

# T+2: THE 5 Ws



*April 1, 2015*

# Agenda

- Introductions
- WHERE have we come from as we prepare for T+2?
- WHY is T+2 again on the horizon?
- WHAT is CDS doing? WHEN will we hear more?
- HOW will T+2 affect my firm and clients?
- WHO can we look to for information and support
- Deductions



**WHERE  
are we coming from?**



# Was it really that long ago?

- U.S. – align settlement cycles
- September 11, 2001
- What made Canada's brush with T+1 different?



# What worked?

- CCMA: regulators, custodians, asset managers (institutional investors), dealers, vendors
- Principles-based; outcome-focused
  - Must have policies and procedures
  - Must sign agreement/post statement confirming Ps&Ps to achieve same-day matching
  - Exception reporting with root causes
- Phased implementation
- CCMA and IIAC



ENGLISH FRANCAIS

# WHERE have we come from?

Values	Entered T	Entered Noon T+1	Entered T+1 EOD	Matched T	Matched Noon T+1	Matched T+1 EOD
<b>Debt and Equity</b>						
<b>Jun-07</b>	52%	76%	84%	23%	55%	<b>69%</b>
<b>Feb-15</b>	90%	92%	94%	53%	83%	<b>87%</b>
<b>% change</b>	<b>73%</b>	21%	11%	<b>127%</b>	51%	26%
<b>Equity</b>						
<b>Jun-07</b>	47%	74%	83%	19%	54%	68%
<b>Feb-15</b>	75%	91%	93%	45%	86%	90%
<b>Debt</b>						
<b>Jun-07</b>	71%	89%	92%	37%	64%	74%
<b>Feb-15</b>	83%	92%	94%	54%	83%	86%



**WHY**  
**is T+2 again on the horizon?**





SMART PEOPLE  
SUPERB TECHNOLOGY

# SS&C Technologies (NASDAQ:SSNC)

T+2 Settlements – Europe and the US  
April 2015

SSNC  
NASDAQ  
LISTED

# T+2 Settlements

## ■ Key to institutional T+2 Settlements

- Institutional trades *must* be matched by noon on T+1 at the latest with same day affirmations on Trade Date being defined as best practice

***T+2 Settlements = Same Day Confirmations or Affirmation***

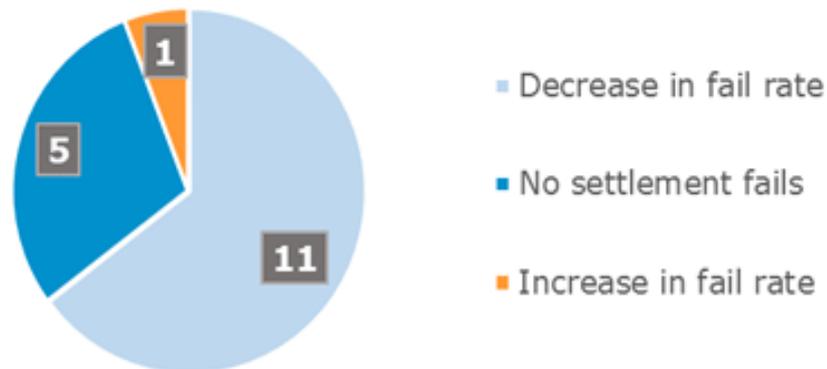
# Europe and Target2-Securities

- The fundamental objective of the T2S project is to integrate and harmonize the highly fragmented securities settlement infrastructure in Europe. It aims to reduce the costs of cross-border securities settlement and to increase competition and choice amongst providers of post-trading services in Europe.
- T2S improves the post-trade infrastructure by providing a single IT settlement platform, a single set of standards for securities settlement in central bank money, and a single operational framework.
- Article 5 of the pan European Central Securities Depository Regulation (CSDR) mandated a T+2 settlement cycle
- On October 6, 2014 participants in 28 markets moved to a T+2 settlement cycle. There are only a couple outliers (Spanish equities, Bosnia)

# Europe and Target2-Securities

- In Scope
  - Cash Equities
  - Fixed Income
  - ETF's
  - Warrants
  - Securities settlements stemming from derivatives contracts
- According to Clearing Houses, Custodians, and Fund Managers there were no increases in fails, no disruptions, and no major inconveniences

