Response Document –
Harmonization of the
Unique Transaction Identifier
Question 3: Do respondents agree with the proposed approach to UTI allocation for package transactions? Under what circumstances should the entire package have a single UTI?
Question 4: Are there other approaches to UTI allocation for package transactions that should be considered? If so, please describe.

Response for Q3 & Q4:
I would recommend to have separate UTIs for individual components of a packaged transaction. However, in order to identify a packaged transaction, a parent UTI should be allocated to the packaged trade along with individual UTIs for the components (refer Solution A below).

Question 5: Which, if any, of the options for identifying and linking components of packages do you favor and why? In particular, please consider the extent to which the options achieve traceability?
Question 6: Do you see any difficulties in implementing any of the options for identifying and linking components of packages? If so, please describe.
Question 7: Please identify and describe any alternative approaches for identifying and linking components of packages that should be considered, focusing in particular on any impact they would have on UTI generation.

Response for Q5, Q6 & Q7:
I do not agree with the options (i) and (iii) proposed for handling packaged transactions. In order to achieve flexibility characteristic of UTI and UPI, structuring a format for UTI/UPI in order to identify a packaged transaction within a UTI/UPI would make it inflexible. Since packaging is a trade execution strategy, identifying packaged transactions using UTI is more significant than using UPI.
I am more inclined towards option (ii) with a slight enhancement (refer Solution A mentioned below).

• Solution A: Possible Alternative Approach
A possible approach for handling packaged transactions can be as follows:
1. Assigning a parent UTI for Packaged Trade and individual separate UTIs for the components of the packaged transaction.
2. The Parent UTI format is structured in such a way that it clearly and exclusively represents a parent UTI for a packaged transaction. Individual UTIs are assigned to components of packaged transaction in usual manner.
3. Reporting should happen at component level with their respective UTIs populated in the UTI field and the parent UTI populated in the “Related UTI” field (instead of using the current field name “Prior UTI”, replace it with the field name “Related UTI”). Refer Solution B for the need of replacing “Prior UTI” field with “Related UTI” field).
Using the above mentioned approach for assigning parent UTIs to packaged transactions would make UTI generic and flexible and moreover handle any new trade execution methodologies innovated in the future.

Question 8: Is the proposed division between events that should and should not require a new UTI complete and correct (please refer to the proposal described in this section and the table in Section 8)? If not, please provide other cases and explain why they should or should not lead to a new UTI being required.

Response for Q8:
Yes, the proposed list of events along with the need for generating new UTIs are complete and correct.

Question 10: Do respondents agree with the analysis of linking related transactions through lifecycle events?
Question 11: Are there other cases to be considered in the analysis of linking related transactions through lifecycle events?

Response for Q10 & 11:
Yes, I agree completely regarding linking of related transactions through lifecycle events.
Question 13: Can respondents suggest other ways of achieving links between reports subject to lifecycle events that meet the characteristic to provide an audit trail?

Question 14: Which of the proposed solutions to linking reports subject to lifecycle events do you favor? Do you see any difficulties in implementing any of the proposed solutions, and if so, what are they?

Question 15: Can respondents suggest UTI constructs that would achieve embedding the link information about lifecycle events into the UTI while still compliant with the authorities’ desired characteristics for the UTI?

Response for Q13, Q14 & Q15:
I do not agree with proposals (i), (ii) & (iv) because:

- Proposal (i) would not help in achieving the characteristics of a UTI (being flexible) to the fullest extent. It would make the UTI inflexible.
- Proposal (ii) would make it a tedious task for including successor UTIs in the predecessor transactions.
- Proposal (iv) would be an additional repetitive task which can be avoided using the Solution B (refer below).

**Solution B: Possible Alternative Approach**

A possible solution for linking various lifecycle event reports can be achieved as below:

1. As mentioned in Solution A, the “Related UTI” field can be used for populating UTIs of all predecessor transactions
2. The “Related UTI” field will contain comma separated values, with first initiated trade populated with a UTI and subsequent related trades (or trade events) are populated with previous trade UTIs in “Related UTI” field with comma separated values (the latest UTI in the “Related UTI” representing the latest trade/event).
3. The order of comma separated values indicate the order of predecessor transactions/trades.

