Post Trade Corporate Action Message Standardisation (CAMS) Service Description

Contents

1. Introduction

In today's Hong Kong equities market, listed issuers disseminate corporate action (CA) event information in an unstructured PDF format that is published through the HKEXnews website. Market participants such as CCASS participants, financial intermediaries and investors largely interpret this bulk of unstructured and nonstandardised information manually. Such processes naturally result in significant and unnecessary delays, risks and costs.

1.1 Post Trade Corporate Action Message Standardisation (CAMS)

With the structure offered by the standardised messaging format of SWIFT's ISO 15022 and ISO 20022, Hong Kong Exchanges and Clearing Limited (HKEX) is launching the Corporate Action Message Standardisation (CAMS) service, enabling market participants to increase their Straight Through Processing (STP) rate when handling CA event information in the Hong Kong equities market. This solution aims to standardise and streamline the existing processes, and maximise efficiency for market participants.

The CAMS service is an optional service and the existing HKEXnews distribution channel will remain unchanged.

1.2 This document

This service description follows an extensive engagement exercise with market participants that sought to:

- Confirm our understanding of the industry's pain points;
- Propose a solution and seek feedback on its viability and value; and
- Ensure the proposed solution addresses the core issues for our participants.

The CAMS service workflow was designed based on the market participants' feedback throughout the years.

Some functions described in this document may be modified over the course of development and testing. We are committed to providing participants with updates in due course.

We welcome and encourage feedback, and hope this document enables participants to assess the impact to the operations and systems of their business.

2. CA event information

This section describes today's CA event dissemination process and areas of inefficiency that the CAMS service can improve.

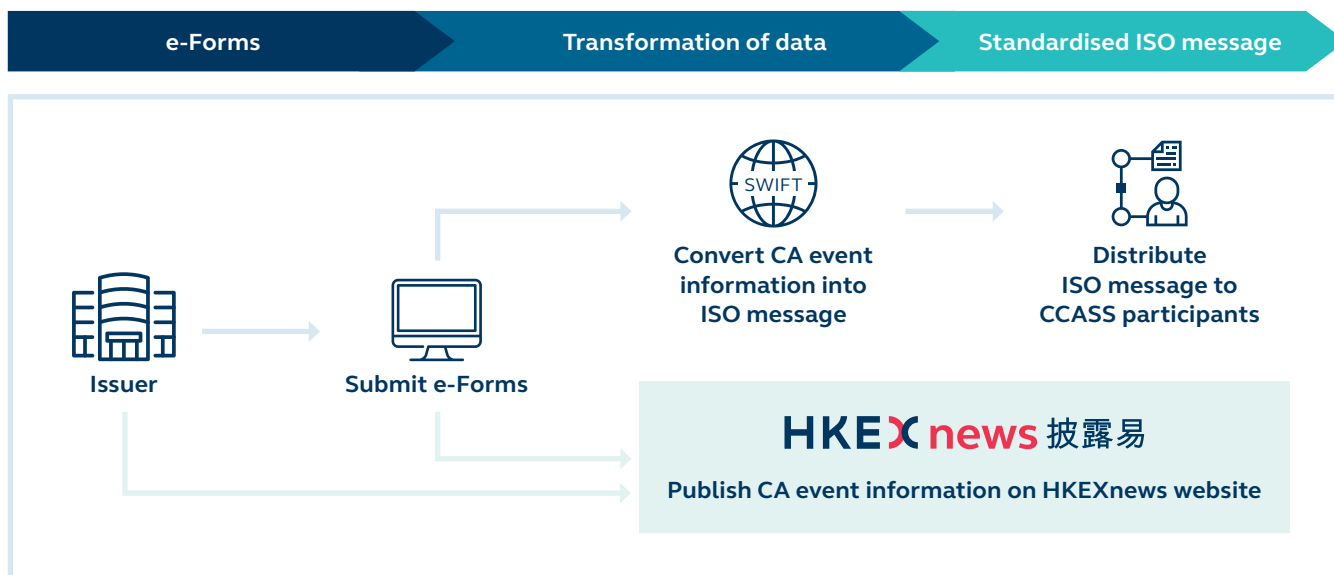## 2.1 CA event information processing – Current state

2.2 CA event information processing – Key pain points

|	
Potential for information misinterpretation	CA event information is currently disseminated by the issuer in an unstructured format, which may lead to ambiguities and misinterpretation when extracting information.
Processing times	The current process remains unstructured due to the nature of the data, which may extend processing times and cause delays in reporting.
Data accuracy	Processing non-standardised CA event information naturally increases the risk of errors.
Operational effort	Data extraction and processing of CA event information largely involve manual work. With the number of listed companies steadily growing, the associated increased volumes of CA events will only incur higher operational costs and efforts in the future.

