





CFIHOS - The relationship between CFIHOS and JIP33

4th October 2023

Stavanger

Peter Townson

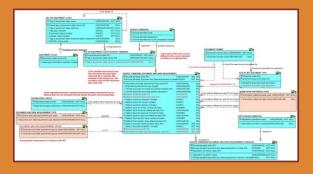
Project Director CFIHOS (JIP36)

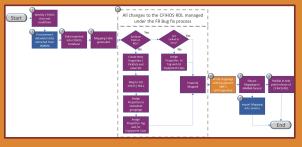


Agenda

The relationship between CFIHOS and JIP33

- · CFIHOS background
- CFIHOS and JIP33 Alignment
- Alignment process
- Current Status







CFIHOS Face to Face 2023 meeting 18th to 22nd September - Kingsport Hosted by EASTIVEAN Bringing together:

- over 100 engaged attendees
- 47 leading companies from around the globe





CFIHOS - Purpose

CFIHOS – 'Capital Facilities Information Handover Specification' (pronounced "see-foss")

The purpose of CFIHOS is to create a handover specification that can be implemented by operators, contractors and equipment manufacturers and suppliers to standardize the specification of information handover requirements for a project.

That is required to own, operate, maintain a facility safely, efficiently and demonstrate compliance to the regulator.

Plus, CFIHOS is foundational to achieving interoperability and your digitalisation goals

This will significantly lower the lifecycle cost associated with incorrect and missing information required to operate a facility.





CFIHOS – Key Elements

Key elements of CFIHOS Narrative Documents library Scope and procedures Document How to define the scope of Information Management to support delivery of CFIHOS requirements **Technical Specification Document** Requirements, rules and principles for information handover **Process & Guidance Documents** Outlining implementation steps (and do's & don'ts) **Data Model** For structuring data and documents about assets **Reference Data Library (Dictionary)** Consistent naming of equipment, properties & documents



Current CFIHOS Membership

17. Wipro 18. Phusion IM

Participation has grown to 81 organizations across multiple industry sectors, with 400+ SMEs from the member organizations.



Aker Solutions

10. Petrofac 11. Baker Hughes 20. Hanwha Ocean

21. Tecnimont





Operations

GmbH



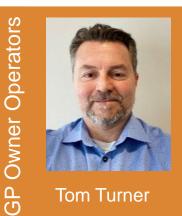
14

8

32

CFIHOS – Our Steering Committee







Leclerc



Anders

Thostrup







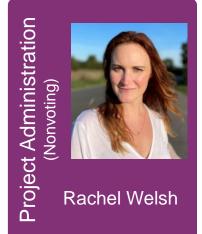




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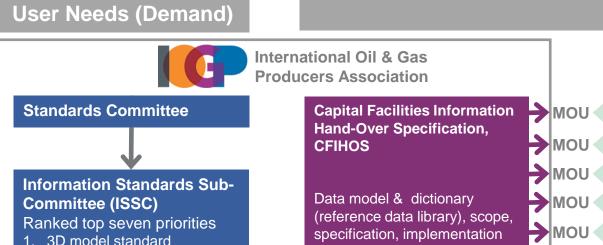






CFIHOS - Alignment MoU partners Key industry initiatives to strengthen our common data language

Data Standards (Supply)



guides, software compliance criteria

(Includes 2,3,&6 from ISSC **Priority List)**

→MOU → MOU → MOU < → MOU < **→**MOU

Process Stream and P+ID data - DEXPI

Electrical and Instrumentation Data - NAMUR

Tagging Philosophy & 3D Models (FL3DMS) - USPI

Digital Requirements Mgt (READI) / Industry Data Ontology- Standards Norway and PCA

Construction Mgt / Advance Work Packaging Data - CII

Alignment to IDO and CFIHOS in French - Evolen

Water Industry - NEOM/ENOWA

Power and Paper & Pulp Industry- SEIIA, THTH

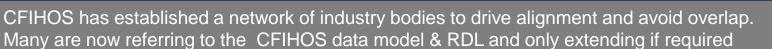
Information lifecycle model – ISO 15926 (Referenced in CFIHOS RDL)

Reliability & Maintenance - ISO 14224 (Alignment / Mapping discussions on going)

Cost and Planning Data - ISO 19008

Equipment Requirements JIP 33

Equipment Information Requirements Specifications.