**Example:**

![UTI population diagram](image)

Figure 1: UTI population
Trade 1:
As mentioned in the above figure, a packaged transaction is initiated between Counterparty 1 and Counterparty 2. In this scenario, a parent UTI (UTIP1) is assigned to the packaged transaction and individual UTIs (UTI1, UTI2, and UTI3) are assigned to the components. The parent UTI is filled in the “Related UTI” field of the component UTIs.

<table>
<thead>
<tr>
<th>UTI</th>
<th>Related UTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI1</td>
<td>UTIP1</td>
</tr>
<tr>
<td>UTI2</td>
<td>UTIP1</td>
</tr>
<tr>
<td>UTI3</td>
<td>UTIP1</td>
</tr>
</tbody>
</table>

The parent UTI of a packaged transaction can be identified using the unique structure designed for the parent UTI.

Trade 2:
A novation happens where Counterparty 1 (transferor) moves out of the trade and Counterparty 3 (transferee) comes into the trade. A new UTI is generated for this transaction (as it is a packaged trade, a new parent UTI is also assigned).

<table>
<thead>
<tr>
<th>UTI</th>
<th>Related UTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI4</td>
<td>UTIP1, UTI1, UTIP2</td>
</tr>
<tr>
<td>UTI5</td>
<td>UTIP1, UTI2, UTIP2</td>
</tr>
<tr>
<td>UTI6</td>
<td>UTIP1, UTI3, UTIP2</td>
</tr>
</tbody>
</table>

Trade 3:
Finally, a packaged transaction occurs between the remaining counterparty of the trade (Counterparty 2) and the new counterparty (Counterparty 3).

<table>
<thead>
<tr>
<th>UTI</th>
<th>Related UTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI7</td>
<td>UTIP1, UTI1, UTIP3</td>
</tr>
<tr>
<td>UTI5</td>
<td>UTIP1, UTI2, UTIP3</td>
</tr>
<tr>
<td>UTI6</td>
<td>UTIP1, UTI3, UTIP3</td>
</tr>
</tbody>
</table>

As populated in the “Related UTI”, the order of UTIs determine the order of trade events/transactions with the latest event UTI being populated in the last among the list of comma separated values. In the above case, UTIP1 is the parent UTI generated first and UTIP3 is the parent UTI which is latest generated UTI.

The parent UTI can be uniquely identified using the exclusive structure/format used for generating parent UTIs.

Cross Border Transactions:
For Cross Border transactions, a similar approach can be followed by creating a parent UTI for a cross border transaction and individual UTI(s) (if different jurisdictions demand different UTIs, then two separate UTIs would be generated as per respective jurisdiction requirements) representing the actual trade transaction. The parent UTI for identifying a cross border transaction would be unique and have exclusive format dedicated for cross border transaction. This parent UTI would be populated in “Related UTI” field.

If a packaged cross border transaction occurs, then first a parent UTI for cross border transaction is populated and then a parent UTI for packaged transaction is populated in the “Related UTI” field (cross border transaction UTI takes precedence over packaged transaction UTI in the order of population of UTIs in “Related UTI” field).

Assume in the above Figure 1, the initial packaged trade occurs between counterparties of same jurisdiction. However, a novation happens whereby the new counterparty entering the trade is of a different jurisdiction. The UTI generation and population would be as follows:
Trade 1:
As mentioned in the above figure, a packaged transaction is initiated between Counterparty 1 and Counterparty 2. In this scenario, a parent UTI (UTIP1) is assigned to the packaged transaction which is filled in the “Related UTI” field of the component UTIs.

<table>
<thead>
<tr>
<th>UTI</th>
<th>Related UTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI1</td>
<td>UTIP1</td>
</tr>
<tr>
<td>UTI2</td>
<td>UTIP1</td>
</tr>
<tr>
<td>UTI3</td>
<td>UTIP1</td>
</tr>
</tbody>
</table>

The parent UTI of a packaged transaction can be identified using the unique structure designed for the parent UTI.

