



ENGINEERING & TECHNOLOGY EXCELLENCE

iRING

ISO 15926 Realtime Interoperability Network Grid

PCA-FIATECH IDS-ADI iRING

Robin Benjamins

Bechtel

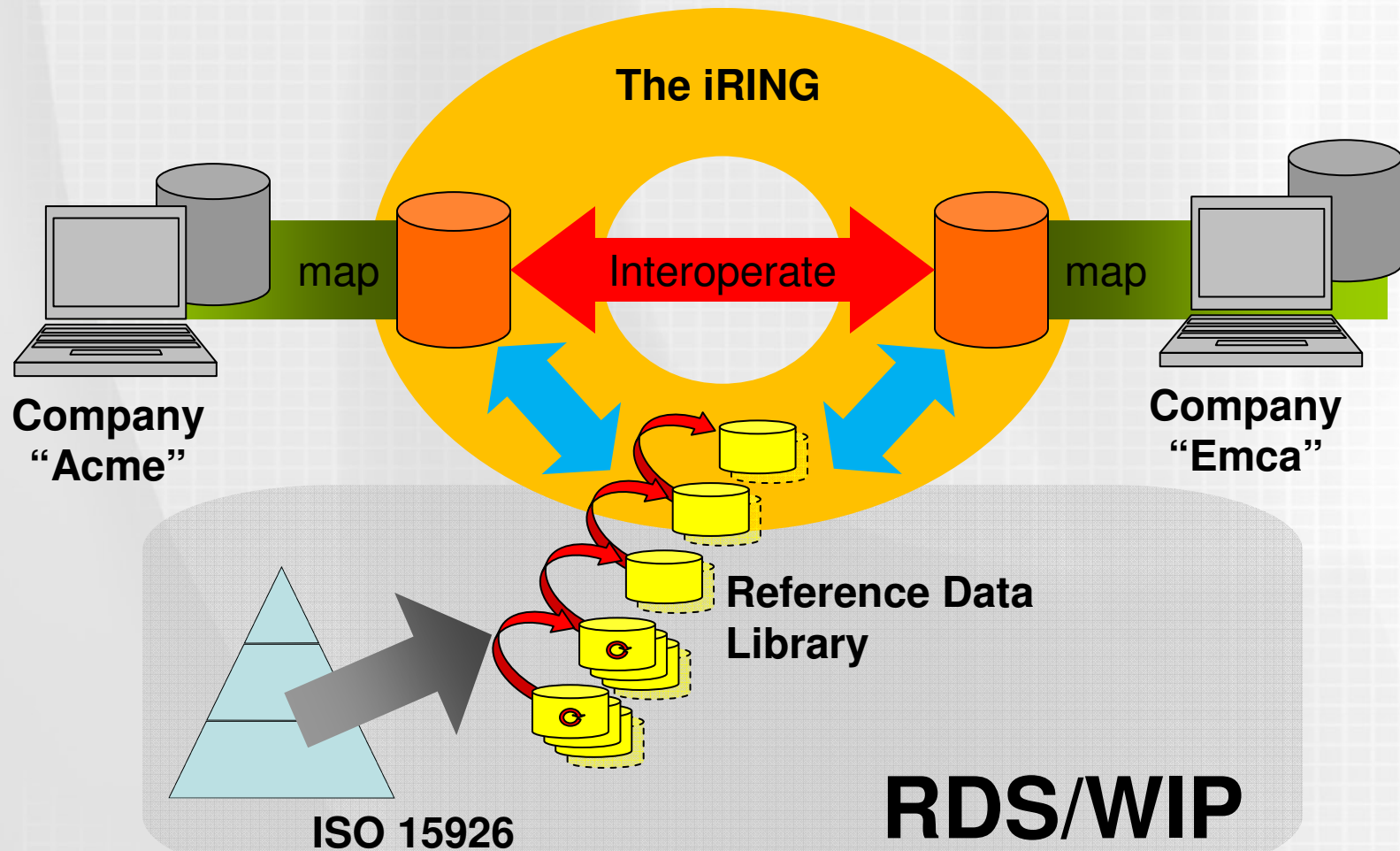
Central Engineering & Technology



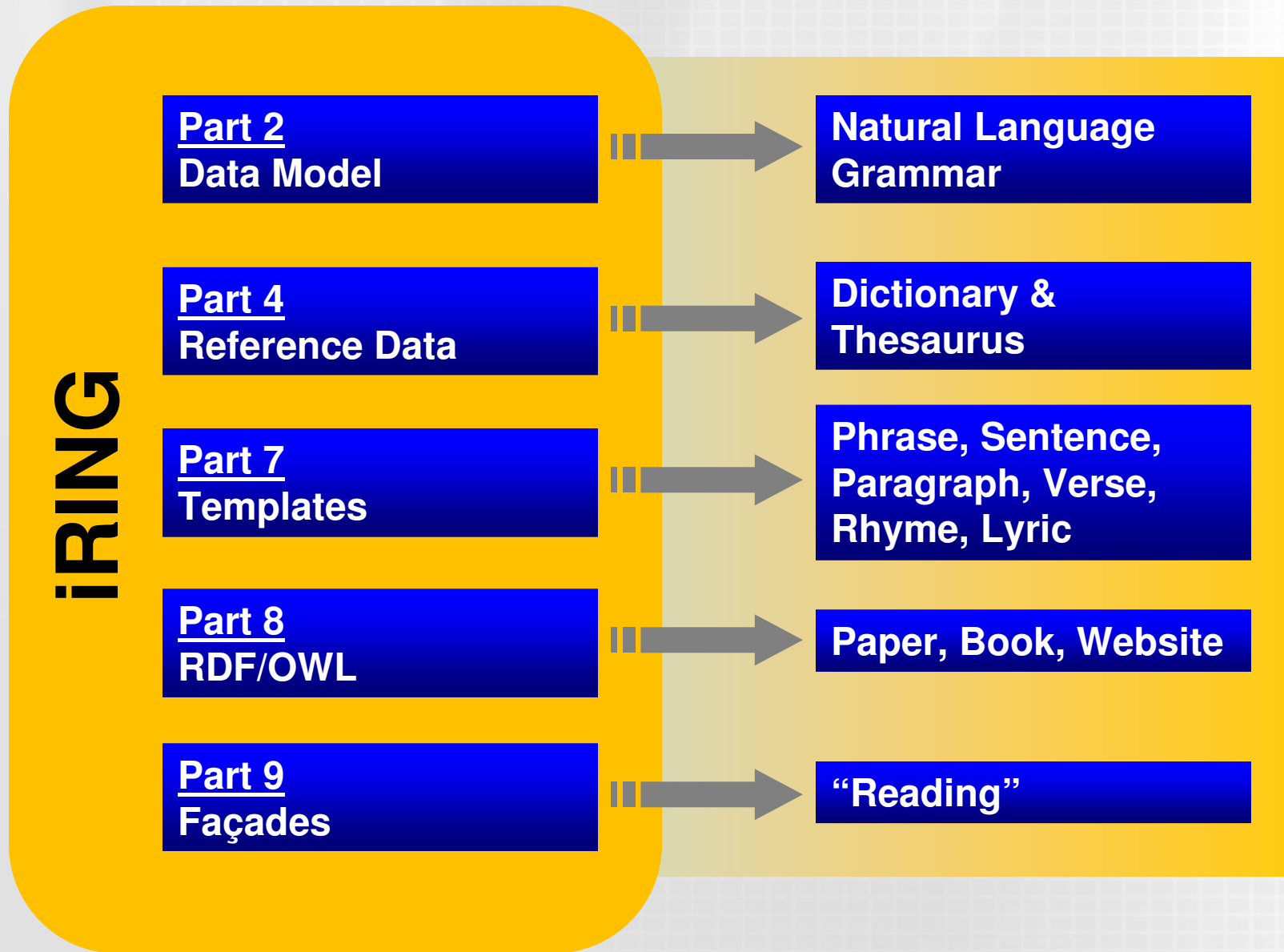
Improve Your Interoperability

Start with ISO 15926!

