

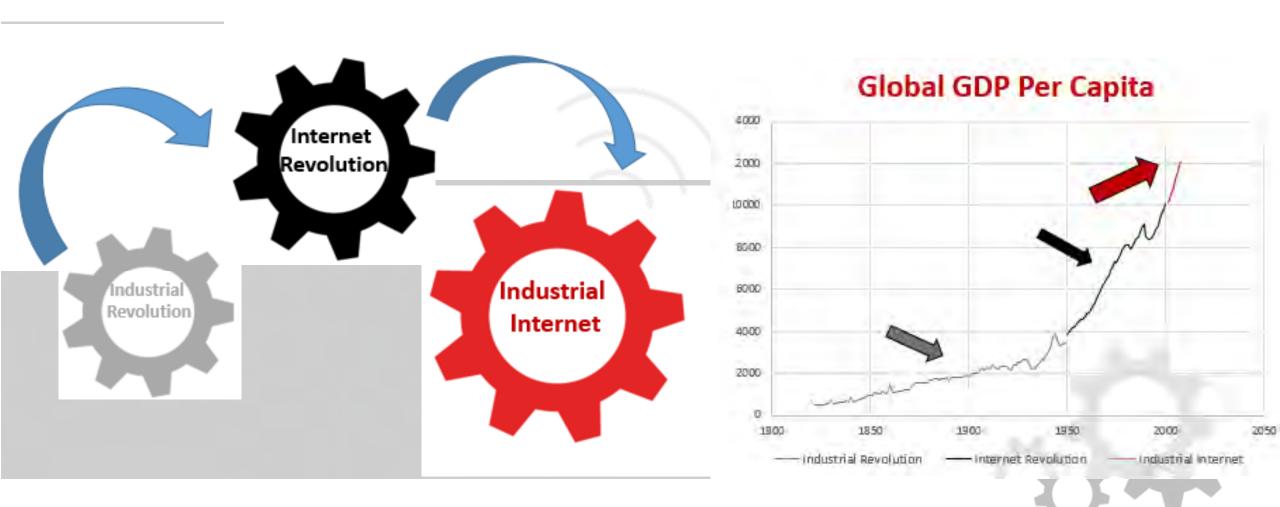
IIC OPC-F Joint Liaison Workshop Building the IIoT Ecosystem

