

Governance arrangements for the unique product identifier (UPI)

Second consultation document dated 26 April 2018

Optional response template

Instructions:

Submission of consultation responses via this template document is optional.

The document has been designed to be completed as a form in Microsoft Word. To assist with automated compilation of answers, users are only able to make changes in the spaces set aside for answers.

For the context of any question or for defined terms, please refer to the relevant parts of the consultation document.

Please save and submit the completed questionnaire as a Microsoft Word document, rather than converting it to a PDF. A password may be applied; in that case you should communicate the password by separate email or by telephone conversation arranged by email.

The FSB invites stakeholders to provide their responses by Monday 28 May 2018 by e-mail to fsb@fsb.org with “UPI Governance Arrangements” in the e-mail subject line. The feedback received will be taken into account in the FSB’s development of the UPI Governance Arrangements.

You may choose to leave answers blank – in that case it is acceptable to leave the answer reading “Click here to answer text”.

Should you wish to obtain an unlocked version of this template in order to facilitate sharing of draft answers in your organisation, please contact the FSB Secretariat on the email address above. In that case, you would still be requested to copy your answers to the locked version on the template to ensure accurate processing of the data.

Questions	Answers
Information about the respondent	
A. Name of respondent institution/firm	ISDA and GFXD
B. Name of representative individual submitting response	Karel Engelen (ISDA); Fiona Willis (GFXD)
C. Email address of representative individual submitting response	kengelen@isda.org ; fwillis@gfma.org
D. Do you request non-publication of any part(s) of this response? If so, which part(s)? <i>Unless non-publication (in part or whole) is specifically requested, all consultation responses will be published in full on the FSB's website. An automated e-mail confidentiality claim will not suffice for these purposes.</i>	No
E. General information about the respondent institution/firm	<p>Since 1985, The International Swaps and Derivatives Association, Inc. (ISDA) has worked to make the global derivatives markets safer and more efficient. Today, ISDA has more than 900 member institutions from 68 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org. Follow us on Twitter @ISDA.</p>

Questions	Answers
	<p>The Global FX Division (GFXD) of the Global Financial Markets Association (GFMA) was formed in co-operation with the Association for Financial Markets in Europe (AFME), the Securities Industry and Financial Markets Association (SIFMA) and the Asia Securities Industry and Financial Markets Association (ASIFMA). Its members comprise 25 global foreign exchange (FX) market participants, collectively representing around 85% of the FX inter-dealer market. Both the GFXD and its members are committed to ensuring a robust, open and fair marketplace and welcome the opportunity for continued dialogue with global regulators.</p>
<p>F. General or introductory remarks</p>	<p>We understand the FSB is looking to select one or more UPI Service Providers by the middle of 2019. We encourage the FSB to put the governance bodies discussed in the Second Consultation in place as soon as possible. As discussed further below, we strongly believe that the governance over the UPI system needs to have a formal board structure comprised of independent members representing a good balance of industry segments and geographies. It is crucial that the governance board, can contribute to, and participate in, the UPI Service Provider(s) selection process.</p> <p>The questions raised in the consultation for example on cross subsidizing and the provision of value added services, highlight the need for a clear definition of the core services expected from a UPI Service Provider. Defining the core services could be one of the first tasks for the governance bodies and one more reason to establish them as soon as possible.</p>

Questions	Answers
	<p>Given the level of granularity that has been defined for the UPI in the technical specifications, we believe that for the overall infrastructure set up and cost allocation, much of the effort will be focused on preliminary issuance. Once the required UPIs are issued we anticipate a low level of new issuances i.e. the population of identifiers will be relatively static. There will be some exceptions for example within equity swaps due to the variability in underliers.</p> <p>As a consequence, the cost recovery and fee models will require a relatively high initial investment compared to the run cost, followed by comparably low maintenance and run costs. Clear transparency should be provided regarding the different cost types such as operational costs related to running the service and governance related costs.</p>
G. Date of response	25.05.2018
Consultation questions	
<p><i>Q1. Do you agree a public-private partnership model such as the one sketched above should be adopted for the UPI Governance Arrangements?</i></p>	<p>We agree with the choice of a public-private partnership model for the UPI governance arrangements and believe the proposed structure provides a good way to obtaining input and oversight from both the public sector and the industry.</p> <p>We propose that a more formal board structure for the Industry Representation Group (IRG) should be established and suggest Global Identifier Board (GIB) as its designation. The scope and charter of the</p>

