



MEMORANDUM

TO:	David A. Stawick Secretary of the Commission Commodity Futures Trading Commission Three Lafayette Centre 1155 21st Street, NW Washington, DC 20581 secretary@cftc.gov .	FROM:	PJ Di Giammarino, CEO, JWG PJ@jwg-it.eu www.jwg-it.eu +44 (0) 20 7870 8004
CC:	Adam LaVier, US Treasury, SEC Matthew Reed, Division of Risk, Strategy and Financial Innovation, SEC		
SUBJECT:	Consultation response to RIN number 3038-AD19 'Commodity Futures Trading Commission; Swap Data Recordkeeping and Reporting Requirements'		
Date:	1 April 2011		

Introduction

Following an invitation from Commissioner Gensler to respond post-deadline, the response to the Office of Financial Research (OFR) consultation on 31 January¹ and discussions with Adam LaVier, Office of Domestic Finance, US Treasury, during the week of 21 March, we are writing in response to the 8 December proposal by the CFTC to issue a Unique Counterparty Identifier (UCI).

JWG is a financial services think-tank which works with regulators, investment firms and their information technology supply chain to help determine how the right regulations can be implemented in the right way. The 10 firms that are involved in JWG's Customer Data Management Group have asked us to submit this letter.

We were pleased, through our discussions in Washington, to be assured that the intent to issue a single policy for the Legal Entity Identifier (LEI) via the OFR will meet the needs of the Commodity Futures Trading Commission's (CFTC) UCI requirements. In our review of the CFTC's Swap Data Recordkeeping and Reporting policy 3038-AD19, this had previously been unclear.

The purpose of this memo is twofold. Firstly, to express our wholehearted support for your recognition of one identifier for legal entities and/or counterparties (the "identifier") globally with the correct characteristics. Perhaps more importantly, we also would like to highlight a few key potential issues which could affect the UCI/LEI policy standards adoption in Europe. We are raising these issues now in hope that early discussion of them will facilitate rapid reconciliation of any differences of opinion which would inhibit rapid implementation of a single, common global policy on the identifier.

¹ JWG's Customer Data Management Group (CDMG), in association with University College London's Systemic Risk Working Group (SRWG) and the British Bankers' Association (BBA), have engaged experts from top financial institutions over several weeks in response to the Office of Financial Research's consultation paper regarding standardised Legal Entity Identifiers. The Group's response to the OFR's consultation is attached to this memorandum.



Key messages

Differences between LEI and the UCI must be reconciled. The CFTC's UCI proposal was issued in parallel with the OFR's proposal on standard Legal Entity Identifiers. The CFTC has stated in the 'Swap Data Recordkeeping and Reporting Requirements' that the identification system must:

"Result in a unique identifier format that is capable of becoming the single international standard for unique identification of legal entities in the financial sector on a global basis" (page 76591, third column)"

This implies that there cannot be separate and discrete Universal Counterparty Identifiers and Legal Entity Identifiers – they must be the same identifier. Therefore, **the differences between the LEI and UCI proposals must be reconciled into what will ultimately become a single identification policy.** While the CFTC has recognised the need to require the LEI endorsed by the OFR as the authoritative standard identifier for all CFTC requirements, there has been no public confirmation of this at the time of this memorandum.

Requirements-based design is required. The question of what we are attempting to identify, and for what purpose, has yet to be clarified. If identification is required at a lower level of granularity than the legal entity (e.g., the trading account level), calling the identifier an LEI is unhelpful. Careful planning will be required to establish related dependencies and avoid potential conflicts created by other areas of regulatory reform. **To help clarify the scope, we urge the regulatory community to engage in the debate on the potential uses of the identifier both in the US and internationally.**

A global standard is important. The industry welcomes the CFTC's initiative to institute a UCI standard throughout the financial sector. However, in order for it to be successful, it is important that it is implemented as part of a "global UCI standard" and phased properly and with due consideration to the issues raised in this memorandum. We are concerned that an inappropriately parochial identifier could exacerbate current data quality issues and undermine future standardisation efforts. The construction of a standard, which we support, **should not just be a standard for the US; it should be globally applicable, relevant and implementable.**

The time for EU engagement is now. Europe may well have to wait for agreement from Parliament before the European Supervisory Agencies are asked to become involved in the creation of the identifier. We recognise the US deadlines loom and urge an active dialogue to get clarity on, with a view to resolving, any potential differences in EU and other international policy before the identifier is globally adopted. Therefore, **in order to secure global support for a standard identifier system, it is important that US regulators ensure that they are actively engaging with EU and global industry experts.**

Our comments are structured to reflect the key barriers that CDMG members have noted specific to the CFTC's UCI proposal. These barriers have been divided into three subsections, pertaining to the scope, operating model and implementation of the identifier, respectively.



Table of contents

A. SCOPE OF THE UCI/LEI.....	4
1. HIERARCHY AND LINKING	4
2. PRIVACY AND BANKING SECRECY	4
3. USE OF THE UCI/LEI.....	5
B. OPERATING MODEL OF THE UCI/LEI	5
4. 'REASONABLE ROYALTY'	5
5. INTELLECTUAL PROPERTY RIGHTS (IPRS)	6
6. DATABASE ACCESS AND OWNERSHIP RIGHTS	6
C. IMPLEMENTATION OF THE UCI/LEI	6
7. IMPLEMENTATION APPROACH	6
8. STANDARDS.....	7
9. GOVERNANCE	7
D. CONCLUSION	8



A. Scope of the UCI/LEI

We support the notion that the identifier should be a 'dumb number'. However, it is difficult to create an identifier that is fit for purpose without detailed discussion of how the CFTC, SEC, European Commission and other regulatory bodies will plan to use it.

1. Hierarchy and linking

The UCI proposal statement reads:

"The proposed regulations would require each swap counterparty to report all of its corporate affiliations into a confidential, non-public corporate affiliations reference database, maintained and located as determined by the commission... for these purposes, 'corporate affiliations' would mean the identity of all legal entities that own the counterparty, that are under common ownership with the counterparty, or that are owned by the counterparty." (page 76591 column 1)

This is a requirement that was not called for by the OFR's proposal on Legal Entity Identifiers and would seem to include the entirety of the legal entity's legal hierarchy. This could be a very difficult, complicated and cumbersome requirement to implement and maintain. Further, the verification of such a chain of ownership would be time consuming and costly.