2.3 CA event information processing – CAMS service model

e-Forms → Transformation of data → Standardised ISO message

Issuer → Submit e-Forms

Convert CA event information into ISO message

Distribute ISO message to CCASS participants

HKEX news 披露易

Publish CA event information on HKEXnews website

2.3.1 CAMS service overview

The objective of the CAMS service is to standardise CA event information, with a focus on the vast majority of CA event types, to improve downstream processing efficiencies.

2.3.2 CAMS workflow and high level service scope

e-Forms

ISO message distribution

Subscription maintenance
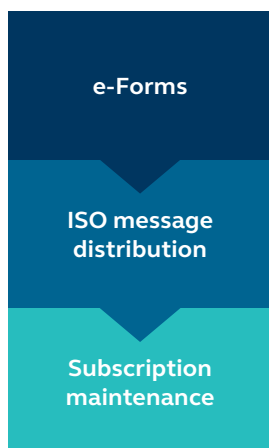
1. Issuers will submit an e-Form for the CA event for creation, update or withdrawal.

2. The e-Forms will be published in PDF format on the HKEXnews website.

3. The completed e-Forms will be converted into ISO messages using ISO 15022 and/or ISO 20022 standards, according to the SWIFT ISO mapping requirements and standards.

4. Upon generation, the ISO messages will be distributed immediately to subscribers via the SWIFT network. The conversion and distribution of ISO message will be in real-time.

5. CCASS participants can manage the CAMS service via a CCASS/3 Terminal (C3T).

6. CCASS participants can view the CAMS service subscription activities in a new CCASS report "ISO Messages Service Subscription Audit Trail Report".

7. CCASS participants can view the monthly CAMS service subscription fee in a new CCASS report "Corporate Action ISO Message Service Monthly Billing Report".

2.3.3 CAMS value proposition

Real-time information	CAMS offers real-time and comprehensive CA event information.
Standardisation	CA event messages will be compliant with ISO 15022 and/or ISO 20022, giving subscribers the option to select their suitable messaging standard. The CAMS service allows for the dissemination of structured CA event information directly from issuers without manual intervention.
Efficiency	By increasing the STP rate for CA event information processing, this will improve downstream efficiency and result in related cost savings. The CAMS service will cover the CA event types that account for the majority of CA volumes.
Risk reduction	Operational risk will be reduced, as CA event information is effectively received directly from issuers. Without the need for manually interpreting CA data, the risk of judgement or human error is also reduced.

3. Business features

3.1 CAMS onboarding

In order to receive CA event ISO messages via SWIFT, CCASS participants will need to subscribe to the CAMS service via a new online function in C3T. The subscription process follows 4-eyes (maker-checker) authorisation principles.

To subscribe, CCASS participants will provide the following:

- BIC code
- SWIFT addressing DN[1]
- Target effective date of new subscription
- Cash dividend and bonus issue - ISO standard 15022 and/or 20022 preference selection
- Interest payment - ISO standard 15022 and/or 20022 preference selection
- Meeting notification - ISO standard 20022 selection

CCASS participants may choose to select and receive specific corporate action announcements that are available through the CAMS service. For the list of CA event types covered, please refer to Section 3.2.

Upon receipt of the subscription request, HKSCC will review the input and perform the necessary SWIFT setup. For the maker-checker process, please refer to the diagram in Sections 4.1 and 4.2.

CCASS participants can change or delete the subscription before the subscription is authorised.

Note 1: SWIFT addressing DN is the Distinguished Name that is at the top of a SWIFT user's addressing tree contains the BIC of that user. SWIFT Address DN is required for receiving ISO-20022 messages.

3.2 Scope of CA event information for CAMS service

Upon completion of SWIFT setup, CCASS participants are able to receive ISO SWIFT messages once an issuer creates, updates or withdraws the CA event information.