Questions	Answers
	<p>governance bodies such as the UIROC and GIB should be clearly defined.</p> <p>Besides the reporting entities which should have a clear representation on the GIB, the GIB should at a minimum contain representation of the derivative infrastructure providers, market data providers, trade associations, service providers such as custody banks, the UPI service provider(s), and the RDL provider. The board should also be geographically diverse.</p> <p>While the composition of the GIB should represent the different constituents of the derivatives industry, the GIB representation does not have to be limited to derivatives industry representatives only. We encourage the FSB to consider representation from other industries, such as for example the technology industry, not-for-profit or academia, as independent representatives.</p>
<p><i>Q2. Do you believe any governance functions in Annex 4 should be performed by a different body? If so, which ones and why?</i></p>	<p>No</p>
<p><i>Q3. How should any Governance Arrangements for the UPI System be funded?</i></p>	<p>Other than the administrative and technical support which should be funded by the Service Provider(s), the UIROC and GIB (IRG) should be self-funded when fulfilling their primary goal of governance oversight. The UPI service provider(s) might, from time to time, rely on the representatives on the governance bodies, or the firms they represent, to provide expertise that is more operational in nature. In this case compensation might be required. This should be funded by the UPI service provider and the fee structure they have put in place.</p>

Questions	Answers
<p><i>Q4. Do you consider the Governance Arrangements described in section 3 above are appropriate and adapted to provide oversight on fees and cost recovery?</i></p>	<p>Taking into account our comments in question 1 (in particular the need for a formal board structure for the industry representation group), we believe the arrangements described in section 3 are appropriate and can suffice to provide the required oversight on fees and cost recovery.</p> <p>Much will depend on the actual representation on the different governance bodies.</p>
<p><i>Q5. Please provide any specific suggestions to promote adherence to the cost and open access criteria, including suggestions relating to escalation procedures, including complaint handling bodies and processes.</i></p>	<p>A formal independent external audit should be conducted periodically as agreed by the UIROC and GIB (IRG) to provide independent feedback to the GIB (IRG) and the UIROC regarding adherence to key criteria for the UPI system¹ in particular cost and open access.</p> <p>A cap on allowable fee changes should be put in place by the UIROC and the GIB (IRG). Proposed fee increases that breach the cap should trigger a broader consultation process to be defined by the GIB (IRG) and the UIROC.</p>
<p><i>Q6. If you believe that start-up costs should be fully recovered by a UPI Service Provider, how should they be allocated between earlier- and later-arriving subscribers? For example, over how many years should the start-up costs be amortised?</i></p>	<p>The primary reason we expect to see earlier- and later-arriving subscribers is different jurisdictions having different start dates or phasing in of the UPI requirement. While we understand that a big bang approach is unlikely, we urge the FSB to keep the period during</p>

¹ FSB UPI Governance CP #1, Section 4.

Questions	Answers
	<p>which UPI becomes required in different jurisdictions (“Implementation Period”) as short as possible, with a maximum of 3 years from the time UPI goes live in the first jurisdiction. In addition, we advise the FSB to put out an end date by when all jurisdictions should require a UPI, similar to the approach FSB took for the implementation of the UTI.²</p> <p>We recommend an amortizing period that is sufficiently large. The period should at a minimum cover the Implementation Period specified above.</p> <p>As far as start-up costs are concerned, we propose that any rebates (see also Q7) are used in first instance to pay back the start-up costs to the early adopters.</p> <p>By rebating the start-up cost, in the longer run, it will have been distributed more evenly across all users of the service. We acknowledge the approach is not fail proof, for example there might never be a rebate. Keeping the Implementation Period limited and using a long amortization period for the start-up costs will further help to evenly distribute the start-up costs.</p>
<p><i>Q7. If revenues for a year have exceeded or fallen short of anticipated costs for that year, should the UPI Service Provider have</i></p>	<p>Rebating is an acceptable way to adjust cost, particularly in the initial period when costs might be less well known or understood. Over time we would expect the cost and funding to become stable and both the size of, and the need for, rebates should be greatly reduced.</p>