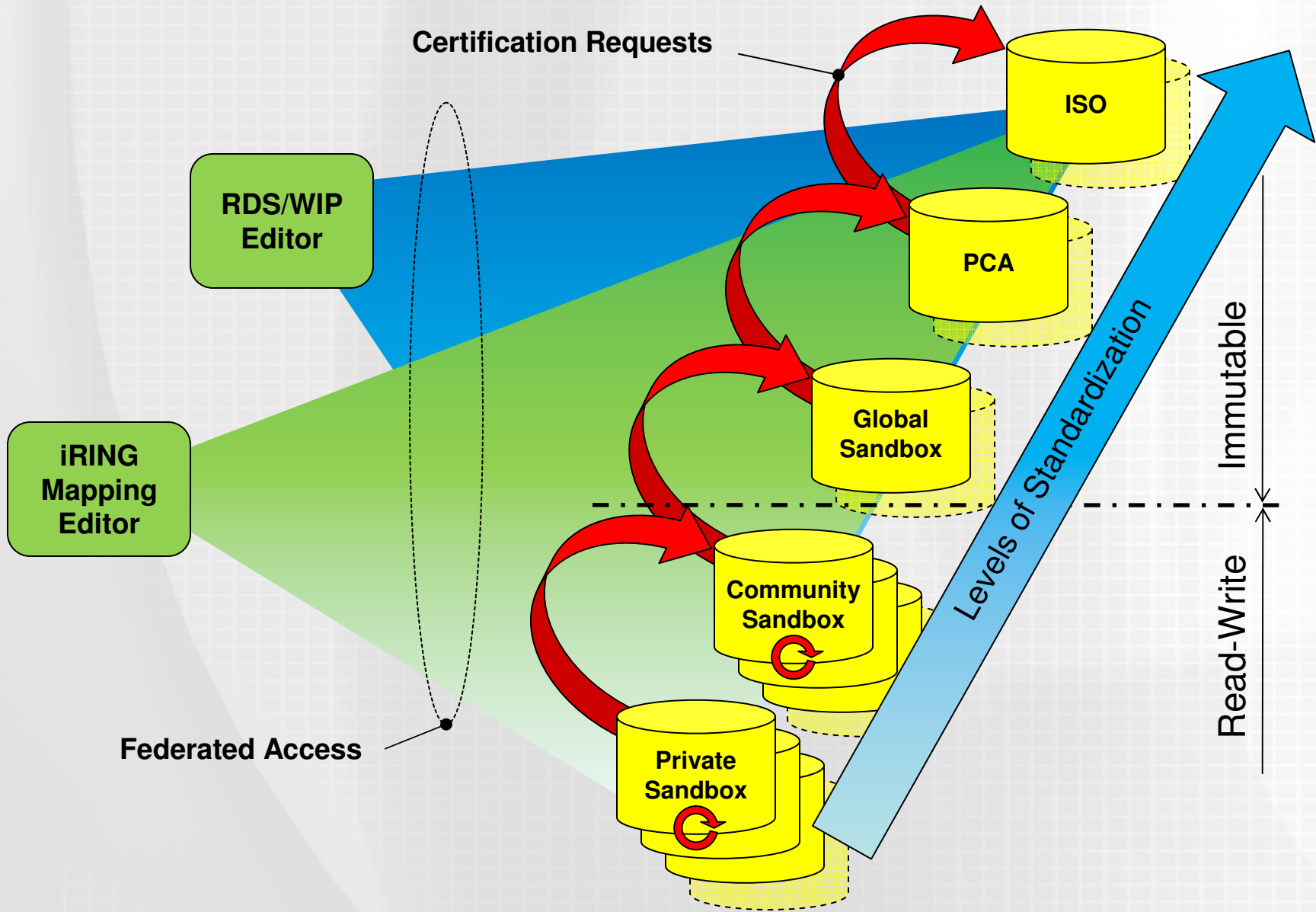
ISO 15926 is a standard for interoperability and the integration of lifecycle information



