

A roadmap to achieving STP for corporate actions

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ABSTRACT

Unlike other areas of the financial services industry, such as trading or settlement, the automation of a corporate action throughout its lifecycle — from announcement, through election, to entitlement and payment — has not yet been realised. The straight-through processing (STP) rates, which indicate the degree of



automation, for corporate actions are poor and the management of corporate actions data remains highly manual. The result is that corporate actions are risky and costly — even simply getting hold of good, ‘clean’ data that is comprehensive is very challenging. Can a roadmap that achieves high STP rates for announcements be built and realised? This paper argues that for the USA — the largest market in the world, covering about 65 per cent of all global corporate action volume alone — the answer is ‘yes’, and the course has already been set.

Keywords: *corporate, actions, standards, xbrl, dtcc, announcements, STP, issuer*

BACKGROUND

Corporate actions reflect the legal structure, financial structure or operation of a publicly traded company upon its issued capital, whether an equity or bond. They cover events that return a portion of profits to security holders (for example, cash/stock dividends), events that cover corporate restructuring (for example, mergers, tenders, spin-offs, liquidations or name changes), and events that influence the share price (for example, forward or reverse stock splits).

Corporate actions can be ‘mandatory’, should the event be initiated by the board of directors, and such events affect all shareholders and participation is not optional. Alternatively, corporate action events can be ‘voluntary’ — that is, the shareholder may elect to participate in the event according to prescribed options. Events can also be a mix of the two, commonly referred to as ‘mandatory with options’, whereby a mandatory event still offers shareholders a choice in how the entitlement can be taken — for example, shares or cash for a mandatory merger with elections.

The issuing firm, or its agent, will create the corporate action event as an ‘announcement’ in the form of a press release, a prospectus or a legal filing, and this is distributed to the market through a network of newswire services and data providers.

THE ANATOMY OF A CORPORATE ACTION ANNOUNCEMENT

To help to determine the ultimate solution of the corporate action straight-through processing (STP) quandary, it is necessary to define further the components of a corporate action and explain why it is not as simple of putting together a standard with its associated market practice.

Problem #1: There is no defined list of events upon which everyone can agree

Considering, firstly, event type, the International Organization for Standardization (ISO) 15022 ‘data dictionary’ defines about sixty specific ‘event types’,¹ but events are further defined elsewhere within the standard — for example, ‘mini tender’ or ‘special dividend’. No doubt, if ten people were asked to provide a list of corporate actions, ten completely different lists would be forthcoming that may have, at best, an 80 per cent overlap.

Problem #2: There is no definitive list of security types and associated corporate actions

Having determined what the event is, it is necessary to understand upon what type of security the event will occur. In some cases, the security type will determine how the event is defined — for example, a distribution of cash from a stock will usually take the form of a cash dividend, whereas a bond will make an interest payment. In some cases, however, a

'hybrid' security can make both an interest and a dividend payment; where a dividend on an equity may have different data elements to a dividend paid on a unit investment trust adds yet another level of complexity in determining what data is required for an event. Derivatives are a whole other class of securities for which corporate actions have barely scratched the surface on how to automate.

Problem #3: Market variance complicates the standardisation of an event

Once the event and security type have been identified, there may then emerge variations in how each market treats the event. A stock option dividend may be treated differently in the Netherlands and the UK, for example, especially when taking into account the process differences between bearer and registered shares. Again, this leads to a potentially different set of data elements or processing steps to accommodate the nuances of each market.

Problem #4: Investor restrictions place additional processing requirements on an event

So, once the characteristics of the event and security are understood, along with market variance to determine what data is specifically needed for an event, it is now necessary to look at who the holder of the security may be, as further complications are introduced. For example, terms of an event may impact the eligibility of an investor to participate in an event. Generally, event eligibility will be based upon where the investor is located. In the USA, some events may not be registered within the state of residence of the investor (known as 'blue sky law'), which would exclude the investor from making an election. On an international level, some events may not be registered with

the US Securities and Exchange Commission (SEC), which limits the ability of US investors to take part in the event. Therefore, the investor is not permitted to make a choice that requires the issuer to offer only the 'default' option² to the investor and restrictions placed upon investor residency, amongst other such conditions that limit investor action, are a critical aspect to an event.