Proportion of failed instructions at CSDs on 8 October  
(compared with the previous week's average)



# T+2 Drivers

- Canada must follow the US T+2 time table
- In 2012 DTCC retained the Boston Consulting Group (BCG) to perform a cost benefit analysis
  - BCG estimated the US industry cost to be \$550 million and that the migration could be completed within three years absent other significant / conflicting demands
- Decline in Buy-Side Counterparty Exposure if a Broker defaults

DECLINE IN BUY-SIDE COUNTERPARTY EXPOSURE					
Settlement Cycle	T+3	T+2		T+1	
Stress Scenario	\$300MM	\$190MM	-35%	\$80MM	-70%
Major Failure Scenario	\$2,600MM	\$1,600MM	-40%	\$600MM	-75%

# T+2 Drivers

- Decline in NSCC's Clearing Fund
  - NSCC guarantees all broker to broker settlements as a Central Counterparty
  - Margin requirements collected from brokers would be reduced as follows

REDUCTION IN NSCC CLEARING FUND REQUIREMENT						
Settlement Cycle	T+3		T+2		T+1	
Average Period (10/2010 - 8/2011)	\$4B	\$3.4B	-15%	\$3B	-25%	
High Volatility Period (8/2011)	\$7.3B	\$5.5B	-24%	\$4.6B	-37%	

- Reducing the three day cycle reduces exposure between trade parties, between trade parties and the clearing house, and for the clearing house itself

