

CELENT

EUROPE T+2

IS ASIA-PACIFIC READY?

Neil Katkov
September 2014

CONTENTS

- Executive Summary..... 1
- Background..... 2
- An Introduction to Europe T+2 Settlement..... 3
 - Goals of the T+2 Shorter Settlement Cycle in Europe 3
 - Compliance and Penalties..... 4
- Impact on Market Participants in Asia-Pacific..... 5
- What, Where and Who will be Affected 11
 - Asset Classes 11
 - Trading Venues..... 11
 - Market Participants 11
- Impact on Post-trade cycles..... 13
 - Time Zone Challenges 13
- Conclusion: Is Asia-Pacific Ready for Europe T+2? 16
 - Challenges..... 16
 - Solutions..... 17
- Appendix: Survey Background..... 18
- Leveraging Celent’s Expertise 19
 - Support for Financial Institutions 19
 - Support for Vendors 19
- Related Celent Research..... 20

EXECUTIVE SUMMARY

Europe T+2 settlement is the latest initiative by regulators to create a more efficient trading structure in the fragmented European markets. Most European markets will move to the shorter settlement cycle on October 6, 2014, with a few switching over at a later date.

Crucially, market participants in Asia-Pacific trading on European venues will also be required to adhere to the T+2 settlement cycle.

Penalties including monetary fines and suspension from trading will be imposed for trades that fail to settle in time. Regulators have indicated these penalties will be fairly severe in order to ensure the success of the T+2 settlement program.

Celent recently surveyed investment managers, broker/ dealers and custodians in Asia-Pacific on their readiness for Europe T+2. The survey's findings include:

- While 80 – 90% of respondents intend to move to T+2 settlement, some firms in Asia-Pacific plan to stay on T+3 and rely on their brokers to fulfill the T+2 obligations on their behalf. Although this is causing some concern, it also presents a competitive opportunity for brokers with the appetite to take on this risk for their clients.
- 73% of firms said they will change their processes to meet the T+2 requirements for Europe, while 64% of firms indicated they will need to upgrade their post-trade technology. Only 18% of respondents plan to change their investment strategies in order to avoid the T+2 regime.
- 58% of firms have yet to complete the needed changes to support T+2 settlement in Europe. Some firms will still be working on the improvements even after the cutover in October 2014, which could put them at risk in meeting the shorter settlement deadlines.
- 34% of firms expect the process and technology costs for compliance with Europe T+2 will be under US\$100,000 and 33% expect needed investments will be under US\$500,000. Large regional banks with a presence in Europe and global firms estimate their costs will exceed US\$2 million.
- T+2 settlement in Europe is unlikely to be disruptive to the investment activities of market participants in Asia-Pacific. Most see it as a surmountable challenge. NAV calculation for mutual funds, buy-ins, portfolio balancing and corporate actions for depositary receipts are seen as the most onerous aspects of complying with the new regime.

The time zone difference with Europe means that market participants in Asia-Pacific will be on a tighter post-trade schedule than locations in Europe. For firms with any significant level of trading, automating processes will be essential. In particular, electronic matching will be advisable in order to meet the deadlines.

BACKGROUND

This report was commissioned by Omgeo; however, the analysis and conclusions are Celent's alone, and Omgeo had no editorial control over report contents.

Formed in 2001, Omgeo automates trade lifecycle events between investment managers, broker/ dealers and custodian banks, enabling 6,500 clients and 80 technology partners in 52 countries around the world to seamlessly connect and interoperate. By automating and streamlining post-trade operations, Omgeo enables clients to accelerate the clearing and settlement of trades, and better manage and reduce their counterparty and credit risk. Omgeo's strength lies within its global community and its ability to create solutions to enable clients to realize clear returns on their investment strategies, while responding to changing market and regulatory conditions. Across borders, asset classes, and trade lifecycles, Omgeo is the global standard for operational efficiency across the investment industry. Omgeo is a subsidiary of The Depository Trust & Clearing Corporation (DTCC).

Company website:

<http://www.omgeo.com>

AN INTRODUCTION TO EUROPE T+2 SETTLEMENT

Over the past decade, regulators in Europe have introduced a series of measures aimed at creating a more efficient capital markets structure in the fragmented European markets. The latest initiative is a move to a shorter settlement cycle (SSC) scheduled to occur in 26 European markets on October 6, 2014, with a few markets switching over at a later date. This will involve these markets moving from the current T+3 to T+2 settlement.

Table 1: Planned T+2 switchover by market

October 6, 2014	Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Latvia, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Sweden, Switzerland, United Kingdom
November 2015	Spain (equities)
TBD	Romania
Already on T+2	Bulgaria, Germany, Slovenia

Source: European Central Bank

The move of European markets to T+2 is governed by the Central Securities Depositories Regulation (CSDR), which has been in the works since 2012 and was adopted by the European Council in June 2014.

Crucially, the CSDR applies to market participants located outside Europe as well. This means that securities trades placed on European venues by market participants in Asia-Pacific will also be required to adhere to the T+2 settlement cycle.

GOALS OF THE T+2 SHORTER SETTLEMENT CYCLE IN EUROPE

T+2 settlement will support the Target 2 Securities (T2S) platform, an initiative mandated by the European Central Bank (ECB) to transfer the settlement function of Europe's CSDs to a common technology platform. The T2S platform is scheduled to go live in June 2015, with markets moving onto the platform according to a staged schedule.