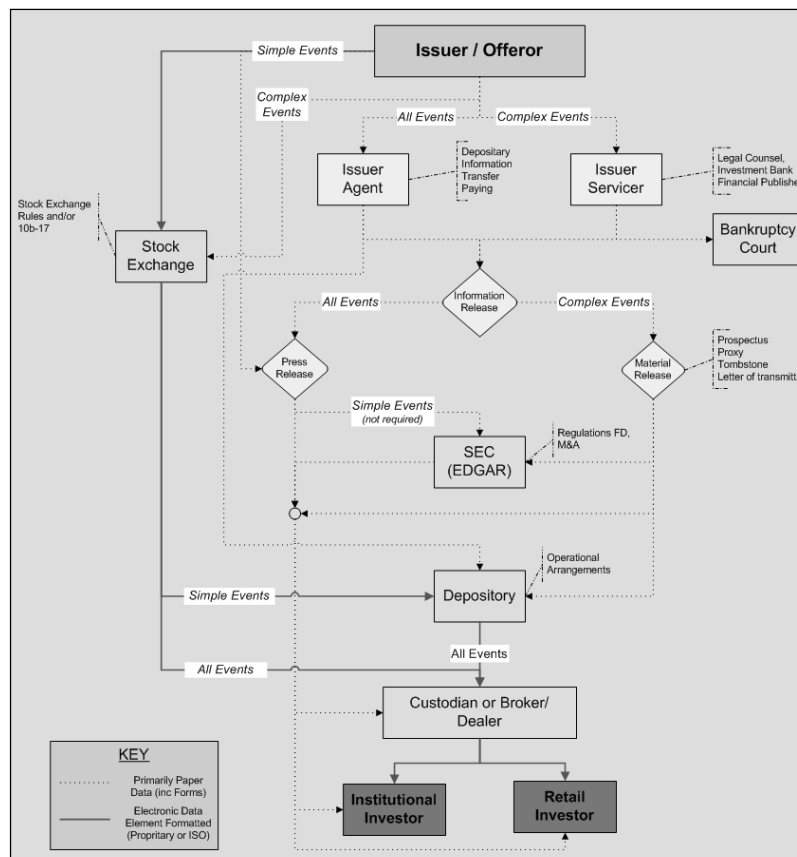
Problem #5: What data elements constitute an event and who is the 'source' of the data element?

What constitutes a complete announcement is still, even today, open to discussion. Much work has been undertaken by various groups — from the (international) Securities Market Practice Group (SMPG), the US National Market Practice Group (NMPG), the Securities Industry and Financial Markets Association (SIFMA) corporate action division and Asset Manager Forum (AMF), and the Market Data Providers (MDP) User Group. But some key data elements have still not been applied to announcements (within the ISO 15022 data dictionary) or have yet to be fully defined. As the announcement continues to be made more transparent and include other constituents into the discussion (for example, issuers), there will no doubt be more data elements that should be included. In reality, each data element has one source, whether it is an ex-date from a stock exchange, or a record date from an issuer, or a processing date from the depository.

Problem #6: Information is disseminated in non-standard flows and in non-standard formats/content

Lastly, and by no means least, is the rationalisation of the announcement data flow itself. Focusing upon the USA, it is clear that the 'simple' process of disclosing

Figure 1 A
simplified US
corporate action
announcement flow



information from issuer to investor is complicated by a number of ‘touch points’. Under SEC regulations such as ‘Fair disclosure’ (Rule 100) and ‘Mergers and acquisitions’ (Item 1004), the SEC requires that information should be provided at the same time to all, along with some terms to be included on tenders, mergers and exchange offers. Typically, this is via a press release and/or SEC filing into its Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system.³

The key parties to the flow are the issuer (and its agents), the stock exchange, the depository, the asset servicer (custodians and broker-dealers), the asset managers and the individual investors. All

parties have direct or indirect relationships with each other, which require the transmittal of information. But the data transfer process is neither in the same delivery method (electronic vs paper), nor in the same format. Issuers will provide paper material that requires transformation into electronic data for onward delivery. Often, the electronic data is in proprietary format, but where standards and market practice are applied, not all parties have adopted their usage.