Wael William Diab
IIC Liaison WG Chair
IIC SC Secretary
Senior Director, Huawei





The Industrial Internet is leading the next economic revolution





Yet there are current roadblocks to widespread adoption

3% of IoT Professionals Say Connectivity is the Biggest Challenge

Data Standards are Largely Proprietary, Works-in-Progress, or Non-Existent

70% of IoT Professionals
Say Interoperability is the
Biggest Challenge

59% of IT Pros Say They Have Not Started Preparing for Expected Data Increase

73% of Companies Have
Not Made Concrete Plans for
the Industrial Internet

The Industrial Internet: A \$32 trillion opportunity

Research into the Industrial Internet has Only Existed in the Past 3 Years

Urgent Need to Refocus
Education to Prepare for the
Upcoming Digital
Workplace

Many Countries Have
Insufficient Conditions to
Support Widespread
Adoption

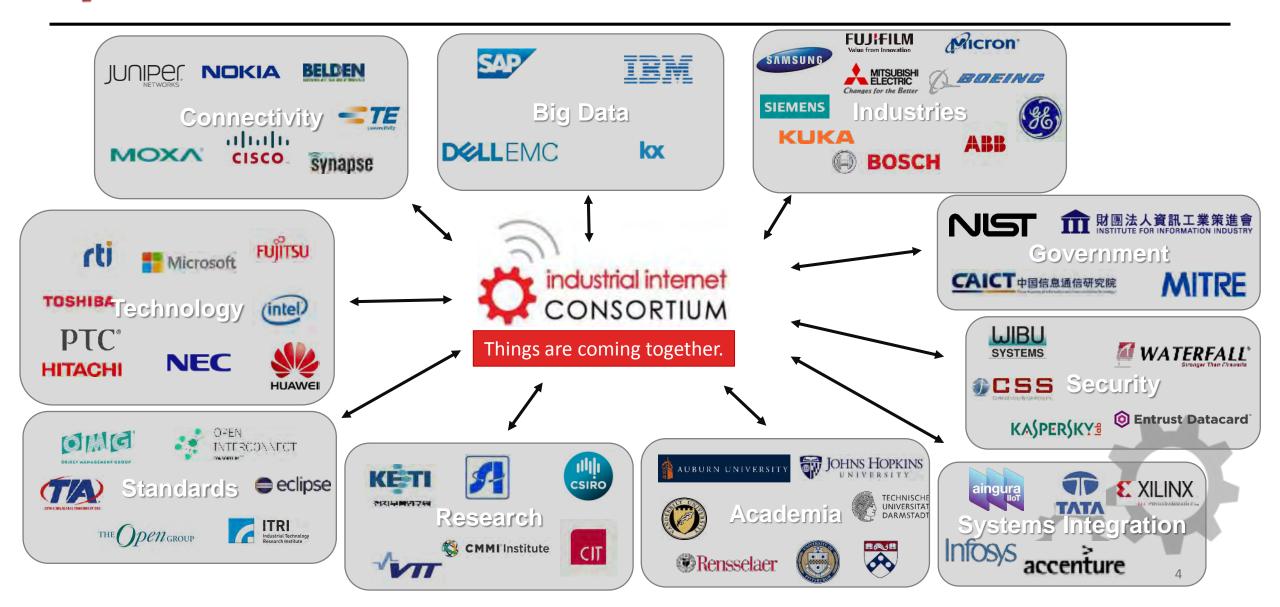
14% of IoT Professionals
Say Security is the Biggest
Challenge

36% of Executives Say
System Barriers Between
Departments Prevent
Collection and Correlation of
Data



The IIC Global Ecosystem of Stakeholders:

Things are coming together



Industrial Internet Consortium Vision & Mission



Vision: The Industrial Internet Consortium (IIC) is the world's leading organization transforming business and society by accelerating the Industrial Internet of Things (IIoT).

Mission: Our mission is to deliver a trustworthy Industrial Internet of Things (IIoT) in which the world's systems and devices are securely connected and controlled to deliver transformational outcomes.

An open, neutral "sandbox" where the IIoT Ecosystem of global industry, academia and government meet to collaborate, innovate and enable.

- More than 250 organizations from more than 30 countries and growing
- 27 active testbeds all over the world from more than a dozen different segments
- Numerous publications including Reference Architecture; Security Framework; Analytics WP

The IIC is an open, neutral "sandbox" where industry, academia and government meet to collaborate, innovate and enable.