The group believes that the linking of identifiers should best be left as a separate exercise. However, it is recognised that, if the regulatory requirement is to capture trading counterparties which may involve branches, then a proper consideration of the hierarchy will be necessary at an earlier stage.

We note that the CFTC's proposal would appear to contradict the report 'Creating a Linchpin for Financial Data: Toward a Universal Legal Entity Identifier,' which states:

"...organizational hierarchy, instrument identification, and counterparty exposure all build upon entity identification, therefore requiring that the LEI problem be solved first" (Introduction – page 2 4th paragraph)

Clarification is therefore necessary as to what the precise regulatory requirements are and how the CFTC statement and the OFR's LEI characteristics will be reconciled.

2. Privacy and banking secrecy

The CFTC has stated that the UCI:

"Be sufficiently extensible to cover all existing and potential future legal entities² of all types that are or may become swap counterparties, are or may become involved in any aspect of the financial issuance and transaction process, or may be subject to required due diligence by financial sector entities." (page 76592 column 1)

This seems to suggest that the UCI will require a very broad scope of coverage. However, the current scope of the LEI has been narrowed sufficiently as to not include individuals, nor go deep enough to include the asset level or account through which the legal entity conducts its business (i.e., the sub-account level). Such requirements could seriously hinder the UCI from being adopted globally – this broad range of coverage would surely involve complications arising from EU data privacy and international banking secrecy laws and policies.

Our position on this point is that the scope of the exercise needs to be handled delicately; setting the bar too high could hamper the effort to the point of making it far too expensive and impractical to implement, thereby derailing it.

² Emphasis added; we note that one country's legal entity may not exist as such in another



3. Use of the UCI/LEI

It is currently unclear how, precisely, the UCI/LEI will be used. A preliminary analysis of the current regulatory proposals would indicate at least half a dozen potential uses as shown in Figure 1.

Figure 1: **Potential uses of UCI/LEI**

Use/purpose	US	EU
Trade reporting and data retention	<ul style="list-style-type: none"> ▶ Swaps data repository (SDR) ▶ Reporting to SEC/CFTC where SDR does not exist ▶ SD/MSP data retention and reconstruction of a swap 	<ul style="list-style-type: none"> ▶ Trade repository reporting ▶ Reporting to ESMA where repository does not exist ▶ CCP retention for 10 years
Position reporting	<ul style="list-style-type: none"> ▶ Speculative position limits 	<ul style="list-style-type: none"> ▶ Draft MiFID text and position limits due June 2011
Clearing	<ul style="list-style-type: none"> ▶ Mandatory clearing of standardised contracts 	<ul style="list-style-type: none"> ▶ Mandatory clearing of standardised contracts
Counterparty risk	<ul style="list-style-type: none"> ▶ Large exposure reporting 	<ul style="list-style-type: none"> ▶ Large exposure reporting
Macroprudential risk oversight	<ul style="list-style-type: none"> ▶ FSOC reporting via OFR TBD ▶ G-SIFI analysis TBD 	<ul style="list-style-type: none"> ▶ ESRB reporting TBD ▶ G-SIFI analysis TBD
Basel III	<ul style="list-style-type: none"> ▶ Incorporation into calculation of stable funding ratios (2018) ▶ Liquidity risk reporting (2018) 	<ul style="list-style-type: none"> ▶ Incorporation into calculation of stable funding ratios (2018) ▶ Liquidity risk reporting (UK 2010)

We do not yet know what the scope of UCI/LEI reporting will be and when the detailed regulatory proposals being considered will call for the adoption of the identifiers. Decisions about scope and implementation phasing will be dependent upon a clear and precise definition of purpose. Though EU policy is beginning to be defined through a consultative process (e.g., MiFID, EMIR), these discussions do not include discussion of the identifier requirements.

Careful planning will be required to identify dependencies between new regulatory requirements and changes to existing ones. An example of this has been provided in the UK, where the Financial Services Authority is consulting on a move from the FRN to the BIC code for transaction reporting in 2011³. Should a global identifier other than BIC be decided upon, transaction reporting in the EU should be migrated to this as the more regulatory identification systems, the higher the potential to introduce more cost and risk into obtaining transparency.

B. Operating model of the UCI/LEI

CDMG members have expressed concern over how specific points of the operating model of the LEI/UCI proposal will work.

4. 'Reasonable royalty'

Regarding fees, the CFTC has stated in its proposal:

"Voluntary consensus standards include provisions requiring that owners of relevant intellectual property have agreed to make that intellectual property available on a non-discriminatory, royalty-free or reasonable royalty basis to all interested parties." (page 76591 column 3)

³ FSA Market Watch 38 http://www.fsa.gov.uk/pubs/newsletters/mw_newsletter38.pdf



"Information concerning the issuance process required for new identifiers and a comprehensive, current list of issued UCIs must be available publicly and free of charge." (page 76592 column 1)

However, clarification is required concerning what exactly a 'reasonable royalty basis' is. For instance, when the Committee on Uniform Security Identification Procedures (CUSIP) system migrated to Europe, such a 'reasonable' fee mandate did not keep it from being prohibitively expensive. In this particular case, an identifier should not confer prohibitive costs on the industry in order to maximise its potential to be adopted as a truly global, standard identifier.

5. Intellectual Property Rights (IPRs)

There is a potential disconnect between the US and EU views on the topic of Intellectual Property rights which would be assigned to the code itself; US commercial practices commonly confer privately held rights to the use of an identifying number. Although database rights may be established in the database in the EU, no other IPRs vest in a string of numbers. It will be important to investigate the international position on IPRs against existing contracts with data vendors in this space.