CA event types covered by the CAMS service include:

- Cash dividend
- Cash dividend with currency option
- Cash dividend with scrip option
- Cash dividend with currency and scrip options
- Bonus issue of shares or warrants
- Interest payment
- Meeting notification

3.3 ISO messaging standards

Below is a summary of the messaging standards available for subscribers to select based on the CA event types covered:

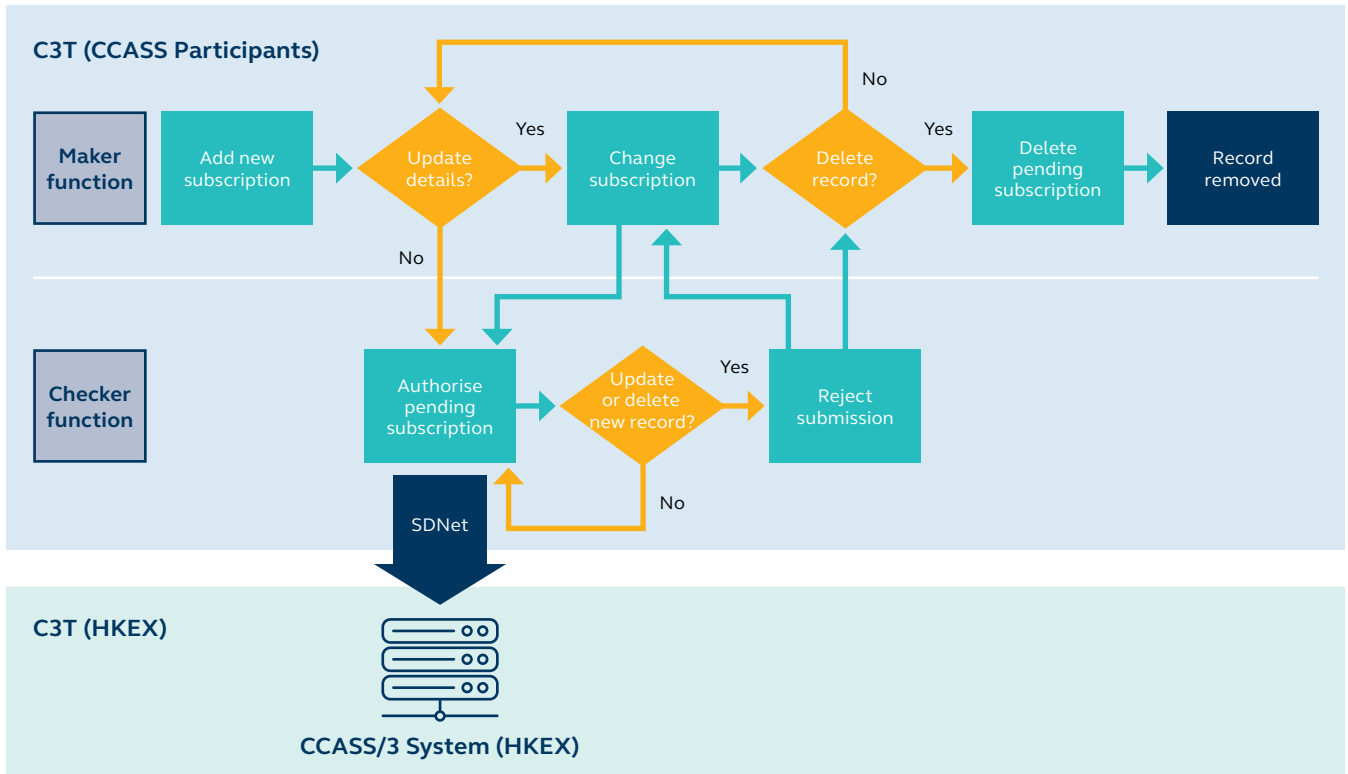| CA type	ISO 15022*	ISO 20022*
Cash dividend (including scrip and currency options)	✔	✔
Bonus issue of shares or warrants	✔	✔
Interest payment	✔	✔
Meeting notification	✘	✔