ISO 15926 “Parts” Analogy



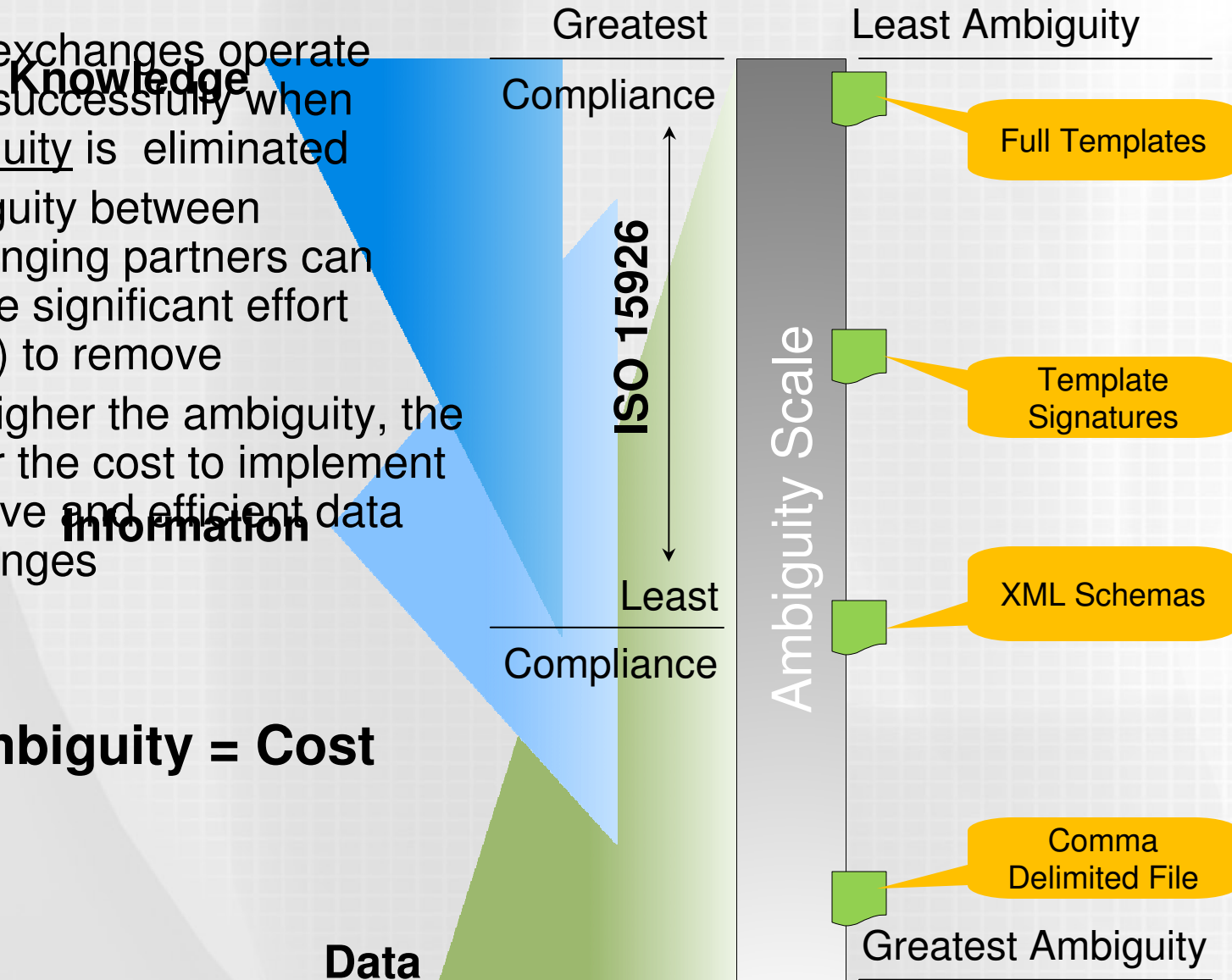
Reference Data Federation



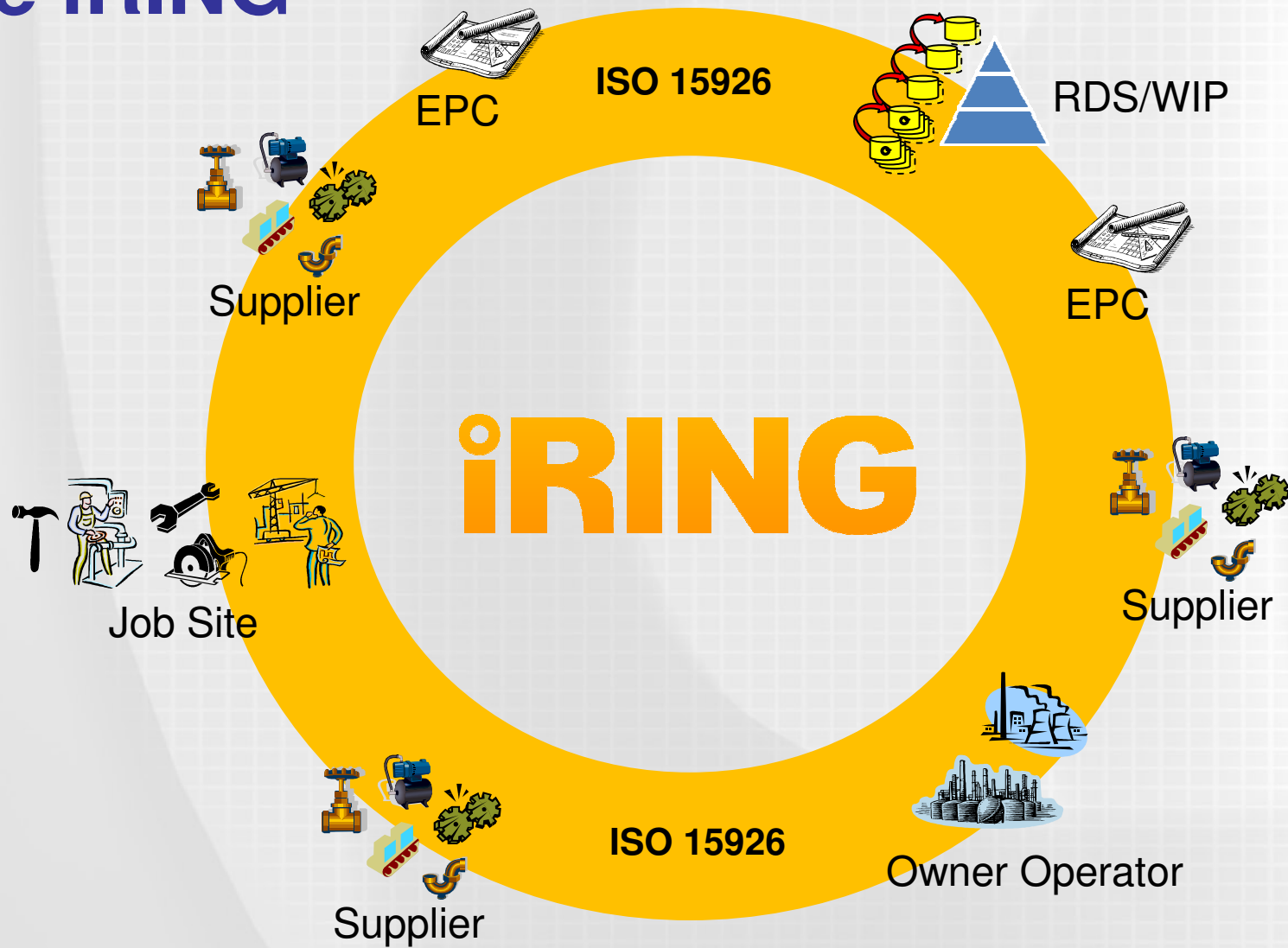
Information Ambiguity

- Data exchanges operate most successfully when ambiguity is eliminated
- Ambiguity between exchanging partners can require significant effort (labor) to remove
- The higher the ambiguity, the higher the cost to implement effective and efficient data exchanges