The stated goals of the T2S and CSDR initiatives are to:

- Standardize processes across the various markets in Europe, to create a more uniform marketplace, reduce settlement costs and facilitate cross-border trading across the European Union markets.
- Promote the automation of trade processes, improve operational efficiency, and reduce counterparty settlement risk by means of the shorter settlement cycle.
- Foster competition among CSD and settlement agents, with the aim of increasing choice of providers and reducing settlement costs for market participants.

COMPLIANCE AND PENALTIES

The CSDR calls for the imposition of penalties for transactions that fail to settle by the deadline. These penalties are seen as a necessary measure to ensure adherence to the T+2 settlement regime. The penalties will include monetary fines for failed trades, and even suspension of trading for participants whose trades fail consistently.

Significantly, the fines will be imposed on a daily basis. Accordingly firms with process and technology challenges in meeting T+2 settlement may face repeated fines, which could be extensive in aggregate.

The specific penalties will be developed by the European Securities and Markets Authority (ESMA), around mid-2015. Although it is not yet known how much these charges will be, regulators have indicated they will be fairly severe so they will have some real teeth in ensuring adherence to the T+2 settlement regime and ensure the success of T2S.

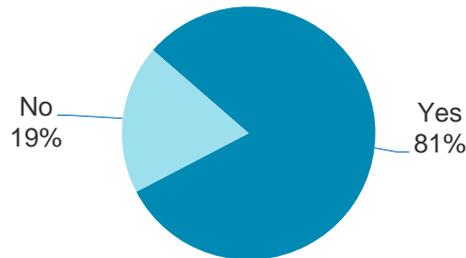
IMPACT ON MARKET PARTICIPANTS IN ASIA-PACIFIC

To understand the implications of the upcoming T+2 settlement regime on market participants in Asia-Pacific, Celent surveyed firms in four major Asia-Pacific markets: Australia, Singapore, Hong Kong and Japan.

Most firms surveyed in these markets are aware of the impending move to T+2 settlement in Europe. Respondents that were not aware of the initiative were specialized brokers and asset managers who also have operations in Europe, which presumably are handling the transition.

Figure 1: Awareness of Europe T+2 is high in Asia-Pacific

Is your firm aware of the move by 26 EU countries to T+2 equities and fixed income?

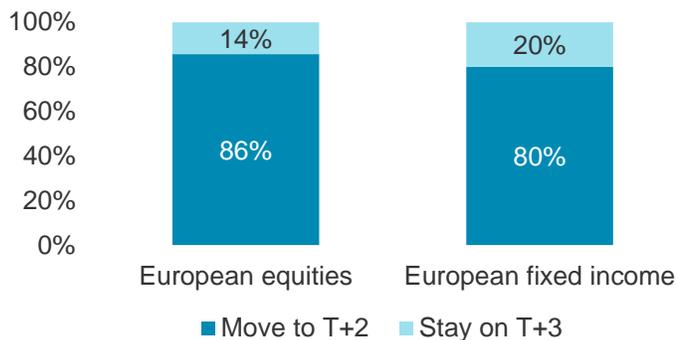


Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

In addition, most respondents intend to comply with the upcoming T+2 settlement regime for European trading. The holdouts were buy side firms, including several Tier 1 firms in Hong Kong and Japan. These firms presumably will rely on their brokers to fulfill orders for them while buffering them from the T+2 requirement.

Figure 2: Most Asia-Pacific firms plan to comply with Europe T+2

Will your firm move to T+2 settlement for European Issues?

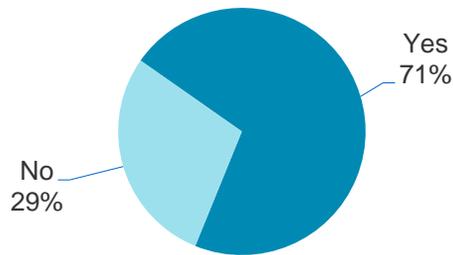


Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

Most firms say they need to make changes to be ready for T+2 settlement in Europe. Firms in Hong Kong, Singapore and Japan that said they do not need to make changes (but do plan to support T+2) explained that their current processes already cater to T+2 settlement, and are already settling on a T+2 basis in some markets.

Figure 3: Most Asia-Pacific firms need to make changes to support Europe T+2

Do you believe your firm needs to make changes to comply with T+2 settlement in Europe?

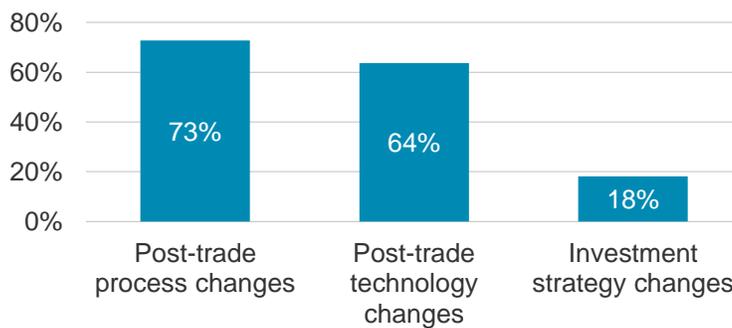


Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

Most firms will need to adjust their processes. This is not surprising considering that the time difference with Europe will put added pressure on firms in Asia to comply with the shorter T+2 settlement cycle. A majority of firms also said they will need to upgrade their post-trade technology. Few firms plan to change their investment strategies in order to avoid the T+2 regime.