2. Project Information

4. Capital Cost and

Handover Specification

3. Vendor Data and Document

Requirements Standard

Planning Data Standard

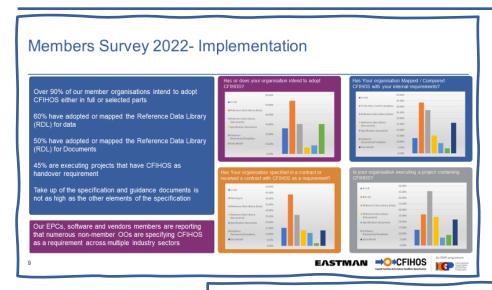
Parts Data Specification

5. Materials Procurement 6. Equipment and Spare

7. Equipment Reliability

Data

CFIHOS - Members Survey 2023



Members Survey 2022— Quality of our published deliverables

The perception of quality is high.

All elements of our published deliverables scoring around 4 out of 5 for quality.

Our 2023 members survey closed in September

We need to analyse the results of our annual members survey in detail.

Initial insights are:

- Implementation progress is up
- 2. Quality of our deliverables is high and improved from last year

We will publish the full results during October.





CFIHOS – Timeline and JIP33 alignment

Since the initial release in 2014 there have been seven versions published.

In January 2020, the governance of CFIHOS transferred from USPI to IOGP, becoming Joint Industry Project (JIP) 36 – to assure further development of the CFIHOS project and its growing number of supporting members also ensuring tighter alignment with JIP33.

Version 1.5 in November 2021 has been adopted by a large number of organisations from multiple industry sectors across the complete supply chain.

The current version is 1.5.1 which was published in April 2023, a minor release with major content to support JIP33 plus our first bilingual Chinese version



Revalidation of Our roadmap & priorities and **Held our** Face 2 Face meeting in Stavanger and developing content for Version 1.5.1 Including **RDL** additions (Data and **Documents**) to support JIP33 IRS and **Procurement Datasheets**

2022

Published Version
1.5.1 April
including our first
bilingual Chinese
Held our annual
Face to Face
members
meeting in
Kingsport
Tennessee
Publish our
annual adoption
staircase data Q3
Develop content
for Version 2.0

- Rework of our narrative documents into requirements
 Additional
- Additional content to support our shortterm goals
- RDL updates to support JIP33