* The CAMS ISO Technical Specification document can be provided upon request. Please send us an email at the contact information found in Section 7.
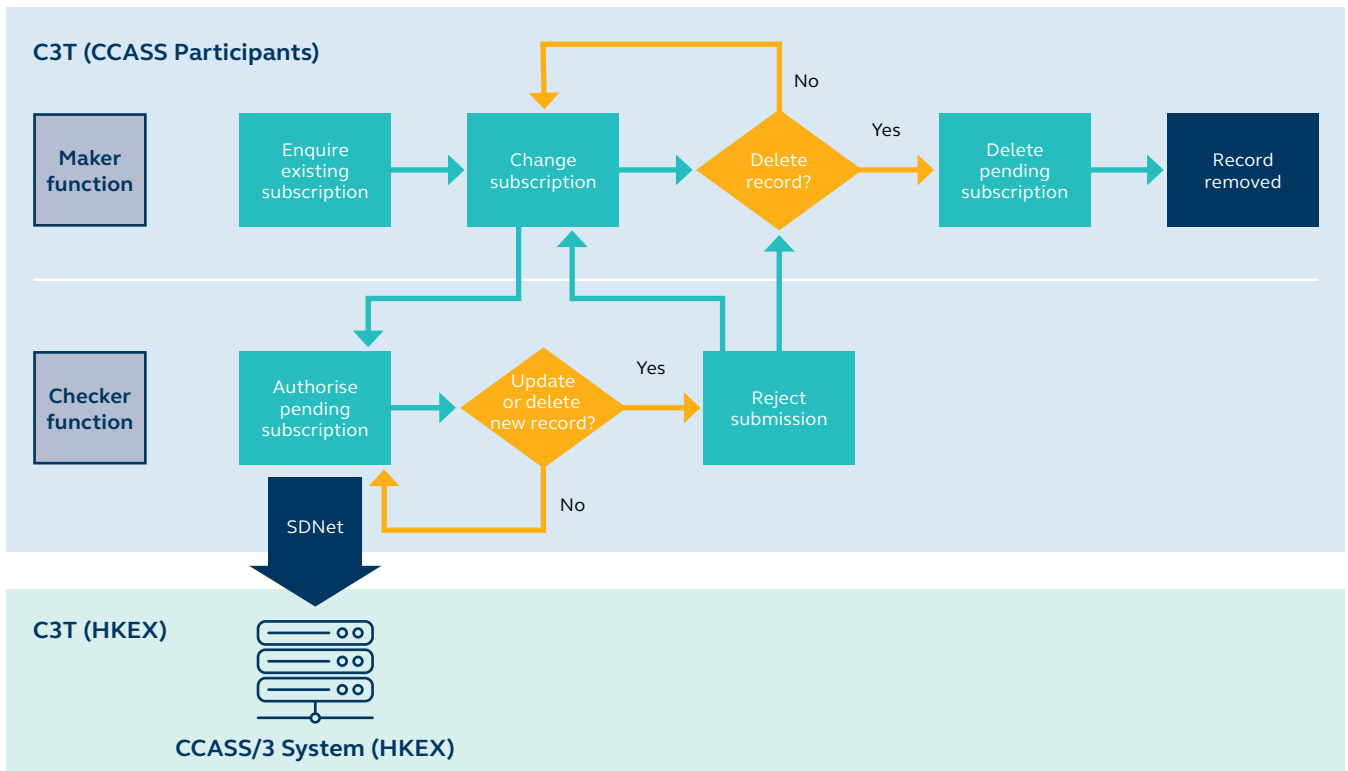
4. Technical features

4.1 Add new CAMS service subscription

The diagram below illustrates how CCASS participants add new CAMS service subscriptions utilising 4-eyes authorisation via CCASS/3 Terminal (C3T).

C3T (CCASS Participants)

Maker function → Add new subscription → Update details? — Yes → Change subscription → Delete record? — Yes → Delete pending subscription → Record removed

Update details? — No
Delete record? — No

Checker function → Authorise pending subscription → Update or delete new record? — Yes → Reject submission

Update or delete new record? — No

SDNet

C3T (HKEX)

CCASS/3 System (HKEX)

4.2 Update existing CAMS service subscription

The diagram below illustrates how CCASS participants update existing CAMS service subscriptions utilising 4-eyes authorisation via CCASS/3 Terminal (C3T).

C3T (CCASS Participants)

Maker function → Enquire existing subscription → Change subscription → Delete record? — Yes → Delete pending subscription → Record removed

Delete record? — No

Checker function → Authorise pending subscription → Update or delete new record? — Yes → Reject submission

Update or delete new record? — No

SDNet

C3T (HKEX)

CCASS/3 System (HKEX)

5. Project timeline

Updates to the schedules, testing periods and the publication of related documents will be shared in due course. Project dates are indicative and subject to change.

	Activity	Description
Aug 2020	Pilot group engagement	Invite interested CCASS participants to join the CAMS project.
Nov 2020	Pilot group kick-off meeting	Initial project documentation to be presented to the CCASS participants to cover the CAMS service workflow and technical set up.
Dec 2020	Obtain commitment from pilot group	Finalise list of CCASS participants who have committed to join the pilot group
Q1 2021	CAMS testing environment set up for the pilot group	Coordinate with the pilot group for the preparation of testing environment setup.
Late Q1 / Early Q2 2021	CAMS service connection workshop for the pilot group	Provide and prepare pre-launch service connection workshop to the pilot group
Q2 2021	Pilot group testing	Coordinate with the CCASS participants to begin pilot group testing.
Sep 2021	Production launch	CAMS services go live.

6. Document version control

Version	Updates
December 2020	First version

7. Contact details

Comments and question should be sent to the contacts below:

Email: hksccn_cams@hkex.com.hk