Figure 4: Asia-Pacific firms will focus on process and technology enhancements to comply

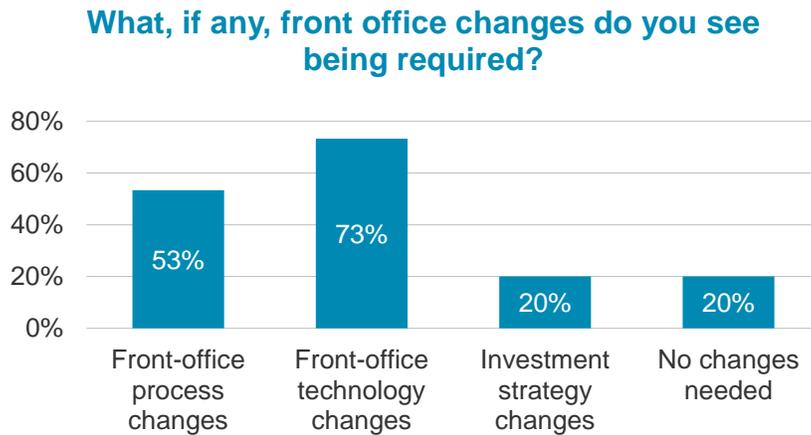
What changes have you made or plan to make to comply with T+2 settlement in Europe?



Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

Nearly three-fourths of the firms say they will need to make technology changes in the front office, and over half will require process changes in the front office. Again, few firms expect to opt for changing investment strategies as a result of the Europe T+2 settlement regime. One broker in Japan pointed out that firms trading on a DMA (direct market access) basis are likely to already have fast processes in the front office.

Figure 5: Front office changes for Europe T+2

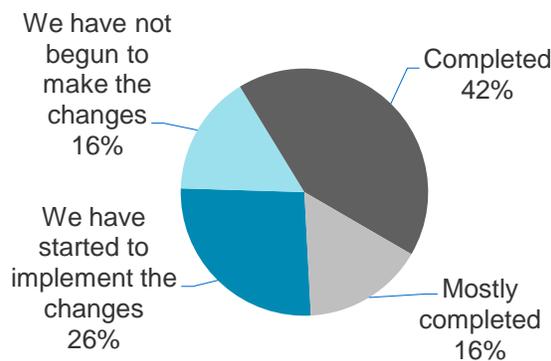


Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

Most firms have started retooling processes and technology to enable T+2 settlement for European issues. More than 40% of respondents said they have completed these improvements; these firms tend to be global brokers, investment managers and custodians in Hong Kong, Singapore and Japan. The remaining firms, however, will likely still be working on the improvements even after the cutover to T+2 settlement in October 2014. This could put them at risk in regard to meeting the deadlines.

Figure 6: Asia-Pacific firms' progress to meeting Europe T+2

To what extent has your firm completed the necessary changes?

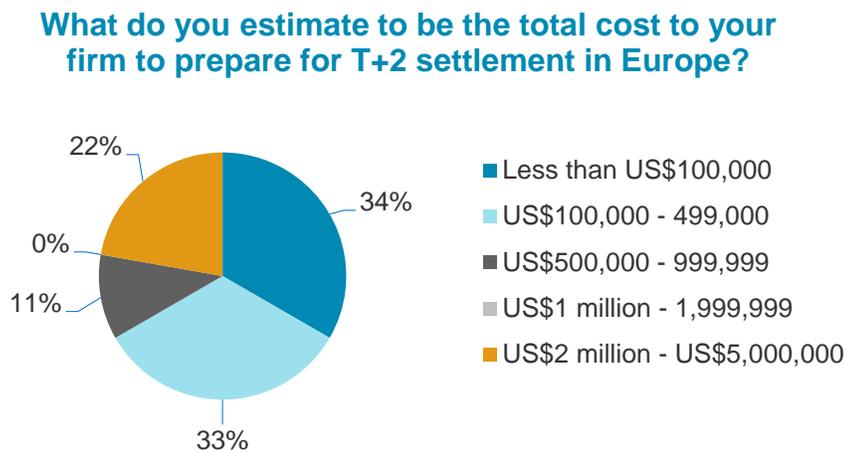


Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

Two-thirds of the respondents expect to complete the necessary process and technology improvements for T+2 settlement with an investment of less than US\$500,000, and one-third for less than US\$100,000. For firms that have already enabled STP in the middle office, this will likely focus on internal IT development. Firms without STP-enabled processes may find they need to spend on vendor systems as well.

For large banks in Asia trading European securities in multiple lines of business, the investment needed to attain the process and technology improvements can be surprisingly large — over US\$2 million. This includes large regional banks with a Europe presence as well as global firms.

Figure 7: Asia-Pacific firms' costs in meeting Europe T+2 requirements



Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

Most firms are aware of the penalties for failed trades, and more than half see these as the greatest risk under the new regime. Moreover, nearly 40% of respondents feel they are at risk for incurring failed trades in a T+2 settlement cycle. Many firms also expect operational costs to increase with T+2 settlement.