As the European Competition Commission has indicated in its investigation of Standard & Poor's charging model for the assignment of ISINs to product codes, the EU stance is that such information is to be regarded more as a public good. In the case of the UCI, in order for the identifier to become the global standard, it will be necessary to agree internationally what IPRs vest in the identifiers and how these should be defined and monitored (or whether alternative models should be considered).

6. Database access and ownership rights

Following on from the IPR point noted above, there are multiple questions that would need to be answered from an EU perspective:

- ▶ Who would own such a database?
- ▶ Would the database be protected by 'database rights'?
- ▶ Who would be allowed access to it?
- ▶ Where would it be located?
- ▶ How could confidentiality concerns, data privacy and banking secrecy laws be circumvented?

CDMG members have noted much more investigation of the architectural requirements is necessary.

C. Implementation of the UCI/LEI

It is clear that there will be significant challenges presented when it comes to rolling out the programme.

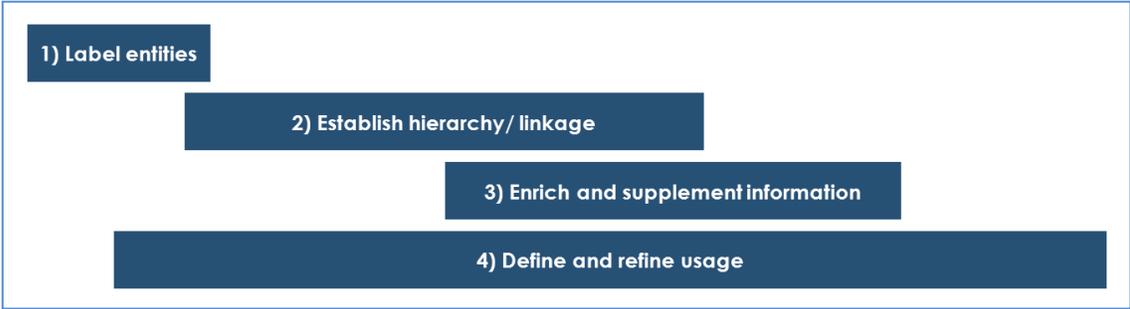
7. Implementation approach

As with the LEI, the method of implementation will be critical in determining the success of the standard UCI programme. A phased introduction would be the most effective and prudent way to implement it, possibly beginning with wholesale or SIFs and global counterparties. Once the success of the pilot programme has been determined, and necessary adjustments made, the programme can be extended more generally to those determined to be in the project's scope.



Regarding the phasing of different aspects of the UCI, as mentioned in section A.1, the first, most critical, aspect that should be implemented is simply a 'dumb number' identifier. Once an identifier is in place, only then should a separate and discrete effort take place to institute linking (e.g., ID 3 is the parent of ID 2 and child of ID 1, which is the ultimate parent; identification of branches; corporate affiliations; etc.). Later in the timeline, further attributes can be added to the identifier in an 'enrichment' phase as needed once the groundwork is laid and important functions implemented, and use cases can then be defined. This approach is described in Figure 2.

Figure 2: Implementation phasing



8. Standards

Regardless of the attributes chosen, standardised input methods will need to be put in place and, at this juncture, missing ISO 20022 standards are a cause for significant concern. Therefore, care must be taken to ensure that the methods chosen can be globally applied and are not limited to the US (for example, addresses which are not internationally consistent and which do not have an ISO standard).

CDMG has noted in its response to the OFR that this effort needs to leverage existing international standards and, perhaps, create new ones. However, it cannot be owned by a standards body without the correct engagement model. In Europe, the ESAs have a responsibility to define technical standards for regulation once a new directive or regulation becomes law. This could well mean that the ESAs, and others that are involved in the use of that data like the ESRB, could play a role in defining the standard. Internationally, the BIS and/or FSB, IOSCO and IMF could also be involved. Whatever the standards process, clarity about who is responsible for what and how decisions will be made is necessary from the start to avoid confusion.

9. Governance

Although regulators in the United States have been the first to propose standardised Legal Entity Identifiers, it is of the utmost importance to ensure that their aims are completely aligned with those of the European Union and Asia. If goals or methods are allowed to diverge, then the ability to map and identify interdependencies between legal entities will be undermined and systemic risk will remain undetected. It is important to recognise that there is currently no global legal entity standard and having multiple expressions of an LEI would lead to splintering of data formats, resulting in expensive and unnecessary duplication. The BCBS, IOSCO and international oversight bodies might also be involved in the detailed data definition and governance.

Political sensitivities and legal differences will need to be taken into account when finalising policy and choosing the location for both the "voluntary consensus standards body" and servers storing the data itself. Issues could arise concerning information masking, national secrecy laws



and information sharing arrangements. Conflicts of interest regarding which country has control over the data and the locality of the standards body could arise and will need to be avoided.

Terminology will continue to be a concern on an international level; problems resulting from language barriers and transliteration issues will have to be considered.

Finally, it must be recognised that certain regulatory initiatives have called for identifiers, metrics and reports for specific regulatory purposes. An example of this is Single Customer View identifiers (noted in footnote 4 of the Linchpin report) in the UK and Australia that, though different, have both been put in place for the purposes of deposit guarantee schemes. It is important for systemic risk purposes to ensure clarity of use and description of these and other identifiers.

The organisation that is chosen (or created) to develop the standards of the identifiers, as well as being charged with the responsibility of their maintenance, will be crucial to the success of the project. Given the size of the effort at hand, it is not entirely clear that the OMB A-119 definition of a consensus standard is appropriate and consideration should be given to other types of standards (e.g., non-consensus standards, industry standards, company standards) based on the answers to other questions in this memorandum.

It is generally accepted that the body should be operated on a not-for-profit basis in order to reduce the opportunity of conflicts of interest arising. There is a strong preference to leverage an existing data provider for the purpose, but there still remains an inherent risk of conflicts of interest when almost any existing supplier has an interest in being chosen.

There would also have to be complete assurances to the firms that the chosen bodies have the expertise, resources and capability to cope with the very significant task of handling and maintaining the identifiers across the entire industry, as well as fulfilling the global requirements for the ID. To that end, it may be in the best interest of the industry to build a new institution from the ground up to allocate LEIs. Further discussion and consultation on the matter will be necessary.

