	X	X
Takayama	Kazuya	Nitto Denko Corp.	Nitto Denko Corp.	X	
Takefman	Michael	Inphi	Inphi	X	
Theodoras	Jim	HG Genuine	HG Genuine	X	
Torres	Luisma	KDPOF	KDPOF	X	X
Tsuzaki	Nozomi	Independent	Independent	X	X
Ueno	Yuto	Sumitomo	Sumitomo		X
WABANABE	Yuji	AGC	AGC	X	X
Wang	Haifei	Huawei	Huawei	X	
Wells	Hunter	UNH-IOL	UNH-IOL		X
Wienckowski	Natalie	General Motors	General Motors	X	X
Xu	Xing	Huawei	Huawei	X	X
Yonezawa	Kenji	AGC	AGC	X	X
Young	James	Commscope	Commscope		X
Yurtin	John	APTIV	APTIV	X	X
Zhuang	Yan	Huawei	Huawei	X	

Tuesday, 19th January 2021, 12:00 (noon) UTC

The meeting was called to order at approximately 12:02 UTC Tuesday 19th January 2021
Chaired by Robert Grow, IEEE P802.3cz Task Force Chair.

Mr. Grow presented *Agenda and General Information* (https://www.ieee802.org/3/cz/public/jan_2021/Agenda_3cz_01_0121.pdf). Mr. Grow presented the agenda for the meeting. The agenda was approved by unanimous consent.

The minutes of the last IEEE P802.3cz Task Force Ad hoc meeting were approved by unanimous consent.

Mr. Grow asked the audience if there was anybody from the press. No one responded to the call.

Mr. Grow explained how to get IEEE 802.3 session credit by signing on imat application. Mr. Grow provided the session code.

Mr. Grow described how to access the private area in the Task Force website, and provided the password. Mr. Grow also reminded participants of the draft 1.0 review process and the associated deadline.

Mr. Grow asked the audience if there any participants were not familiar with the IEEE general rules presentation. No one responded. Mr. Grow went through the general rules' presentation briefly.

Mr. Grow issued the call for essential patent claims. No one responded to the call. He also presented the slides on the IEEE Copyright Policy and participation guidelines.

Mr. Grow showed the approved objectives for this Task Force and the project timeline.

Mr. Grow proposed a possible calendar for the next Task Force meetings, and for the Draft 1.1 review and comment resolution.

Mr. Pérez-Aranda had requested to present *Eye Safety control method for 802.3cz* (https://www.ieee802.org/3/cz/public/jan_2021/perezaranda_3cz_01_0121_eyesafety.pdf).

The presentation summarized the previously presented Eye Safety algorithm. Mr. Pérez-Aranda made a motion to adopt it as part of the baseline. Mr. Abbot second it.

Mr. Law expressed concerned about the inclusion of the eye safety state diagram because it is not necessary for interoperability and explained briefly to the TF how standards specifying safety mechanisms have different IEEE review requirements. Some discussion started and several Task Force members shared their thoughts about the issue.

Mr. Pérez-Aranda request to withdraw the motion to take into account Mr. Law comments. Mr. Grow asked if anyone opposed the withdrawal. No one answer. The motion was withdrawn.

Mr. Pérez-Aranda announced that he will elaborate for the continuation of the interim meeting a new motion to fulfil the raised concerns.

Mr. Swanson had requested to present *Proposed Category B Liaison with IEC TC86* (https://www.ieee802.org/3/cz/public/jan_2021/swanson_3cz_01a_0119_IEC_TC86_liaison.pdf).

The presentation summarized the motivation to promote a liaison with IEC TC86, and the IEC TC86 working groups and subcommittees. Mr. Swanson moved the following motion:

Motion #1:

Move that the IEEE 802.3cz Task Force approve a request for a category B liaison with IEC TC 86 to cover matters related to optical components for automotive applications and cabling outside the scope of the existing liaison between ISO/IEC JTC 1/SC 25/WG3 and IEEE 802.3

Mover: Steve Swanson

Mr. Pérez-Aranda seconded the motion. Under the motion discussion, a possible draft of the liaison letter was presented, and some questions about the different types of available liaisons were answered.

Motion #1 was adopted by unanimous consent.

Mr. Pardo had requested to present *ISO TC22 SC32 / IEEE 802.3 Liaison* (https://www.ieee802.org/3/cz/public/jan_2021/pardo_3cz_01_0121_liaison_ISO.pdf).

The presentation summarized the already existent liaison between IEEE 802.3 and ISO TC22 SC32 and showed a draft liaison letter informing ISO TC22 SC32 officially about the new standardization efforts that may be of interest for ISO.

Mr. Pardo moved the following motion:

Motion #2:

Request that the IEEE 802.3 Working Group approve IEEE_802d3_to_ISO_TC22_SC32_0521_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to ISO TC 22 / SC 32.

Mr. Abbot seconded the motion.

Motion #2 was adopted by unanimous consent.

With no further business to conduct today, the meeting was recessed at approximately 13:54 UTC.