Figure 8: Asia-Pacific firms' perception of the risks from Europe T+2

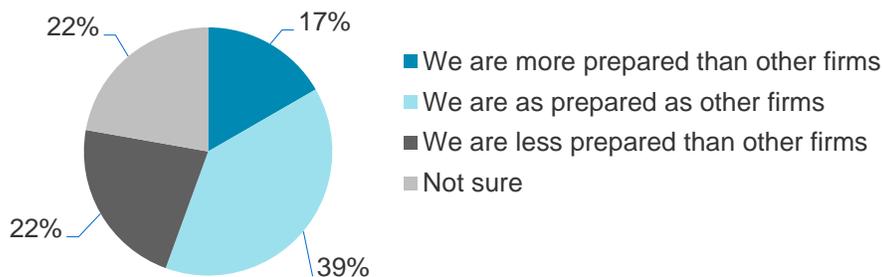


Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

About 40% of survey respondents, mostly in Australia, Hong Kong and Japan, believe their state of preparedness is typical of the industry overall. Unfortunately, a greater number indicated a lack of confidence about their Europe T+2 programs, either seeing their firms as underprepared — an especially common response among Japanese firms — or not certain where they stand. Less than one-fifth of respondents think they are ahead of the curve.

Figure 9: State of the industry in Europe T+2 preparedness

Is your firm more or less prepared than other firms undertaking similar activities?

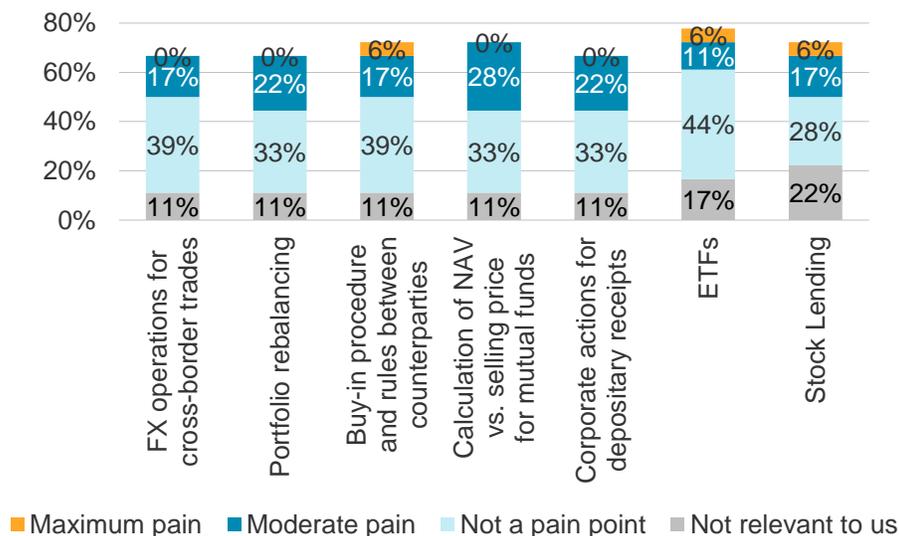


Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

T+2 settlement in Europe is unlikely to be disruptive to the investment activities of market participants in Asia-Pacific. Most see it as a surmountable challenge. NAV calculation for mutual funds, buy-ins, portfolio rebalancing and corporate actions for depositary receipts are seen as the most onerous aspects of complying with the new regime.

Figure 10: Asia-Pacific firms' expected pain points under Europe T+2

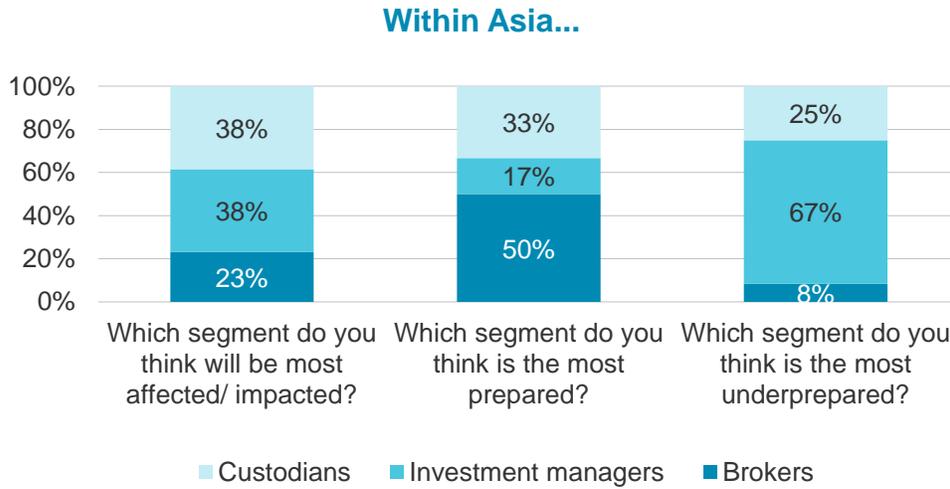
Which of the following will be pain points for your firm under the Europe T+2 regime?



Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

Market participants in Asia-Pacific see brokers as the most prepared for T+2 settlement in Europe, and investment managers as the least prepared. This is further evidence that some buy side firms will try to continue to operate on a T+3 basis internally, and rely on their brokers to provide a buffer.