D. Conclusion

The industry supports the creation of a UCI/LEI but, before any serious progress can be made and the matter of standardising UCIs in the financial industry across the globe can move on from the idea stage, there is a plethora of questions to be answered and issues to be clarified, and barriers to overcome.

It bears repeating that it is absolutely critical, from both an industry and regulatory standpoint, that the proposed LEI and UCI systems are, in fact, the same. To ask the industry to effectively implement similar, but slightly different, systems would introduce both operational and systemic risk back into the system. It is therefore necessary that the gaps between US and EU proposals are closed, and the differences between them are reconciled into a single system. The onus ultimately lies on the regulators to define the use cases for this system in order to determine the best possible implementation and outcome.

We trust that the above provides an appropriate starting point for review of this important matter. We would be delighted to work with the Commodity Futures Trading Commission to discuss the opportunity before us and would welcome a meeting with you to expand on these issues in more detail.

Attachment: BBA/UCL/CDMG OFR LEI response 31 January 2011



MEMORANDUM

TO:	Office of Financial Research Department of the Treasury 1500 Pennsylvania Avenue, NW Washington, D.C. 20220 Via website: http://www.regulations.gov	FROM:	PJ Di Giammarino, CEO, JWG PJ@jwg-it.eu www.jwg-it.eu +44 (0) 20 7870 8004 Simon Hills, Executive Director, British Bankers' Association, simon.hills@bba.org.uk , +44 (0) 020 7216 8861 Christopher D. Clack, Chairman, Systemic Risk Working Group, UCL clack@cs.ucl.ac.uk , +44 (0)20 7679 7284
SUBJECT:	Consultation response to 'Office of Financial Research; Statement on Legal Entity Identification for Financial Contracts' from JWG Group and the BBA		
DATE:	31 January 2011		

Introduction

JWG, the BBA and the UCL Systemic Risk Working Group are pleased to be able to respond together to the Office of Financial Research's (OFR) consultation on Legal Entity Identifiers (LEI).

JWG is a financial services think-tank which works with regulators, investment firms and their information technology supply chain to help determine how the right regulations can be implemented in the right way. The 10 firms that are involved in JWG's Customer Data Management Group have all provided detailed input into this response.

The British Bankers' Association ("BBA") is the leading association for the UK banking and financial services sector, speaking for over 230 banking members from 60 countries on the full range of the UK and international banking issues. All the major banking players in the UK are members of our association as are the large international EU banks, the US banks operating in the UK as well as banks from India, Japan, Australia and China. The integrated nature of banking means that our members are engaged in activities ranging widely across the financial spectrum encompassing services and products as diverse as primary and secondary securities trading, insurance, investment banking and wealth management, as well as deposit taking and other conventional forms of banking.

UCL (University College London) is a world-leading research university, as reflected in performance in a range of rankings and tables. For example, UCL was ranked fourth in the world in the 2009 Times Higher Education-QS World University Rankings. UCL's Systemic Risk Working Group (SRWG) brings together academia and industry to explore and address fundamental issues in the understanding, monitoring and control of systemic risk. The SRWG emphasises a pragmatic, multi-disciplinary approach to systemic risk, encouraging input from industry practitioners, computer scientists, mathematicians, economists, psychologists, complexity scientists and experts from many other disciplines.



Key messages

A global standard is important. The industry welcomes the OFR's initiative to institute a LEI standard throughout the financial sector. However, in order for it to be successful, it is important that it is implemented as part of a "global LEI standard" and phased properly and with due consideration to the issues raised in this memorandum. We are concerned that an inappropriately parochial LEI could exacerbate current data quality issues and undermine future standardisation efforts. The construction of a standard, which we support, **should not just be a standard for the US; it should be globally applicable, relevant and implementable.**

Setting the scope right will 'make or break' the initiative. It is important to realise the scope of this proposal: an effort to define, enforce and maintain an LEI standard on a global scale will be complex, challenging and expensive. The subject matter experts we have engaged caution that it could become derailed by scope-creep and quality control issues. Realistic goals, timelines and expectations must be set so that the LEI is indeed useful, useable and extensible for the needs of the regulators and firms. To do this, we believe it is necessary to **focus efforts and prove the concept by concentrating on wholesale business only to start.**

The LEI database presents real risks that require mitigation. We are concerned that the vision of a single overarching body, responsible for administering global registration and global real-time database requests, introduces a single point of failure that will be fragile and vulnerable to accident or targeted attack. In addition, if the scope, standards and timing are not managed, the **resulting costs could far exceed initial estimates (hundreds of millions) and quality could be too low to realise the value envisioned by the framers of the OFR requirements.**

Success requires active engagement of experts. The content in this memo is the result of years of research and experience in this space brought to bear in three meetings with over 20 representatives from a dozen of the global systemically important financial institutions to discuss the implementation strategy and operating model implications of the LEI. Although held in London, these meetings assembled experts from the UK and continental Europe, Canada and the US in order to reflect the global nature of the institutions represented and their customers/direct counterparties. We have found the expertise required in a large array of departments that need to work collaboratively to create a holistic picture of the issues: data officers, operations specialists, anti money laundering experts, technical architects, lawyers, standards experts, Finance and Treasury have all participated in our discussions. **The challenges of successful global implementation need to be considered with the relevant experts within the financial institutions.**

OFR industry engagement. As JWG's 2010 research into the 'pipes and plumbing' for systemic risk (attached to this memo) found, we are just at the start of a much larger discussion on data policies for systemic and macroprudential risk analysis. The LEI is, of course, just one facet of a much larger regulatory data discussion. This memo contains a wide array of detailed issues specific to the LEI. For the avoidance of doubt, these perspectives are those of the financial institutions only, but it is recognised that more effort is required for a comprehensive engagement across the industry and its supply chain. We would like to maintain an ongoing, global dialogue, throughout the lifecycle of the LEI and any associated efforts, in order to relay issues to our members. The subject matter experts offer their comments in the hope that our contribution to this discussion could help all parties create a clear and holistic picture of the end game so as to reduce the risk of the programme's failure. **We look forward to engaging with the OFR in a meaningful, collaborative dialogue on the creation of a potential solution.**

Our comments are structured to align with the corresponding points of the OFR policy statement published in the Federal Register Vol. 75, No. 229 on Tuesday, November 30, 2010.



