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Prioritised standards marked

Market Standards for Corporate Actions Processing

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Introduction

In the **Giovannini Reports** corporate actions processing is dealt with as **Barrier 3**, where, referring to the existing national differences, the operational problems are characterised by "the variety of rules, information requirements and deadlines for corporate actions. These differences may require specialised local knowledge or the lodgement of physical documents locally, and so inhibit the centralisation of securities settlement."

Corporate actions processing is deemed one of the most complex areas of post trading. Standardising these processes across all European markets, and possibly beyond, aims at achieving a significant reduction of respective costs and operational risks. To dismantle Giovannini Barrier 3, investments may be required in order to become compliant with the standards on corporate actions processing. However, upon implementation of the standards, the European securities market and its users will benefit from cost savings resulting from harmonising the processes **cross border**.

Individual work of associations contributing to the dismantling of Giovannini Barrier 3 was replaced in summer 2007 by the set up of the Corporate Actions Joint Working Group (CAJWG)¹ that encompasses the main relevant constituencies, i.e. Issuers, market infrastructures and intermediaries. The CAJWG's objective has been to develop a comprehensive set of market standards for the operational processing of all categories of corporate actions² including transaction management.

This document contains the standards developed by the CAJWG, reviewed in the 1st quarter 2009 in consideration of the responses to the market consultation of the 4th quarter 2008 and endorsed by the involved associations: EuropeanIssuers, European Central Securities Depositories Association (ECSDA), European Association of Clearing Houses (EACH), Federation of European Securities Exchanges (FESE), European Banking Federation (EBF), European Association of Cooperative Banks (EACB), European Savings Banks Group (ESBG), European Securities Services Forum (ESSF/SIFMA).

¹ See Annex 1

² Except for general meetings that is the subject of the Joint Working Group on General Meetings

The CAJWG has agreed on basic principles whereby the standards should be based on work already performed and should reflect **future best market practices** (rather than solutions currently applied in most markets) that, once implemented, should **dismantle the operational part of Barrier 3** as concerns the categories of Corporate Actions addressed.

The market standards cover the following categories of Corporate Actions (rather than individual event types) as well as transaction management:

- Distributions
 - Distributions:
 - Cash Distributions (e.g. cash dividend, interest payment)
 - Securities Distributions (e.g. stock dividend, bonus issue)
 - o Distributions with Options (e.g. optional dividend)
- Reorganisations
 - Mandatory Reorganisations with Options (e.g. conversion)
 - o Mandatory Reorganisations (e.g. stock split, redemption)
 - Voluntary Reorganisations (e.g. tender offer)
- Transaction Management
 - Market Claims (Distributions)
 - o Transformations (Reorganisations)
 - Buyer Protection (Elective Corporate Actions)

The scope of application of the market standards includes

- all types of the above categories of Corporate Actions (Distributions and Reorganisations)
- all securities used for direct investments (equities, fixed income instruments) deposited and settled in Book Entry form with an (I)CSD in Europe; investment funds listed and traded on a regulated trading venue should be processed, where possible, in accordance with the applicable standards hereof
- all parties involved, i.e. Issuers, market infrastructures (trading, clearing and settlement), Intermediaries and End Investors, except for standards for transaction management which are directed at market infrastructures and Intermediaries only.

The subject matter of the standards concerns

- the information flow throughout the chain of relevant parties
- key dates and their sequence
- the operational processing of Corporate Actions.

It is important to note that, within the standards, **entitlements** are determined from the actual settled positions in the Issuer (I)CSD's books on **Record Date**, whereas Intermediaries may calculate on a contractual settlement basis on **Ex Date**.

The CAJWG takes the view that in order to reap the full benefits of the standards the **harmonisation of Settlement Cycles in Europe** is required. However, the implementation of the standards should not be delayed in the absence thereof.

Glossary

Note: Definitions given in this glossary are for the purpose of the standards on Corporate Actions only and are not intended to have any legal connotations or to reflect current market practices.

Actual Settlement Date Date on which the settlement effectively takes place.

Bilateral Input Instructions submitted by both parties to settlement as opposed to direct input, which is

submitted by third parties.

Book EntryAccounting of securities and other financial assets in dematerialised or immobilised form.

Business Day Business day at the Issuer (I)CSD.

Buyer Protection Process whereby a buyer who has yet to receive the Underlying Securities of an Elective

Corporate Action, instructs the seller in order to receive the outturn of his choice.

Buyer Protection DeadlineLast day and time by which a Buyer Protection instruction can be given.

CCP Central counterparty, i.e. an entity that interposes itself between the two parties to a trade,

becoming the buyer to every seller and the seller to every buyer.

Cash Distribution A Distribution where the proceeds consist of cash only.

Chain of IntermediariesSequence of Intermediaries connecting the Issuer / Issuer CSD with the End Investor and vice

versa in respect of securities held by Book Entry in a securities account.

Corporate Action Action initiated upon a security by the Issuer or an Offeror.

Distribution Corporate Action whereby the Issuer of a security delivers particular proceeds to the holder of

the Underlying Security without affecting the Underlying Security.

Distribution with Options A Distribution with a choice of proceeds.

Election Period Period during which elections can be made.

Elective Corporate Action Distribution with Options, Mandatory Reorganisation with Options or Voluntary Reorganisation.

End Investor Physical or legal person who holds the security for his own account, not including the holder of

a unit of a UCIT (undertaking for collective investments in transferable securities).

Ex DateDate from which the Underlying Security is traded without the benefit / right attached to it.

FractionsThe number of Underlying Securities remaining after the calculation of the entitlement to the

proceeds of a Corporate Action.

or

The decimal part of the balance of outturn securities resulting from the calculation of the

proceeds of a Corporate Action.

Guaranteed Participation Date

Last date to buy the Underlying Security with the right attached to participate in an Elective

Corporate Action.

(I)CSD (International) Central Securities Depository

Intended Settlement DateDate on which a Transaction is due to settle.

Interim Security Short term transferable operational instrument, issued for processing purposes only, which is

not representative of the Issuer's capital.

Intermediaries Financial institutions that provide and maintain securities accounts.

Investor (I)CSD (I)CSD that holds securities with another (I)CSD or with an Intermediary.

ISIN International Securities Identification Number

ISO International Organization for Standardisation

IssuerThe issuer of an Underlying Security including the agent mandated by the Issuer for Corporate

Actions purposes.