Figure 11: Perception of market segments' readiness for Europe T+2



Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

WHAT, WHERE AND WHO WILL BE AFFECTED

The Europe T+2 settlement initiative is broad in scope and will be applicable to most equities trading in Europe. The effect on fixed income will be mixed, because of the persistence of OTC trading in the bond markets.

ASSET CLASSES

The T+2 settlement mandate will apply to trading in equities and securitized debt (fixed income).

Some related financial products are also in scope. These include depositary receipts, collective investment undertakings such as mutual funds and exchange traded funds (ETFs), and securities settlement arising from derivatives trading.

As a result, the Europe T+2 mandate will involve most equities-related trading in Europe.

The effect on fixed income trading will be less pervasive, due to the large OTC market in fixed income.

TRADING VENUES

The CSDR calls for T+2 settlement to apply to trading on venues governed by MiFID (Markets in Financial Instruments Directive). Significantly, these include not just the so-called regulated markets (exchanges), but alternative trading systems (ATFs) as well.

The trading landscape in Europe is extremely fragmented, with 105 regulated markets, such as Euronext and the London Stock Exchange, and 151 registered ATFs. In Europe, ATFs are classified as multilateral trading facilities (MTFs) and organized trading facilities (OTFs). MTFs include both equities venues such as Liquidnet and Turquoise and fixed income platforms such as MTS and Tradeweb. OTFs are a new classification covering broker networks (broker dark pools).

With so many specialized markets, despite the intent of the CSDR it is not certain that every trading venue will be subject to the T+2 regime, but certainly the majority of trading in Europe will be.

MARKET PARTICIPANTS

The requirement for T+2 settlement applies to CSD participants. These are defined broadly to include sell side firms, investment managers, and asset servicers such as custodians, transfer agents, and providers of outsourced services.

Crucially, the mandate will apply not just to participants within the European Union, but participants outside the EU as well. In other words, market participants in Asia-Pacific trading European securities will also be required to adhere to the T+2 settlement cycle.

The Buy Side Loophole

While the intent of the regulation is to include investment managers in the T+2 settlement framework, there is a loophole. Buy side firms that trade through a broker will presumably be able to avoid the T+2 requirement, on the grounds that the buy side – broker leg of the trade is not considered an on-exchange transaction. These buy sides would rely on their brokers to complete the trade in T+2, in effect fronting the cash or carrying the risk for the buy side firm for one day.

Brokers, then, will be faced with providing funding (for buy orders) and holding the risk (for sell orders) for any clients who stay on T+3 settlement. This will be a challenge for brokers that do not have the appetite to carry these risks, and at the same time represents a potential competitive advantage for brokers that are willing and able to fulfill such buy side requirements.

The extent to which this has been discussed and agreed between clients and their brokers in the lead-up to the implementation date remains to be seen. Failure to reach such agreement ahead of implementation will carry risks.

[Table 2: Asset classes, venues and participants affected by Europe T+2](#)

ASSET CLASSES	VENUES	PARTICIPANTS
Cash equities	Exchanges	Sell side firms
Bonds	MTFs	Investment managers
ETFs	OTFs (broker networks)	Asset servicers
Warrants		Investors within the EU
Securities settlement linked to derivatives		Investors outside of the EU

Source: Celent

IMPACT ON POST-TRADE CYCLES

T+2 settlement in Europe will naturally require market participants to follow a tighter post-trade schedule than under T+3. For firms with any significant level of trading, automating processes will be essential. In particular, electronic matching will be advisable in order to meet the tighter deadlines.

Essentially, firms will need to verify trade details and provide settlement instructions earlier in the trade cycle, in order to meet the settlement deadline on T+2. The major steps in the post-trade process will be affected as follows:

- Confirmation, allocation, and affirmation will need to be performed earlier in the trade cycle. In fact, the Harmonisation Steering Group (HSG) of the T2S initiative recommends affirmation on the day of trading (T+0).
- Settlement instructions will need to be sent to custodians and other asset servicers so as to enable pre-settlement matching on T+1 (this is also an HSG recommendation).
- In addition, foreign exchange transactions to support cross-border trades will need to be performed earlier in order to secure the needed funds by the settlement deadline.

TIME ZONE CHALLENGES

In Asia-Pacific, the tighter settlement cycle will be even more challenging, due to the time zone differences with Europe. From an operational perspective, Asia-Pacific locations are four to nine hours behind Europe. For the major markets of Tokyo, Hong Kong, Singapore, and Sydney, the trading day overlaps with London or Frankfurt for just 1 or 2 hours, depending on the time of year, or not at all (see the emerald lines in the figures below).