Table of contents

A. CHARACTERISTICS AND SCOPE OF THE LEI	4
1. DEFINITIONS AND ASSIGNMENT OF REGISTERED AND NON-REGISTERED ENTITIES	5
2. THE SCOPE OF THE LEI	5
3. STANDARDISING TAXONOMY	5
4. INTERNATIONAL CONSISTENCY	6
5. COMMERCIALISATION	7
6. SECURITY	7
7. TIME VALIDITY	7
8. USING EXISTING TECHNOLOGY	7
9. SEPARATION OF MAPPING AND REGISTRATION PROCEDURES	8
B. INSTITUTIONAL ARRANGEMENTS FOR LEI ISSUANCE	8
10. COST	8
11. THE "VOLUNTARY CONSENSUS STANDARDS BODY" AND OPERATING BODY	9
C. INSTITUTIONAL ARRANGEMENTS FOR DEVELOPING, MAINTAINING AND PUBLISHING LEI DATA ...	9
12. DATA ATTRIBUTES AND DEFINITIONS	10
13. DATA QUALITY, LOADING AND MAINTENANCE	10
14. TARGET OPERATING MODEL AND GOVERNANCE	10
15. DATA SYSTEM PHASING	11
16. THE FUTURE AND DIRECTION	11
D. CONCLUSION	11
ATTACHMENT 1: CUSTOMER DATA BARRIERS	13
ATTACHMENT 2: CUSTOMER DATA REGULATORY INITIATIVES 1H 10.....	14



A. Characteristics and scope of the LEI

A clear and overarching definition of what exactly does and does not constitute a legal entity will be fundamental in standardisation efforts moving forward – different characterisations of 'legal entity' must be accommodated explicitly, or excluded from the scope of the LEI depending on exactly what the LEI will be used for. In fact, precise terminology must be defined across the entire scope of the OFR's work programme, taking into consideration firm differences and global language barriers.

We are very familiar with how difficult regulatory-driven data standards are. JWG formed the Customer Data Management Group (CDMG) in 2008 to define 'what good customer data management looks like.' After two years and 600 man days of effort, we were able to produce the foundation for the first 'data rulebook' that prescribes, in a neutral way, the mechanics of managing the information that regulators require.

Our [guidance](#) is now recognised by the Association of Financial Markets in Europe (AFME) and the Futures and Options Association (FOA) and has been distributed to 300+ firms. In summary, the guidance makes seven recommendations which form the operational compliance guideline for customer data management and takes into account the different types of customers, the reference process for creating and maintenance of their data and the way that the quality of the information can be assessed.

As we have investigated over 10 different customer identities published by G20 regulators in 2010, we have sought to foster a global dialogue between regulators, firms and their suppliers to address:

- ▶ What information do we need? The questions that need to be answered, by whom, when, where and why need to be identified. Examples include counterparty exposures, valuations, liquidity and positions
- ▶ How do we agree the data requirements? 'What does good data look like?' is a serious and difficult question to answer and will take time and effort. The answer may differ significantly across jurisdictions due to differences in market practices, language, law, tax regimes and what each member State is willing to spend
- ▶ What are the standards objectives? The data priorities should be driven by the regulatory mission but data collection will be user-driven. It will be critical to manage the scope of the programme to get to a focused set of results that can be achieved quickly. Issues such as the linkage between legal entities and instruments will need to be managed carefully. It will be important to clearly articulate the mission and success criteria as well as the metrics used to judge performance
- ▶ How is the holistic set of standards governed? This effort needs to leverage existing international standards and, perhaps, create new ones. However, it cannot be owned by a standards body without the correct engagement model and oversight. In Europe, the ESRB and the ESAs should all play a role. Internationally, the BIS and/or FSB and IMF could also be involved.

There are a number of technical, legal and policy barriers which need to be considered in developing a customer data rulebook for the LEI. Some of these that were considered by the industry in the context of the transaction reporting consultation response have been listed in Attachment 1.



Goals across the US, UK, EU and Asia must remain aligned or the potential for international standardisation will be lost. Political sensitivities and legal differences across nations will have to be considered when choosing a standards body and physical location.

The financial institutions we have engaged voiced these specific concerns:

1. Definitions and assignment of registered and non-registered entities

It is currently not clear at what level of granularity legal entities are to be defined. There is also some inconsistency within the industry as to what constitutes a legal entity for these purposes. Where does one draw the line, and what level of depth will be required (e.g., branch, accounts, subaccounts, etc.)?

It will be important to discuss what is to be counted, such as umbrella funds, where individual funds are not separate legal entities, high net worth individuals, small and medium enterprises and partnerships, and how (and if) these will be identified. Will the overseas branch of a subsidiary be counted separately? Governments, for instance, are legal entities, but is every municipality a legal entity in its own right? And for that matter, how does one define a government – national, regional or local are all possible sub-categorisations? Moves for increased investor protection may result in greater protection for some layers of government than for others. This would not be captured if a single LEI were used for the government as a whole.

The level of granularity will impact the scale of the project, i.e., the overall numbers of possible identifiers required. If we have interpreted the wording of the policy statement correctly, we could well have tens of millions of legal entities to contend with in the US alone. As discussed in point 10, the costs of this effort are not insignificant and the larger the scope of the project, the more expensive it will be.

2. The scope of the LEI

Prior to Basel II, there was no requirement for firms to keep aggregated data. As such, firm infrastructure has evolved without a way to support this comprehensive view. Therefore, in order to best implement LEI standardisation, the scope of these identifiers must be defined and narrowed. There must be clarity as to precisely what the objective of the LEI is in order to engineer a solution that is fit for purpose. The information that regulators will be looking for specifically when viewing these identifiers will have to be clearly stated and identifiers will have to be compatible with the large range of uses that firms currently have for them (e.g., credit, compliance, trading, etc.), alongside this new regulatory requirement.