Ambiguity = Cost

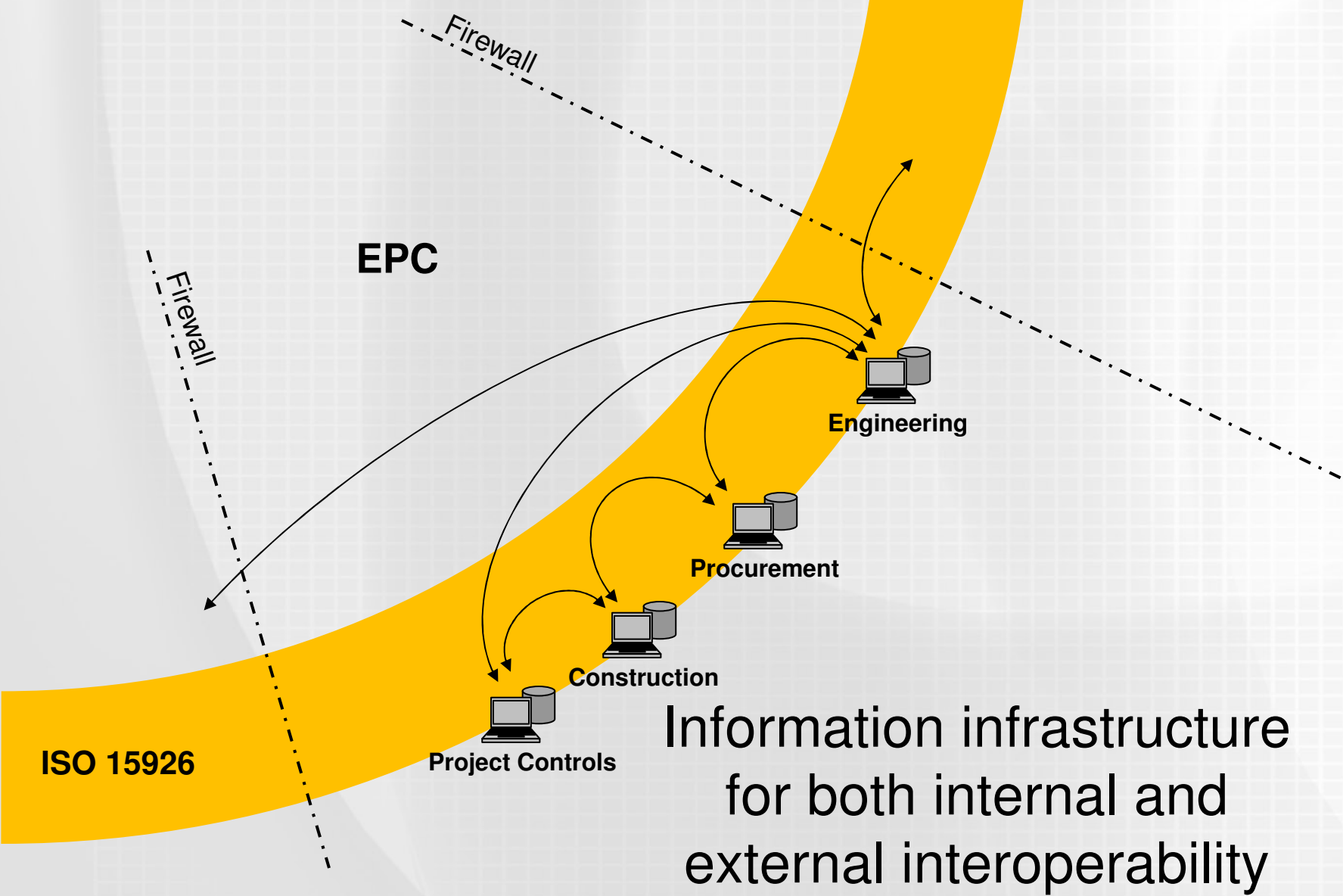


The iRING



ISO 15926 Realtime Interoperability Network Grid

The iRING in your Company



Collaboration is the Key

- To develop the standard
- To build the reference data
- To develop and test prototypes
- To create production software
- Gain access to the experts
- Share the costs
- Leverage knowledge
- Common problem for all
 - Glass is half full or glass is half empty?

iRING — **USER GROUP**

www.iringug.org

iRING



iRING – A set of information interoperability and integration protocols and reference data that are compliant with the ISO 15926, Parts 7, 8, & 9 standards, which builds and depends on ISO 15926 Parts 1 - 6.



iRINGUserGroup - An open online community of users, companies, and organizations who use, are considering using, or are developing or deploying **iRING** protocols. The **iRINGUserGroup** is also responsible for the management, enhancement, and maintenance of **iRINGTools** and **iRINGSandbox**.



iRINGTools - A set of free, public domain, open source (BSD 3 license) software applications and utilities that implement **iRING** protocols. **iRINGTools** provide users with production ready deployable solutions. **iRINGTools** also provides technology solution providers with usage patterns for the implementation of **iRING** protocols in their respective solutions.



iRINGSandbox – An internet hosted, publicly accessible and publicly downloadable, **iRING** reference system that will showcase the use of **iRINGTools** and other technology solution provider's products that implement **iRING** protocols. This reference system will also include an example **iRING** community sandbox that will hold ISO 15926 RDL extensions.