Figure 1 provides a view of how information is disseminated in the USA. Included are representations for each party, what rules may be applied and whether the information flows electronically or in paper form.

Problem #7: A patchwork of regulations, market practice and processes exists

The announcement of corporate action events⁴ by issuers⁵ has long been mired in the processes of the past. The dissemination of paper materials (press releases, SEC filings, prospectuses and the like) detailing an event is necessary, but has resulted in the growth of a cottage industry that employs thousands of people across the globe. Like many cottage industries, the work is localised, inefficient, lacks benefits of scale and introduces risk should any independent part fail to produce a standard product.

Take, for example, a merger event between two US listed companies. Both parties fulfil their obligations to investors and regulators by creating a press release, completing the necessary filings and mailing proxy statements/prospectuses to investors. The actual path from issuer to investor is, however, complicated by a patchwork of financial intermediaries (see Figure 1). At each step along the path, those parties involved in the flow, whether a stock exchange, central securities depository, custodian, broker-dealer or asset manager, need to ensure that they have the correct event information to pass onwards.

Although the number of parties involved should not matter in this day and age, unfortunately effective electronic communication has largely bypassed the corporate action announcement flow. In fact, issuer dependency upon paper to communicate at the very start of the corporate action information chain immediately inhibits STP, thereby forcing the financial securities industry to create individual electronic versions manually, based upon the issuer's source paper material. Placing the responsibility for creating electronic announcements on the

financial services industry, rather than relying on the issuer, inherently introduces unnecessary risk, because the transformation involves interpreting, validating and then distributing the issuers' intentions, all the while maintaining accuracy and timeliness. Should any part of the manual process fail, the risk exposure faced by a financial services firm is significant.

The USA is not alone in this dilemma — effective corporate action notification is a truly global issue. The European Union (EU) created a taskforce to identify issues with cross-border securities clearing and settlement. In 2001, the taskforce, known as the 'Giovannini Group', reported on 15 Barriers, of which one focuses upon corporate actions (Barrier 3). To address this Barrier, a working group was formed, which later reported:⁶

When there are legal obligations for issuers to communicate about corporate actions, these communication requirements are often geared toward 'old style' communication mechanisms, such as publication in the press, paper letters to shareholders ... These obligations may not be adequate in the current environment and even lead to reducing efficiency gains by sticking to paper format. In effect, electronic communication is often not encouraged or even prohibited in some cases.

The Group of 30 (G30)⁷ also addressed such matters within the securities industry, including a recommendation⁸ that:

Issuer, providers or clearing and settlement services, and other relevant market participants should *advise investors of all details of corporate events that they require in an automated, timely manner and*

in compliance with accepted industry standards, so that each investor can make a timely decision on the action to be taken with full knowledge of the facts.

RISKY BUSINESS

For all of the above reasons, it is not a secret that corporate actions remain one of the riskiest areas within financial services. If a company makes a decision based on incorrect information (for example, a date), or if a payout rate is incorrect, then the financial exposure can be significant. Whilst it is true that corporate action events do not often go wrong, when they do, it can be costly.

Not surprisingly, historical data on actual losses incurred by firms as a result of corporate action failures is not available in the public domain, but Oxera's detailed report, entitled *Corporate Actions Processing: What are the Risks?*, estimated the actual losses to be around US\$10bn, globally, per year. At the individual firm level, this approximates to an actual loss of US\$0.5m per firm, with 'near misses' of US\$5m per year.

As discussed, corporate actions are fundamentally complex in their nature, with many moving parts: each corporate action event can have one or more 'options', and each option can have one or more 'payouts', and each of these has specific dates and rates, as well as a host of other event information. In addition, there are text-based terms, conditions and restrictions to get right.