Trade 2:
A novation happens where Counterparty 1 (transferor) moves out of the trade and Counterparty 3 (transferee) which is from a different jurisdiction (effectively making it a cross border transaction) comes into the trade.

<table>
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</tr>
</tbody>
</table>

Trade 3:
Finally, a packaged cross border transaction occurs between the remaining counterparty of the trade (Counterparty 2) and the new counterparty (Counterparty 3).

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</tr>
</tbody>
</table>

Question 17: Would it be beneficial if the guidance did not provide for the harmonization of rules for the responsibility for UTI generation with respect to trades that are not cross-border? Would there be disadvantages to this approach? Does the analysis of this idea depend on which option is used for cross-border trades?

Response for Q17:
If there is no harmonization of rules for which counterparty to generate UTI to trades which are NOT cross border, there would still be ambiguity in cases where both the counterparties are obliged to report a common UTI for the trade. In order to achieve full harmonization, I am more inclined towards option (i), i.e. having a globally harmonized rules (across all jurisdictions) defining which entity should generate UTI. With options (ii) and (iii), the ambiguity still persists thereby does not help in achieving full harmonization of UTI.

Question 18: Do respondents agree with the high-level assessment of the Option 1 proposal for the responsibility for generating UTIs? Please explain why or why not.

Response for Q18:
Yes, I completely agree with Option 1 proposal for having same set of rules for defining the responsibility for UTI generation across all transactions and jurisdictions (irrespective of what local regulations state). Hence, the framework for the rules on responsibility for UTI generation would be strong, robust and flexible.
Question 19: Are there additional considerations relevant to the Option 1 proposal for the responsibility for generating UTIs? If so, please describe.

Response for Q19:
The high level assessment mentioned in Option 1 proposal covers all the features required for a unique and robust UTI globally. Hence no additional considerations are needed.

Question 21: What are respondents’ views on the proposed Option 1 hierarchy for the responsibility for generating UTIs? Are the steps necessary and sufficient? Are they sufficiently defined? Are there alternative ways of achieving Step 6?

Question 22: Is it desirable to include the sort of flexibility represented by Steps 1–5? If so, where in the hierarchy should the flexibility be provided (eg as the first step in the hierarchy or further down the waterfall)?

Question 23: Can respondents provide an alternative set of UTI generation steps for the proposed Option 1 hierarchy for the responsibility for generating UTIs that meet all of the characteristics set out in Section 2?

Question 24: Does the proposed Option 1 hierarchy for the responsibility for generating UTIs work across different reporting jurisdictions, particularly considering differences such as single-sided and double-sided reporting?

Response for Q21, Q22, Q23 & Q24:
The hierarchy for counterparties’ responsibility for generating UTI mentioned in Option 1 reflects a correct approach. However, slight modifications are needed in the approach (refer Solution C).

- **Solution C: Possible Alternative Approach**
  The hierarchy mentioned below mirrors the proposed hierarchy in Option 1 with certain changes:
  
  **Step 1:** Responsibility of generating a UTI would be mutually agreed between the counterparties (UTI generator can also be a third party)
  
  **Step 2:** If neither of the counterparties agree on who would generate a UTI and the trade is executed on a standardized exchange (like SEF, DCM or MTF etc.), then the standardized exchange be responsible for generating the UTI
  
  **Step 3:** If the trade is not executed on a standardized exchange but it is confirmed using a standard/electronic confirmation platform, then that confirmation platform would be responsible for generating the UTI
  
  **Step 4:** If neither Step 2 nor Step 3 occurs and the counterparties do not mutually agree on responsibility of generating UTI, then the below hierarchy should be followed for identifying which among the two counterparties is responsible for generating the UTI:

  a. The counterparty having LEI is responsible for generating the UTI

  b. If both counterparties have LEIs, then the counterparty with least ASCII value of earliest occurrence character in reversed LEI would be UTI generator.
   