² FSB conclusions – UTI <http://www.fsb.org/wp-content/uploads/P291217.pdf>

Questions	Answers
<p><i>a mechanism for rebating or recovering the excess, either during that year or at a later time?</i></p>	<p>We expect the UPI Service Provider(s) to have a certain amount of reserves. Rather than individual firm rebates or additional levies in case of shortfalls, we expect fee adjustments and contributions to, or withdrawals from, the reserves to deal with shortfalls.</p> <p>Once start-up costs are paid back and the subscriber pool (source for the funding) is sufficiently stable, rebates can be carried over to the following year as a reduction in fees, rather than actual rebates.</p> <p>While rebates are acceptable in our view, in particular in the first couple of years, the goal should be to minimize or not have any rebates.</p>
<p>Q8. <i>Do you believe that a UPI Service Provider should be allowed to cross-subsidise the provision of UPI Services with revenues from other business lines, either with regard to start-up costs or on an ongoing basis? Why or why not?</i></p>	<p>We would like to state upfront the importance and need to clearly define the scope and boundaries of the core UPI service. Questions around cross-subsidizing, value added services and ring fencing need to be looked at in the context of that core service.</p> <p>It can be challenging at times to go beyond principles without having a better view on the actual ultimate structure that will be put in place. However, we have tried to do so to the extent possible.</p> <p>Cross-subsidizing the core service with revenue from outside the core service can work and provide a welcome solution for the fee and cost recovery questions. However cross-subsidizing can create conflicts of</p>

Questions	Answers
	<p>interest and, if allowed, needs to be carefully monitored by a strong governance. Transparency needs to be provided around the cost of the core service irrespective whether the funding of such service happens through a cross-subsidy arrangement.</p> <p>For a regulatory identifier we would be concerned if any cross-subsidy arrangement would require a continuation of the identifier beyond a regulatory requirement or if the cross subsidy arrangement would hamper and delay regulatory change and progress.</p> <p>Additional items to consider are:</p> <ul style="list-style-type: none"> - A clear separation and back-up plan needs to be in place to facilitate the continuation of the core service in case the cross-subsidization ceases to exist. - Bundling of services: The cross-subsidization should not require the use of the additional service in order to gain access to the core service. A clear separation is needed. - Caution needs to be exercised to ensure that the service that is providing funding through the cross subsidization should not be part of the core service. <p>Given the potential for conflicts of interest, it is critical that a strong and appropriate governance is put in place with a set of parameters within which cross-subsidy should be considered.</p>

Questions	Answers
<p><i>Q9. Should a UPI Service Provider be permitted to provide value-added products and services (i.e., products and services that incorporate UPI data but are not required by the UPI Technical Guidance)?</i></p>	<p>The arguments in our response to Question 8 largely apply to this question as well. Providing value added services can be an acceptable and, if successful, would be a welcome way to fund the core service in whole or in part. It requires a clear upfront definition of the scope of the core service. Caution needs to be exercised and strong governance oversight is required.</p> <p>In addition we would like to stress that providing the value added services should be open to other parties as well. External parties that may want to provide value added services need to have the same access to the data as the UPI Service Provider.</p>
<p><i>Q10. What is your evaluation of the risks of restrictive practices limiting open access, e.g. through the bundling of UPI Services with value-added services? How and by whom could such practices be prevented or restricted?</i></p>	<p>Open access to the data is a cornerstone of the UPI system and should not be limited by, for example, bundling of services. A strong governance framework overseeing the provision of the core service and the cost recovery aspects of the core service is the key component to prevent this from happening.</p>
<p><i>Q11. Should a UPI Service Provider that engages in other business activity be required to “ring fence” its UPI functions? If so, what sort of corporate, legal, and/or accounting mechanisms would be necessary to effect such an arrangement?</i></p>	<p>Ring fencing, which can have different meaning for different people, is not a requirement per se but can be a useful tool to help achieve clarity on cost attribution and to protect IP rights and should be looked at in this context.</p> <p>From a cost allocation perspective, a clear distinction is needed between activities undertaken by a service provider in its function as a UPI Service Provider and other activities which may or may not be</p>