2023

Publish version 2.0 during in 2024

Develop backlog to deliver core roadmap requirements

Continued development of RDL (Data & Documents) to support JIP33

Mature renewables content

Publish interim versions when meaningful content is available



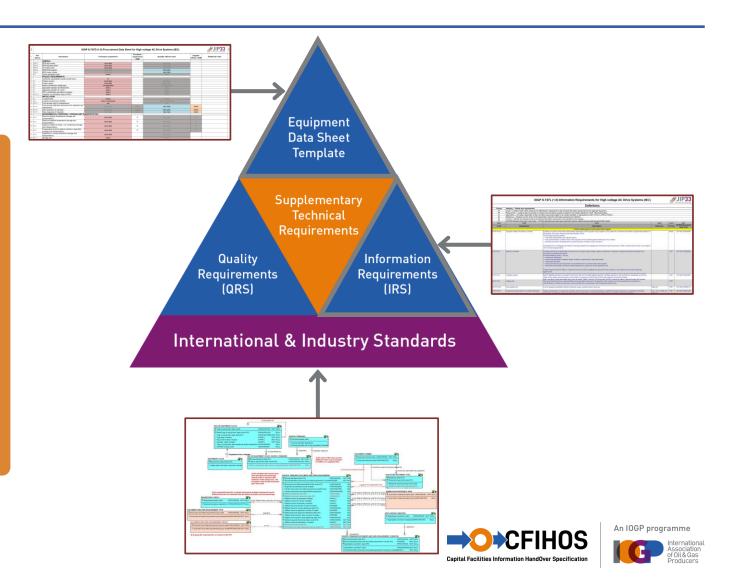


2024 +

CFIHOS and JIP33 Alignment

Why Align

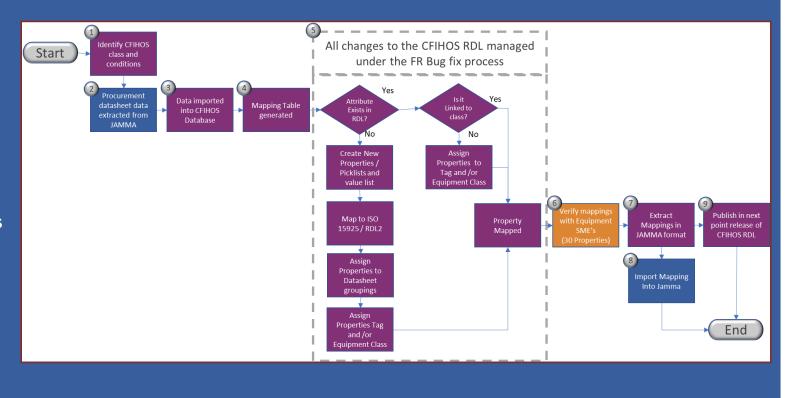
- CFIHOS is foundational to the development of the IRS and procurement data sheet
- Enables interoperability whilst respecting the language of the base standard
 - Humanly readable
 - Machine to machine
- Give clear line of sight from CFIHOS classes & attributes to the JIP33 specification
 - Information Requirements Specification (IRS) both data and documents
 - Procurement Data Sheet (PDS) and base Standard



CFIHOS and JIP33 Alignment Process

Alignment Process

- Dedicated working group from CFIHOS and the JIP33 information network
 - Following the CFIHOS FR process
 - With a specific workflow between CFIHOS and JIP33
- CFIHOS data model update in V1.5 to support the Information Requirements Specification (IRS) both data and documents, Procurement Data Sheet (PDS)
- CFIHOS and JIP33 Discipline Document types aligned
- Mapping of JIP33 Classes and Attributes to the CFIHOS Reference Data Library (RDL) for both data and documents
- Enrichment of the CFIHOS RDL to close any gaps identified by the JIP33 Specifications, IRS and PDS
 - Allocating CFIHOS unique IDs to additions to the RDL as we go





CFIHOS and JIP33 Alignment Status

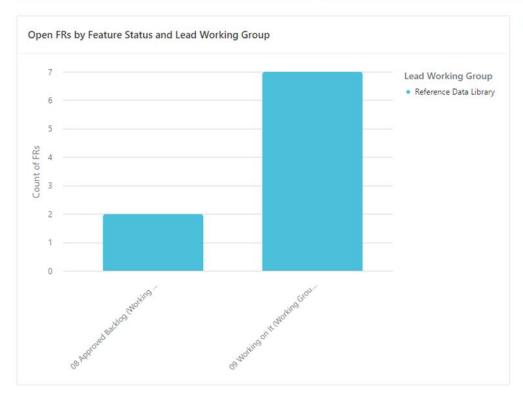
Total Count of JIP33 FRs

Count of FRs Planned for Next Release

Count of FRs on Hold

Count of FRs Already Released

3



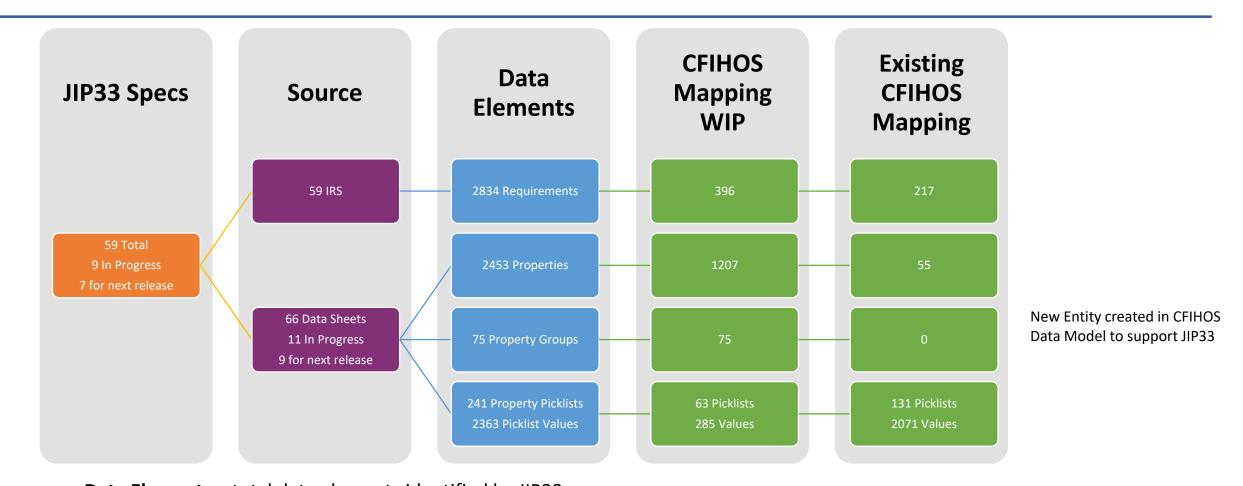
List of Individual FR Records (all FRS)