   Example:
   Counterparty 1 – State Street (5493006RH3PQC41AJP68)
   Counterparty 2 – Bank of America (24J22RISN931T5F155)
   Step 1: Reverse their LEIs
   State Street – 86PJA14CQP3HR6003945
   Bank of America – 551F75T139NSIR22J42
   
   The 1st character in reversed LEIs are ‘8’ (for State Street) and ‘5’ (for Bank of America). The least ASCII value is for Bank of America, hence the UTI generator in this case is Bank of America.
   
   **Note:** If the ASCII values matches, then next character is considered. Similar iteration is performed on the reversed LEIs until least ASCII value is obtained.

  c. If neither counterparties have LEIs, then the counterparty with greater market activity in OTC Derivatives market would be responsible for generating UTI. The market activity is calculated based on the average of gross notional exposure (globally) of counterparty for a certain time period (say for last 3 years). The notional amount is always expressed in USD. For counterparties with notional exposure in a currency different from USD, convert that specific currency to USD using standard exchange rates with previous day closing value (the day prior to determining which counterparty has greater market activity)
**Step 5:** Post creation of UTI for the trade, if the trade is centrally cleared via a clearing member or a CCP, then that clearing member or CCP is responsible for generating UTIs for newly created trades while clearing (Note: The counterparty/entity which was responsible for generating the UTI initially has the responsibility to share the previously generated UTIs to the clearing member or CCP which would in turn populate it in "Related UTI" field).

**Step 6:** If the trade is bilaterally cleared then no new UTI generation is required.

In case of novation, a similar logic is applied between transferor-transferee and transferee-remaining counterparty for generating UTI. The party which generated the UTI for the trade prior to novation, is responsible to share the UTI (generated prior to novation) to the reporting party post novation (which would in turn populate in "Related UTI" field).

The above hierarchy holds good for counterparties in cross border transactions. This hierarchy should be followed irrespective of asset classes/products in the trade (as this would avoid any ambiguity which may arise when a new asset class/product is innovated in the future).

For questions 25-30, I do not support Options 2 & 3 for defining the responsibility of UTI generation because full harmonization cannot be achieved using these options and ambiguity still persists on which party is responsible for generating the UTI.

The below figure highlights the hierarchy for party responsible for generating UTI.
Question 33: Which option for the responsibility for generating UTIs do you regard as preferable? Why is this? What would be the disadvantages to you if your non-preferred option was chosen?

Response for Q33:
I would prefer Option 1 for identifying the responsibility for generating UTIs as the proposal stated in this Option helps in achieving full harmonization without any ambiguity. Options 2 & 3 are not preferred because upon implementing these options, there would still be an ambiguity and confusion on which party is responsible for generating UTIs. Hence full harmonization cannot be achieved using Options 2 & 3.

Question 34: Is the assessment about timing for UTI generation correct? Are there examples of timing requirements from authorities that are incompatible with other elements of the proposed UTI generation approach? If so, please describe them.

Response for Q34:
I would recommend that UTI generation should be no later than confirmation of the trade. By the time a trade is confirmed (either electronically or manually (paper confirmation)) there should be a UTI in place agreed by the counterparties of the trade and reported to the respective Trade Repository.

Question 35: Do respondents agree with the proposed overall approach to UTI structure and format? If not, please suggest alternatives that meet the characteristics?

Response for Q35:
Yes, I agree with the approach to UTI structure and format as stated in the consultative document.

Question 36: Which of these possible UTI components, if any, are important and why? Is it necessary for the UTI to have any of these components?

Question 38: Which components, if any, should be included in the UTI? Which, if any, components should be used in UTI construction but not appear in the UTI? In answering this question, consider both the components listed in the table above or suggest other components as necessary. Please, explain how the particular components contribute towards meeting the characteristics set out in Section 2.

Question 47: What are respondents’ views on the lengths of the various potential components of the UTI (assuming that they are included directly in the UTI) and hence the length of the overall UTI?