Questions	Answers
	<p>UPI related and might be undertaken by the same people or by different people.</p> <p>As mentioned in the introduction, the core service the UPI Service Provider(s) is required to provide needs to be clearly defined. A separate legal structure can potentially help with ring fencing the core service. The questions raised around IP rights in Q12 might be addressed in part by a form of ring fencing as well.</p> <p>Any ring fencing has the potential to add to the cost of the overall UPI service and the cost aspect should be carefully weighed against the benefits of the structure.</p>
<p><i>Q12. Should ownership of any intellectual property created by a UPI Service Provider be assigned to a third party in order to maintain and ensure continuation of open access in the event that the provider were to become insolvent or subject to administration or voluntarily withdraw? If so, how should that third party be structured?</i></p>	<p>Wherever possible the IP should be open source and governed by one of the existing open source agreements.</p> <p>Upfront assignment of IP rights to a third party moves the problem but does not solve it as the third party might become insolvent. However we agree that the mechanisms need to be in place to ensure that any IP rights do not get trapped in an insolvency proceeding and in particular that, if such an event were to happen, it would not hamper the continuation of a UPI service.</p> <p>One path to consider is the creation of a trust or foundation to house the IP rights with ultimate oversight by the UIROC.</p>

Questions	Answers
	<p>The protected IP rights are limited to the IP created by a service provider in its function as UPI Service Provider and which are necessary for the continuation of the UPI service.</p>
<p><i>Q13. Should access to a vendor-proprietary identifier in the UPI Reference Data Library be limited to only those market participants who have a corresponding license agreement with the respective vendor? If so, how should that underlying asset or index be identified for non-licensees?</i></p>	<p>As we indicated in our response to the first governance consultation, access to the UPI code and the UPI reference data held in the UPI Reference Data Library should be available to all users without cost. Reasonable technical access modalities need to be provided for free.</p> <p>The UPI code should be free from any restrictions on re-use in all cases. UPI data elements which are data in the UPI Reference Data Library, can carry IP rights and may be restricted in terms of their usage outside of the UPI context, i.e., OTC derivative product identification purposes. Specifically, as described in the example below, there are certain elements, like an index name, that are critical to the accurate description of a product that may have IP rights associated with them. To ensure that the UPI system is useable for OTC derivative product identification, ISDA believes that such elements must be included in the Reference Data Library regardless of IP considerations.</p> <p>Certain UPI data elements may have another layer of data underlying the specific data element itself (for example the constituents of an index that underlie the index name). This next level of underlying data (i.e. the index constituents) does not need to be part of the UPI Reference Data Library and can be subject to additional licensing limitations.</p>

Questions	Answers
	<p>We illustrate the approach outlined above with the example of an index code or name that is used to identify the underlier of a specific OTC derivative product. Such index underliers are necessary to properly define such a product. The UPI code of the product with the particular index as an underlier needs to be available without restrictions. The index name or other label associated with the index needs to be unrestricted and available for free when used for UPI product identification purposes. Use in other cases can be subject to licensing restrictions. For example repackaging and resale or modification of the index name from its original form with an implied endorsement due to the ownership of the underlying IP is not allowed. Finally, information on the index constituents, maintained by the index provider, might require a license from the index provider. This licensing requirement for the “next level underlying data” should not exclude the use of the index name or code to identify an index as an underlier. The information on the index constituents does not need to be present in the Reference Data Library.</p> <p>Building the Reference Data Library needs to balance requirement for open data with requirements for data quality and take into account existing IP agreements with a goal to build a high quality future data set with limited new IP restrictions.</p> <p>We do recognize that the approach outlined above might be in conflict with existing regulatory requirements in certain jurisdictions.</p>