Most of these data fields are generated by the issuer, but some come from the local exchange and others from the local depository. Aside from the job of piecing the event together from several sources, to make things more complicated, an event is rarely announced only once. It is

typical that an event has multiple updates as new information becomes available to the market, as the event matures (for example, the reinvestment price, final cash or security payout rates, or pro-rata information). Typically, we see two, three, or even four updates to an event, but sometimes as many as ten, and occasionally more. Keeping the 'master record' clean and up to date is challenging.

The underlying risk comes from the need to review manually and, if necessary, 'touch' the event to get it right. Experience demonstrates that complex, voluntary events take, on average, 20 times the effort of the simplest corporate action events. Also, non-US events take, on average, five times the effort of US corporate action events.

This problem is not likely simply to go away, either. For 2008, the global volume of unique events — that is, excluding updates — was about 1.1 million announcements, plus an additional 6.8 million scheduled payments, and the overall growth rate is about 5 per cent per year. The growth rate in 'complex' announcements — that is, those announcements that are not routine or mandatory, but have an elective component with differing options and payouts — is almost 10 per cent per year.

Although the USA currently generates about 65 per cent of the global corporate action announcements, the bulk of this growth is taking place in Europe, the Middle East and Asia, especially Brazil, India, China and Russia. For these markets extra effort is needed because the corporate action events are complex, the market practice rules are less mature and the data are less readily available.

Lastly, just to add more complexity, volumes can easily double, and sometimes treble, between quiet and busy periods — for example, during the European 'dividend season', from February through

to May — so there is an overlay of seasonality to manage.

LIVING WITH THE RISK

To try to minimise the exposure to the US\$10bn overall losses, then, financial services firms follow one of two options in managing the complexity and the risk.

The first option is ‘do it yourself’ (DIY), manually, by throwing people at the problem. While there are some good tools available, there remains a lot of manual effort involved in ‘scrubbing’ data. According to CityIQ, the average corporate action team size is currently 21 full-time employees (FTEs) up from 15, five years ago. These are average figures, and the actual numbers vary by client type: custodians have teams of 40 or more, while investment managers may have fewer than ten.

To compound the issue, the skill set needed is very specialised. Projects and systems can support data normalisation and data distribution within a firm, but highly specialised operations resources are still needed to perform various tasks, from data scrubbing, through to management of the election process. Getting hold of good, ‘clean’ data that is comprehensive is very challenging, and the skill set needed to manage this process is very specific and very deep.

The second option is to ‘outsource’ the effort to a specialist firm. For announcement capture, where ‘golden copy’ data is ‘scrubbed’ from numerous sources, there are a couple of choices: either Fidelity Actions Xchange (FAX) or the Global Corporate Action Validation Service (GCA VS) from the DTCC. Outsourcing can offer a solution that manages risk by providing good, clean data, and also allows firms to reassign their resources.

Whichever of these two routes is taken, the risk should be managed between the ‘providing’ and ‘consuming’ parties, by following a few best practices, as follows.

- (i) Ensure coverage/timeliness/accuracy adequacy through a contractual service level agreement (SLA) with the provider — for example, specifying the need for the ‘golden copy’ to be finalised by market announcement date + 24 hours.
- (ii) Ensure a ‘fit-for-purpose’ footprint, depending on portfolio requirements — for example, tailor support according to global vs domestic coverage, which may raise the need for 24-hour coverage, local market knowledge and regional languages.
- (iii) Ensure that the consumer has a voice and that there is long-term commitment to enhancements through funding, because requirements will shift over time as trading strategies and the portfolio mix change.

The bottom line, however, is that manual cleansing only masks the underlying issues and allows a firm to live, albeit uncomfortably, with the problem — it does not solve it.

