Dear ISSA Members and interested parties,

First of all, the ISSA Board and the CEO Office thank our members for their continued commitment to support our activities. Beyond the financial contribution we can count on a high number of professional experts who bring their knowhow into the Working Groups. We are also very grateful for an increased member involvement across geographic regions and along the value chain.

In February 2017 the Closed User Group (CUG) section went live successfully on our homepage for exclusive use by our membership. The CEO Office encourages its member institutions to broaden the CUG access within their organizations. The CUG provides access to various ISSA corporate documents and publications, such as the recently released report on Custody Risk. We are very pleased to note that several non-member institutions have indicated their interest to receive this particular report. We therefore deem it the right time for organizations to evaluate an ISSA membership and to take advantage from various benefits. In addition to having access to all of our reports and detailed membership information, a member enjoys the unique opportunity to influence future solutions by participating in working groups and benefits from various networking possibilities.

In this Newsletter you will find four special contributions. Tom Casteleyn, BNY Mellon and ISSA Board Member, shares with you his views about Corporate Actions Processing providing the potential for a typical industry utility. Dmitry Ivanov, Secretary AECSD, gives an introduction to this regional CSD organization. Karen Webb, Australian Securities Exchange, is talking about ASX’s transformation of Corporate Action Announcements and their Adoption of ISO 20022. And finally, Stephan Wolf, CEO Global Legal Entity Identifier Foundation, is exploring how the LEI Index can support organizations to make decisions about who to do business with.

In our July Newsletter we will be happy to inform about relevant discussion items and decisions taken by the ISSA Operating Committee and the Board.

With best regards – ISSA CEO Office
An Industry Utility for Corporate Actions Processing

Corporate actions are an integral part of the capital markets industry. Their current processing is complex and involves many industry inefficiencies.

First, there are a large number of market participants and intermediaries – from the issuer and its agent, to the data vendors, (International) Central Securities Depositories (CSDs), custodians, tax agents, asset managers, broker / dealers, banks and final investors. This results in a large volume of instructions and various information flows for each action. The information on the corporate actions themselves usually reaches investors and their intermediaries through various channels. Each party in the chain is responsible to get the information right. Therefore, inconsistencies between various sources need to be cross-checked.

Second, the processing of corporate actions is highly manual and involves many duplicated activities across the intermediary chain and the full process flow – from data scrubbing, to the identification of eligible accounts and clients, notification of clients, calculation of entitlement, process of client instruction, and the calculation and settlement of proceeds, taxes and fees. In addition, a large proportion of the process still involves faxes and unformatted emails.

Finally, there is lack of common industry standards. There are no standards on event announcement, no standard methods to send market instructions, and no universally accepted single securities identification system. There are differences in the processing details and terminology depending on particular market or financial instrument. There are also national differences in rules and practices governing corporate actions (e.g. European and Asia-Pacific markets).

These industry inefficiencies in corporate actions processing result in increased risks (operational, financial, market and reputational risk) and processing costs for market participants. An industry utility pooling some parts of the corporate action processing could address those industry inefficiencies by bringing multiple benefits to market participants, and reduce the associated risks and costs. An industry utility can be defined as a user owned and governed entity established by a variety of industry participants to create efficiencies by collectively performing a set of non-differentiating functions such as technology and operational activities, that were previously managed by financial institutions individually and that are similar across the member companies.

A utility for the processing of corporate actions could offer a number of benefits to

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Governance Update

We are pleased to inform about the following changes in the ISSA Board and the ISSA Operating Committee:

**Change in the ISSA Board**

In March 2017 Colin Brooks replaced Alan Naughton as ISSA Board Member representing Standard Chartered Bank.

**Change in the Operating Committee**

In January 2017 Andrew Smith was appointed as BNY Mellon’s new representative succeeding James Greig.

**New Member**

In January 2017 Société Générale Paris, Zurich Office, Switzerland, joined ISSA.

We welcome this organisation and are looking forward to a mutually fruitful relationship.