Issuer (I)CSD (I)CSD with whom the Issuer has deposited and maintains its primary securities issuance by

Book Entry.

Mandatory ReorganisationA Reorganisation that mandatorily affects the Underlying Security.

Mandatory Reorganisation

with Options

A Mandatory Reorganisation with a choice of proceeds.

Market Claim Process to reallocate the proceeds of a Distribution to the contractually entitled party.

Market Deadline Last date and time, preferably end of day, to send election instructions to the Issuer (I)CSD.

Matching Process of comparing the two relevant settlement instructions as provided by the two

counterparties to ensure that they match.

Offeror Party (other than the Issuer) including its agent, offering a Voluntary Reorganisation.

Payment Delivery of the proceeds of a Corporate Action.

Payment Date Date on which the Payment is due.

Pending Transaction Unsettled Transaction.

Record Date Date on which settled positions are struck in the books of the Issuer (I)CSD at close of

business to determine the entitlement to the proceeds of a Corporate Action.

Reorganisation A Corporate Action whereby the Underlying Security is replaced with proceeds.

Securities Distribution A Distribution where the proceeds consist of securities.

Settlement Cycle Number of Business Days from the trade date to the Intended Settlement Date.

Transaction The result of Matching.

Transformation Process by which Pending Transactions, on or after Record Date / Market Deadline, are

cancelled and replaced by new Transactions in accordance with the terms of the

Reorganisation.

Underlying Security Security that is the subject of a Corporate Action.

Underlying Transaction Transaction upon which a Market Claim, Transformation or Buyer Protection is applied.

Voluntary Reorganisation A Reorganisation in which participation is optional for the holder of the Underlying Security.

Sequence of dates graphs

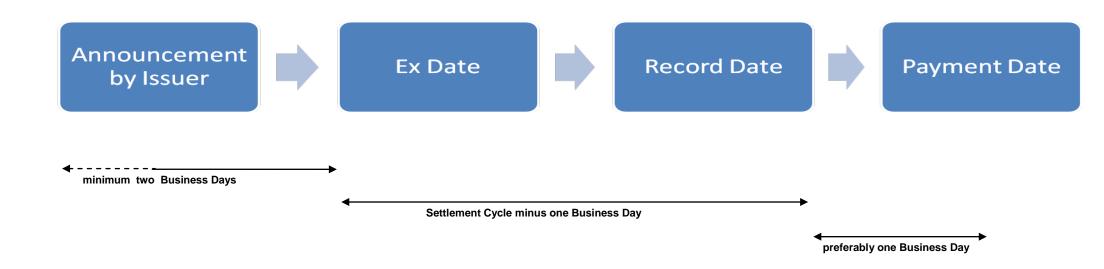
Graphs in this document are for illustrative purposes only; please refer to the standards for a detailed description of the timelines.

In the absence of harmonised Settlement Cycles, the graphs in this document do not use a day-by-day timeline. They show the sequence of key dates as well as the length of intervals between key dates including the relevant daytime of these dates.

Cash Distributions

Cash Distributions

Sequence of dates



Note that the Ex Date is not applicable to securities in nominal, e.g. bonds

Market Standards for Cash Distributions

Information from Issuer to Issuer (I)CSD

- 1. The Issuer should inform its Issuer (I)CSD of the details of a Cash Distribution, including the key dates, as soon as the Issuer has publicly announced the Corporate Action according to applicable law. It should also inform the Issuer (I)CSD of any change or confirmation of the Corporate Action.
- 2. For floating rate instruments, the Payment Date confirmation and the announcement of the next applicable rate with reference to the applicable period for that new rate should be made in two separate announcements and not combined in the same.
- 3. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 4. For narrative text in the information, Issuers with an international shareholder base should use at least a language customary in the sphere of international finance, currently English.

Information from Issuer (I)CSD to its participants

- 5. The Issuer (I)CSD should communicate the information, and any subsequent information, without undue delay of receipt from the Issuer, to all its participants¹ who, at the time of the announcement, have a direct holding or Pending Transaction in the Underlying Security with the Issuer (I)CSD.
- 6. The Issuer (I)CSD should also inform, without undue delay, any participant who obtains a holding or is subject to a new Transaction on the Underlying Security after the announcement until the Record Date.
- 7. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 8.If a Payment needs to be reversed, an announcement, including the reason for such reversal, should be made by the Issuer (I)CSD to all affected parties prior to processing the reversal.

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¹ Including Investor (I)CSDs

Information flow from (I)CSD participants to End Investors

- 9.(I)CSD participants, their clients and the onward Chain of Intermediaries, each at its respective level towards its own clients, should comply with standards 5 and 6 above until the information reaches the End Investor. For End Investors, information by means of account statement is deemed sufficient unless provided otherwise in their service level agreement.
- 10. The information should be communicated to Intermediaries in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 11. The information should be communicated to non-Intermediaries, including End Investors, in a clear and comprehensible way.

Key dates

- 12. Key dates are:
 - a) for Distributions relating to securities in nominal (e.g. bonds): Record Date and Payment Date.
 - b) for Distributions relating to securities in units (e.g. shares): Ex Date, Record Date and Payment Date.
- 13. The public announcement by the Issuer under standard 1 above should be made at least two Business Days before the Ex Date.
- 14. For floating rate instruments, the payable rate should be confirmed as soon as possible but no later than three Business Days before the Payment Date.
- 15. The Ex Date should precede the Record Date by one Settlement Cycle minus one Business Day.
- 16. The Payment Date should be as close as possible to the Record Date, preferably the next Business Day.

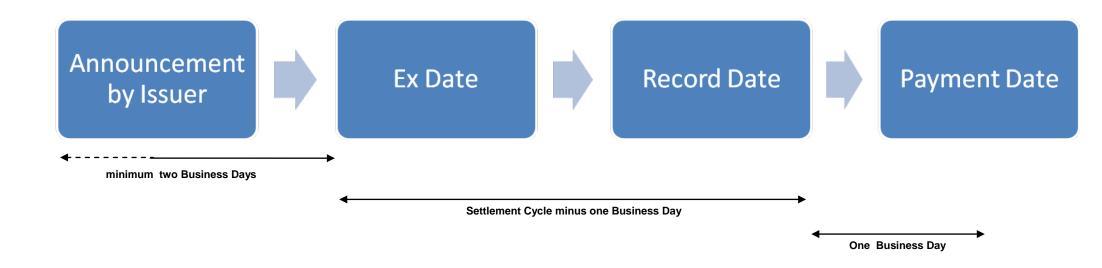
Processing

- 17. Payments should be by Book Entry.
- 18. Interest Payments should be processed separately from redemptions even if their Payment Dates coincide.
- 19. All Cash Distributions and related Market Claims should be paid in cash and not coupons.
- 20. For Payments, the following should apply:
 - a) From Issuers to (I)CSD participants, Payments should be made through the Issuer (I)CSD, using the same Payment mechanism as for other cash transactions through the Issuer (I)CSD.
 - b) Payments by Issuers and Issuer (I)CSDs should be in the original currency as per the announcement under standard 1 above.
 - c) The Issuer should make Payments as early as possible after opening of the Payment system and no later than 12:00 noon Issuer (I)CSD local time.
 - d) No blocking of holdings for the purpose of Cash Distributions.
 - e) If a correction of the Payment is necessary, it should take the form of a complete reversal of the Payment followed by a new correct Payment.