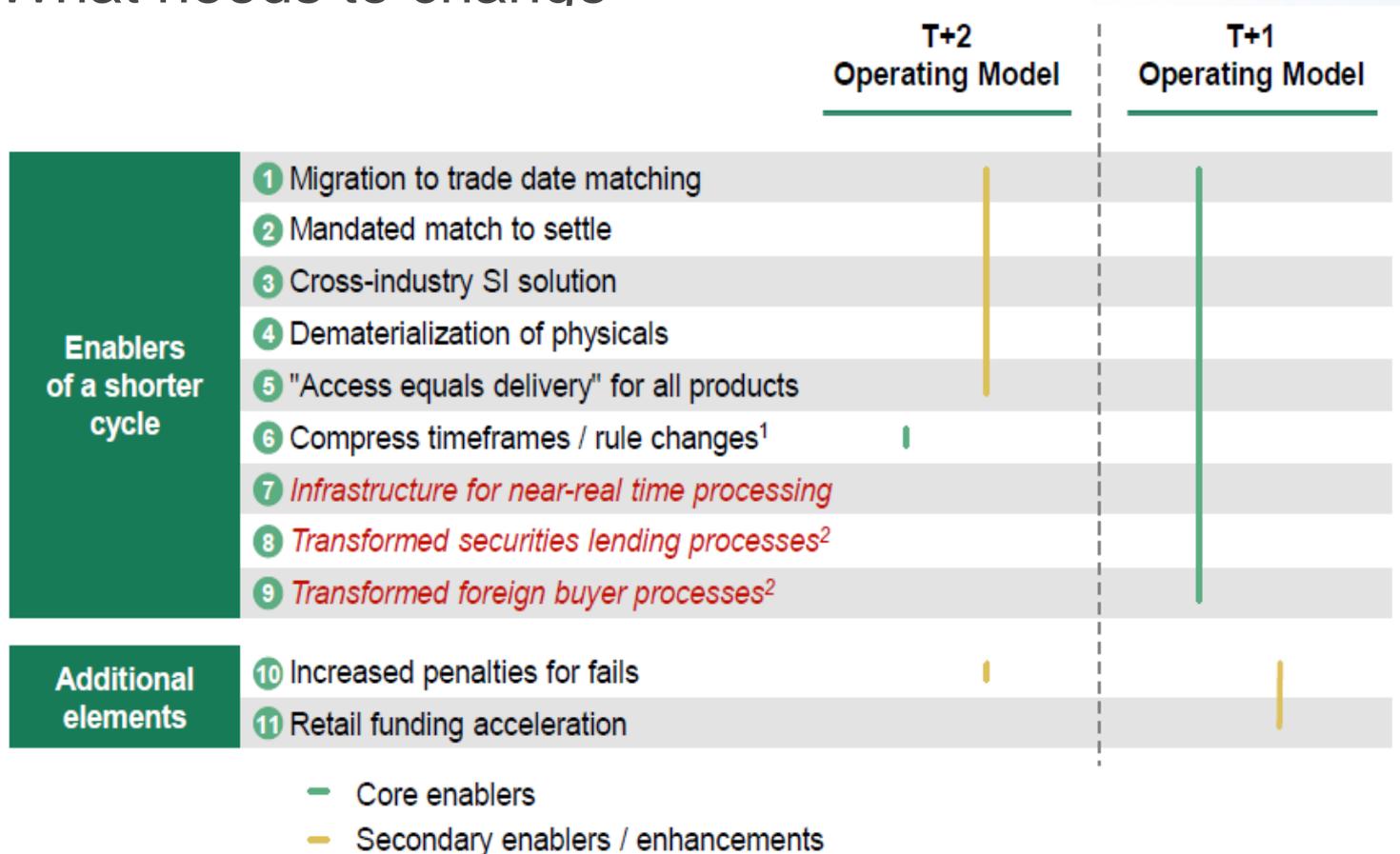
# T+2 Drivers

- Aligning Settlement Cycles Across Geographies
  - Much of Asia is T2 or T1
  - Most of Europe is now T2
  - The ASX published a comprehensive T2 consultation paper requesting comments in 2014
  - Singapore is actively engaged in examining a move to T2
- Support for shortened settlements came from all segments

E	<u>T+2</u>	years
Required investment	(\$550M)	
Annual operational cost savings	\$170M	
Annual value of Clearing Fund reductions	\$25M	
Reduction in risk exposure on unguaranteed buy-side trades	Up to \$200M	

# T+2 Drivers

## ■ What needs to change



# T+2 Drivers

- Feasible timeframes
  - High-end estimated implementation times

	<b>T+2</b>	<b>T+1</b>
<b>Institutional B/Ds</b>	up to 3 years	up to 6 years
<b>Retail B/Ds</b>	up to 2 years	up to 4 years
<b>Buy side firms</b>	up to 1 year	up to 3 years
<b>Custodian banks</b>	up to 2 years	up to 6 years

# T+2 Drivers

## ■ Costs of changes:

	Average investments	Examples of investments
Institutional B/Ds	Up to \$4.5M for large players	<ul style="list-style-type: none"><li>• End-to-end analysis and testing</li><li>• Limited systems change</li><li>• Tighter controls on inventory management</li></ul>
Retail B/Ds	Up to \$4M for large players	<ul style="list-style-type: none"><li>• End-to-end analysis and testing</li><li>• Limited systems change to accommodate new processes</li></ul>
Buy Side	Up to \$1M for large players	<ul style="list-style-type: none"><li>• Enhancements to interfaces with B/Ds and custodians<ul style="list-style-type: none"><li>– Standardizing and automating instructions</li></ul></li><li>• Process redesign to accommodate shorter timeframes</li></ul>
Custodian Banks	Up to \$4M for large players	<ul style="list-style-type: none"><li>• Enhancements to interfaces to increase automation</li><li>• Standardization of data formats/ exchanges</li></ul>

# T+2 Drivers

## ■ Benefits of changes:

### Example of major efficiencies drivers

<b>Institutional broker-dealers</b>	<ul style="list-style-type: none"><li>• Systematic usage of enhanced and accurate cross-industry SSIs</li><li>• Mandating match to settle, increasing affirmation rates (Central matching)</li></ul>	➔	<ul style="list-style-type: none"><li>• FTE reduction in client data and exceptions management</li><li>• FTE reduction in Institutional trade processing</li></ul>
<b>Retail broker-dealers</b>	<ul style="list-style-type: none"><li>• Dematerialization of physical certificates</li><li>• Improvements to retail funding options</li></ul>	➔	<ul style="list-style-type: none"><li>• Operations cost reductions from elimination of manual processing for physical certificates and corresponding fees</li></ul>
<b>Buy side/ asset managers</b>	<ul style="list-style-type: none"><li>• Migration to central matching, eliminating the need for an affirm</li><li>• Increasing standardization/ automation of communication</li></ul>	➔	<ul style="list-style-type: none"><li>• FTE reduction associated with send/receive of instructions, confirmation / affirmation and exception management</li></ul>
<b>Custodian banks</b>	<ul style="list-style-type: none"><li>• Increasing standardization/ automation of communication</li><li>• Dematerialization of physical certificates</li></ul>	➔	<ul style="list-style-type: none"><li>• FTE reduction associated with manual trade processing (e.g., input of transactions, etc.)</li><li>• Reduction in settlement costs</li></ul>

