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Technology Working Group Chair Roles & Responsibilities

iNEMI Roadmap

Summary

The objective of the iNEMI Technology Working Groups (TWGs) is to produce the 2019 iNEMI roadmap chapters for the various technology topics--based on input of original equipment manufacturer (OEM) requirements from the product emulator group (PEG) assessments issued in May—by identifying gaps with product needs and available technology, preparing a list of options to address those needs, and revising the latest roadmap information for the next 10-years.

There are many benefits for those serving as TWG Chairs, such as:

- An early look at the results of the 2019 Roadmap as it is being finalized.
- A free copy of the entire iNEMI 2019 Roadmap (\$3500.00 value)
- Experience leading an international group of contributors that also builds a network of valuable contacts.
- The opportunity to help drive the industry over the 10-year horizon of the iNEMI Roadmap and insure your company’s needs are represented.

Timeframe: Technology Working Group (TWG) roadmap development cycle is February–September 2018.

Chair and Co-Chair Role:

- Assemble and lead working group teams of subject matter experts during team calls
- Present team updates during Roadmap workshops and webinars
- Interface directly with Roadmap manager
- Serve as primary writer and team editor for the TWG report
- Serve as consultant for TWG information and content for the Roadmap Executive Summary

Chair and Co-Chair Tasks	Time Commitment
<ul style="list-style-type: none"> • Produce the TWG roadmap chapter: <ul style="list-style-type: none"> ○ Lead the team to identify technology gaps between product emulator needs and technology evolution, based on the Key Attributes report from each PEG ○ Lead the team and sub-teams of the TWG to revise/write the TWG roadmap chapter* ○ Engage or delegate a TWG-member(s) to engage with other related-topic PEG or TWG teams as needed for roadmap content consistency 	2-3 hours per month (includes mtg. prep time)
<ul style="list-style-type: none"> • Schedule and lead monthly team teleconferences 	1-2 hours
<ul style="list-style-type: none"> • Attend face-to-face (F2F) workshops 	2-3 times/year, 2-day duration
<ul style="list-style-type: none"> • Attend virtual TWG progress check workshops 	2-3 times/year, ½ day duration
<ul style="list-style-type: none"> • Edit final TWG roadmap chapter* 	16-24 hours over one-month period.

*Time commitment during the chapter writing and editing phase will be higher

TWG Chair-Co-Chair Deliverables:

- TWG presentation materials of roadmap revisions for progress checks and workshops
- iNEMI technology roadmap chapter
 - Final draft due September 24, 2018

TWG Face-to-Face Meeting Calendar

Q1'18	Q2'18	Q3'18
<ul style="list-style-type: none"> • Date: Feb. 25-26, 2018 • Event: Roadmap TWG kick-off meeting/ PEG Workshop • Meeting type: Face-to-face, with WebEx • Location APEX, San Diego, CA (Updated emulator presentation for TWG Chairs) 	<ul style="list-style-type: none"> • Date: April TBD, 2018 • Event: TWG optional / PEG Chapter TC review • Location WebEx 	<ul style="list-style-type: none"> • Date: August TBD, 2018 • Event: TWG Chapter Technical Committee review meeting • Location: TBD
	<ul style="list-style-type: none"> • Date: May 28, 2018 • Event: North America Roadmap Workshop • Location: ECTC Meeting in San Diego, CA 	

Roles and Responsibilities Description

The iNEMI Roadmaps encompass more than just a projection of the evolution of manufacturing technology. Large end user companies provide an outlook on what their technology *Product Needs* are going to be over the time frame of the roadmap. This is accomplished by providing information on *Product Emulators* to the Technology Working Groups.