Securities Distributions

Securities Distributions

Sequence of dates



Market Standards for Securities Distributions

Information from Issuer to Issuer (I)CSD

- 1. The Issuer should inform its Issuer (I)CSD of the details of a Securities Distribution, including the key dates and the ISIN of the outturn security, as soon as the Issuer has publicly announced the Corporate Action according to applicable law. It should also inform the Issuer (I)CSD of any change or confirmation of the Corporate Action and, if applicable, of the reference of compensation of Fractions by the Issuer². The reference price should be communicated as soon as possible and at the latest on Record Date minus one Business Day.
- 2. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 3. For narrative text in the information, Issuers with an international shareholder base should use at least a language customary in the sphere of international finance, currently English.

Information from Issuer (I)CSD to its participants

- 4.The Issuer (I)CSD should communicate the information, and any subsequent information, without undue delay of receipt from the Issuer, to all its participants³ who, at the time of the announcement, have a direct holding or Pending Transaction in the Underlying Security with the Issuer (I)CSD.
- 5. The Issuer (I)CSD should also inform, without undue delay, any participant who obtains a holding or is subject to a new Transaction on the Underlying Security after the announcement until the Record Date.
- 6. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.

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¹ The reference price is a price determined by the Issuer and is not the market price resulting from the sale of fractional shares by the Issuer in the open market.

² See also recommendation in Annex 2

³ Including Investor (I)CSDs

7.If a Payment needs to be reversed, an announcement, including the reason for such reversal, should be made by the Issuer (I)CSD to all affected parties prior to processing the reversal.

Information flow from (I)CSD participants to End Investors

- 8.(I)CSD participants, their clients and the onward Chain of Intermediaries, each at its respective level towards its own clients, should comply with standards 4 and 5 above until the information reaches the End Investor. For End Investors, information by means of account statement is deemed sufficient unless provided otherwise in their service level agreement.
- 9. The information should be communicated to Intermediaries in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 10. The information should be communicated to non-Intermediaries, including End Investors, in a clear and comprehensible way.

Key dates

- 11. Key dates are Ex Date, Record Date and Payment Date.
- 12. The public announcement by the Issuer under standard 1 above should be made at least two Business Days before the Ex Date.
- 13. The Ex Date should precede the Record Date by one Settlement Cycle minus one Business Day.
- 14. The Payment Date should be the next Business Day after Record Date.

Processing

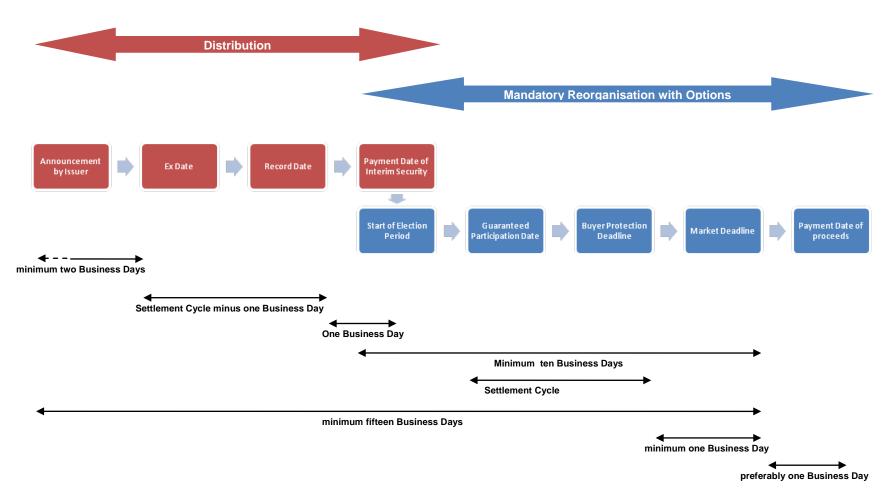
- 15. Payments should be by Book Entry.
- 16. For Payments in securities, the following should apply:
 - a) The Issuer should make Payments through the (I)CSD as early as possible and no later than the opening of the settlement system for settlement on the relevant Payment Date.

- b) The Payments should be processed by rounding down to the nearest whole number (top-down method).
- c) When Fractions occur and the Issuer compensates them in cash at the level of the Issuer (I)CSD, the Issuer (I)CSD participants and all the Intermediaries down the chain should on their turn, each at its respective level, also compensate any Fractions in cash.
- 17. For Payments of Fractions in cash, where applicable, the following should apply:
 - a) From Issuers to (I)CSD participants, Payments should be made through the Issuer (I)CSD, using the same Payment mechanism as for other cash transactions through the Issuer (I)CSD.
 - b) Payments by Issuers and Issuer (I)CSDs should be in the original currency as per the announcement under standard 1 above.
 - c) If a reference price is announced by the Issuer, the Payment Date for Fractions should be the Payment Date for Distribution. If Fractions are compensated by the Issuer but no reference price is announced, the Payment Date should preferably be one Settlement Cycle after the Payment Date for Distribution.d) The Issuer should make Payments as early as possible after opening of the Payment system and no later than 12:00 noon Issuer (I)CSD local time.
 - e) If a correction of the Payment is necessary, it should take the form of a complete reversal of the Payment followed by a new correct Payment.

