

### SUMMER SLOWDOWN?

In today's ever connected society, our devices enable us to get more accomplished in less time, or efficiently accomplished with dedicated "screen time." This enhanced productivity and less downtime comes partially as a result of the Internet, but also as a result of the Industrial Internet Revolution, powered by Industrial Internet Consortium (IIC) members.

**The IIC did not slow down for the summer!** Several IIC Testbeds have reached a level of maturity where results have emerged and have recently been encapsulated in the report, [Why we Build Testbeds: First Results](#). Two editions of the [Journal of Innovation](#), plus the [Industrial Internet Vocabulary Technical Report v.2.0](#) were published. Liaison Member agreements were announced between the IIC and the [Manufacturing Enterprise Solutions Association](#), the [Edge Computing Consortium](#), and [oneM2M](#). New testbeds were introduced in the areas of [Smart Factory Machine Learning](#), [Deep Learning Facilities](#) and [Retail Video Analytics](#). New videos were published in support of the [Industrial Analytics Whitepaper](#), the [Business Strategy and Innovation Framework](#) and the [Security Framework](#). We hosted the Q3 IIC Quarterly Meeting and [IIoT World Tour in Singapore](#), and finally, we will start the new quarter by heading to Barcelona for the annual [IIoT Solutions World Congress 2017](#).

### FROM TESTBEDS TO RESULTS

Testbeds bring IoT out of the realm of abstract theory and turn it into hands-on applications. As a major focus and activity of the Industrial Internet Consortium, we are continually adding new testbeds many of which are now reporting tangible results.

The outcomes from testbeds are the cornerstones of a feedback loop from concept to reality and back to guidance for further innovation. We are pleased to deliver the September 2017 report, [Why We Build Testbeds: First Results](#), describing specific results from several testbeds.

### JOURNAL OF INNOVATION

The Industrial Internet Consortium's [Journal of Innovation \(Joi\)](#) - the initiative of our Thought Leadership Task Group - highlights the innovative ideas, approaches, products, and services emerging within the Industrial Internet.

A ["Smart Cities" edition of the Joi](#) was published in June 2017 with a spotlight on IIoT as one of the main technology drivers behind smart cities.

The theme of the September 2017 edition is "Edge Computing -- Where is the Edge of the Edge in Industrial IoT?"

This edition explores the rise of powerful edge computing devices which are

accelerating the convergence of the IT and OT domains and driving new Industrial IoT functionality.

## **INDUSTRIAL INTERNET VOCABULARY TECHNICAL REPORT**

The Industrial Internet brings together a diverse population including those involved in Operational Technology (OT), Information Technology (IT), networking, software, hardware, system architects, business people and different vertical industries. Different stakeholders have their own set of terms with specific meanings that are not necessarily understood by others.

The [Industrial Internet Vocabulary Technical Report V2.0](#) provides a basis for effective communication within the Industrial Internet ecosystem, and a common set of terms and their definitions that the diverse set of stakeholders in the Industrial Internet can use to effectively communicate ideas.

## **NEW LIAISON MEMBERS**

The [Liaison Working Group](#) continues to approve and pursue strategic technical relationships with over 65 organizations including Avnu Alliance, ITAC, CAICT, ISO, Industrie 4.0, IEEE, OASIS, OMG, SGIP and many others. New Liaison Members of the IIC established in Q3 include:

- [oneM2M](#) -- the global standards initiative that covers requirements, architecture, API specifications, security solutions and interoperability for Machine-to-Machine and IoT technologies.
- [The Edge Computing Consortium \(ECC\)](#) - a world leading organization driving edge computing industry development

in Internet of Things (IoT) area, consisting of industrial and academic members that work on promoting open cooperation.

- [The Manufacturing Enterprise Solutions Association \(MESA\)](#) International -- a worldwide not-for-profit community of manufacturing companies, information technology hardware and software suppliers, system integrators, consulting service providers, analysts, editors, academics and students.

## **“VOICES OF THE IIC” VIDEOS**

Several new [“Voices of the IIC”](#) Videos were published to support and describe recently released technical documents.

### *Industrial Analytics*

Members of the Industrial Analytics Task Group discuss how to apply advanced analytics to machine and process data for deriving new insights and enable transformational business outcomes. If data is the new fuel, data analytics is the new engine. View this video [here](#).

### *Business Strategy & Innovation Framework*

As the IIoT transforms businesses and changes the competitive landscape, collaboration and mastery of new skills will be essential to business success. Several authors of the Business Strategy and Innovation Framework (BSIF) share a conversation around issues that any enterprise will need to address, and offer an organized, disciplined approach to moving forward successfully. View this video [here](#).