£ Name		Planned for next rele	⊞ Lead Working Group	
FR109 - JIP33 Alignment: S-733 Low Voltage Motors (IEEE Std 841)	09 Working on It (Worki	Yes	Reference Data Library	1
FR108 - JIP33 Alignment: S-704 High Voltage Three Phase Cage Induc	08 Approved Backlog (Yes	Reference Data Library	2
FR95 - JIP33 Alignment: S-729 Control Valves	08 Approved Backlog (Reference Data Library	2
FR94 - JIP33 Alignment: S-615 Pumps – Centrifugal to API Std 610	09 Working on It (Worki	Yes	Reference Data Library	ž
FR87 - JIP33 Alignment: S-719 Water Fire Mist Protection Systems	09 Working on It (Worki		Reference Data Library	2
FR86 - JIP33 Alignment: S-562 Ball valves	09 Working on It (Worki	Yes	Reference Data Library	2
FR85 - JIP33 Alignment: S-620 HV Switchgear & Control Gear to IEC	09 Working on It (Worki	Yes	Reference Data Library	2
FR84 - JIP33 Alignment: S-560 LV Switchgear & Control Gear to IEC	09 Working on It (Worki	Yes	Reference Data Library	
FR83 - JIP33 Alignment: S-703 Low Voltage Motors to IEC	09 Working on It (Worki	Yes	Reference Data Library	2
FR16 - Align CFIHOS Discipline Document Types with JIP33	12 Released (Backlog Te		Document	2
FR15 - JIP33 Part 2 : Enable practical implementation of JIP33 via CFIH	12 Released (Backlog Te		Data Model	2
FR14 - JIP33 - CFIHOS RDL portion (part of former CR0016)	12 Released (Backlog Te		Data Model	2
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	FR109 - JIP33 Alignment: S-733 Low Voltage Motors (IEEE Std 841) FR108 - JIP33 Alignment: S-704 High Voltage Three Phase Cage Induc FR95 - JIP33 Alignment: S-729 Control Valves FR94 - JIP33 Alignment: S-615 Pumps – Centrifugal to API Std 610 FR87 - JIP33 Alignment: S-719 Water Fire Mist Protection Systems FR86 - JIP33 Alignment: S-562 Ball valves FR85 - JIP33 Alignment: S-620 HV Switchgear & Control Gear to IEC FR84 - JIP33 Alignment: S-560 LV Switchgear & Control Gear to IEC FR83 - JIP33 Alignment: S-703 Low Voltage Motors to IEC FR16 - Align CFIHOS Discipline Document Types with JIP33 FR15 - JIP33 Part 2 : Enable practical implementation of JIP33 via CFIH	FR109 - JIP33 Alignment: S-733 Low Voltage Motors (IEEE Std 841) FR108 - JIP33 Alignment: S-704 High Voltage Three Phase Cage Induc FR95 - JIP33 Alignment: S-729 Control Valves FR94 - JIP33 Alignment: S-615 Pumps – Centrifugal to API Std 610 FR87 - JIP33 Alignment: S-719 Water Fire Mist Protection Systems FR86 - JIP33 Alignment: S-562 Ball valves FR85 - JIP33 Alignment: S-620 HV Switchgear & Control Gear to IEC FR84 - JIP33 Alignment: S-560 LV Switchgear & Control Gear to IEC FR83 - JIP33 Alignment: S-703 Low Voltage Motors to IEC FR83 - JIP33 Alignment: S-703 Low Voltage Motors to IEC FR16 - Align CFIHOS Discipline Document Types with JIP33 FR15 - JIP33 Part 2: Enable practical implementation of JIP33 via CFIH FR14 - JIP33 - CFIHOS RDL portion (part of former CR0016) 09 Working on It (Worki 12 Released (Backlog Te 12 Released (Backlog Te	FR109 - JIP33 Alignment: S-704 High Voltage Motors (IEEE Std 841) FR108 - JIP33 Alignment: S-704 High Voltage Three Phase Cage Induc FR95 - JIP33 Alignment: S-729 Control Valves FR94 - JIP33 Alignment: S-615 Pumps — Centrifugal to API Std 610 FR87 - JIP33 Alignment: S-719 Water Fire Mist Protection Systems FR86 - JIP33 Alignment: S-502 Ball valves FR85 - JIP33 Alignment: S-620 HV Switchgear & Control Gear to IEC FR84 - JIP33 Alignment: S-560 LV Switchgear & Control Gear to IEC FR85 - JIP33 Alignment: S-703 Low Voltage Motors to IEC FR85 - JIP33 Alignment: S-703 Low Voltage Motors to IEC FR86 - Align CFIHOS Discipline Document Types with JIP33 FR15 - JIP33 Part 2 : Enable practical implementation of JIP33 via CFIH FR14 - JIP33 - CFIHOS RDL portion (part of former CR0016) O9 Working on It (Worki Yes 12 Released (Backlog Te Table Packlog Te 12 Released (Backlog Te)	FR109 - JIP33 Alignment: S-733 Low Voltage Motors (IEEE Std 841) FR108 - JIP33 Alignment: S-704 High Voltage Three Phase Cage Induc FR95 - JIP33 Alignment: S-729 Control Valves O8 Approved Backlog (FR95 - JIP33 Alignment: S-729 Control Valves O8 Approved Backlog (Reference Data Library FR94 - JIP33 Alignment: S-615 Pumps – Centrifugal to API Std 610 O9 Working on It (Worki FR87 - JIP33 Alignment: S-719 Water Fire Mist Protection Systems O9 Working on It (Worki FR86 - JIP33 Alignment: S-562 Ball valves O9 Working on It (Worki FR85 - JIP33 Alignment: S-620 HV Switchgear & Control Gear to IEC O9 Working on It (Worki FR84 - JIP33 Alignment: S-560 LV Switchgear & Control Gear to IEC O9 Working on It (Worki FR85 - JIP33 Alignment: S-703 Low Voltage Motors to IEC O9 Working on It (Worki Yes Reference Data Library FR85 - JIP33 Alignment: S-703 Low Voltage Motors to IEC O9 Working on It (Worki Yes Reference Data Library FR86 - Align CFIHOS Discipline Document Types with JIP33 12 Released (Backlog Te Document FR15 - JIP33 Part 2 : Enable practical implementation of JIP33 via CFIH 12 Released (Backlog Te Data Model FR14 - JIP33 - CFIHOS RDL portion (part of former CR0016)