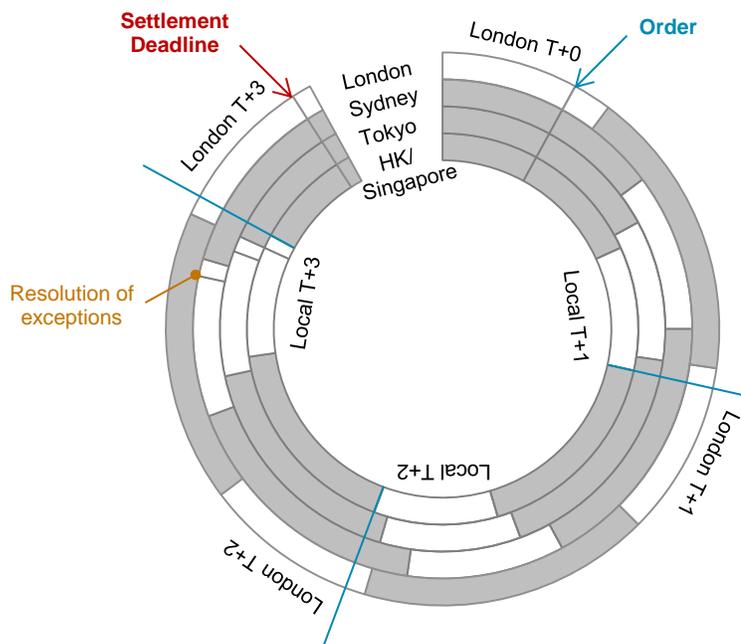
Accordingly, market participants in Asia-Pacific will have to operate with even more severely compressed post-trade cycles:

- Asia-Pacific locations will not easily be able to meet the HSG recommended schedule of trade affirmation on trade date, without the use of European locations (their own offices or outsourced).
- Asia-Pacific market participants will need to provide custodians with settlement instructions on T+1 in order to meet the HSG-recommended pre-matching schedule. This can mean completing the confirmation, allocation, affirmation and settlement instructions in one day.

The figure below shows the time zone challenges in trading for the four major Asia-Pacific markets — Australia, Hong Kong, Japan and Singapore — using the dominant London market as an example.

Most trades on the London market will not be seen by an Asia-based middle office operation until the next day, which we will call local T+1. Because the calendar day in Asia-Pacific begins before Europe's, under T+3 settlement this gives firms in Asia-Pacific at least two full days to process the trades through to settlement instructions. Because the counterparties or custodians may be in Europe, however, resolving trade exceptions may need this extra day due to the time zone differences, particularly when participants or their counterparties do not have sufficient automation in the middle office.

Figure 12: Post-trade cycles in European and Asian time zones: T+3 settlement

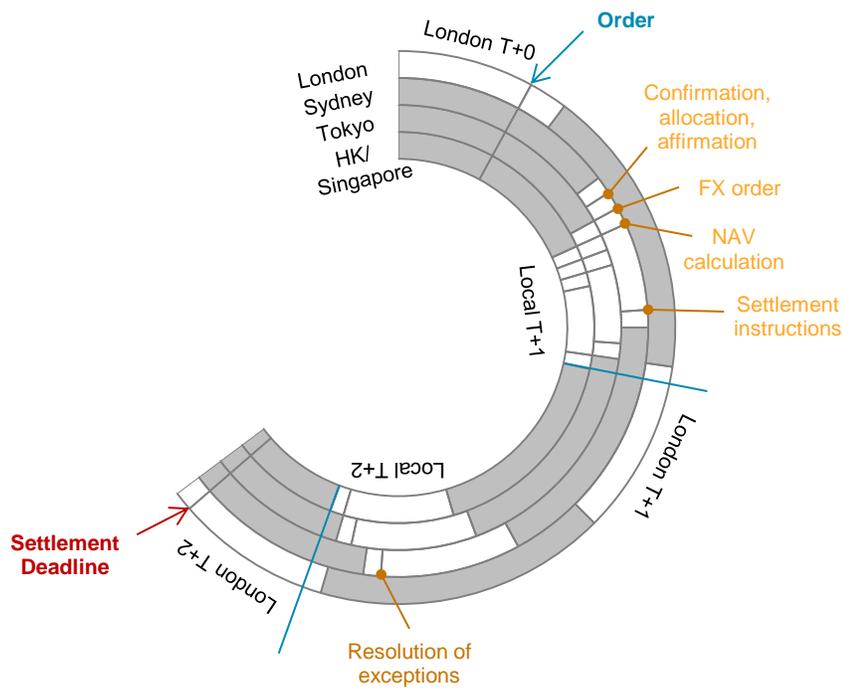


Source: Celent. Based on an 8:00 – 17:00 business day during Standard Time.

The situation becomes more challenging under T+2 settlement particularly because locations in Asia-Pacific lose the current 1-day buffer for handling exceptions. This also means ipso facto that Asia-Pacific locations for the most part cannot meet the HSG's recommendation of completing affirmations on T+0, at least not during regular business hours.

In order to meet the T+2 settlement deadline, Asia-Pacific locations should complete trade affirmations and settlement instructions within local T+1, and will need to resolve any remaining exceptions within local T+2.

Figure 13: Post-trade cycles in European and Asian time zones: T+2 settlement



Source: Celent. Based on an 8:00 – 17:00 business day during Standard Time.

Even for best practice firms in Asia-Pacific that are already adhering to such a time line, as in the above charts, the loss of the local T+3 day means that processes will have to be more finely tuned in order to deal with exceptions and cash and securities shortfalls.

Fail management is a significant consideration. A T+3 cycle provides a fairly ample time buffer for handling exceptions. Europe executions arrive in Japan on local T+1, so the time to confirm a trade under T+2 settlement is extremely limited with a correspondingly higher risk of failed trades. To reduce this risk, it is advisable for firms to improve their exception management processes and technology.