Distributions with Options

Distributions with Options

Overall sequence of dates



Market Standards for Distributions with Options

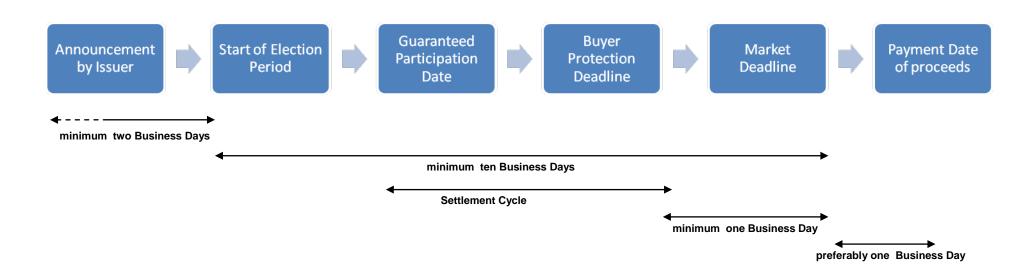
- 1. Distributions with Options should be represented by an Interim Security with an official ISIN.
- 2. The issuance of the Interim Security and the options attached to it should be operationally treated as two separate Corporate Actions, the first being a Distribution, the second a Mandatory Reorganisation with Options (or a Voluntary Reorganisation). They should be communicated to the Issuer (I)CSD at the same time and the second Corporate Action type should be indicated in the information of the first Corporate Action.
- 3. The standards for Securities Distributions should apply to the first Corporate Action, i.e. the Distribution.*
- 4. The standards for Mandatory Reorganisations with Options (or Voluntary Reorganisations) should apply to the second Corporate Action, i.e. the Mandatory Reorganisation with Options (or the Voluntary Reorganisation).*
- 5. The Election Period determined by the Issuer should not start before the Payment Date of the Interim Security.
- 6. The Intended Settlement Date of any Transaction in the Interim Security should not be prior to the Payment Date of the Interim Security.

* To the extent of prioritised standards

Mandatory Reorganisations with Options

Mandatory Reorganisations with Options

Sequence of dates



Market Standards for Mandatory Reorganisations with Options

Information from Issuer to Issuer (I)CSD

- 1. The Issuer should inform its Issuer (I)CSD of the details of a Mandatory Reorganisation with Options, including the key dates and the Issuer default option, as soon as the Issuer has publicly announced the Corporate Action according to applicable law. It should inform the Issuer (I)CSD also in case of a change or confirmation of the Corporate Action and, if applicable, of the reference price ¹ for compensation of Fractions by the Issuer². The reference price should be communicated as soon as possible and at the latest on Market Deadline minus one Business Day.
- 2. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 3. For narrative text in the information, Issuers with an international shareholder base should use at least a language customary in the sphere of international finance, currently English.

Information from Issuer (I)CSD to its participants

- 4. The Issuer (I)CSD should communicate the information, and any subsequent information, without undue delay of receipt from the Issuer, to all its participants³ who, at the time of the announcement, have a direct holding or Pending Transaction in the Underlying Security with the Issuer (I)CSD.
- 5. The Issuer (I)CSD should also inform, without undue delay, any participant who obtains a holding or is subject to a new Transaction on the Underlying Security after the announcement until the Market Deadline.
- 6. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 7.If a Payment needs to be reversed, an announcement, including the reason for such reversal, should be made by the Issuer (I)CSD to all affected parties prior to processing the reversal.

¹ The reference price is a price determined by the Issuer and is not the market price resulting from the sale of fractional shares by the Issuer in the open market

² See also recommendation in Annex 2

³ Including Investor (I)CSDs

Information flow from (I)CSD participants to End Investors

- 8.(I)CSD participants, their clients and the onward Chain of Intermediaries, each at its respective level towards its own clients, should comply with standards 4 and 5 above until the information reaches the End Investor.
- 9. The information should be communicated to Intermediaries in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 10. The information should be communicated to non-Intermediaries, including End Investors, in a clear and comprehensible way.

Key dates

- 11. The public announcement by the Issuer under standard 1 above should be made at least two Business Days before the start of the Election Period.
- 12. The start of the Election Period as determined by the Issuer should be at least ten Business Days before the Market Deadline¹.
- 13. The Guaranteed Participation Date should precede the Buyer Protection Deadline by one Settlement Cycle.
- 14. The Buyer Protection Deadline should be at least one Business Day before the Market Deadline.
- 15. The Payment Date of the elected Option should be as close as possible to the Market Deadline, preferably the next Business Day.

Processing

- 16. Payments should be by Book Entry.
- 17. An ISIN that is different from the ISIN of the Underlying Security should be allocated to each outturn security.
- 18. Each option should have a unique identifier provided by the Issuer, that will be maintained by the Issuer (I)CSD and all Intermediaries.

¹ In case of multiple deadlines, the earliest deadline is meant here.

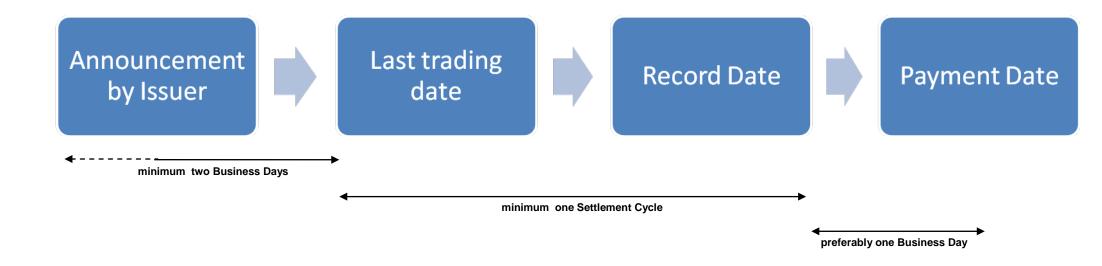
- 19. Elections should be communicated from the last intermediary in the Chain of Intermediaries up to the Issuer* in formatted electronic form using standards defined and used by the securities industry such as the ISO standards, irrespective of the communication channel used. (* prioritised up to the Issuer (I)CSD only)
- 20. Underlying Securities¹ on which an election is made should be separated accounting-wise from non-elected Underlying Securities¹ by the (I)CSD and all Intermediaries.
- 21. For non-elected Underlying Securities¹, the default option as announced by the Issuer should apply.
- 22. For Payments in cash, the following should apply:
 - a) From Issuers to (I)CSD participants, Payments should be made through the Issuer (I)CSD, using the same Payment mechanism as for other cash transactions through the Issuer (I)CSD.
 - b) Payments by Issuers and Issuer (I)CSDs should be in the original currency as per the announcement under standard 1 above.
 - c) The Issuer should make Payments as early as possible after opening of the Payment system and no later than 12:00 noon, Issuer (I)CSD local time.
 - d) If a correction of the Payment is necessary, it should take the form of a complete reversal of the Payment followed by a new correct Payment.
- 23. For Payments in securities, the following should apply:
 - a) The Issuer should make Payments to the (I)CSD as early as possible and no later than the opening of the settlement system for settlement on the relevant Payment Date.
 - b) The Payments should be processed by rounding down to the nearest whole number (top-down method).
 - c) When Fractions occur and the Issuer compensates them in cash at the level of the Issuer (I)CSD, the Issuer (I)CSD participants and all the Intermediaries down the chain should on their turn, each at its respective level, also compensate any Fractions in cash.
 - d) If a reference price is announced by the Issuer, the Payment Date for Fractions should be the Payment Date for Reorganisation. If Fractions are compensated by the Issuer but no reference price is announced, the Payment Date should preferably be one Settlement Cycle after the Payment Date for Reorganisation.