IIC Founders, Contributing Members, & Large Industry Members

IIC Founding and Contributing Members





































■ NetApp*

































ERICSSON







Changes for the Better



















IIC Founders, Contributing Members, & Large Industry Members































































IIC Small Industry Members



















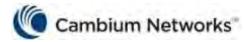
















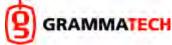














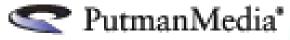




PRAETORIAN



































IIC Small Industry Members





















































































IIC Nonprofit, Academic, & Government Members













































University of New Hampshire









National Laboratory

















IIC Nonprofit, Academic, & Government Members























ICT Austria













Center for Business Technology

Shanghai Institute of Microsystem and Information Technology





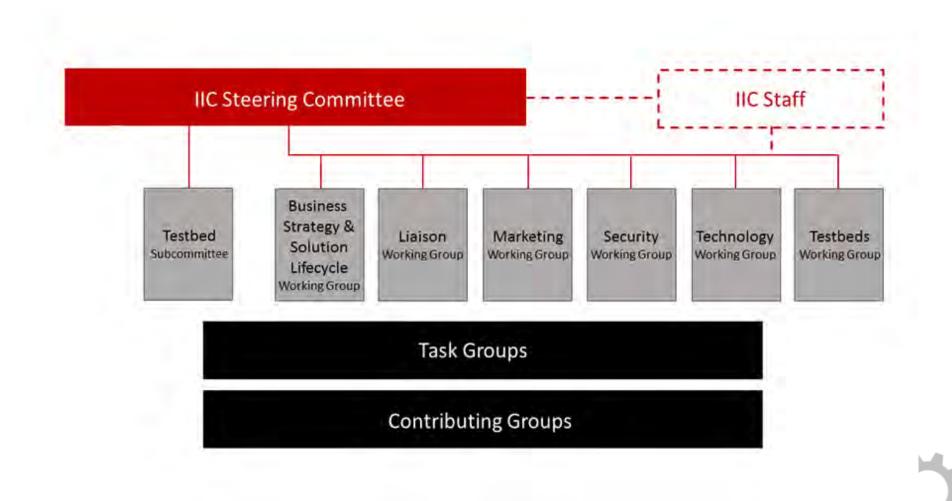






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Organizational Structure of the Industrial Internet Consortium





The IIoT Ecosystem: Criticality of Liaisons

IIC has more than 42 existing <u>liaisons</u> and currently has 30 more in flight! That's impressive for an organization that has its 4th birthday on March 27th, 2018! Below is a sample of the ecosystem that IIC is creating in the industry



















































IIC Vision: The Industrial Internet Consortium (IIC) is the world's leading organization transforming business and society by accelerating the Industrial Internet of Things (IIoT).

IIC Mission: Our mission is to deliver a trustworthy Industrial Internet of Things (IIoT) in which the world's systems and devices are securely connected and controlled to deliver transformational outcomes.

LWG Mission: The IIC Liaison Working Group

- Facilitates external interactions with the goal of building relationships for IIC
- Coordinates internal stakeholder requests and interest with external organizations



Building Coalitions to Address the IoT Ecosystem

Liaison Working Group *Strategic* Objectives

- Build and coordinate collaborative, working relationships inclusive of government organizations, formal standards development organizations and open source industry organizations
- Working with peer working groups, identify gaps in the portfolio of IIC and create then leverage relationships for IIC
- Make strategic recommendations to IIC Steering Committee to grow ecosystem

Example areas of *collaboration*

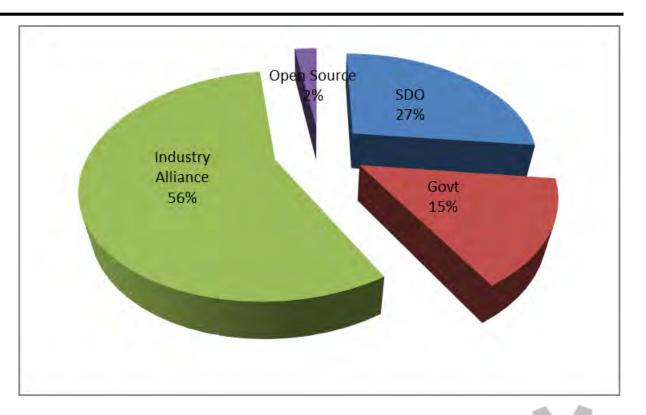
- Joint workshops conducted with partners (partner hosted)
 - E.g. IIC:IVI (Japan), IIC:CAICT (China), IIC:I4.0 (Germany), IIC:ECC (Industry)
- **Technical workshops** e.g. technology and security workshop with NIST, IIC:NEMA, IIC:EdgeX
- Collocated, IIC hosted workshops e.g. IIC:oneM2M, IIC:OSGi
- Liaison partnerships with organizations focusing on verticals
- Liaison partnerships with global SDOs focused on IoT technologies
 - E.g. ISO/IEC JTC 1/SC 41 (IoT), oneM2M, IEEE P2413 and 802.24 etc.
- Liaison partnerships with global SDOs focused on related areas
 - E.g. ISO/IEC JTC 1/WG 9 (Big Data)