The wholesale issuing and real-time mapping of a unique LEI for each global trading entity should be the overriding objective. We recommend that initial efforts are placed on creating a legal identifier in relation to wholesale clients; further consideration can then be spent at later stages on SMEs, natural persons and the like. The mapping of parent-child relationships (legal entity hierarchy) is a substantially more complex issue and will, in many instances, be highly volatile. There is concern that focusing attention on such mapping could delay the initiative (and potentially stop it) and could interfere with the efficient operation of the issuing and real-time mapping of unique LEIs.

3. Standardising taxonomy

There are serious issues regarding taxonomy, terminology and definition that will need to be ironed out before any meaningful progress can be made. This should be the immediate objective of the LEI work. Though CDMG have set themselves an objective to develop a common inter-firm taxonomy in order to align reporting conversations with regulators



globally in 2011, the US standards will require significant resource come to a common way for different firms to use the same terms for the same information. Further work will also be required to specify how relationships between data entries are formed, measured and maintained.

4. International consistency

Given the fact that many entities conduct business at a global level, and the global impact of the proposed reforms, there are many considerations to take into account.

Although regulators in the United States have been first to propose standardised Legal Entity Identifiers, it is of the utmost importance to ensure that their aims are completely aligned with those of the European Union and Asia. If goals or methods are allowed to diverge, then the ability to map and identify interdependencies between legal entities will be undermined and systemic risk will remain undetected. It is important to recognise that there is currently no global legal entity standard and having multiple expressions of an LEI would lead to splintering of data formats, resulting in expensive and unnecessary duplication. The BCBS, IOSCO and other international oversight bodies should also be involved in the detailed data definition and governance.

Political sensitivities and legal differences will need to be taken into account when finalising policy and choosing the location for both the "voluntary consensus standards body" and servers storing the data itself. Issues could arise concerning information masking, national secrecy laws and information sharing arrangements. Conflicts of interest regarding which country has control over the data and the locality of the standards body could arise and will need to be avoided.

Terminology will continue to be a concern on an international level; problems resulting from language barriers and transliteration issues will have to be considered.

Finally, it must be recognised that certain regulatory initiatives have called for identifiers, metrics and reports for specific regulatory purposes. An example of this is single customer view identifiers (noted in footnote 4 of the Linchpin report) in the UK and Australia that, though different, have both been put in place for the purposes of deposit guarantee schemes. It is important for systemic risk purposes to ensure clarity of use and description of these and other identifiers.

The challenge for any identification scheme is that successive waves of regulation over the past two decades have created a *de facto* set of requirements. For example, a single set of customer data can be viewed through a variety of regulatory lenses including, but not limited to, transaction reporting (market abuse), anti money laundering (beneficial ownership), large exposures (interconnectedness), MiFID conduct of business (suitability/appropriateness), liquidity (concentration risk), carbon footprint (ownership), single customer view (transactional activity) and resolution (exposure and asset value). In aggregate, these rules form a patchwork of compliance requirements, but nowhere sets out the business rules for managing this information to appropriate quality levels.

To complicate matters, in order to hit the G20's aggressive regulatory reform deadlines, there is now - and will continue to be - a very high degree of parallel change to manage in the short term. A snapshot of 'customer reference data' changes being implemented now is provided in attachment 2. This list has grown from half a dozen a year ago to over 40 today – we have provided a pre Dodd-Frank snapshot from mid last year.



5. Commercialisation

Data vendors will play a large role in the distribution and day-to-day use of the new LEI standard, but it is important to consider the complications that will arise from their involvement. For example, if an identifier is found to be inaccurate, strict rules will need to be in place to determine accountability for the error. If other attributes or features are added by vendors as value-added packages then it will be hugely important that the strongly defined LEI 'core attributes' are able to be immediately queried from the 'master list' of LEIs, brought up-to-date and deemed inalterable to ensure accuracy. Questions regarding ownership of data and intellectual property rights will also complicate matters once the LEI standard of the data has been value-added, commercialised and sold by vendors. It may also be worth considering the solutions and adoption plans in the case of wide-spread dissemination of inaccurate or flawed data.

6. Security

The vision of a single global repository for LEI data is a cause for concern, since such a structure embodies a single point of failure that will be highly fragile and vulnerable to both accident and targeted attack. We consider a distributed system with multiple copies and hierarchical delegated authority to be more resilient to failure and attack, and to be substantially more efficient in terms of responding to real-time LEI database queries. Further, there must be strict rules governing the 'gold copy' of LEIs and who in the organisation will actually have the administrative ability to interact with and alter these IDs in order to prevent tampering and vandalism.

The subject matter experts we have engaged voiced the following further specific concerns:

7. Time validity

LEIs should incorporate mandatory time validity attribute data, i.e., a date stamp indicating the time at which the LEI became valid as an identifier for a counterparty to a financial transaction, and a date stamp indicating the time at which the LEI became invalid. This will permit LEIs to be issued in advance of the entity becoming legally entitled to trade, and to indicate whether an issued LEI is no longer a valid reference for a trading counterparty due to (for example) merger, acquisition, bankruptcy and so forth. This will assist management of counterparty credit risk in trading organisations and will assist researchers in time series analysis. A non-essential extension of this concept could permit multiple "start" and "stop" dates (perhaps to track legal actions that might temporarily prevent an entity from trading in a particular jurisdiction).

8. Using existing technology

Although the number of trading legal entities is very high, this will be dwarfed by the number of real-time LEI database requests. However, such numbers are easily accommodated in other existing areas of technology – for example, the Data Object Identifier system (DOI) or the Internet Domain Name System (DNS). It is not necessary to invent new technology to administer LEIs and we very strongly encourage the use of tried and tested existing systems, protocols and structure for administering global unique identifiers. The DNS, though we do not specifically endorse its adoption, provides a good model for a global LEI system; the unique LEI would be a number (similar to an IP address) and a hierarchical structure of consistency-assured databases would map an LEI number to its associated data on demand (in the same way that the DNS maps between IP address and domain names and can also provide further registration details on demand). The hierarchical structure utilised in the DNS would easily accommodate both the raw number of LEIs and the predicted number of real-time mapping requests. We note in passing that the deployment of the new IPv6 protocol faces very similar practical problems to that of deploying a global LEI and we



therefore recommend that study of the IPv6 deployment plans is used to inform the deployment plans for the global LEIs.