¹ Interim Security in case the Mandatory Reorganisation with Option is the second Corporate Action in a Distribution with Options.

Mandatory Reorganisations

Mandatory Reorganisations

Sequence of dates



Market Standards for Mandatory Reorganisations

Information from Issuer to Issuer (I)CSD

- 1. The Issuer should inform its Issuer (I)CSD of the details of a Mandatory Reorganisation, including the key dates, as soon as the Issuer has publicly announced the Corporate Action according to applicable law. It should also inform the Issuer (I)CSD of any change or confirmation of the Corporate Action and, if applicable, the reference price for compensation of Fractions by the Issuer². The reference price should be communicated as soon as possible and at the latest on Record Date minus one Business Day.
- 2. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 3. For narrative text in the information, Issuers with an international shareholder base should use at least a language customary in the sphere of international finance, currently English.

Information from Issuer (I)CSD to participants

- 4. The Issuer (I)CSD should communicate the information, and any subsequent information, without undue delay of receipt from the Issuer, to all its participants³ who, at the time of the announcement, have a direct holding or Pending Transaction in the Underlying Security with the Issuer (I)CSD.
- 5. The Issuer (I)CSD should also inform, without undue delay, any participant who obtains a holding or is subject to a new Transaction on the Underlying Security after the announcement until the Record Date.
- 6. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 7.If a Payment needs to be reversed, an announcement, including the reason for such reversal, should be made by the Issuer (I)CSD to all affected parties prior to processing the reversal.

¹ The reference price is a price determined by the Issuer and is not the market price resulting from the sale of fractional shares by the Issuer in the open market.

² See also recommendation in Annex 2

³ Including Investor (I)CSDs

Information flow from (I)CSD participants to End Investors

- 8. (I)CSD participants, their clients and the onward Chain of Intermediaries, each at its respective level towards its own clients, should comply with standards 4 and 5 above until the information reaches the End Investor.
- 9. The information should be communicated to Intermediaries in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 10. The information should be communicated to non-Intermediaries, including End Investors, in a clear and comprehensible way.

Key dates

- 11. The public announcement by the Issuer under standard 1 above should be at least two Business Days before the last trading date as determined by the Issuer.
- 12. The last trading date, i.e. the last date to trade the Underlying Security in the old ISIN, should precede the Record Date by at least one Settlement Cycle.
- 13. The Payment Date should be as close as possible to the Record Date, preferably the next Business Day for cash outturns and the next Business Day for securities outturns.

Processing

- 14. Payments should be by Book Entry.
- 15. Redemptions should be processed separately from Interest Payments even if their Payment Dates coincide.
- 16. An ISIN that is different from the ISIN of the Underlying Security should be allocated to each outturn security.

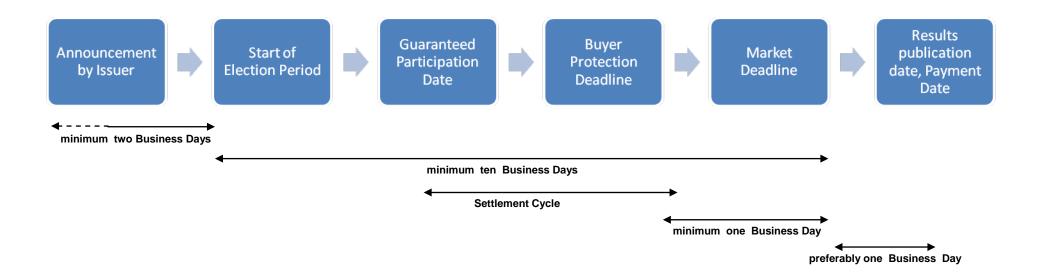
17. For Payments in cash, the following should apply:

- a) From Issuers to (I)CSD participants, Payments should be made through the Issuer (I)CSD, using the same Payment mechanism as for other cash transactions through the Issuer (I)CSD.
- b) Payments by Issuers and Issuer (I)CSDs should be in the original currency as per the announcement under standard 1 above.
- c) The Issuer should make Payments as early as possible after opening of the Payment system and no later than 12:00 noon, Issuer (I)CSD local time.
- d) If a correction of the Payment is necessary, it should take the form of a complete reversal of the Payment followed by a new correct Payment.
- 18. For Payments in securities, the following should apply:
 - a) The Issuer should make Payments to the (I)CSD as early as possible and no later than the opening of the settlement system for settlement on the relevant Payment Date.
 - b) The Payments should be processed by rounding down to the nearest whole number (top-down method).
 - c) When Fractions occur and the Issuer compensates them in cash at the level of the Issuer (I)CSD, the Issuer (I)CSD participants and all the Intermediaries down the chain should on their turn, each at its respective level, also compensate any Fractions in cash.
 - d) If a reference price is announced by the Issuer, the Payment Date for Fractions should be the Payment Date for Reorganisation. If Fractions are compensated by the Issuer but no reference price is announced, the Payment Date should preferably be one Settlement Cycle after the Payment Date for Reorganisation.

Voluntary Reorganisations

Voluntary Reorganisations

Sequence of dates



Market Standards for Voluntary Reorganisations

Information from Issuer/Offeror to Issuer (I)CSD

- 1. The Issuer or the Offeror, as the case may be, should inform the Issuer (I)CSD of the details of a Voluntary Reorganisation, including the key dates, as soon as the Issuer, or the Offeror, has publicly announced the Corporate Action according to applicable law. The Issuer or the Offeror, as the case may be, should also inform the Issuer (I)CSD of any change or confirmation of the Corporate Action.
- 2. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 3. For narrative text in the information, Issuers with an international shareholder base should use at least a language customary in the sphere of international finance, currently English.

