



Safe,
Efficient
Markets

ISDA Clearing Connectivity Standard (CCS)

Q4 2014

ISDA CCS: The Clearing Connectivity Standard

- Beginning in 2011, Custodian Service Providers led by State Street, Northern Trust, BNY Mellon and JP Morgan approached Sapien to gather information on data formats and reach a consensus that would become the ISDA CCS industry standard.
- Derivatives customers, notably large asset managers, are requesting that their Clearing Firms comply with ISDA CCS.
- Clearing Firms are cooperating with the Standard both because of client interest and to streamline their operations.
- Eight major clearing brokers and Eight major custodians are currently either producing or testing the CCS Summary report.
- The Standard currently covers cleared IRS, CDS and NDF trade, position, margin, and collateral data for LCH, CME and ICE products.
 - The Steering Committee is investigating the addition of swaptions, futures, and listed options to the Standard.
 - Eurex has also agreed to support the standard, and engagement with TSE, SGX and ASX is ongoing.
- The account level **Summary report**, **Position & Trade report**, **Daily Activity report**, **Collateral Holdings report**, **Upcoming Cash Flows report**, and **Cash Settlement report** have been finalized and are being tested between reporting parties.
- The next reports being targeted integrate F&O products to facilitate cross product netting and margining.

ISDA Governance

- On October 24th, 2012 ISDA announced its support of the standard
- The ISDA CCS Steering Committee governs the direction of the standard, reviews requested format changes, governs committee membership, and encourages rapid implementation
- On June 10th, 2013, the largest 4 Clearing Brokers and Custodians announced or confirmed their support of the standard
- The ISDA FpML Standards Committee has pledged to support the transition of CCS to FpML format. The Steering Committee will determine when sufficient implementation has been achieved to make this change without alienating smaller firms.
- Steering Committee Members:

Clearing Firms

- | | |
|--------------------------------------|--|
| <input type="radio"/> BAML* | <input type="radio"/> JP Morgan* |
| <input type="radio"/> Barclays* | <input type="radio"/> Morgan Stanley |
| <input type="radio"/> BNP Paribas* | <input type="radio"/> NewEdge |
| <input type="radio"/> Citi* | <input type="radio"/> Nomura |
| <input type="radio"/> Commerzbank | <input type="radio"/> RBC |
| <input type="radio"/> Credit Suisse | <input type="radio"/> State Street GM* |
| <input type="radio"/> Deutsche Bank | <input type="radio"/> UBS* |
| <input type="radio"/> Goldman Sachs* | <input type="radio"/> Wells Fargo |
| <input type="radio"/> HSBC* | |

*Ready to send or actively testing.

Custodians / Service Providers

- BNP Paribas*
- BNY Mellon*
- Brown Brothers Harriman
- Citco*
- Citi*
- JPM WSS*
- Northern Trust*
- SS&C GlobeOp*
- State Street*