9. Separation of mapping and registration procedures

Registration of LEIs will, apart from an initial intensive period, be a much rarer event than operational queries of the LEI database to examine the underlying data for a given LEI (we call this a "mapping" from an LEI to its underlying data). Furthermore, the operational requirements for registration are different to those for mapping: the former requires a hierarchical structure of registration authorities which are reliable, authoritative and culpable and where the required speed of registration is relatively slow; the latter requires a much deeper hierarchical structure of consistency-assured databases that feature high resilience, high reliability, total availability, high capacity and very high speed. Attention might, therefore, be given to the possibility and desirability of separating the two processes of registration and query mapping.

B. Institutional arrangements for LEI issuance

The cost of LEI standardisation across the entire industry will be significant. It should be noted that the methodology of implementation may burden smaller firms proportionately more, because of the high fixed costs elements of the exercise.

The standards body to be chosen or created must be both free of any possible conflicts of interest as well as completely capable of doing its job properly so we support the governance principles that the OFR has articulated in its consultation. That said, there is a strong industry inclination to leverage an existing body, but it recognises that avoiding conflicts of interest will be difficult as any pre-existing body would have something to gain by being chosen.

The financial institutions we have engaged have voiced two specific concerns:

10. Cost

As indicated in point 1, the cost will be driven by the scope of the effort. In addition, the cost will be dependent on the manner and level in which new identifiers are implemented. A full replacement of currently existing data structures would have a significantly higher initial cost, whereas running a second data system concurrently with existing ones, solely for LEIs, could be less costly at first but would result in higher maintenance costs and could lead to very serious issues down the line (convoluted mapping tables, etc.). It is entirely possible that a complete data infrastructure overhaul would be needed by firms.

JWG research has indicated that the cost to UK firms of managing customer data updates is over £1 billion per annum¹ and we estimate that, globally, the total spend on customer data management is approximately \$10 billion. As indicated in attachment 2 and discussed in point 4, firms are already spending a fair amount of money, manpower, time and other resources in the legal entity area and are getting ready to spend more for Dodd-Frank. Preliminary estimates by financial firms have quoted costs of maintaining a standard LEI system for their single institution, in conjunction with their other existing data systems, as upwards of \$10 million per year, excluding the costs of implementation - which could be larger. It is important that the LEI project not be viewed in a vacuum, but within the context of all the other identifier efforts in progress as divergence - or worse, conflicts - in the requirements will only serve to increase the cost of data management and delay the implementation of the LEI.

¹ JWG's 'Maintenance of wholesale customer data: A guide for UK investment firms'. January 2010



Regardless of the method of implementation, smaller firms will incur a disproportionately higher cost. Whereas large financial institutions may have the capital to absorb the cost of such an overhaul, it is unlikely that small and medium firms would be able to devote the necessary resources to make the necessary changes without having a detrimental effect on their day-to-day business activities.

It is stated in the policy statement that the cost of issuing and maintaining identifiers may be recovered through 'reasonable' fees, so long as they are not imposed on end users and the identifiers themselves are available to the public "without fees for storage, access, cross-referencing, or redistribution." At present, it is currently the custodians of the data that pay for issuance and maintenance but, under the proposed changes, it will be the financial institutions, including brokers, asset managers, hedge funds, insurers, and the like, that will cover the costs.

We believe that the most effective way to recover the costs of the proposed system may be a subscription based model, wherein fees are related to the volume of data accessed. This is, however, tentative and requires further consultation and research.

11. The "voluntary consensus standards body" and operating body

The organisation that is chosen (or created) to develop the standards of the LEIs as well as charged with the responsibility of their maintenance will be crucial to the success of the project. Given the size of the effort at hand, it is not entirely clear that the OMB A-119 definition of a consensus standard is appropriate and consideration should be given to other types of standards (e.g., non-consensus standards, industry standards, company standards) based on the answers to other questions in this memorandum.

It is agreed within the industry that the body should be organised and operated as a not-for-profit body in order to reduce the opportunity of conflicts of interest arising. There is a strong preference to leverage an existing data provider for purpose, but there still remains an inherent risk of conflicts of interest when almost any potential existing supplier has an interest in being chosen.

There would also have to be complete assurances to the firms that the chosen bodies have the expertise, resources and capability to cope with the very significant task of handling and maintaining the Legal Entity Identifiers across the entire industry, as well as fulfilling the global requirements for the ID. To that end, it may be in the best interest of the industry to build a new institution from the ground up to allocate LEIs. Further discussion and consultation on the matter will be necessary.

C. Institutional arrangements for developing, maintaining and publishing LEI data

Clarification of data requirements will be necessary, not just for the definition of the proposed fields, but for the specific format of the data input. Further, though initial discussions have expressed agreement throughout the industry regarding keeping LEIs thin in the interest of applying them internationally, more consideration is required to determine if these fields are the most beneficial and useful. There is also the problem of data maintenance; how will it be done to the high standards required, and who will be responsible if data is poorly maintained or inaccurate?

The operating model and service levels will need to be clearly defined and, in order not to disrupt the day-to-day business of firms, the bar will be set incredibly high for service levels for the standards body.



As this policy statement is only the beginning of a series of changes that regulators will make regarding making systemic risk more transparent, the industry needs a clear picture of what the next steps are and what the end will look like in order to be able to make the wisest choices for implementation and phasing.

The financial institutions we have engaged have voiced four specific concerns:

12. Data attributes and definitions

It is generally agreed by the industry that, in the effort to maximise the potential of the proposed LEIs to be adopted as the global standard, it should remain as lightweight as possible. However, care should be taken when it comes to deciding precisely what fields are absolutely necessary and sufficient to create a standard, unique and international ID. It is not clear that the proposed fields to be included in the LEI (i.e., name, location, electronic address, legal status) are sufficient for this purpose.