TO SOLVE THE PROBLEM, WE NEED TO GET OUT OF THE DARK AGES

The ultimate source of all corporate action announcements is the issuer, or the issuer’s agent. For the US market, as well as many others, the issuer has an obligation to disseminate the corporate action information to the marketplace. Typically, this is done by sending out a physical press release, prospectus or legal filing. These physical documents describe, in words, the underlying details of the corporate action announcement. They are written

in free text, without recourse to formal standards or market practice, and without the data elements being ‘fielded’.

These practices have evolved organically over many years. Considering that a prospectus can easily be 300 or 400 pages long, it is clear that these practices are inefficient, lack scale and propagate errors, because they create the need for manual effort before the underlying data can be utilised. This paper trail is the originating source of corporate actions risk, and this needs to be fixed. We need to ‘get out of the Dark Ages’.

The good news is that these inefficiencies and risks are recognised, and that there are (many) recommendations from various industry groups and institutions, such as SMPG, SIFMA, European Commission’s Clearing and Settlement Advisory and Monitoring Expert Group (CESAME), the G30 Report, the Giovannini Group, the European System of Central Banks (ESCB), the Committee of European Securities Regulators (CESR), the European Central Securities Depositories Association (ECSDA), the ISITC and others.

The bad news is that these recommendations have not been completely coordinated, and that no single firm, or group of firms, has the clout to actually fix the issue and enforce a solution — that is, until now.

It is becoming apparent that the USA — the largest market in the world — is building a three-step roadmap that will actually solve the issue, once and for all.

THE STP ROADMAP

Step 1: Drive global standards

The Society for Worldwide Interbank Financial Telecommunications (SWIFT), acting on behalf of the ISO, has long

been the primary industry organisation that has driven corporate action standards — firstly, with ISO 7775 messages, and now with the more comprehensive and flexible ISO 15022 data dictionary.

Acting in partnership with SWIFT in pursuing the adoption and enhancement of ISO 15022, we have seen the growth of market practice groups — for example, the US ISITC — which bring representatives of the financial services markets to the standards table.

Certainly, it has taken a few years for ISO 15022 to become a true global standard, because it has had to overcome the complexities of market variance and lack of processing compatibility, even within a single market. The standard has been enhanced by the market practice groups, through work on the event interpretation grid (EIG) and the global market practice guides.

It can be argued, however, that ISO 15022, in its present form, is a good start, but neither covers all of the corporate action event types, nor all of the necessary data elements for an event to be considered ‘complete’. It can be estimated that it perhaps completes around 70 per cent of the necessary process.

In addition, the current standard could be considered as ‘too flexible’. For example, experience shows that the third largest (by volume) event type received by the DTCC from the 150 custodians and subcustodians delivering data is ‘OTHR’ (that is, ‘other’). This classification, although perfectly valid according to the standard, means that the event has to be manually reviewed as reclassified with the correct event type. The inherent flexibility of the current standard has led to a degree of exploitation, which, in turn, causes inefficiency and unnecessary manual effort.

In order for the future standard to be global, all-encompassing and holistic, at

least 200 data elements would need to be added — for example, separating the same information provided by the issuer, depository, exchange or asset servicer — and there are some structural, or level, changes that should be considered — for example, how to present different dividend withholding address tax rates effectively. Both of these changes would ensure that the underlying data model better represents what happens in the real world.

The good news here is that various industry organisations such as SMPG, SWIFT Standards, international central securities depositories (CSDs), ISITC, SIFMA, and a number of key global custodians and broker-dealers are already actively working with the ISO to enhance ISO standards ahead of the implementation of ISO 20022 ‘Corporate Action Messages’ and the subsequent, date to be determined, removal of ISO 15022.

The aim is that ISO 20022 will be the holistic, global standard data model that will permit messages to be created based upon a common data dictionary that covers not only corporate actions, but also all other data elements used within the financial securities industry. Euroclear has already led corporate action development with new ISO 20022 messages that focus upon the communication between issuer agents and CSDs. SWIFT Standards is currently developing new ISO 20022 corporate action messages based upon the current ISO 15022 standard message suite of MT564-8.