Information from Issuer (I)CSD to its participants

- 4. The Issuer (I)CSD should communicate the information, and any subsequent information, without undue delay of receipt from the Issuer or the Offeror, as the case may be, to all its participants who, at the time of the announcement, have a direct holding or Pending Transaction in the Underlying Security with the Issuer (I)CSD.
- 5. The Issuer (I)CSD should also inform, without undue delay, any participant who obtains a holding or is subject to a new Transaction on the Underlying Security after the announcement until the Market Deadline.
- 6. The information should be communicated in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective of the communication channel used.
- 7. If a Payment needs to be reversed, an announcement, including the reason for such reversal, should be made by the Issuer (I)CSD to all affected parties prior to processing the reversal.

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¹ Including Investor (I)CSDs

Information flow from (I)CSD participants to End Investors

- 8. (I)CSD participants, their clients and the onward Chain of Intermediaries, each at its respective level towards its own clients, should comply with standards 4 and 5 above until the information reaches the End Investor.
- 9. The information should be communicated to Intermediaries in formatted electronic form using standards defined and used by the securities industry, such as the ISO standards, irrespective from the communication channel used.
- 10. The information should be communicated to non-Intermediaries, including End Investors, in a clear and comprehensible way.

Key dates

- 11. The public announcement by the Issuer or the Offeror, as the case may be, under standard 1 above should be made at least two Business Days before the start of the Election Period as determined by the Issuer or the Offeror respectively.
- 12. The start of the Election Period as determined by the Issuer or the Offeror, as the case may be, should be at least ten Business Days before the Market Deadline¹.
- 13. The Guaranteed Participation Date should precede the Buyer Protection Deadline by one Settlement Cycle.
- 14. The Buyer Protection Deadline should be at least one Business Day before the Market Deadline.
- 15. The Payment Date should be as close as possible to the Market Deadline, preferably the next Business Day.
- 16. When the Voluntary Reorganisation is conditional, the Issuer or the Offeror, as the case may be, should publish the result of the elections. The results publication date should follow the Market Deadline as soon as possible, preferably the next Business Day, but before the Payment is made. Payment Date should preferably be one Business Day after results publication date.

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¹ In case of multiple deadlines, the earliest deadline is meant here.

- 17. Payments should be by Book Entry.
- 18. An ISIN that is different from the ISIN of the Underlying Security should be allocated to each outturn security.
- 19. Each Option should have a unique identifier provided by the Issuer or the Offeror, as the case may be, that will be maintained by the Issuer (I)CSD and all Intermediaries.
- 20. Elections should be communicated from the last intermediary in the Chain of Intermediaries up to the Issuer* or the Offeror*, as the case may be, in formatted electronic form using standards defined and used by the securities industry such as the ISO standards, irrespective of the communication channel used. (* prioritised up to the Issuer (I)CSD only)
- 21. Securities on which an election is made should be separated accounting-wise by the (I)CSD and all Intermediaries from non-elected securities.
- 22. For Payments in cash, the following should apply:
 - a) From Issuers or Offerors to (I)CSD participants, Payments should be made through the Issuer (I)CSD using the same Payment mechanism as for other cash transactions through the Issuer (I)CSD.
 - b) Payments by Issuers, Offerors and Issuer (I)CSDs should be in the original currency as per the announcement under standard 1 above.
 - c) The Issuer or the Offeror, as the case may be, should make Payments as early as possible after opening of the Payment system and no later than 12:00 noon Issuer (I)CSD local time.
 - d) If a correction of the Payment is necessary, it should take the form of a complete reversal of the Payment followed by a new, correct Payment.
- 23. For Payments in securities the Issuer or the Offeror, as the case may be, should make Payments to the Issuer (I)CSD as early as possible and no later than the opening of the settlement system for settlements on the relevant Payment Date.

Transaction Management

Transaction management provides market standards for Market Claims, Transformations and Buyer Protections¹.

The standards on transaction management should apply to all types of Transactions unless agreed otherwise by the parties to it.

They rely on the application of and compliance with the agreed ECSDA/ESF Matching Standards.²

The standards aim at: a) enabling the automation of the transaction management processes to ensure their timely and efficient settlement; b) protecting the right of both the buyer and the seller; c) limiting the intervention of each party involved; and d) reducing the number of Transactions to be managed considering that such process requires a reconciliation effort.

This chapter is split into 3 parts in accordance with the category of the Corporate Action:

- Market claim resulting from a Distribution
- Transformation resulting from a Reorganisation
- Buyer Protection for an Elective Corporate Action that a buyer can use if the Transaction is still unsettled whilst the Market Deadline is approaching.

¹ For Target2-Securities more detailed processes have been developed by the T2S Corporate Actions Sub Group (CASG)

² https://www.ecsda.com/attachments/media_centre/press_releases/ESF%20ECSDA%20Matching%20Standards%20Oct06.doc http://essf.sifma.org/publications/documents/ESF-ECSDAMatchingStandardsOct06.pdf

The CAJWG examined the question of the **fiscal status of the cash Market Claim** of a Pending Transaction impacted by a Cash Distribution and consequently the exact cash amount applicable for the Market Claim. Uncertainty remains regarding the exact moment of transfer of ownership from a fiscal point of view and different approaches co-exist in Europe. The CAJWG has identified this fiscal issue but acknowledges its limitation of competence and would recommend referring it to the FISCO group (Giovannini Barrier 11). The CAJWG believes that efforts to improve consistency and common fiscal treatment across markets and countries are essential to reap the full benefit of the EU financial market integration. The preferred solution of the CAJWG is that the default withholding rate applied to Market Claims should be determined by the Issuer (I)CSD.

Market Standards for Market Claims

Creation

- 1. Market Claims should be created, as a separate Transaction without changing the Underlying Transaction, by the (I)CSD or the CCP for all irrevocable settlement transactions (as defined in each market) as follows:
 - a) For securities in units (e.g. shares);
 - From the seller to the buyer, when trade date is before Ex Date and there is a Pending Transaction at close of business of Record Date; or
 - From the buyer to the seller, when trade date is on or after Ex Date and Actual Settlement Date is on or before Record Date.
 - b) For securities in nominal (e.g. bonds): from the seller to the buyer, if the Intended Settlement Date is on or before the Record Date but there is a Pending Transaction at close of business on Record Date.
- 2. Concurring Bilateral Input should allow to determine whether the underlying trade is "ex" or "cum" and the (I)CSD or CCP should take this into account for the creation of a Market Claim, irrespective of the actual Ex Date.