The roadmap document is made possible by volunteers from the electronics industry (members and non-members of iNEMI) that form groups and committees to develop chapters for the 21 TWGs (Technology Working Groups) - technical areas covered in the roadmap and based upon the OEM needs detailed in the 7 product emulator chapters. Each of the PEGs (Product Emulator Groups) has a chair or co-chairs and as many group members as is needed for a broad-based view of that emulator's scope (usually 2-5). The list of PEGs for 2019 are Automotive; Portable / Wireless; Office / Consumer; High-End Systems (HP Computing, Storage, Netcom); Aerospace & Defense, Medical and IoT. These emulators are a collection of key attributes that are required to design, build and test a virtual product set as forecast out over 10 years.

The list of TWGs for 2019 is as follows: IM (Information Management); Modeling, Simulation & Design Tools; Thermal Management; Sustainable Electronics; Board Assembly; Test, Inspection & Measurement; Final Assembly; Semiconductor Technology; Packaging & Component Substrates; Electronic Connectors; Interconnect PCB - Organic; Interconnect Substrates – Ceramic; Energy Storage Systems; Passive Components; RF Components; MEMS/Sensors; Optoelectronics; Flexible Hybrid Electronics, Solid State Illumination, Power Conversion and Mass Data Storage. The TWGs will use the OEM requirements from a business and technology perspective (as detailed in the 7 PEG Chapters) in their preparation of a roadmap chapter detailing where they stand - and expect to progress over the next 10 years - with respect to the stated needs. The TWG Chapters will also identify any gaps between the forecast needs of the emulators and the capabilities and prepare a list of options (including R&D) to address those gaps.

As a TWG Chair, you are tasked with assembling a committee, organizing meetings (telecons), writing the chapter draft, acting as the primary interface with the responsible iNEMI Staff and attending, or arranging for an attendee, at a maximum of 3 required meetings during the 8-month roadmap cycle. These meetings are held to discuss progress of the chapter or collaborate on cross cut issues with other chairs in the development of all the chapters. Interactions with other related PEGS or TWGs throughout the process is encouraged, too, with the Chair/Co-chair serving as a primary point of contact with these engagements.

The product of this work will be a technical/business chapter that follows accepted iNEMI chapter formats for arrangement and content by the September 24th deadline. This date will allow for editing and publication for release to iNEMI Members in December.

Past TWG Chairs have typically served for multiple roadmap cycles. Reasons given for their on-going dedication include:

- the opportunity to help focus the future direction of technology evolution,
- the early knowledge of the roadmap product and all that brings to them and the companies they represent,
- a free copy of the final roadmap (\$3500.00 value), and
- the number of new industry colleagues they are privileged to meet and work with every roadmap cycle.

It is also important to have management support from a chair's company due to the required hours of work and limited travel required to fulfill the duties of a TWG Chair.

Estimate of Time Commitment

All meetings are planned to have remote meeting capability but the February 25-26 kickoff, the May 28 North America Roadmap workshop and the August TC final review meetings are most beneficial when attended in person for networking and cross-cut discussions.

In addition to this time, effort will be required to conduct conference calls and edit the document during the period from March through completion of chapter (end of September). While each group sets their own work patterns, the following is a reasonable estimate of time required:

TWG conference calls:

- 1-2 times per month for 1-2 hours
- At end of cycle (last few weeks), can be more frequent as chapter is assembled

Effective TWG leaders will usually break up writing assignments and development of chapter sections to members of committee. Chair and Co-Chair of committee can then focus on editing chapter and writing summary/conclusions.

Editing time estimate:

- 16-24 hours over a one-month period.

After chapter is submitted by September 24th, TWG Chairs/Co-Chairs may be consulted from time to time as overall roadmap is integrated and overall executive summary is created. This is usually limited to a few phone calls and, potentially, small clarifications/additions to chapter.

Once the iNEMI roadmap is released, some TWGs use their chapter as the basis for industry talks and/or articles. iNEMI has staff resources to help facilitate these optional tasks.

iNEMI Roadmap Support

Chair and Co-chair support is provided, with chapter templates that are pre-formatted, presentation templates, and other TWG chair engagement (cross-cut matrix) and iNEMI WebEx hosting is available to assist the TWG teams on an exception basis.