Of most importance is clear understanding of what lies ahead during the phase known as ‘ISO 15022/20022 coexistence’. The initial release of ISO 20022 corporate action messages introduces XML messages that sit alongside the current ISO15022 syntax. Working under industry demand to neither (i) enforce a new message standard under a ‘big bang’ approach, and (ii) con-

tinue ISO 15022 for some time to ensure return on investment (ROI) for existing ISO 15022 adoption, any enhancement to ISO 20022 will require a corresponding enhancement⁹ in ISO 15022. Such considerations limit the ability to a wholesale redesign of the corporate action standard.

It is, however, possible to end on a positive note: during the coexistence phase, there is a golden opportunity truly to tackle the deficiencies of ISO 15022 and to ensure the creation of a business model that is not only supported by the current users of ISO 15022, but also incorporates the needs of issuers,¹⁰ amongst others. Then, at an appropriate time in the future, after ISO 15022, it will be possible to implement the new model, which should bring the industry closer to a complete STP solution — that is, a new model that clearly articulates information required based upon event type, market and security type, while recognising the source of each data element and even in what capacity the message sender is acting (issuer, agent, CSD, account servicer, even data vendor).

Step 2: Force standards usage for the consumers via the infrastructure providers

Having a global, holistic standard as the ‘next generation’ is a critical first step, but alone it does not solve the issue.

Financial services companies that undertake asset servicing functions and ‘consume’ corporate action data all need to process the announcements — that is, to manage elections, entitlements and payments — using standards as a natural part of the day-to-day activity, otherwise the standard is ineffectual.

To this end, in the USA, the DTCC is undertaking its ‘corporate actions re-engineering’ initiative. This is a major, multi-year project to rewrite all of DTCC’s corporate action systems, cover-

ing announcements, through elections, to payments. Initially, the new system will create corporate action announcements in both ISO and XML formats, with the aim of migrating to ISO 20022 when the new standard becomes available. Announcements will continue to be published in legacy formats, which are not ISO-compliant, for a number of years after the project goes live, but will eventually be decommissioned.

In addition, the initiative will tag each announcement with a unique corporate action identifier. This identifier will act in the same way that static security data is referenced — for example, via the International Securities Identification Number (ISIN), Stock Exchange Daily Official List (SEDOL) number or Committee on Uniform Security Identification Procedures (CUSIP) number — and will be invaluable in correctly distinguishing and identifying between corporate actions.

These changes are important, because they ensure that all of DTCC's participant clients — essentially, all of the North American market — will actively adopt and use industry standards. Usage for the consuming firms will be forced.

Similarly, there are other initiatives from other infrastructure providers that will force global adoption of standards: ISO 20022, the 'target' standard for SWIFT Standards corporate action messages, and Euroclear's 'Issuer/Agent to Central Security Depository (CSD)' message suite.

Step 3: Force standards usage for the issuers

Within the USA the regulatory body, the SEC, is charged with '*enforcing the delivery of meaningful, accurate, timely, easy-to-use data*' for the entire financial services industry.

At a higher level than that of corporate actions, in May 2008, the SEC undertook

a rule filing for the top 500 companies in the USA to 'field' and 'electronically tag' all data elements within Generally Accepted Accounting Practices (GAAP) financial reports, using XBRL. The expectation is that this becomes mandatory for all companies by the end of 2010.

Given the current state of the financial services industry and the growing need to manage down risk/costs in lieu of greater transparency, the SEC is turning its attention towards one of the largest risk areas remaining in the industry — that is, corporate actions. To that end, the DTCC, XBRL Consortium, SWIFT Standards and representatives from the industry are starting to work together ultimately to mandate issuers to 'field' electronically all corporate actions data within the press release, prospectus or filing, aligned to the ISO standard and using the XBRL technology.

It is expected that 'plug-in' extensions will be available for Microsoft Word, and other word processors, which will enable 'XBRL for corporate actions'. The issuer, agent or publisher will simply highlight and tag all relevant data elements within MS Word as they are writing the press release or prospectus. The electronically tagged data elements are stored as machine-readable fields when the document is saved as a PDF document, and these data elements can easily be extracted when the document is 'read'.