- 3. The (I)CSD or the CCP should create the Market Claims by end of Record Date or, for Transactions that become eligible for a Market Claim after Record Date, as soon as possible and not later than twenty Business Days thereafter.
- 4. All Market Claims should be in the outturn of the Distribution to which they relate.
- 5. The Intended Settlement Date of the Market Claim should be on the Payment Date. If it is created after the Payment Date, it should be on the earliest settlement date.
- 6. The settlement of the Market Claim should be independent from the settlement of the Underlying Transaction to which the Market Claim relates. However, (I)CSDs should provide a user friendly tool to manage the interdependency between the Market Claim and the Underlying Transaction.
- 7. The withholding rate applied to the Distribution by the Issuer (I)CSD should also apply to the Market Claim.

Reporting

- 8. Market Claims should be reported as such by the (I)CSD or the CCP and any other participant down the Chain of Intermediaries, at both the time of the creation and the settlement of the Market Claim, referencing both the Distribution and the Underlying Transaction that gave rise to the Market Claim.
- 9. The reporting should be done in formatted electronic form using standards defined and used by the industry, such as the ISO standards, irrespective of the communication channel used.

Market Standards for Transformations

- 1. A Transformation should be processed for Pending Transactions on Record Date in the event of a Mandatory Reorganisation and, when a Buyer Protection has been agreed, a Voluntary Reorganisation.
- 2. The (I)CSD or the CCP should process the Transformation, cancelling matched instructions still pending by the end of Record Date ("Original Transaction") and replacing them by new matched instructions in the outturn ISIN and/or cash ("Replacement Transaction") in accordance with the terms of the Reorganisation. The old trade date should remain unchanged in the Transformation.
- 3. Opt-out facilities should be allowed for Bilateral Input if both parties agree. In case of an opt-out the Original Transaction is cancelled but no new Transaction generated.

- 4. The Transformation should be carried out by the (I)CSD or the CCP between end of Record Date for Mandatory Reorganisations or end of Market Deadline for Voluntary Reorganisations and the opening of the securities settlement system for value next Business Day.
- 5. For Mandatory Reorganisations settlement in the old ISIN should be discontinued after the Record Date or the Market Deadline, as applicable. Input of instruction in the old ISIN should still be possible after the Guaranteed Participation Date / last trading date for instruction with trade date before or on the Guaranteed Participation Date / last trading date. If such instructions match, they will automatically be transformed. Instruction with trade date after Guaranteed Participation Date / last trading date should always be in the new ISIN.
- 6. The Replacement Transaction should neither settle before the Payment Date nor before the Intended Settlement Date of the Underlying Transaction.
- 7. In case of multiple outturns, each Replacement Transaction should be allowed to settle irrespective of the others.

- 8. When the Reorganisation consists of the replacement of an Underlying Security by cash (typically a final redemption), the Transformation will result in exchanging cash against cash. To ease the reconciliation process (or for fiscal reasons), two new Transactions¹ should be created, one for the original cash amount and the other one for the cash benefit of the Reorganisation.
- 9. When the outturns generate Fractions the number of outturn shares should be rounded down to the nearest whole number.
 - a) When the Issuer compensates the Fractions in cash, an additional cash Transaction should be created with a cash amount equal to the number of residual Fractions multiplied by the applicable price, and credited to the buyer².
 - b) When net CCP transactions are involved in a Transformation process with Fractions, the CCP could adjust (when necessarily required) the number of new shares and Fractions to maintain a balance between net buyers and net sellers. The price of each Fraction should be the Issuer' price and the impacted net Transaction(s) should be reduced to their minimum.

Reporting

- 10. Transformations should be reported as such by the (I)CSD and the CCP and any other participant down the Chain of Intermediaries, referencing both the Original Transaction and the Replacement Transaction as well as the Reorganisation reference number of the concerned Corporate Action.
- 11. The reporting should be done in formatted electronic form using standards defined and used by the industry such as the ISO standards, irrespective of the communication channel used.

¹ E.g.: ISIN A is replaced by 10 euro. Before Transformation, a DVP Transaction "X has to deliver 10 ISIN A to Y against 90 euro would become "X has to deliver (10X10) euro to Y against 90 euro." 2 new transactions should be created: "X has to pay 100 euro to Y " and "Y has to pay 90 euro to X". The reference of the underlying ISIN (nihil Quantity) could facilitate the reconciliation.

² E.g.: 1 ISIN A is replaced by 1/3 ISIN B, and each fraction B is compensated at 1,7 euro. Before Transformation a DVP Transaction "X has to deliver 11 ISIN A to Y against 60 euro." The top down method rounded down to the nearest whole number allows to transform 11 ISIN A x 1/3 resulting in 3,666 ISIN B, with 0,666 B transformed in cash (0,666 x 1,7 euro) . 2 new transactions should be created: "X has to deliver 3 ISIN B to Y against 60 euro" and "X has to pay 1,13 euro to Y".

Market Standards for Buyer Protection

The CAJWG acknowledges that there are other means of warranting buyer protection than an institutionalised and automated service provided by market infrastructure organisations, e.g. bi-lateral agreement between the respective trading parties by means of a manual process. Therefore there are two different sets of standards, one for automated Buyer Protection and one for manual Buyer Protection.

Automated Buyer Protection

Creation

- 1. A Buyer Protection instruction should be created by the buyer, referencing the Corporate Action, the chosen option(s), the quantity of securities and the Underlying Transaction.
- 2. The Buyer Protection instruction should be communicated from the buyer to the seller without undue delay via the Chain of Intermediaries and the (I)CSDs in formatted electronic form using standards defined and used by the securities industry such as the ISO standards, irrespective of the communication channel used.

- 3. The Buyer Protection Deadline should follow the Guaranteed Participation Date by a Settlement Cycle.
- 4. The Buyer Protection Deadline should be at least one Business Day before the Market Deadline.
- 5. Any Buyer Protection instruction by the buyer prior to the Buyer Protection Deadline and related to a Transaction for which the trade date is on or before the Guaranteed Participation Date, with intended settlement date no later than the Buyer Protection Deadline, is a binding instruction and should be accepted without requiring Matching, irrespective of the CSD rules for Transformation.
- 6. Standard 5 above should apply also in case of Buyer Protection instructions being raised against CCPs.