* Ready to receive

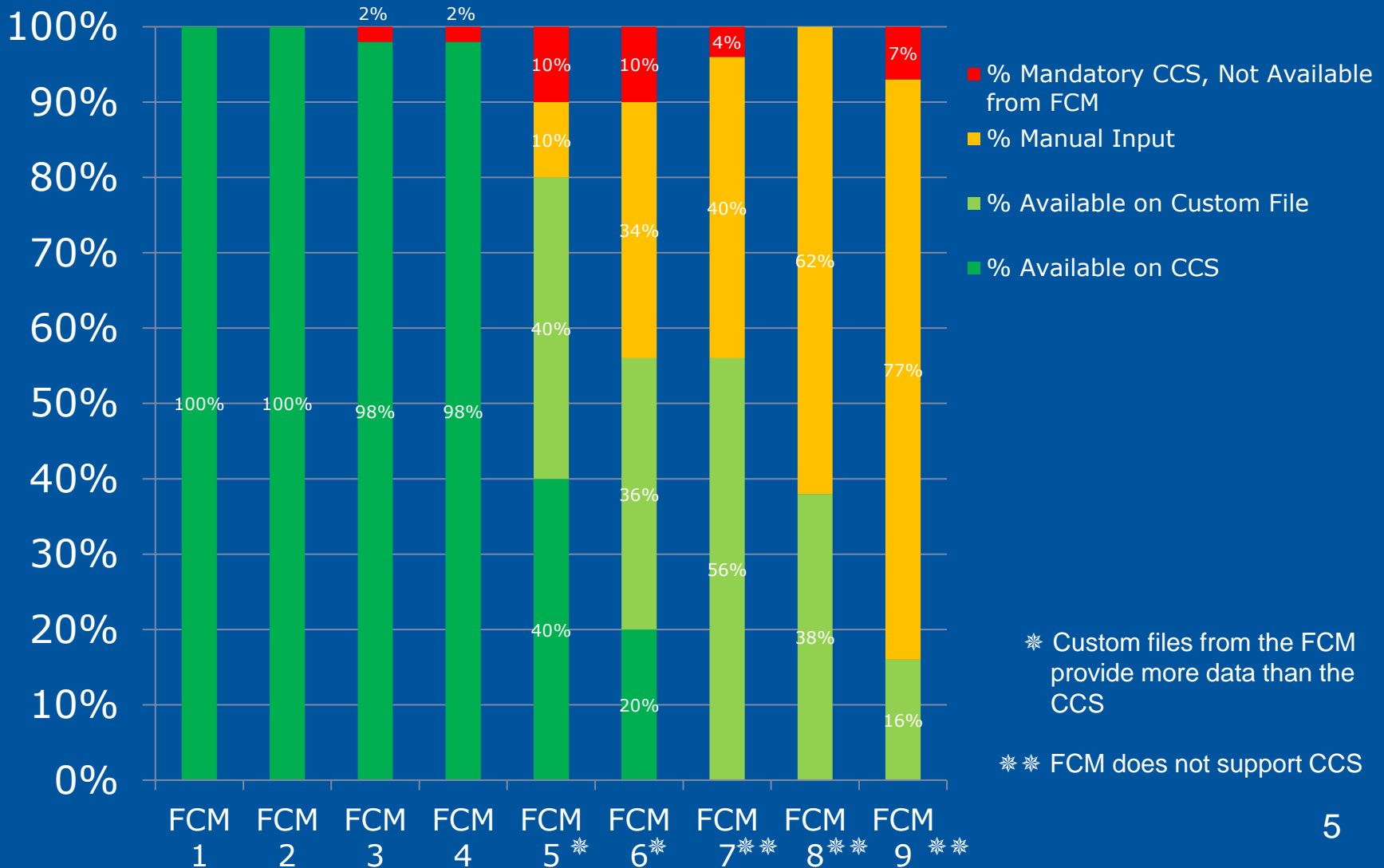
Standard File Specification

- CCS is currently specified as a series of CSV files, presented in an Excel document.
- The format utilizes a series of section specifications and headers, so that data can be combined into as many or few files as desired.
- The Standard can also be applied to varying timing and/or frequencies for complete or partial feeds; such variations must be discussed and agreed between the parties.
- Report Sections and implementation phases