As well as the issuers, the initiative will be applied to other players that provide corporate actions data — for example, the ex-date from the local exchange, or the many 'processing' data elements, such as trading 'chill dates', from the local depository.

When achieved, XBRL will ensure that all US corporate action announcements are sourced directly from the source, in machine-readable format, according to the industry standard.

Table 1 The STP roadmap

<i>Problem</i>	<i>Solution</i>	<i>Addressed within Step</i>
1 No defined list of events upon which we can all agree upon	Drive global standards	1
2 No definitive list of security types and associated corporate actions	Drive global standards	1
3 Market variance complicates the standardisation of an event	Drive global standards	1
4 Investor restrictions place additional processing requirements on an event	Force standards on issuer	3
5 What data elements constitute an event and who is the 'owner' of the data element?	Drive global standards	1
6 Information is disseminated in non-standard flows and in non-standard format/content	Force standards on the issuer and market infrastructures	2 and 3
7 A patchwork of regulations, market practice and processes	Drive global standards and force standards on the issuer and market infrastructures	1, 2 and 3

Outside of the USA, there are already pockets of activity. For example, China is forging ahead with XBRL, with the creation of a corporate actions taxonomy for five event types. Assuming success with the SEC for the US market, it is likely that XBRL will work with the regulators, banks, stock exchanges and industry bodies within the local markets to seek local enforcement, using the US experience as the template.

CONCLUSION

Collectively, these three steps are the light at the end of the corporate actions tunnel. Although implementation is still several years away, the roadmap is set, see Table 1, and it will fundamentally change the corporate action industry.

Circling back to the list of seven problems raised, the three steps within the roadmap will address each concern resulting in (very) high STP rates, a lower rate of manual exceptions and lower risk for the industry.

POSTSCRIPT

While the focus of this paper has been on corporate action announcements, it is worth noting that progress is being made on elections processing. A common complaint raised is the lack of a standard approach to how, for those events that require an election by the investor, asset managers can provide the same response to each custodian when the custodians may number the options differently. An initial attempt to solve this conundrum failed, but a new approach of identifying options uniquely by their attributes may well provide a solution. Perhaps a subject for future thought is whether or not the election process itself needs to be enhanced to cover any gaps in the flow of information back to the issuer.

REFERENCES

- (1) CAEV values, which is defined as 'Specifies the type of corporate event' (see <http://www.iso15022.org>).
- (2) Investors may circumvent the

- restrictions if they can prove or attest to being a sophisticated or accredited investor.
- (3) See <http://www.sec.gov/edgar/aboutedgar.htm>.
 - (4) 'Corporate actions' covers such events as dividends, tenders, mergers, bond redemptions and stock splits.
 - (5) 'Issuer' applies to public companies issuing securities (equity or debt), but can also apply to municipalities and government agencies.
 - (6) ECSA (European Credit Sector Association) (2007) *Securities Clearing and Settlement, Harmonisation of Corporate Actions Processing in Europe: Giovannini Barrier 3, 30 April*, available online at: http://www.esbg.eu/uploadedFiles/Position_papers/Harmonisation%20of%20Corporate%20Actions%20Processing%20in%20Europe%20Giovannini%20Barrier%203.pdf (accessed June 2009).
 - (7) The Group of 30 is a private, non-profit, international body composed of very senior representatives of the private and public sectors and academia (see <http://www.group30.org>).
 - (8) G30 (2003) *Recommendation 8: Global Clearing and Settlement — A Plan of Action*, January, available online at http://www.issanet.org/html/g30_rec8.html.
 - (9) Although the working premise is that ISO 15022 and ISO 20022 should provide the same content, there may be cases in which information will only be available in the ISO 20002 messages.
 - (10) The Euroclear-driven issuer agent messages serve an important need, especially from the processing of a corporate action perspective, but it remains necessary to drive further up the chain to the issuing community directly.