Response for Q36, Q38 & Q47:
1. **Jurisdiction:** This 2 character country code component is required to be represented in UTI. However, this component should represent the jurisdiction where the trade has been executed (or cleared). This would avoid the ambiguity of cross border transactions (where there would be an ambiguity if jurisdiction of reporting is considered for this component).
2. **Encoding Scheme:** I do not agree for the need of this component. UTI should represent the transaction/trade as much as possible but not the way in which it is generated. This component is not required. Differentiation of UTI based on new approach and legacy methods can be done using the timestamp field.
3. **Mint:** This component is required to be represented in UTI. Using ISDA’s UTIPrefix (http://www.utiprefix.org/), one can identify the unique 10 digit code of the party responsible for generating UTI. Hence, no separate methodology is needed to generate the value for this component. Moreover, using ISDA’s UTIPrefix would force entities to register and get LEIs for themselves thereby increasing the coverage of entities having LEIs.
4. **CP1, CP2:** I do not agree for the need of this component. As the report submitted to a TR would already contain the counterparty fields in it, incorporating this component in UTI would make it redundant.
5. **Transaction Date:** I do not agree for the need of this component. As the report submitted to a TR would already contain the trade date field in it, incorporating this component in UTI would make it redundant.
6. **ID Value:** This value should solely represent a unique identifier for transaction. Apart from Jurisdiction and Mint fields, the field ID Value would also be a part of UTI which clearly identifies a unique transaction id for the trade. ID Value would be derived using an algorithm which would input counterparty information, transaction date and other details regarding the trade to come up with unique ID Value. Instead of having Points 4 & 5 (CP1, CP2 & Transaction Date) explicitly, they can be incorporated in the ID Value field.
7. **Package Component Suffix:** I do not agree for the need of this component. Packaged trades can be identified using “Solution A” proposed in this response document.

UTI should be a variable length field not exceeding 64 characters. While decoding a UTI, it would be easier for authorities to identify the jurisdiction of trade execution (first 2 characters), details of UTI generator (next 10 characters) and the transaction identifier (remaining characters of UTI).

**Note:**
For Packaged Transactions, only the parent UTI would be appended with four additional characters “_PKG” post the ID Value field. Similarly for Cross Border Transactions, only the parent UTI would be appended with four additional characters “_CBT” post the ID Value field. This ensures to easily identify parent UTIs for packaged transactions and cross border transactions (if the UTI ends with “_PKG” or “_CBT” then it would be a parent UTI representing a packaged trade or a cross border trade respectively).

**Question 39:** Should the UTI be solely a dummy code, i.e., a value that contains no embedded intelligence? Why or why not?
Assuming that other data elements regarding a transaction (e.g., the identification of the counterparties, the date and time of execution etc) will be captured by the report to the TR, is it necessary to reflect such elements in the UTI?

**Response for Q39:**
It is not necessary to have elements such as counterparty identification, trade date etc. in the UTI as they are already reported in the report to the TR. However these elements should be used as inputs to the algorithm for generating unique ID Value (a component of UTI). Instead of generating some random unique ID Value (by using UUIDs), I would recommend to incorporate a logic/algorith which generates a unique ID Value that closely represents the trade (by inputting key trade details). This makes sure that there is an intelligence incorporated in the UTI.

**Question 40:** Should the details of how to construct the ID value be defined and, if so, what approach (e.g., UUID) should be used?

**Response for Q40:**
Yes, I recommend that there should be a standard way for constructing ID Value component instead of using some randomly generated characters. The algorithm should input trade timestamp, counterparties information, underlying asset, settlement/delivery type, notional currencies, notional amount and other key transaction information and generate a unique number (32 character). This unique number can be appended with a maximum of 16 character alpha-numeric random value (instead of having complete ID Value field as a random value, one of its components can be a random alpha-numeric value), thereby effectively making the ID Value field a maximum of 48 character field.