- 7. Buyer Protection Deadlines should be identical across (I)CSDs in Europe.
- 8. In regard of any Buyer Protection instruction by the buyer prior to the Buyer Protection Deadline, settlement of the Underlying Transaction should be allowed until the Buyer Protection Deadline.
- 9. A Buyer Protection instruction issued on a Pending Transaction that finally settles on or before the Buyer Protection Deadline (end of settlement process) should be void.
- 10. Transactions attached with a valid Buyer Protection that are still pending on the Buyer Protection Deadline should be frozen until their Transformation. This should ensure that the seller executes the buyer's Buyer Protection instruction.
- 11. The Transformation of the Underlying Transaction should be carried out, in accordance with the Buyer Protection instruction, on the Market Deadline/ Record Date of the concerned Elective Corporate Action.
- 12. For Mandatory Reorganisations with Options, non elected Transactions should transform into the default option set by the Issuer (I)CSD.

Manual Buyer Protection

Creation

- 13. A Buyer Protection instruction should be created by the buyer if the requested option is not the default option, referencing the Corporate Action, the chosen option(s), the quantity of securities and the Underlying Transaction in line with the template attached hereto.
- 14. The Buyer Protection instruction should be communicated from the buyer to the seller electronically using the template attached hereto or an ISO message once available.

- 15. The Buyer Protection Deadline should follow the Guaranteed Participation Date by a Settlement Cycle. The creation of a Buyer Protection instruction is possible until close of settlement of the Buyer Protection Deadline. Buyer Protection instructions allocated by a CCP against a seller are allowed until close of settlement of the date of the Buyer Protection Deadline plus one hour.
 - Each market should issue Buyer Protection Guidelines that include the settlement schedule of the respective (I)CSD and related Buyer Protection Deadlines and Market Deadlines.
- 16. The Buyer Protection Deadline should be at least one Business Day before the Market Deadline.
- 17. Any Buyer Protection instruction by the buyer prior to the Buyer Protection Deadline and related to a Transaction for which the trade date is on or before the Guaranteed Participation Date, with intended settlement date no later than the Buyer Protection Deadline, should be accepted.
- 18. Standard 17 above should apply also in case of Buyer Protection instructions against CCPs.
- 19. Buyer Protection Deadlines for the same event should be identical across (I)CSDs in Europe.
- 20. In regard of any Buyer Protection instruction by the buyer prior to the Buyer Protection Deadline, settlement of the Underlying Transaction should be allowed until the Buyer Protection Deadline.
- 21.A Buyer Protection instruction issued on a Pending Transaction that finally settles on or before the Buyer Protection Deadline (end of settlement process) should be void.
- 22. Transactions attached with a valid Buyer Protection that are still pending on the Buyer Protection Deadline should be cancelled by both the buyer and the seller and reinstructed according to the choice of the buyer to prevent settlement after the Buyer Protection Deadline or their Transformation into the default option.
- 23. The Transformation of the Underlying Transaction should be carried out, in accordance with the Buyer Protection instruction, on the Market Deadline/ Record Date of the concerned Elective Corporate Action.
- 24. For Mandatory Reorganisations with Options, non-elected Transactions should transform into the default option set by the Issuer (I)CSD.

BUYER PROTECTION INSTRUCTION

To	
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Attention of : *** / Corporate Actions

From :

Date :

Re: Name of Security - ISIN - Type of Event

We are issuing this Buyer Protection Notice in relation to the following trade(s):

RvP / FoP	ISIN	Quantity of securities to	Trade Date	Settlement	Settlement
		be delivered to us	dd-mm-yyyy	date dd-mm-yyyy	amount including currency

Please be advised that there is a ***** [Corporate Action] occurring with a Buyer Protection Deadline of xx xxx 20**. As the settlement of the trade is currently pending we ask you to protect our securities with the following instruction:

Elect to ***** on xx Rights/Securities of **Name of Security* in order to receive xx cash/ securities of **Name of new securities** (ISIN of new securities).

Should the trade(s) partially settle, then the Buyer Protection will be applied to the remaining pending quantity.

As per standards 20 to 22 of the Market Standards for Buyer Protection being part of the Market Standards for Corporate Actions Processing, version 2012,:

- We shall allow settlement until end of settlement on the date of the Buyer Protection Deadline.
- Should the trade(s) settle on or before the Buyer Protection Deadline, this instruction is void.
- Should the trade(s) **remain unsettled** on the Buyer Protection Deadline, we shall **cancel and reinstruct** according to the option chosen. The trade(s) shall not be allowed to settle after the Buyer Protection Deadline.

Please confirm receipt and agreement of the above protection by return mail. Please do not hesitate to contact us should you have any questions.

Annex 1: Members of the Corporate Actions Joint Working Group (updated January 2012)

Wilfried Blaschke, Commerzbank

Christophe Bonte, EBF

Pierre Colladon, Société Générale

Mike Collier, Deutsche Bank

Edwin De Pauw / Frank Slagmolen, Euroclear

Werner Frey, AFME (Chair)

Susannah Haan, EuropeanIssuers

Dagmar Habersack, Deutsche Bank

Markus Kaum, Munich Re

Anne Mairesse, LCH.Clearnet

Mathias Papenfuss / Thomas Rockstroh, Clearstream

Heather Payne, Goldman Sachs

Véronique Peeters, BNYMellon

Rafael Plata, FESE

Luca Silano, Monte Titoli

Florentin Soliva, UBS

Christine Strandberg, SEB

Mark Tarran, Citi

Hanna Vainio, Euroclear Finland

Ben van der Velpen, ING

Annex 2: Management of Fractions

To minimise the number of fractions and to achieve a harmonised algorithm across European markets, it is recommended that the Issuer includes in his information as per Standard # 1 of the relevant categories of Corporate Actions that the full balance of shares will be transformed immediately.

The following example of a Mandatory Reorganisation explains this process:

The relevant position is 95 A shares. Among the three possible announcements

- 3 old shares (A) are replaced by 2 new shares (B)
- 1 old share (A) is replaced by 2/3 new shares (B)
- 1 old share (A) is replaced by 0,666667 new shares (B)

the calculation method should be: 95 A shares are multiplied by 2/3 resulting in 63.33 B shares. The 63.33 B shares will be rounded down to 63 B shares leaving a fraction of 0.33 B shares to be compensated (if applicable) in cash.