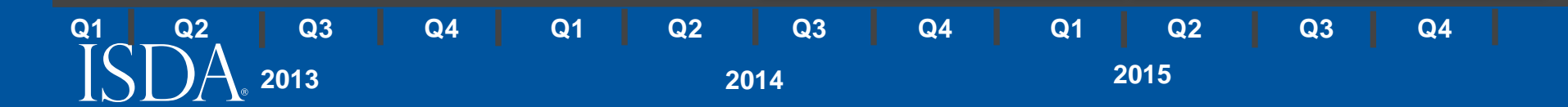
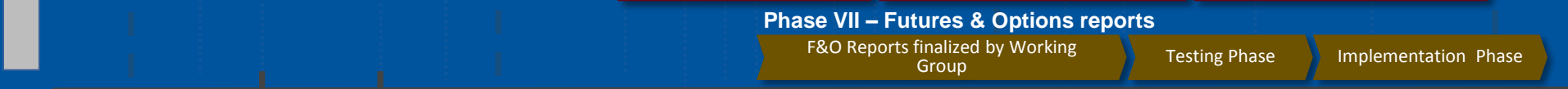
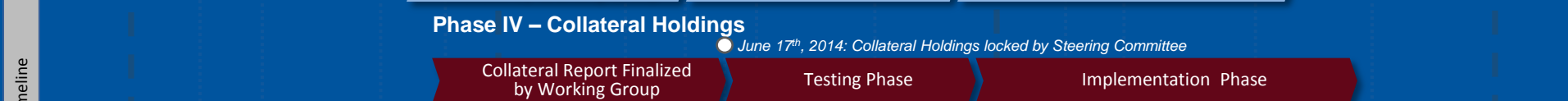
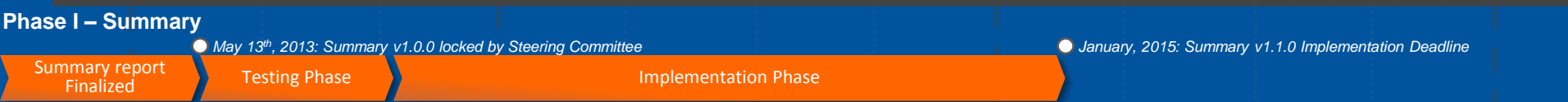
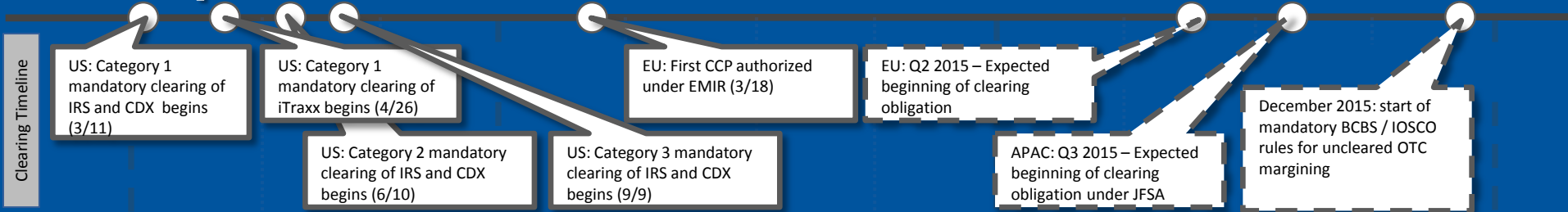
Phase I - v1.00 locked May 13th, 2013 - v1.01 locked for implementation in January 2015	
Summary	The Summary Report lists client account identifying information and an account level summary of fees, OTC product related cashflows, IM and VM balances, requirements and calls, as well as subtotaling by clearinghouse and product type. 45 fields, 35 mandatory.
Phase II - Locked on November 26th, 2013	
Position & Trade	The Position & Trade Report contains client account identifying information and product specific details for IRS, CDS and NDFs at the trade and/or position level. 90 fields, 62 mandatory.
Phase III - Locked on May 6th, 2014	
Daily Activity	The Daily Activity Report contains client account identifying information and daily trade activity for new, terminated, and netted IRS, CDS and NDF trades. 85 fields, 26 mandatory.
Phase IV - Locked on June 17, 2014	
Collateral Holdings	The Collateral Holdings Report shows collateral positions held for the client account at the clearing broker: cash balances and non-cash collateral security positions. 25 fields, 12 mandatory.
Phase V - Locked on July 29, 2014	
Upcoming Cash Flows	The Upcoming Cash Flows Report shows expected cash flows originating from cleared OTC products at the trade or position level, with client account identifying information. 34 fields, 30 mandatory.
Phase VI - Locked on September 9, 2014	
Cash Settlement	The Cash Settlement Report shows daily cash settlement activity at the account level (generally from the previous business day), for both wire and journal entries, associated with margin payments and the product lifecycle. 39 fields, 28 mandatory.
Phase VII	
Futures and Options	Reporting for Futures and Listed Options, in particular with regard to margin call netting and products that can be cross-netted, such as Eurodollar and Treasury Futures, are currently being assessed by a separate Futures and Options Working Group.

OTC Clearing Broker Data Availability Dashboard

- Based on surveys with JPM WSS, State Street, Northern Trust, Citi, and BNP Paribas, as of 7/1/14



Implementation Timeline



Clearing Timeline

CCS Timeline

Contacts

To learn more or request a copy of CCS, please visit the ISDA CCS document repository:

<http://www2.isda.org/functional-areas/technology-infrastructure/clearing-connectivity-standard-ccs/>

Or email ccs@sapient.com

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ISDA

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