**Note:**
The UTI generating party is responsible to maintain the uniqueness of the UTI being generated.
Question 41: How important will it be to be able to distinguish “new” UTIs from “legacy” UTIs? Assuming that the trade report includes the date and time of execution, would it be necessary to embed the indication in the UTI itself or should the indication be explicit in a separate field?

Response for Q41:
I do not recommend to embed any indication specifically to distinguish new UTIs from legacy UTIs. Instead, I suggest the authorities of jurisdictions to take up the Harmonization Group’s final report and implement it as an amendment to existing trade reporting rules. The final date for compliance with these changes would be provided by the respective jurisdiction’s authorities. Hence, by identifying the timestamp/trade date in the report, any UTI reported post their final compliance date would be new UTI.

Question 42: Is it necessary or practical for the UTI to include a Mint component? If so, is the use of the LEI appropriate for the Mint component in the UTI? Are there other values that could be considered for this? What issues would arise in this case? How should cases where the Mint entity doesn’t have an LEI be handled?

Response for Q42:
Yes, it is necessary to have Mint component in UTI which represents the UTI generating party identifier. Mint should be a 10 character UTIPrefix code (obtained from ISDA’s UTIPrefix) which is derived from LEI value. If a UTI generating entity does not have an LEI, then it should register and obtain an LEI first and then get UTIPrefix for itself. Using any identifier apart from LEI would not help in achieving full harmonization (as there is no other standard entity identifier in the market).

Question 43: What issues would arise from using the suffix UTI component to link the reports of components of a package?

Response for Q43:
The characteristic of UTI being flexible would not be met if UTI structure incorporates a component to identify a packaged trade. If in the future, a new trade execution strategy is innovated and that would require a new UTI component to identify such trades then full harmonization would not be achieved. Hence, the solution to generate UTIs for packaged trades is mentioned in “Solution A” in this response document.

Question 44: Are there any issues in having an “intelligent” UTI? What are respondents’ views on the potential solutions to these issues? Are there alternative ways of dealing with this?

Response for Q44:
I do not see any issue in having an “intelligent UTI”. The TRs would need to be more careful from disclosing the information to public as an intelligent UTI would reveal the key confidential information. But having an intelligent UTI would help authorities analyze easily and effectively. It would also help in achieving global harmonization effectively.

Question 48: Should the UTI be case-sensitive (allowing for upper- and lower-case characters to be regarded as distinct)? Should the UTI avoid using certain alphanumeric characters that resemble others? For example, do you think it advisable for the UTI system to avoid using the digits “0” and “1” so as to avoid confusion with the letters “O” and “I” (or vice versa)?

Question 49: Should other characters be allowed in the UTI beyond those proposed? If so, which ones and why do you recommend them? Could all jurisdictions and languages readily accommodate these characters?

Response for Q48 & Q49:
UTI should be upper case only (in order to avoid confusion). Special characters allowed are underscore, colon, period and minus. These special characters can be used only in ID Value component of UTI except for the starting and ending position (as the first two characters and the next 10 characters are already allotted for country code and UTIPrefix (UTI generating party identifier)). The UTI should not end with any of the special characters. I don’t think it is advisable to avoid using “0” and “1” digits in UTI (as in an electronic computation world today, this difference should not be an issue).
Question 50: Should separators between different component parts of the UTI be used? Why or why not? If so, which separators and why do you recommend them?

Response for Q50:
I do not think there is a need to separate various components of UTI by separators. By using the proposed structure of UTI (refer Response for Q36, Q38 & Q47) it would be simple and easy to identify various components of UTI. Separators can be used within the ID Value component of UTI (but this component cannot start or end with a special character). Refer Response for Q48 & Q49 for acceptable special characters.

Question 51: Should the length of UTI be of fixed or should only the maximum length be indicated?

Response for Q51:
The length of UTI should be variable but not exceeding 64 characters. Hence the maximum length (64 characters) should be indicated. I do not recommend a fixed length UTI because in order to achieve fixed length, the UTI should be padded with zeros (or say any other character) and this would create a confusion when the UTI actually ends with a zero (or that specific character). Hence indicating only the maximum length is a better option.