# U.S. Industry T+2 Steering Committee Formed

- DTCC has formed an industry steering committee (ISC) and an industry working group to facilitate the move to shorten the settlement cycle in the U.S. for trades in equities, corporate and municipal bonds, and unit investment trusts
- Co-Chaired by Kathleen Joaquin, Chief Industry Operations Officer, Investment Company Institute (ICI), and Tom Price, Managing Director, Operations, Technology & Business Continuity Planning, Securities Industry & Financial Markets Association (SIFMA)
  - The ISC also includes senior level representation from buy-side, sell-side, and Custodians as well as industry associations
- The Industry Working Group (IWG) is responsible for identifying and executing a tactical plan to implement the business and rule changes required to shorten the U.S. settlement cycle to T+2 in a timeframe that is acceptable for the industry. IWG members include a cross-section of industry participants.

**WHAT is CDS doing?**  
**WHEN will we hear more?**





# The status and future evolution of T+2 settlement

**Fran Daly**

The Canadian Depository for Securities Limited

IIAC Conference 2015

Toronto Stock Exchange | TSX Venture Exchange | TMX Select | Alpha | Montreal Exchange | BOX | NGX | Shorcan

**The Canadian Depository for Securities Limited** | Canadian Derivatives Clearing Corporation

TMX Datalinx | TMX Atrium | TMX Technology Solutions | Equicom | TMX Equity Transfer Services

**1** Background to T+2 in the US

**2** Project Structure & Status

**3** T+2 and the Canadian Marketplace

# Background to T+2 in the US

In 1995, the US settlement cycle moved from T+5 to T+3 for equities, corporate and municipal debt, and UITs. Over last 20 years, the industry further evaluated shortening the settlement cycle but to no avail. The market disruptions occurring during 2007 through 2009 facilitated a new risk assessment of settlement practices that led to industry consensus and support for a move from T+3 to T+2.

## EARLY 2012

SIFMA and DTCC decided to re-examine Shortening the Settlement Cycle (SSC)

## EARLY 2012

DTCC issued - "Proposal to Launch a New Cost-Benefit Analysis on Shortening the Settlement Cycle" outlining approach including an RFP

## MAY 2012

BGC was selected to conduct the cost benefit study

## OCTOBER 2012

BCG issued report, "Cost Benefit of Shortening the Settlement Cycle", indicating a positive business case

## FALL 2012 - EARLY 2013

DTCC interviewed 126 firms, including investment management firms, to validate the BCG study and found a majority consensus to move to a shortened settlement cycle

## Throughout 2013

DTCC continues its effort to build industry consensus and support

## Q2 2014

DTCC received industry support move to T+2

# Benefits of T+2

- ✓ **Reduced buy-side counterparty risk exposure**
- ✓ **Reduced sell-side counterparty risk exposure**
- ✓ **Liquidity benefit**
  - Liquidity needs reduced if portfolio securities settle T+2 rather than T+3
  - CCP's must have enough liquidity on hand to close out its largest firm/family
    - T+2 reduces liquidity need by 20%
- ✓ **Aligns US with other geographies**
- ✓ **Systemic Risk Reduction (especially in times of market stress)**