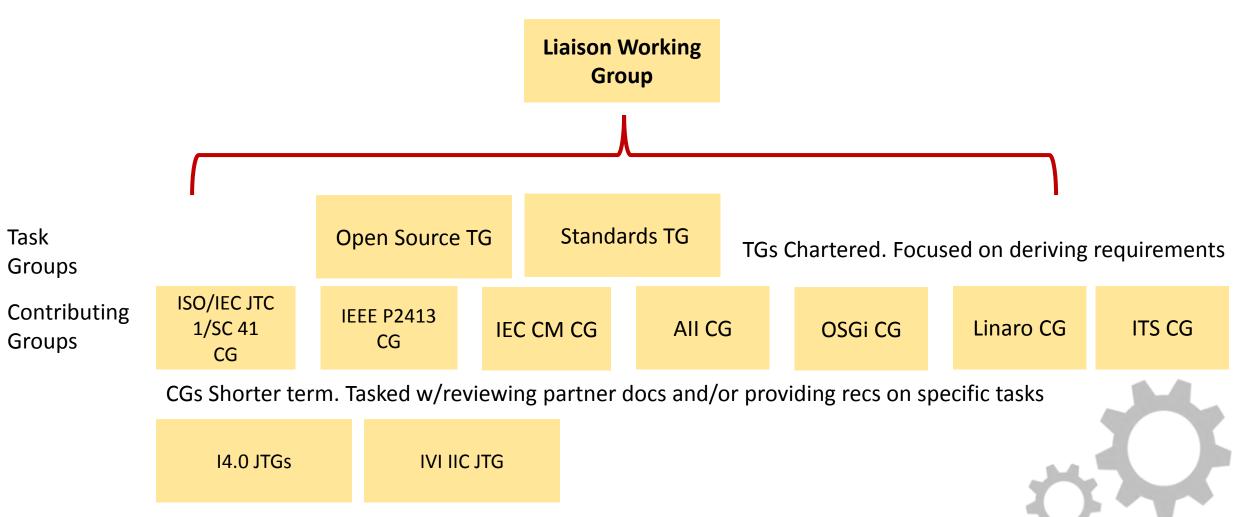
LWG At-A-Glance by the Numbers

- **42** Liaisons established!
- >15 additional new proposed liaisons
 - Driven by ITS Focus Area
 - New collaboration opportunities
- 1 liaison in the process of being renewed





Liaison Working Group – Leaving Q1 2019



JTGs are TGs with external liaison partners. Procedure approved in Q3 by SC to allow LWG to create them. I4.0 JTGs grandfathered in and moved under LWG



LWG Officer Team – Meet the Liaison Working Group Team

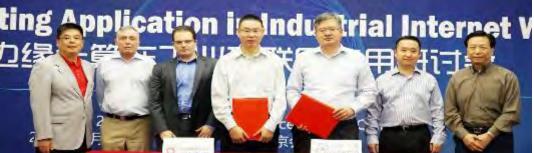
- Working Group Chairs
 - Wael William Diab
 - Stephen Mellor
 - Gary Stuebing
- Standard Task Group Chairs
 - Erin Bournival
 - Ya Ling Zhou
 - Erich Clauer
- Open Source Task Group Chairs
 - Erich Clauer
 - Kai Hackbarth
 - Jiaxin (Jason) Yin
- IVI-IIC Joint Task Group Chair
 - Jacques Durand

- I4.0 Joint Task Group Chair
 - Shiwan Lin
 - Bob Martin
 - Erich Clauer
- Contributing Groups Chairs
 - Erin Bournival ISO/IEC JTC 1/SC 41 CG
 - Kai Hackbarth OSGi CG
 - Reed Hinkel Linaro CG
 - Yunchao Hu IECCM CG
 - ■Haihua Li All CG
 - Francois Ozog Linaro CG
 - Eric Simmon P2413 CG
 - Ya Ling Zhou OSGi CG, Linaro CG
 - Vyacheslav (Slava) Zolotnikov P2413 CG
- Liaison Staff
 - Skyler Lew Liaison Coordinator













ge Computing Application in Industrial Internet We 边缘计算在工业互联网应用研讨会







5TH INTERNATIONAL WOR BIG DATA 14-AUG-2

08:30 - 09:15 Coffee + Registration

09:15 - 09:30 Welcome

Ray Walshe CHAIR of IWBI

Enda McDonnell, Director of

09:30 - 09:45 Official Opening

Adrienne Harringtion

Head of Data Protection Uni

Irish Government Dept. of a

09:45 - 10:00 Special Guest

Daniele Rizzi - EC DG CNEC

European Standardisation F

Session 1

10:00 - 10:25 Wo Chang - ISO IEC JTC1 W ISO Big Data Reference Arch

10:30 - 10:55 Wael Diab - HUAWEI / IIC /

Big Data Ecosystem

11:00 - 11:30 Coffee and Networking

Session 2

11:30 - 11:55 Ashok Ganesh - CEN CENEL ...