Questions	Answers
<p><i>Q14. Do you believe that wherever possible elements within the Reference Data Library should use established International Data Standards?</i></p>	<p>Elements within the Reference Data Library should use established International Data Standards where appropriate.</p>
<p><i>Q15. Do you agree that, for similar reasons as were traversed in the UTI Consultation, the ISO is the most appropriate body to undertake the functions of an International Standardisation Body for the UPI?</i></p>	<p>We agree with allocating the oversight of the 12 character UPI code and format to ISO as the International Standardisation Body, similar to the approach taken for the UTI code structure and format. Any discussions in the ISO working groups need to ensure appropriate and diverse industry representation.</p> <p>However, the scope of items that need standardization for UPI is much broader than is the case for UTI. In addition to the 12 character code, standardization is required for all the data elements that underlie the code and for the values that each of these data elements can take. While we support the use of ISO standards where the ISO standard is developed and fit for purpose, we do not believe that this is true in all cases. In particular where the reference data (values for the UPI elements) is concerned ISO might not provide the reference data or might not be the best source for the reference data. Existing standards, other than ISO, will be better suited depending on the values and these standards should be leveraged where appropriate.</p> <p>In order to guarantee data quality it is extremely important that the right sets of reference data are chosen. A “one size fits all” approach will not accomplish this. The wrong reference data standard will lead to additional data mapping requirements that increase both the cost of the UPI implementation and the risks of errors and hence reduce the data quality.</p>

Questions	Answers
	<p>An example are the floating rate options, which are the underliers for interest rate swap products. While a list of floating rate options exist within ISO, the list is not complete and a functioning maintenance process to keep the list up to date is not available. The existence of a list does not mean that list is appropriate and in this case ISO is not the best source for floating rate options. We are concerned that the “appropriateness” criterion will fall to the side once ISO is selected. The focus should be on selecting the best source for each type of reference data. Often this is the reference data used in other parts of the trade processing lifecycle outside of the regulatory reporting context.</p> <p>The impact of inappropriate reference data on data quality cannot be underemphasized.</p>
<p><i>Q16. Do you think it desirable that all elements in the UPI Reference Data Library be subject to ISO standards?</i></p>	<p>No. As indicated in our response in Q15, while we support the standardization effort under ISO, we do not believe ISO codes are the right solution in all cases.</p>
<p><i>Q17. Do you agree with the FSB’s preliminary conclusions about codelists and related topics in section 5.3 above?</i></p>	<p><i>Please see our response to Q 15.</i></p>
<p><i>Q18. If you believe that the UPI data can and should be used for purposes other than solely regulatory reporting, describe in detail and provide specific examples of any such additional purposes.</i></p>	<p>We would welcome usage of the UPI and its reference data in use cases beyond regulatory reporting. However, given that the number of underlying data fields are prescribed and already specified for the UPI in the final technical guidance from CPMI and IOSCO, usage of the</p>

Questions	Answers
	<p>UPI for purposes beyond regulatory reporting might be limited in the immediate term.</p> <p>Below are examples we provided previously of use cases for product identifiers beyond regulatory reporting that could be satisfied in a product identifier system that allows different levels of granularity. As the use cases demonstrate, the UPI, as a new data field, could simplify derivatives processing. For this to happen high data quality is extremely important. Uncertainty over the data quality will greatly diminish the prospects of broad usage of the UPI. At the same time, the best way to guarantee good data quality in our view is to develop usage outside of the regulatory reporting area.</p> <p><i>1) Portfolio reconciliation and valuation across market participants</i></p> <p>Market participants have recurring needs to share portfolios of positions among each other. The best known and recurring use case is portfolio reconciliation, often in the context of collateral management. Other use cases relate to portfolio acquisitions and valuation services.</p> <p>The most challenging issue in this context remains how to express the portfolio in a manner that can be computed by the receiving party. In the collateral management space, this issue has been partly tackled through the adoption of shared infrastructure. It however remains largely unsolved for more ad-hoc use cases, such as portfolio acquisitions and valuation services, especially as those can involve less sophisticated</p>

Questions	Answers
	<p>counterparties which do not have external interfaces which make use of data standards such as FpML.</p> <p>The ability to abstract part of the product economics through a UPI would provide very meaningful added value, by removing the need to normalize the underlying products terms.</p> <p><i>2) Communication of request for quotes and orders</i> This use case is similar conceptually to the case of valuation among market participants, the key idea being that it is conceptually easier to communicate among counterparties through a UPI rather than by expressing the economics of that product.</p> <p>In practice, this might be a case where a human readable alias to the UPI is required.</p> <p><i>3) Simplified reporting in multiple jurisdictions</i> The use of a UPI for regulatory reporting reduces the number of data fields that needs to be reported and increases the consistency of reporting on a global basis as the UPI links back to a global Reference Data Library.</p> <p><i>4) Meaningful and simplified public reporting using the UPI to identify the product</i> The use of a UPI for public price reporting reduces the number of data fields that need to be reported, increases data quality</p>