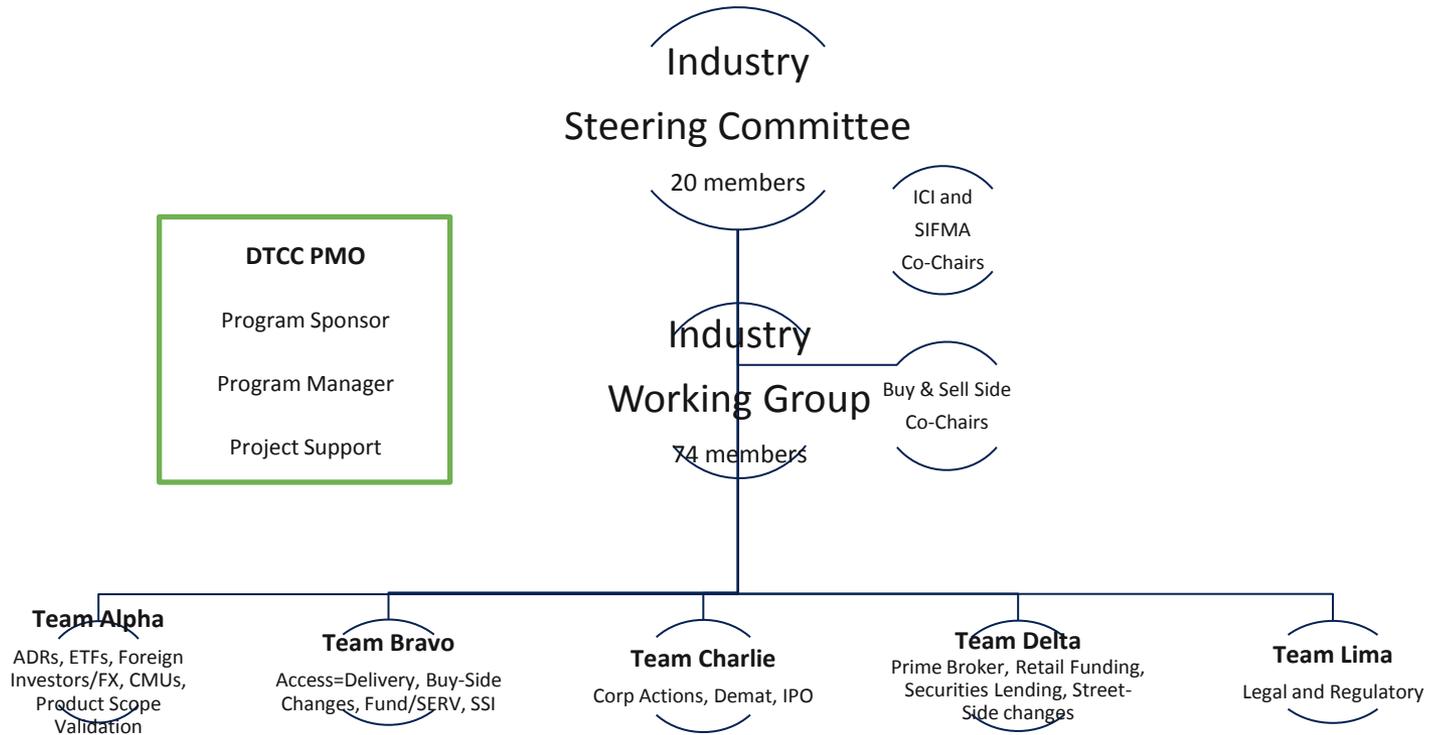
# Agenda

1 Background to T+2 in the US

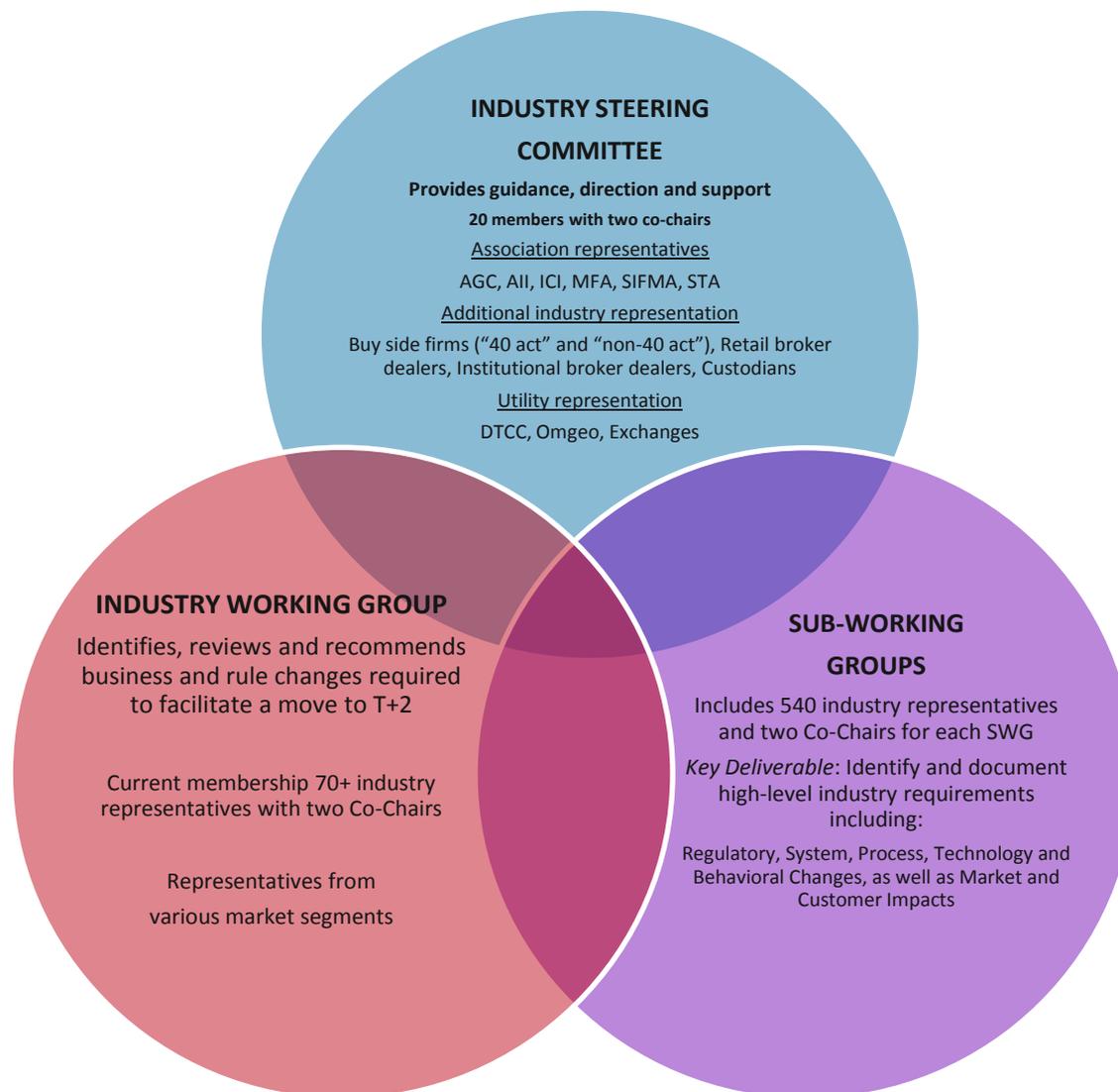
2 **Project Structure and Status**

3 What's next for the industry?

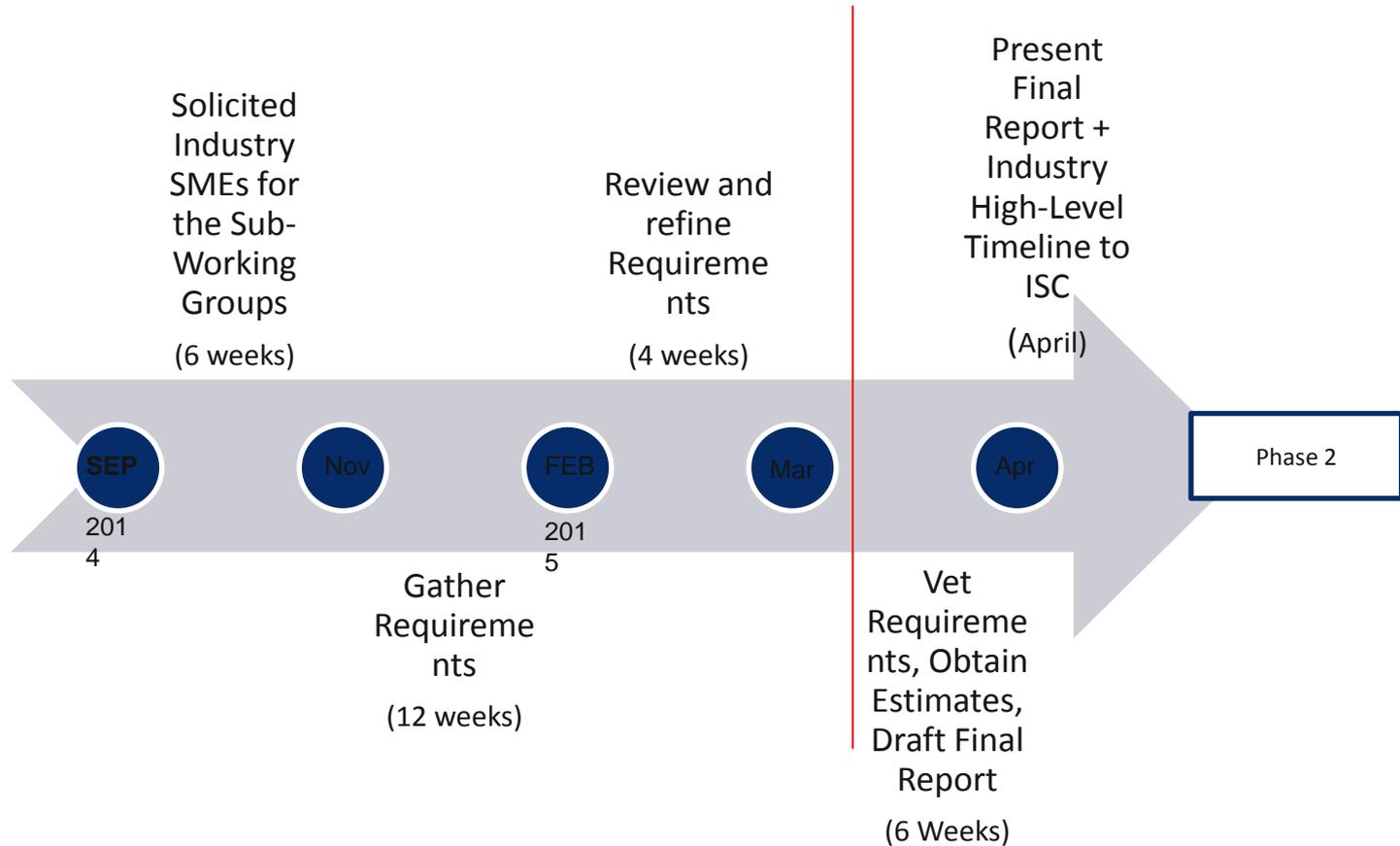
# US Organizational Structure



# US Organizational Structure



# Project Timeline (Discovery Phase)



# Status of Discovery Phase

- The Sub-Working Groups have largely completed their analysis and have not identified any “show-stopper” issues.
  - Firms will need to review the identified changes to understand the impact to their specific firm and to determine the next level requirements.
  - Rules/Regulation work has been the most complex and the current approach is being re-evaluated.
1. Sub-Working Groups output has been consolidated:
    - ✓ Required Changes (34)
      - **Technology (15)**
      - **Process (13)**
      - **Behavioral (6)**
    - ✓ Optional changes (12)
    - ✓ Legal and Regulatory changes are still being reviewed
  2. Discovery Data Repository has been provided to the Industry Working Group to gather duration estimates
    - Estimates will be collected via a survey of the IWG firms
    - Estimates will not include Industry Integration testing
    - Industry Integration Test Strategy Team is currently being assembled
  3. Deliverables targeted for end of April
    - Comprehensive industry paper including required changes and proposed timeline
    - Presentation deck for the ISC, regulators, others

# Agenda

1 T+2 status and its significance

2 Potential CSD and participant enablers for T+2

3 **T+ 2 and the Canadian Marketplace?**

# T+2 is a global reality



## Canada

- Transition to T+2 expected to be in line with industry readiness and harmonization with DTCC cycles

CDS-DTCC clearing link



## US

- DTCC/BCG identified positive cost-benefit reward for T+2 settlement instead of T+3
- Partnering with industry and regulators on potential T+2 transition and approach