Tom Casteleyn
Head of Product Management for Custody, Cash & Foreign Exchange, Asset Servicing, BNY Mellon / ISSA Board Member
user institutions, including:
- Cost reduction through economies of scale and mutualization of expertise
- Process standardization
- Risk reduction
- Better cost management

Three potential levels of a utility solution for the processing of corporate actions can be distinguished depending on the activities mutualized and the information and data access required (for illustration see the chart overleaf):

- The first and simplest level of the utility solution would only mutualize data scrubbing across market participants, a highly duplicative, non-core and non-differentiating activity. This level does not require access to custodians’ data.
- The second level would mutualize (International) CSDs' and custodians’ activities. It would require the utility to get access to client positions and client information data from participating custodians and CSDs.
- The third and final level would mutualize beneficial owners’ activities and would require the utility to get access to client positions and client information data from participating beneficial owners.

Although a utility solution could offer significant benefits to user institutions, there are still challenges in the creation of a true utility for corporate action processing. These include:

- Definition of a target operating model capable to support multiple banks with unique business, technology and operational requirements, and specifying governance, ownership, pricing models, contract terms and service-level agreements.
- Definition of a viable technology solution to support multiple banks with unique requirements, and time and costs required to re-architect banks’ proprietary platforms to create the basis for the utility.
- Agreement on banks’ liability in case of processing failure.
- Regulatory compliance and support for regulatory reporting and supervision of each individual bank.
- Ability to segregate and secure data.
- Lack of awareness and resistance to change of some financial institutions.

In conclusion, a utility solution for the processing of corporate actions has the potential to significantly streamline how operations are carried out, eliminate most redundant activities, and reduce risks and processing costs. Despite the fact that there are still implementation challenges, uptake of the utility solution will likely be driven by the growing realization by market participants of the potential benefits of utilities, and the increasing pressures to cut costs and boost profitability.

The utility should be initiated by a small group of large-scale banks under a commercially oriented model with outcome-based service-level agreements. The level of mutualization of activities will determine the access required by the utility to the data of the participating institutions.

Blockchain and Distributed Ledger Technology (DLT) could offer another avenue to streamline the corporate actions processing with their potential to create trust in a disseminated system, reduce or eliminate manual effort required to manipulate and scrub data, diffuse trusted information in close-to-real-time across multiple parties and create data traceability and audit trail. Utilities and DLT should not be seen as opposing solutions. Rather they should be considered as complementary as a utility for corporate actions processing could be built using components of DLT, thereby leveraging the potential benefits of the technology and contributing to its wider adoption in the capital markets industry.

Note: The chart overleaf shows the main participants (horizontal) and activities (vertical) in the processing of corporate actions for mandatory and choice events. Activities are ordered according to the logical process flow. Check marks indicate which participants normally perform the activity. Colored and circled areas indicate the three potential levels of the utility.
Three Potential Levels of a Utility Solution for the Processing of Corporate Actions

<table>
<thead>
<tr>
<th>Activity</th>
<th>Issuer</th>
<th>Issuer Agent</th>
<th>Data Vendor</th>
<th>gCSD</th>
<th>Local Custodian</th>
<th>Global Custodian</th>
<th>Tax Agent</th>
<th>Asset Manager</th>
<th>Broker</th>
<th>Dealer</th>
<th>Bank</th>
<th>Investor</th>
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<tbody>
<tr>
<td>Create event</td>
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<td>Scrub data</td>
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<td>Identify eligible accounts &amp; clients</td>
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<td>Notify clients</td>
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<td>Calculate entitlement</td>
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<td>Make decision on CA and send instruction</td>
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<td>Process client instructions</td>
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<tr>
<td>Calculate &amp; settle proceeds</td>
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<tr>
<td>Calculate &amp; settle fees and taxes</td>
<td>✔</td>
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<tr>
<td>Reporting</td>
<td>✔</td>
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</table>

1. Simplest utility model. Mutalitize data scrubbing only, a highly duplicative, non-core and non-differentiating activity. Does not require access to custodian data.

2. Mutualize gCSD and custodians activities. Requires access to client positions and client information data from participating custodians.

3. Mutualize beneficial owners' activities. Requires access to client positions and client information data from participating beneficial owners.

AECSD – A Snapshot

The Association of Eurasian Central Securities Depositories (AECSD) unites the central securities depositories of the Eurasian region. The AECSD was established in Moscow in 2004 at an international conference of the CIS countries’ central depositories. At a later stage, CSDs of Turkey, India and South Korea joined the AECSD.