Future Industry Standardisation

12:00 - 12:30 Arne J Berre - TF6 LEAD BDVA

BDVA Standardisation

12:30 - 13:30 LUNCH

Session 3

13:30 - 13:55 Rigo Wenning - W3C

Big Data Europe - Data Engine

14:00 - 14:25 Ingo Simonis - OPEN GEOSPATION CONSORTIUM

Standardized Geospatial Big Data

14:30 - 14:55 Georgios Karagiannis - AIOTI WG3 AIOTI Standardisation

15:00 - 15:30 Panel Session

Ray Walshe (Insight@DCU)

Daniele Rizzi (European Commission)

Wo Chang (NIST/IEEE-SA)

Ana Garcia (Big Data Value Association)

Thomas Hahn (OPC Foundation)

15:30 - 15:45 Final Remarks

15:45 - 16:30 Close of Workshop and Networking





5TH INTERNATIONAL WORKSHOP ON BIG DATA DUBLIN IRELAND 14TH AUG 2017



Adrienne Harrington Dept. of Taoiseach (IRLGOV) European Commission



Daniele Rizzi Head of Data Protection Unit Data Policy and Innovation



Ray Walshe IEEE-SA/BDVA/ ISO Chair of BDVA TF65G6



Ana Garcia Big Data Value Assoc.



Thomas Hahn **OPC** Foundation



Ashok Ganesh CEN CENELEC Director innovation



Arne J Berre Big Data Value Assoc TF6 Technical Task Force





Giorgios Karagiannis Wael William Diab Huawei / IIC / ISO TC204 Lead WG3 Standardisation: Sr. Director / Osair II C Liaison WG



Rigo Wenning Personal Data Expert



Wo Chang NIST / IEEE-SA ISO IEC WG9 Big Data



Ingo Simonis



https://wbds17.evenjarite.ie

International data analysis workshop (5th JUNE, 2017)

10 speakers, About 200 participants from 100+ entities, in CAICT, Beijing





IIC:IVI Signing Ceremony @Hannover Messe (April 2017)







IIC:IVI Workshop @Tokyo Big Sight (June 2017)





IoT International Symposium 2017 (MIC / ITAC) in Tokyo 0317

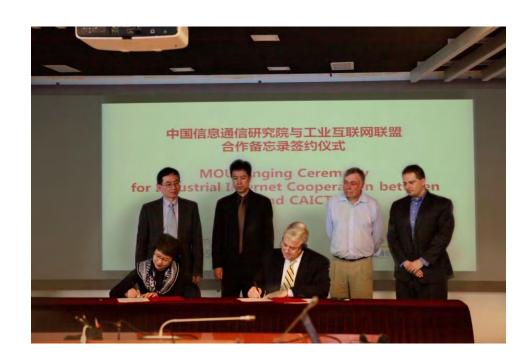


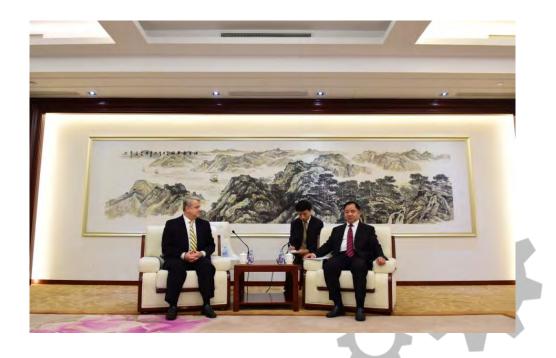


CAICT MoU Signing and Meeting with MIIT (November 7th 2016)

Highlights

- Meeting with Vice-Minister Chen and his senior staff at MIIT on November 7th
- Signing ceremony and joint workshop at CAICT afternoon of Nov 7th
- CAICT held a dinner with IIC delegates and principle attendees of workshop







Community. Collaboration. Convergence.

Things are coming together.

www.iiconsortium.org