## Europe

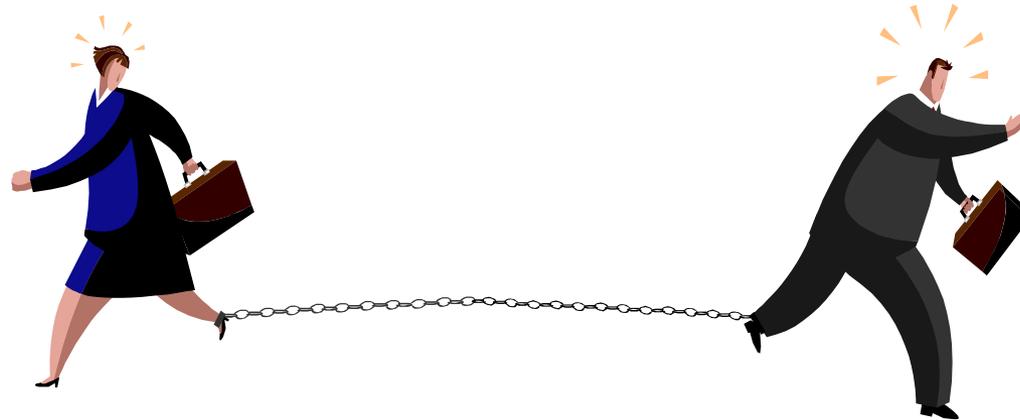
- Central Securities Depositories Regulation (CSDR)
- October 6 2014: 25 markets transitioned to T+2. 2 to follow (Jan 1 2015 and TBD)
- Key component of post-trade harmonization ahead of T2S (Wave 1 to launch in June 2015)
- In scope: cash equities, fixed income, ETFs, warrants, securities settlements from derivative contracts

## Transition to T+2 also impacts T+3 markets through:

- Cross-border securities transactions
- International trading and clearing linkages

***Benefits of T+2 settlement in the Canadian marketplace are consistent with those identified for the US marketplace***

## Alignment between “linked” markets



**CDS-DTCC Link** is one of the world’s most active clearing and depository linkages, with over a million cross-border movements on a monthly basis

**Shortening the settlement cycle is a pervasive change that requires the alignment and coordination from all linked markets**

# Each market faces unique, path-dependent challenges in settlement cycle shortening



## Market structure uniqueness

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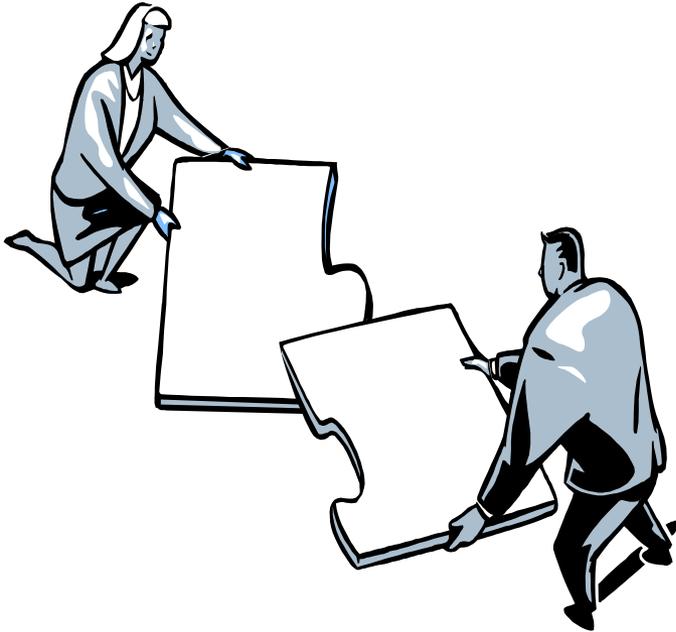
- Regulatory framework and preferences
- Roles and responsibilities of players in the market
- Concentration of volume among institutions

## Operational uniqueness

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- Legacy market practices and protocols
- Timezone profile
- Levels of operational sophistication

# There are no silver bullets, but successful transformation requires a concerted effort between FMIs, participants, and regulators



## It requires:

- ✓ Industry agreement to the case of settlement timeline shortening
- ✓ Commitment and support from regulators and self-regulating organizations (SROs)
- ✓ Clear definition of a transitional roadmap, defining improvements in processing, technology, and rule changes required to effect change
- ✓ Coordinated efforts from participants and FMIs

*CDS believes that Canadian efforts should be driven via the Canadian Capital Markets Association (CCMA)*

**HOW**  
**will this effect dealers? clients?**



# HOW will T+2 affect my firm and clients?

- Prove it to me...
- What *has* changed in the markets?
- And when will it be T+1?
- Rule changes?
- Securities lending
- Carrying-introducing broker dynamic?



# WHO can we turn to for information and support?

- CCMA?
- CDS (IIAC)
- DTCC (SIFMA)
  
- <http://www.ccma-acmc.ca/>



# Deductions...

# ...Questions?