CONCLUSION: IS ASIA-PACIFIC READY FOR EUROPE T+2?

Just like their peers in Europe, market participants in Asia-Pacific trading European securities will need to comply with the T+2 shorter settlement cycle to be implemented in most European markets in October 2014.

Celent's survey of Asia-Pacific market participants found that even some firms with STP-enabled middle office operations and trading in T+2 markets such as Germany still need to enhance their technology and processes in order to support the T+2 regime.

Firms without automated middle office processes will be doubly challenged to meet the new requirements.

CHALLENGES

Some specific challenges for market participants include:

- Investment Managers

Investment managers that cannot or do not intend to support T+2 settlement will need their brokers to provide funding and assume counterparty risk for European trades to bridge the gap. These services will raise trading costs for brokers, who may decide to pass these costs on to their buy side clients. Buy side firms with older systems may find themselves needing to upgrade or replace those systems.

- Broker/ Dealers

Brokers in Asia-Pacific have begun preparations for T+2 settlement and expect to be ready by the October deadline. However for a number of firms, work on systems and processes is ongoing, and will continue after the T+2 cutover date. Such brokers will need to rely on ad hoc methods in the interim, which comes with a risk.

Because some buy side firms intend to stay on T+3 or will be challenged to meet T+2, brokers will be differentiated by their appetite to fund and carry the risk for their clients' trades. This will incur costs, but could also provide competitive advantage.

Brokers and clients are advised to agree on these arrangements in advance in order to ensure compliance with T+2 settlement upon implementation.

- Custodians

Custodians in Asia, particularly local and regional firms, will need to upgrade their systems and adjust their processes in order to support T+2 settlement. This will have an impact on their clients in turn, as custodians may have to shorten their deadlines for receiving settlement instructions in order to make T+2 settlement.

- Trust Banks

In Japan, trust banks play a major role both as investment managers and as custodians. On the asset management side, the top tier trust banks have begun preparations and expect to be ready for Europe T+2. The smaller trust banks, however, have older systems and may face challenges.

As custodians, the situation is also complicated. Trust banks active internationally are making the investments to be ready for T+2 settlement. Some large, more domestically-focused institutions, however, at this point may be intending to stay on T+3.

SOLUTIONS

Some specific approaches firms in Asia-Pacific will be taking to deal with T+2 settlement in Europe include:

- Processing trades outside of regular business hours, in order to accommodate the time difference with Europe. Some firms will increase off-hour staff or adopt a shift system in order to achieve this.
- Some firms with a European presence will reroute processes so that their European locations handle the trade cycle with Asia-Pacific clients.
- Some brokers and investment managers in each of the four markets indicate they will rely on global custodians to support their European trades.
- Increasing STP capabilities in the middle office.

Although a number of markets worldwide are already on T+2, the implementation of the shorter settlement cycle on a pan-European basis is an initiative of unprecedented scope, and accordingly makes greater demands on firms and creates greater risks. In a sense, Europe T+2 is a dress rehearsal for the day when T+2 becomes the global norm for securities settlement. How Asia-Pacific responds will indicate the extent to which the region's internationally focused firms' processes are efficient, flexible, and ready for the challenges ahead.

APPENDIX: SURVEY BACKGROUND

Celent surveyed market participants in Australia, Hong Kong, Japan and Singapore and received 31 completed responses. Although every effort was made to solicit responses from all four markets, responses were weighted somewhat towards Japan. This may reflect a stronger interest in that market around the Europe T+2 issue. Responses were split about half-and-half between top tier institutions and smaller firms. The respondents were executives working within the trading and post trade areas. The survey was conducted online in August and September 2014, supplemented by a number of one-on-one telephone interviews to provide more insight around responses.

Table 3: Survey respondents

HOME MARKET		FIRM TYPE		FIRM SIZE	
AUSTRALIA	16%	Broker/ dealer	39%	Tier 1	52%
HONG KONG	23%	Investment Manager	32%	Tier 2	24%
JAPAN	42%	Custodian	16%	Tier 3	24%
SINGAPORE	19%	Trust Bank	13%		

Source: Celent Europe T+2: Is Asia-Pacific Ready? Survey

Was this report useful to you? Please send any comments, questions, or suggestions for upcoming research topics to info@celent.com.

LEVERAGING CELENT'S EXPERTISE

If you found this report valuable, you might consider engaging with Celent for custom analysis and research. Our collective experience and the knowledge we gained while working on this report can help you streamline the creation, refinement, or execution of your strategies.

SUPPORT FOR FINANCIAL INSTITUTIONS

Typical projects we support related to the post-trade space include:

Vendor short listing and selection. We perform discovery specific to you and your business to better understand your unique needs. We then create and administer a custom RFI to selected vendors to assist you in making rapid and accurate vendor choices.

Business practice evaluations. We spend time evaluating your business processes. Based on our knowledge of the market, we identify potential process or technology constraints and provide clear insights that will help you implement industry best practices.

IT and business strategy creation. We collect perspectives from your executive team, your front line business and IT staff, and your customers. We then analyze your current position, institutional capabilities, and technology against your goals. If necessary, we help you reformulate your technology and business plans to address short-term and long-term needs.

SUPPORT FOR VENDORS

We provide services that help you refine your product and service offerings. Examples include:

Product and service strategy evaluation. We help you assess your market position in terms of functionality, technology, and services. Our strategy workshops will help you target the right customers and map your offerings to their needs.