Tuesday, 26th January 2021, 12:00 (noon) UTC

The meeting was called to order at approximately 12:03 UTC Tuesday 26th January 2021
Chaired by Robert Grow, IEEE P802.3cz Task Force Chair.

Mr. Grow presented *Agenda and General Information* (https://www.ieee802.org/3/cz/public/jan_2021/Agenda_3cz_01_0121.pdf). Mr. Grow presented the agenda for the meeting. Mr. Grow informed the Task Force that Mr. Watanabe sent an email requesting to delay his presentation *Plastic Optical Fiber for Automotive* to the next meeting. Mr. Grow accepted the request to delay.

Mr. Grow presented the organization of the interim meeting session and the approved agenda. Mr. Grow asked the audience if there were any member of the press. No one responded to the call.

Mr. Grow informed about the interim session attendance tool, the private area of the website and the credentials necessary to access both.

Mr. Grow reminded the experts that the Draft 1.0 is under Task Force review, and that the deadline is 26 February 2021.

Mr. Grow asked the audience if any participants were not familiar with the IEEE meeting slide set. No one responded. Mr. Grow went through the slides briefly.

Mr. Grow issued the call for essential patent claims. No one responded to the call. He also presented the slides on the IEEE Copyright Policy and participation guidelines.

Mr. Fukuoka had requested to present *Optical connector requirements considerations - dust tolerance* (https://www.ieee802.org/3/cz/public/jan_2021/fukuoka_3cz_01_0121_connector_dust.pdf). The presentation showed the result of a proposed test procedure to measure the dust tolerance, in terms of insertion loss, of different connector samples, including Butt, EBO, LC, Butt with shutter and POF connectors. An extensive discussion followed with a number of questions asked and Mr. Fukuoka providing answers. Suggestions were made for additional tests. Participants noted manufacturing environments as not being the primary concern, but rather automotive service and replacement part storage and installation being another area of dust contamination concern.

Mr. Ogura had requested to present *Thoughts on PMD baseline proposal for automobile based on Si-Photonics* (https://www.ieee802.org/3/cz/public/jan_2021/ogura_3cz_01_0121_Si%20photonics%20thoughts%20on%20proposal%20jan2021.pdf). The presentation showed an implementation for PMD based on Silicon Photonics. The proposal includes a Laser plus Mach-Zehnder interferometer instead of a VCSEL as light source. The proposed wavelength is between 1280 and 1320 nm. Laser reliability assessment and Eye-safety limits for the wavelength proposed were presented. A number of questions were asked about the presentation and Mr. Ogura provided answers.

Mr. Pérez-Aranda had requested to present *Eye safety requirements for 802.3cz* (https://www.ieee802.org/3/cz/public/jan_2021/perezaranda_3cz_02a_0121_eyesafety.pdf). This presentation is an update of the contribution presented on January 19th (*Eye Safety control method for 802.3cz* (https://www.ieee802.org/3/cz/public/jan_2021/perezaranda_3cz_01_0121_eyesafety.pdf)).

). Slide 6 of the presentation contains the text that is proposed to be included in the next version of the P802.3cz draft, with corresponding editorial license:

"Any nGBASE-AU optical transceiver shall meet eye safety limits.

Specification of this optional method does not preclude optical safety subclause.

nGBASE-AU optical transceivers shall conform to Hazard Level 1 laser requirements as defined in IEC 60825-1 and IEC 60825-2, under any condition of operation. This includes single fault conditions whether coupled into a fiber or out of an open bore.

Conformance to additional laser safety standards may be required for operation within specific geographic regions.

Laser safety standards and regulations require that the manufacturer of a laser product provide information about the product's laser, safety features, labeling, use, maintenance, and service. This documentation explicitly defines requirements and usage restrictions on the host system necessary to meet these safety certifications."

Mr. Pérez-Aranda explained that had discussing with different Task Force contributors and moved the following motion:

Motion #3:

Move to adopt eye safety requirements for nGBASE-AU in slide 6 of perezaranda_3cz_02a_260121_eyesafety.pdf

Mr. Law seconded the motion.

Motion #3 was adopted by unanimous consent.

Mr. Grow was asked to present the last slides from *Agenda and General Information* (https://www.ieee802.org/3/cz/public/jan_2021/Agenda_3cz_01_0121.pdf) regarding future Task Force meetings. Two TF ad-hoc meetings are scheduled 9th and 23rd February. Then, Draft 1.0 comment resolution meetings are scheduled for 9th, 10th, 16th and 17th March.

Mr. Torres reminded the Task Force that the deadline for Draft 1.0 comments is 26th February.

Mr. Torres reviewed with the Task Force group the ToDo list (https://www.ieee802.org/3/cz/P802_3cz_todo_01e.xlsm). Several contribution proposals for the next meeting were scheduled and the ToDo list was updated accordingly.

With no further business to conduct, the meeting was adjourned at approximately 13:47 UTC.

Recording Secretary: Luisma Torres.