Questions	Answers
	<p>and improves the usefulness of the public reporting. A human readable alias for the UPI might be required in this case.</p> <p>Other areas in which UPI might be used include: post-trade processing, pre- trade aggregation of liquidity across multiple platforms, management reporting, risk assessment in terms of concentration risk or exposure, identification of eligibility for other regulatory requirements (e.g. margin, clearing eligibility) and a jurisdiction-agnostic approach to identifying products traded on a venue.</p>
<p><i>Q19. Considering the pros and cons of each of the above-mentioned models (Single UPI Service Provider model or Competitive model), what would in your view be the most suitable? Please provide detailed reasoning.</i></p>	<p>It is important the UPI infrastructure is kept as simple as possible and as cost effective as possible. Whether this can best be achieved by a single provider or by multiple providers will depend in our view to a large extent on the actual set up and cost recovery proposals from the respective candidate Service Providers.</p> <p>We do note that irrespective of the final model, a service provider needs to have the ability to provide technical support during local business hours.</p>
<p><i>Q20. Do you believe that there should be a single UPI Reference Data Library if multiple UPI Service Providers coexist in the UPI System? Why or why not?</i></p>	<p>Yes, there should only be a single UPI Reference Data Library in all instances.</p> <p>We envisage a functional design with a unique repository for UPI consumption and a single point of access to request new identifiers. The technical design might have a distributed data base set up. This</p>

Questions	Answers
	<p>design will allow greater flexibility and minimize risk inherent with vendor lock-in. Once established, whether they are served by a single or multiple providers should not impact the end user. Further, allowing for multiple Service Providers could foster more competitive pricing and services that address nuances specific to product classes. As discussed in the introduction, once the initial set is populated we expect a relatively low volume of new issuances. This should minimize issues around data synchronization, if any.</p> <p>The library contains all UPIs and their underlying reference data. The library should be accessible directly (not just through a Service Provider(s)) for any inquiries on UPI and/or their reference data. Creation of new UPIs should happen through a Service Provider. The Service Provider(s) can develop additional services to facilitate the access to the Reference Data Library. In the case of multiple service providers, the service providers need to communicate with each other to avoid creation of duplicates. The “coordination role” mentioned in the consultation, which we agree is required in case of multiple Service Providers, sits at the level of the Service Providers.</p> <p>The Reference Data Library is responsible for the maintenance of the reference data. Funding of the Reference Data Library will happen through the service providers with oversight by the GIB (IRG) and IUROC where required.</p>

Questions	Answers
<p><i>Q21. What would be the value added in having competing UPI Service Providers if there was a single entity centrally managing the UPI Reference Data Library?</i></p>	<p>The UPI Service Providers can provide levels of service to access the RDL information beyond the basic RDL access requirements. For example, a UPI Service Provider can provide support in a local language.</p> <p>In addition, Service Providers might have unique expertise that complements other Service Providers.</p>
<p><i>Q22. How could the applicable technical principles and governance criteria mentioned in section 6.1 be followed if there were multiple UPI Service Providers?</i></p>	<p><u>Uniqueness</u>: The uniqueness needs to be checked at the level of the Service Providers, not the RDL. It requires coordination between the UPI Service Providers and must be done timely and prior to the issuance of a new UPI to prevent duplication.</p> <p><u>Consistency</u>: This will be enforced at both the level of the Service Provider(s) and the RDL.</p> <p><u>Ease of assignment/retrieval/Query</u>: While we foresee a basic level of access at the RDL, we primarily see this as an area where the Service Provider(s) provide added value.</p> <p><u>Public interest</u>: The primary goal of the UPI that needs to be satisfied is use in regulatory reporting. This does not change whether there is one or multiple Service Providers.</p> <p><u>Cost recovery</u>: In case of multiple Service Providers, the cost of maintaining the central Reference Data Library needs to be shared across the Service Providers.</p>

Questions	Answers
	<p><u>Open access</u>: Each UPI Service Provider would need to provide public access to the UPIs it created, and these should be consolidated and publicly available through the RDL so that firms do not have to check multiple sources to ascertain whether the appropriate UPI is available.</p>