CFIHOS and JIP33 Alignment the detail

Based on latest JAMA extract received from JIP33



Data Elements – total data elements identified by JIP33

CFIHOS Mapping WIP – number of JIP33 data elements in CFIHOS FRs scope for next revision

Existing CFIHOS Mapping – number of JIP33 data elements already included in CFIHOS





CFIHOS - V1.5.1 Standard Documents

CFIHOS V1.5.1 can be found on the CFIHOS Website. This version is considered to be the minimum viable product that can be successfully implemented either in parts or in its entirety.

Narrative Documents	Download Link	
Scope and Procedures (C-TP-001) (V.1.5.1)	CFIHOS Scope and Procedures	
Specification Document (C-SP-001) (V.1.5.1)	CFIHOS Specification Document	
Implementation Guide for Principal (C-GD-001) (V.1.5.1)	CFIHOS Implementation Guide for Principal	
Implementation Guide for Contractor (C-GD-002) (V.1.5.1)	CFIHOS Implementation Guide for Contractor	
Bilingual Versions	Download Link	
English-Chinese Bilingual CFIHOS Narrative Documents (V1.5.1)	English-Chinese Bilingual Narrative Documents	
Reference Data Library	Download Link	
Reference Data Library (C-ST-001) (V1.5.1) – Excel version	Reference Data Library (Excel version)	
Reference Data Library (C-ST-001) (V1.5.1) – CSV version	Reference Data Library (csv version)	
CFIHOS RDL Development Guide (V07)	CFIHOS RDL Development Guide	
Data Model	Download Link	
Using the Data Model (C-DM-001) (V1.5.1)	Using the Data Model	
Data Dictionary (C-DM-002) – (V1.5.1)	Data dictionary V1.5.1	
Data Model HTML viewer - V1.5.1	View Data Model viewer	
Supporting Templates	Download Link	
CFIHOS Contract Scenario Templates (V1.5.1)	CFIHOS Contract Scenario Templates	
Previous Versions	Download Link	
V1.5	Version 1.5	
V1.4.1	Version 1.4.1	

We will continue to develop and improve the content through point releases as we work towards our next version.

Previous versions of CFIHOS can also be found here

https://www.jip36-cfihos.org/cfihos-standards/





Questions?











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