Market messaging and collateral review. Based on our extensive experience with your potential clients, we assess your marketing and sales materials — including your website and any collateral.

RELATED CELENT RESEARCH

Evolution of European Post-Trade Arrangements Under T2S: Competition Spurs New Settlement Strategies

June 2014

Evolution of European Post-Trade Arrangements Under T2S: Impact on Asset Servicing and Securities Payments

June 2014

The Age of Optimization in Corporate Actions Automation

April 2014

Future of the Post-Trade Industry, Part I: Identifying the Drivers of Change

December 2013

Copyright Notice

Prepared by

Celent, a division of Oliver Wyman, Inc.

Copyright © 2014 Celent, a division of Oliver Wyman, Inc. All rights reserved. This report may not be reproduced, copied or redistributed, in whole or in part, in any form or by any means, without the written permission of Celent, a division of Oliver Wyman ("Celent") and Celent accepts no liability whatsoever for the actions of third parties in this respect. Celent is the sole copyright owner of this report, and any use of this report by any third party is strictly prohibited without a license expressly granted by Celent. This report is not intended for general circulation, nor is it to be used, reproduced, copied, quoted or distributed by third parties for any purpose other than those that may be set forth herein without the prior written permission of Celent. Neither all nor any part of the contents of this report, or any opinions expressed herein, shall be disseminated to the public through advertising media, public relations, news media, sales media, mail, direct transmittal, or any other public means of communications, without the prior written consent of Celent. Any violation of Celent's rights in this report will be enforced to the fullest extent of the law, including the pursuit of monetary damages and injunctive relief in the event of any breach of the foregoing restrictions.

This report is not a substitute for tailored professional advice on how a specific financial institution should execute its strategy. This report is not investment advice and should not be relied on for such advice or as a substitute for consultation with professional accountants, tax, legal or financial advisers. Celent has made every effort to use reliable, up-to-date and comprehensive information and analysis, but all information is provided without warranty of any kind, express or implied. Information furnished by others, upon which all or portions of this report are based, is believed to be reliable but has not been verified, and no warranty is given as to the accuracy of such information. Public information and industry and statistical data, are from sources we deem to be reliable; however, we make no representation as to the accuracy or completeness of such information and have accepted the information without further verification.

Celent disclaims any responsibility to update the information or conclusions in this report. Celent accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this report or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages.

There are no third party beneficiaries with respect to this report, and we accept no liability to any third party. The opinions expressed herein are valid only for the purpose stated herein and as of the date of this report.

No responsibility is taken for changes in market conditions or laws or regulations and no obligation is assumed to revise this report to reflect changes, events or conditions, which occur subsequent to the date hereof.

For more information please contact info@celent.com or:

Neil Katkov

nkatkov@celent.com

AMERICAS

USA

200 Clarendon Street, 12th Floor
Boston, MA 02116

Tel.: +1.617.262.3120
Fax: +1.617.262.3121

USA

1166 Avenue of the Americas
New York, NY 10036

Tel.: +1.212.541.8100
Fax: +1.212.541.8957

USA

Four Embarcadero Center, Suite 1100
San Francisco, CA 94111

Tel.: +1.415.743.7900
Fax: +1.415.743.7950

Brazil

Av. Das Nações Unidas, 12901
Torre Norte - 33° Andar
São Paulo SP 04578-903

Tel.: +55.11.5501.1100
Fax: +55.11.5501.1110

Canada

1981 McGill College Avenue
Montréal, Québec H3A 3T5

Tel.: +1.514.499.0461

EUROPE

France

28, avenue Victor Hugo
Paris Cedex 16
75783

Tel.: +33.1.73.04.46.20
Fax: +33.1.45.02.30.01

United Kingdom

55 Baker Street
London W1U 8EW

Tel.: +44.20.7333.8333
Fax: +44.20.7333.8334

Italy

Galleria San Babila 4B
Milan 20122

Tel.: +39.02.305.771
Fax: +39.02.303.040.44

Spain

Paseo de la Castellana 216
Pl. 13
Madrid 28046

Tel.: +34.91.531.79.00
Fax: +34.91.531.79.09

Switzerland

Tessinerplatz 5
Zurich 8027

Tel.: +41.44.5533.333

ASIA

Japan

The Imperial Hotel Tower, 13th Floor
1-1-1 Uchisaiwai-cho
Chiyoda-ku, Tokyo 100-0011

Tel: +81.3.3500.3023
Fax: +81.3.3500.3059

China

Beijing Kerry Centre
South Tower, 15th Floor
1 Guanghua Road
Chaoyang, Beijing 100022

Tel: +86.10.8520.0350
Fax: +86.10.8520.0349

China

Central Plaza, Level 26
18 Harbour Road, Wanchai
Hong Kong

Tel.: +852.2982.1971
Fax: +852.2511.7540

Singapore

8 Marina View #09-07
Asia Square Tower 1
Singapore 018960

Tel.: +65.9168.3998
Fax: +65.6327.5406

South Korea

Youngpoong Building, 22nd Floor
33 Seorin-dong, Jongno-gu
Seoul 110-752

Tel.: +82.10.3019.1417
Fax: +82.2.399.5534