Overview

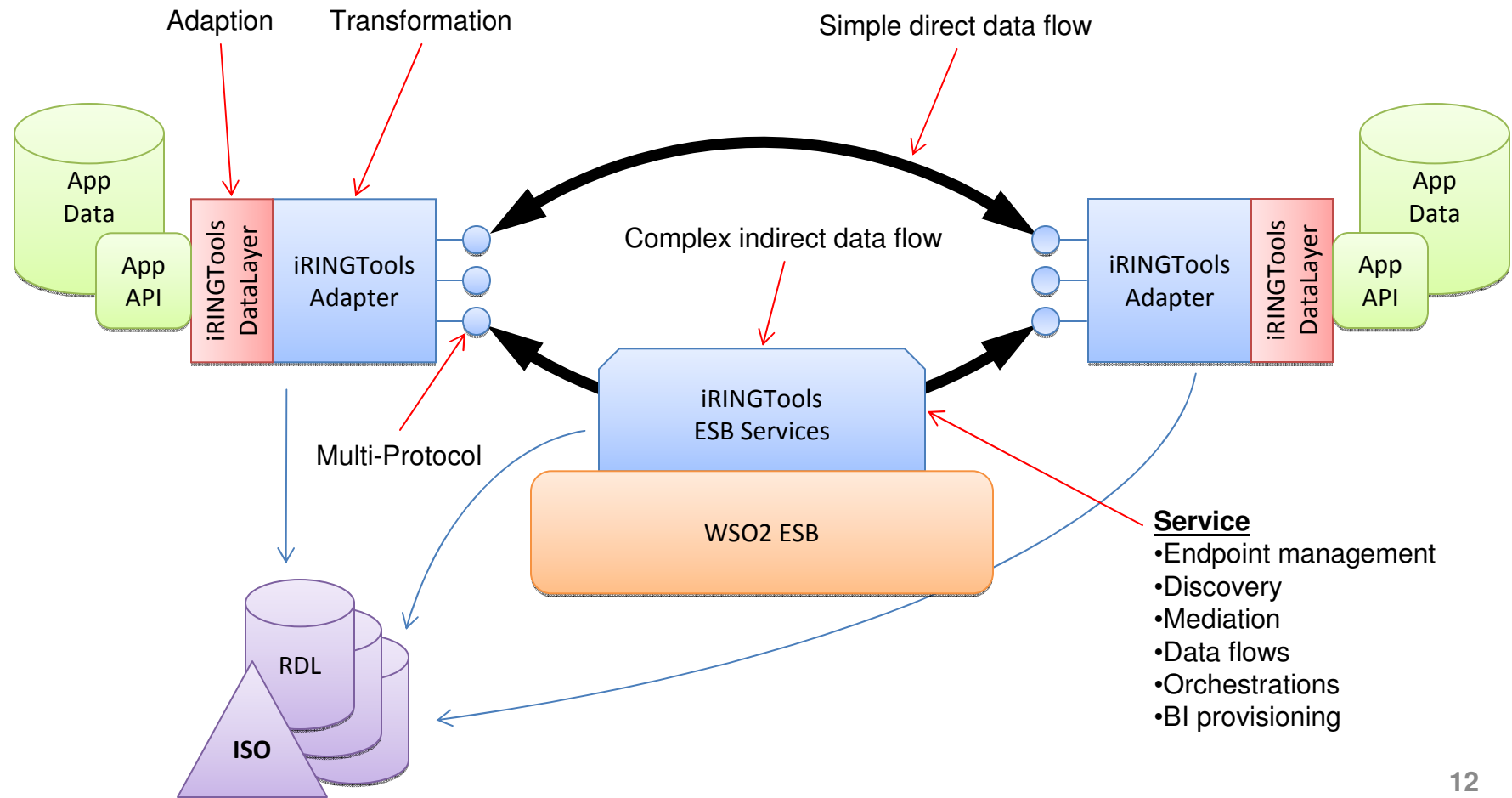
iRINGTools – Big Picture

iRINGTools Products

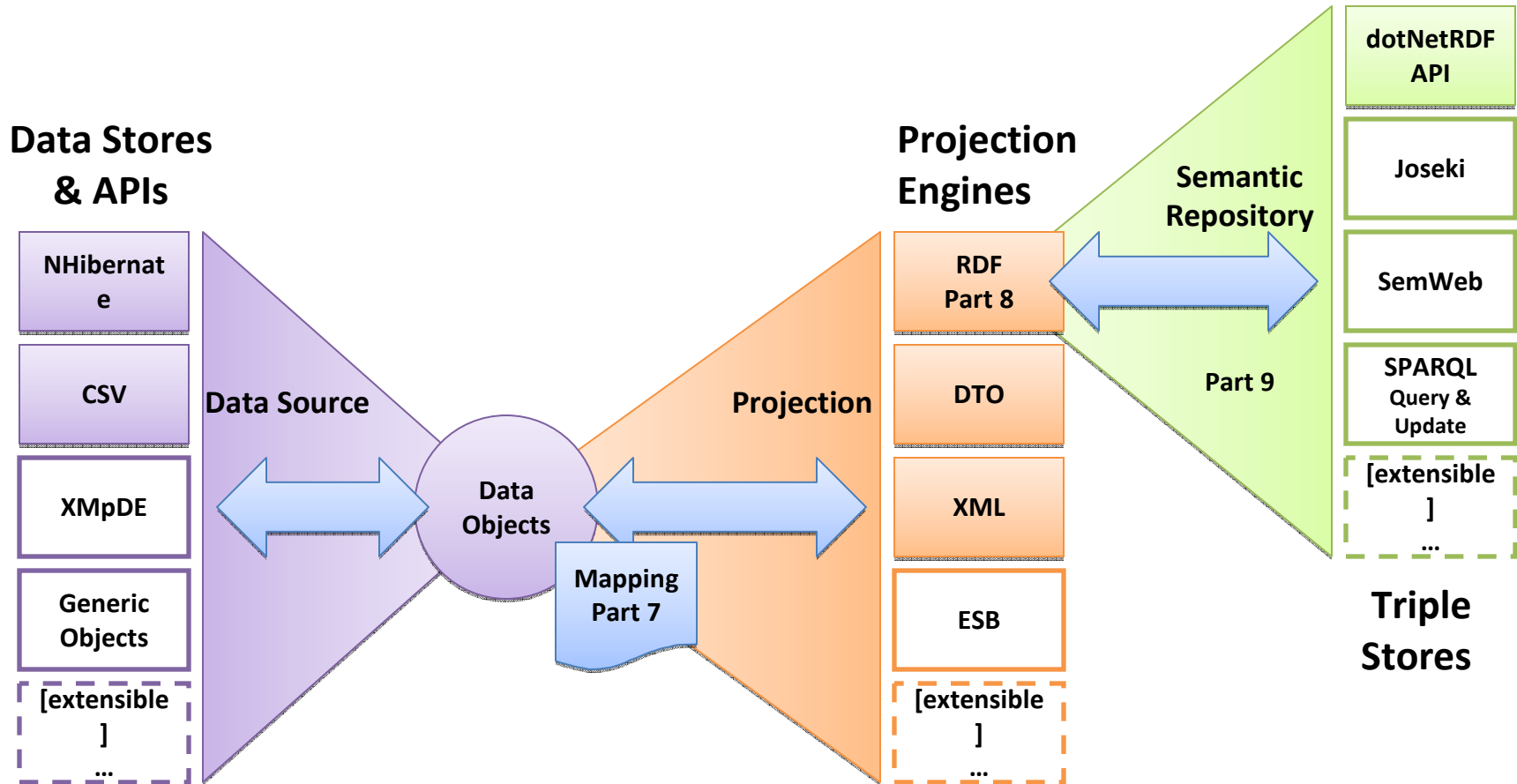
- iRINGTools Adapter
- iRINGTools ID Generator
- iRINGTools Services
- iRINGTools DataLayers

Current DataLayers

- NHibernate
- Excel
- SQL Database



Adapter Framework



2010 Demonstrations

- Digital Plant 2010
 - iRINGUserGroup
 - iRINGTools/Bentley demonstration
- Private Demonstrations
 - Bechtel
 - Hatch
 - Emerson
- FIATECH Conference 2010
 - Bechtel
 - Bentley
 - CCC
 - CH2M Hill
 - Dow
 - Emerson
 - Hatch
 - Intergraph
 - TCS

FIATECH iRING Demo





PCA Instrument SIG Workshop

- Two week workshop at Bechtel's office in Frederick, MD, USA
- Companies in attendance
 - Bechtel
 - Bentley
 - Dow*
 - Emerson
 - Fluor*
 - GlencolS*
 - Hatch
 - PCA
 - Rosatom
 - Sudoexport*
 - Tecgraf
 - TechInvestLab*

PCA Instrument SIG Workshop

- Objectives
 - Harmonize and align ISO 15926 modeling methodologies
 - Review existing set of Instrument reference from EqHub and Emerson
 - Present the JORD project
 - Demonstration of reference data and modeling methodology via iRINGTools
 - Scope future Instrument extensions to the reference data
- Deliverables
 - Beginners Guide to ISO 15926 Modeling
 - Active Instrument SIG to consolidate EqHub, Emerson, and others Instrument reference data
- <https://www.posccaesar.org/wiki/SigInstWorkShops>



Comments on SIG's

- We need to establish more SIGs
- SIGs are a community of experts that begin the process to raise newly created reference data towards ISO certification
- SIGs, via the PCA/FIATECH MoU, should be done with wider participation
- If you are interested in ISO 15926 – Get engaged in SIGs!
- If you don't find the SIG you are looking for – start one!

Questions?