As of March 2017, the AECSD consisted of 16 CSD members from 14 countries and five financial institutions hold observer status. The Association’s mission is to develop and enhance depository activities and to support the unification of standards and technologies in order to help AECSD members to become part of the global settlement infrastructure.

The main objective of the Association is to establish a common depository environment, which can be achieved by harmonization of the regulatory framework for depository activity, relevant rules and standards, development of electronic data interchange and establishment of depository links among the members to support cross-border securities transactions.

In 2015 the AECSD defined three main work streams: Common legal aspects of CSD activities and development of relevant legislation; central securities depository’s business activities; and presenting the AECSD to the global securities market community. Among other things, these work streams ensure regular exchange of information on securities markets events and forthcoming infrastructure changes in member countries. They also facilitate discussions regarding harmonization of processes and formats, as well as implementation of best practices relevant to all aspects of CSD business.

AECSD takes a proactive part in initiatives of the World Forum of CSDs – sharing experience and exchanging opinions, coordinating industry initiatives and participating in a dialogue with regulators and other organizations globally. AECSD’s participation in the WFC Single Disclosure Project, as well as its support and development of the new E-learning application, are recent notable examples of the Association’s active participation.

Dmitry Ivanov, Secretary AECSD
ASX’s Transformation of Corporate Action Announcements and Adoption of ISO 20022

The Australian Securities Exchange (ASX) is focused on improving processes to increase efficiencies and reduce risks and costs for its customers. A key to this initiative is the adoption of global standards to complement or replace long-standing proprietary protocols unique to Australia.

In 2014, ASX introduced an enhanced corporate action notification service that was developed in consultation with regulators, issuers and information consumers including custodians, market participants and investors. The old and largely manual processes were replaced by straight through processing (STP), providing a more timely, informative and standardized notification service. Issuers are now mandated by the ASX Listing Rules to announce certain events to the market by completing new online 'smart forms'. The smart forms have many features, including pre-population of known data and validation of issuer input to ensure the announcement is compliant with rules and standards.

An equivalent PDF announcement is generated from the smart form and once this PDF is released to market, the data from the form is automatically captured in ASX systems. This creates or updates corporate action records and provides STP to existing ASX reference data products and to a near real-time ISO 20022 notification service. A rich and accurate ISO 20022 format notification direct from the source is now delivered to a customer in less than 10 seconds from the announcement to market. The implementation of this service is phased, with approximately 70% of current corporate action volume fully STP’d.

ASX has also commenced work on the replacement of its CHESS equity post-trade system that manages clearing, settlement and asset / holder registration. CHESS introduced dematerialized name on register holdings and rich post-trade functionality in Australia in the 1990s, with transaction processing based on proprietary messaging protocols. As part of the system replacement, ASX will adopt ISO 20022 as the messaging standard. The adoption aims to reduce the number of specified CHESS messages from 500+ to less than 150 unique ISO 20022 messages. The adoption of ISO 20022 for corporate action notifications and post-trade processing may stimulate even further operational efficiencies for ASX and its customers in the future.

The LEI Test

The Global Legal Entity Identifier (LEI) Index can help organizations make smarter, less costly and more reliable decisions about who to do business with.

The 2008 financial crisis, and more recently, the OECD’s tax / benefit decision, have meant that governments and companies alike are under increased pressure to become more transparent about corporate entities. Yet, simply gathering large volumes of data to comply with regulation will not suffice. As stated by a Financial Times article in July 2016, what is needed is “a way for analysts to track the connections that exist between companies scattered across different national jurisdictions”. To date, related information is very difficult to trace as regards cross-border corporate structures. No mean feat you might say. After all, there are thousands upon thousands of companies listed on global stock exchanges and millions of others listed on national registries. The latter group presents more of...
a problem since registries are extremely disjointed.

In financial markets, the word transparency is nearly always equated with information disclosure. The trouble is that up until now, legal entity reference data has been proprietary, siloed and non-standardized. Put simply, organizations across the globe are in dire need of a solution. Not only to keep on the right side of the regulators, but also to be able to make smarter, less costly and more reliable decisions about who to do business with.

So, what’s the solution?
The good news is, there is one and progress is already well under-way to unlocking it. It exists in the form of a Global Legal Entity Identifier (LEI) Index. As a result of services offered by the Global Legal Entity Identifier Foundation (GLEIF), this is a free online source that provides open, standardized and high quality legal entity reference data with the potential to capture any entity engaging in financial transactions globally.