## What's New at the IIC?

---

### *Industrial Internet Security & IIC*

A veteran member and co-author of the Industrial Internet Security Framework presents his global perspective on the need for industrial strength security systems throughout all industries. He and his team have built and established a successful company and renowned reputation for groundbreaking work in the IIoT security field, and he shares how IIC membership has

played a role in their success. View this video [here](#).

Visit our video library for more:  
[www.iiconsortium.org/video-library](http://www.iiconsortium.org/video-library)

## SHOWCASING EXPERTISE AND GATHERING NEW IDEAS

Focus on IoT Solutions World Congress



Our members showcase their expertise at public-facing events around the globe such as the IIoT World Tour Event Series, Public Forums we host, webinars, Hannover Messe and the premier global IIoT event we co-organize – [IOT Solutions World Congress](#). At IOTSWC we will feature demos, testbeds, innovators and thought leaders within the IIC member pavilion and throughout the event.

Highlight reel:

- FOVI TESTBED

Often buried and in various formats, background and contextual data requires vast amounts of storage and data distribution resources. The Factory Operations Visibility & Intelligence (FOVI) Testbed simulates a factory environment, enabling visualization of results that may be used for process optimization.

- TSN TESTBED

Time Sensitive Networking (TSN) is an enhancement to Ethernet, a foundational piece of the IIoT. Our TSN Testbed endeavors to apply new TSN technology in a manufacturing system with a wide range of automation and control vendors, to display the new capabilities and value of TSN. See it in action at the Testbed Area.

- INDUSTRIAL TRUSTWORTHINESS DEMONSTRATION

Observe the evolution of a demonstration started at Hannover Messe 2016 -- a real-time security and interoperability demonstration highlighting collaboration between members of the Industrial Internet Consortium and Plattform Industrie 4.0.

## LOOKING AHEAD TO 2018 – THE I<sup>3</sup>C INITIATIVE

The value in an IIC membership is in the overall experience. A common theme which emerges is cross-pollination. Woven throughout every Working Group and Task Group are activities designed to connect across groups – vertical industry-focused groups to testbeds, liaison organizations to verticals, technology to business strategies, architecture to use cases and so on. Some of these cross pollination activities benefit members directly and some benefit the industry at large.

The convergence of activities within the IIC is being developed into what will be a forward-facing portal to assist the industry in accessing the IIoT use cases, testbed outcomes, architectures and patterns, related standards and the hotspots where interoperability must be addressed to further the adoption of IIoT. Testbeds will be leveraged to provide the necessary information to influence the standards and open-source solutions that enable privacy, security and interoperability to accelerate the adoption of IIoT in the industrial and enterprise space. The “portal” of the [Industrial Internet Interoperability Coalition \(I3C\)](#) initiative is now in the prototype stage and available internally to IIC members only for evaluation and testing.

During the last quarter of 2017 and throughout 2018, the IIC will continue to develop breadth and depth of the I<sup>3</sup>C portal content with a focus on vertical industries.

Ready to take advantage of all the Industrial Internet Consortium has to offer? [Join today.](#)

### Want to learn more?

- Read more about testbed and first testbed results here: [www.iiconsortium.org/test-beds](http://www.iiconsortium.org/test-beds)
- View membership value video here: <https://youtu.be/HrWDtoPa9Q>
- View video on the importance of testbeds here: <https://youtu.be/NZp8WgDNzi8>
- View membership information and rates here: [www.iiconsortium.org/become-member](http://www.iiconsortium.org/become-member)

### Quick Links:

- IIC Technical Resources: [www.iiconsortium.org/white-papers](http://www.iiconsortium.org/white-papers)
- IIC Testbeds Page: [www.iiconsortium.org/test-beds](http://www.iiconsortium.org/test-beds)
- IIC Member Directory: [www.iiconsortium.org/members](http://www.iiconsortium.org/members)
- IIC Liaison Working Group: [www.iiconsortium.org/wc-liaison](http://www.iiconsortium.org/wc-liaison)
- IIC Journal of Innovation: [www.iiconsortium.org/journal-of-innovation](http://www.iiconsortium.org/journal-of-innovation)
- Voices of the IIC – Videos: [www.iiconsortium.org/video-library](http://www.iiconsortium.org/video-library)

**Contributed by:**

Cheryl Rocheleau

Sr. Marketing Manager

Industrial Internet Consortium

- Return to [IIC Journal of Innovation landing page](#) for more articles and past editions.