The reference data represents the information on a legal entity identifiable with an LEI. The LEI itself is a 20-digit, alphanumeric code based on the ISO 17442 standard developed by the International Organization for Standardization. It connects to key reference information that enables clear and unique identification of legal entities participating in financial transactions.

Why the continued focus on quality?
Without continually optimizing the quality of the LEI data pool, however, the entire system would become perfunctory. And it’s one of our core responsibilities at GLEIF to keep on top of this. In partnership with the LEI-issuing organizations, we provide in-depth knowledge of local markets and can be relied on to make available the correct information year after year. To clarify the concept of data quality with regard to the LEI population, GLEIF has defined a set of measurable quality criteria using standards developed by ISO. These can be summarized as follows:

- Monthly data quality reports
  Since February 2016, GLEIF has been publishing monthly data quality reports, which summarize the results of its assessment of the level of data quality in the Global LEI System, based on a set of clearly defined quality criteria. Going forward, the GLEIF data quality management program will continue to evolve by gradually implementing previously defined quality criteria and corresponding controls.

- A central challenge facility
  This extends the ability to trigger updates of LEI data to all interested parties.

- A central duplicate check facility
  This is to help the LEI issuers to ensure that any organization, which has applied for an LEI, has only one LEI and that any LEI code is only issued once.

- Data on who owns whom
  Starting in May 2017, GLEIF will publish relationship data, which allows the identification of direct and ultimate parents of a legal entity and, vice versa, so that the entities owned by individual companies can be researched. By publishing data clarifying who owns whom, GLEIF will provide a unique and free data source that allows corporate dots to be connected globally based on open, standardized and high quality LEI data.

- Data on who owns what
  In cooperation with the Registration Authorities, i.e. SWIFT for the ISO BIC 3166 standard and ANNA for the ISO ISIN 6166 standard, GLEIF is preparing to deliver LEI-to-BIC and LEI-to-ISIN mapping services, respectively.

Progress made to date
As of April 2017, more than 500,000 LEIs have been issued globally to entities based primarily in the U.S. and Europe where regulations require the use of LEIs to uniquely identify counterparties to transactions in regulatory reporting.

The LEI Regulatory Oversight Committee (LEI ROC) concluded that for the regulatory
reporting on some corporate actions and for funds, important enhancements of the LEI system are necessary and issued a public consultation on 16 March 2017. GLEIF cooperates with the LEI ROC on how the implementation of this public policy could best be included in the GLEIF services. GLEIF is backed and overseen by the LEI ROC, representing public authorities from around the globe that have come together to jointly drive forward transparency within the global financial markets.

We expect that by 2020 we will look at a global LEI population of about 1.5 million as a result of regulation. Today, public authorities in many jurisdictions rely on the LEI to evaluate risks, conduct market surveillance and take corrective steps, if required.

We believe that the Global LEI System has the potential to generate significant advantages not only in the regulatory space, but also for private organizations. Businesses across the globe to date are grappling with how to develop and implement a common entity identification system that could serve as a linchpin to identify financial market participants and connect data. Gathering and maintaining related data requires replicating efforts across the market tying up resources that could be spent more productively elsewhere.

Taking advantage of the Global LEI Index will empower organizations across the board to cut costs, simplify and accelerate operations and gain deeper insight into the global market place. The benefits for the wider business community to be generated with the Global LEI Index could grow in line with the rate of LEI adoption. So, our message to businesses around the globe is this: Get an LEI and make it work for you.

We can’t offer a complete solution to the issue of transparency just yet but we are consistently moving closer as the use of the LEI becomes more widespread. To accelerate progress, we must foster greater coherence and collaboration to promote the increased adoption and implementation of shared open data principles, standards and good practice around the world. We will continue to focus, in cooperation with our partners in the Global LEI System, on further optimizing the quality, reliability and usability of LEI data, empowering market participants to benefit from the wealth of information available with the LEI population.

The LEI is the linchpin that connects the dots across the universe of entity identification in the digital age. We’re calling on private and public sector organizations across the globe to consider the benefits of having an LEI and take full advantage of what’s on offer.