Further care should also be taken when it comes to the precise definition of the proposed fields. As it currently stands, the fields are too ambiguous and need significant narrowing; two entries could fulfil the requirements of the fields but still be very mismatched which, in effect, undermines the very purpose of an international standard.

For instance, what is the address of a 'legal entity'? Is it the headquarters or branch location? Is it the office location or mailing address? Call centre or offices if they are in different places? There will also have to be a single format or template that is used when inputting the address to ensure consistency and quality of data. CDMG research in 2010 revealed that there is no suitable ISO 20022 address standard available today and that the work needed to develop a new standard would not be insignificant. Similar clarification of the other proposed fields (in fact, very few people in the industry know precisely what an electronic address is, let alone whether it is even possible to give for every legal entity).

13. Data quality, loading and maintenance

Naturally following on are concerns regarding data quality and maintenance. Considering the vast importance that required standard LEIs will play in the financial sector, it is inevitable that this data will need to be held to the highest possible quality and meticulously maintained. Presumably, the "voluntary consensus standards body" will be responsible for maintaining data at the cost of the firms for whom this body holds it. It is mentioned that this body must have a "robust quality assurance process" but it remains unclear as to how exactly this programme will work, or if such a process is even possible. It bears repeating that early estimates place the cost for each firm to be upwards of \$10 million per year. Further, if the maintenance of the data is outside of the scope of firms' responsibilities, then questions remain as to who will be responsible when inaccuracies are found, or if firms or regulators act on data that has been improperly maintained. In sum, we need a better view of the regulatory consequences, and who will end up with the bill.

14. Target operating model and governance

There are still questions as to how exactly LEIs would be issued and their bearing on trading and other transactions. Will firms have to request IDs for entities on a real-time basis? Would firms have the option of requesting that this governing body convert their current cache of data into the new standard? Could firms create LEIs themselves and have those verified by the governing body? According to the release, "Issuance of LEIs must be timely and non-discriminatory... and must not materially hinder the normal course of an entity's business". If this body is entirely responsible for the creation and issuance of LEIs, then service levels will be crucial to the day-to-day business of the industry. Can transactions take place if the LEIs



for one or more of the parties involved don't yet exist, or if they are inaccurate? Will the standards body be liable if it cannot keep up with demand or technical issues keep LEIs from being disseminated quickly enough? What would operating hours be and would they cater to all time zones? All of these questions need to be explored and answered in satisfactory detail.

"The entity's processes must adequately governed and auditable" and it must be answerable to regulators. Which regulators it would have to be answerable to and to what extent, however, remains unclear.

15. Data system phasing

Given the huge scope of the project, careful consideration must be given to implementation timelines and phasing. There will obviously be a transition period that must be taken into account from a regulatory standpoint. Questions remain to be answered regarding who involved in financial services will be responsible for ensuring the necessary parties have the standard LEI; will counterparties be accountable for obtaining their own LEI or will banks obtain it for them?

Firms will have to have clear direction on when the LEI identification mechanism will be ready and usable and what the transition process will look like. The best way of going forward is very dependent on the point below.

16. The future and direction

It is clear that the proposed changes are just the tip of the systemic and macroprudential risk assessment iceberg. The creation of LEIs will be a small piece of a much larger puzzle. Therefore, firms will need a clear picture of where exactly this is going and the path to get there, how LEIs will affect dependencies with other policies in the future (e.g., instruments) and how the initiative will align with tax and registration issues.

The industry needs to have a view of the end-game in order to make the transition as smooth and efficient as possible. Implementing one isolated change after another is inefficient and costly, and will only serve to undermine the goals that regulators hope to achieve. Therefore, the industry and regulators must engage in conversation and cooperation, not just in this particular instance, but towards the common goal that this policy change alludes to. For more information see the attached "Achieving supervisory control of systemic risk" (September, 2010).

D. Conclusion

The industry supports the creation of an LEI but, before any serious progress can be made and the matter of standardising LEIs in the financial industry across the globe can move on from the idea stage, there is a plethora of questions to be answered and issues to be clarified.

It is important to note that, if the LEI initiative is to be successful, it must be done so with complete commitment and conviction. The industry would be breaking new ground on LEI standardisation, so the body that is chosen to issue that standard and maintain it would have to be able to provide the necessary resources and expertise required to create a viable solution.

The sheer scope of the task at hand necessitates an incredible amount of collaboration, not just between firms in order to foster standardisation worldwide, but also between the industry and regulators to determine a shared vision of the future which will drive implementation and phasing throughout the process.



We trust that the above provides an appropriate starting point for this important matter. We would be delighted to work with the Office of Financial Research to discuss the opportunity before us and would welcome a meeting with you to expand on these issues in more detail.

Yours faithfully

PJ Di Giammarino
CEO, JWG

Simon Hills,
Executive Director, BBA

Signature

Christopher D. Clack
Chairman, Systemic Risk Working Group, UCL

Attachment: '*Achieving supervisory control of systemic risk*' (September, 2010)
(<http://www.jwg-it.eu/AchievingSupervisoryControlOfSystemicRisk>).



Attachment 1: customer data barriers

Company registration. There is no consolidated register of all businesses across Europe and, as highlighted above, we are in the very early days of defining a regulatory requirement for the varied and several uses of customer data. Current service levels from the 100+ registrars across Europe are spotty at best. As noted by the CESR consultation on transaction reporting, there are likely to be data privacy and other legal challenges, as well as operational difficulties to collect and share this information. Perhaps for this reason, the framers of the UK and Australian 'Single customer view' policies have opted to live with a 'halfway house' of an identifier for a customer that is unique to the firm for the moment in time that the report is created.

Personal identity. The customer data problem starts with the identity of the customer itself. In the case of a 'natural person' (i.e., client) this requires the collection of personal data (name, address, telephone, etc.) and some form of unique identifier, like the national insurance number. This will allow a banking group, like Lloyds, to identify that the account opened by a grandparent for Joe Bloggs, as a child, but who is now an adult and runs a small company with accounts with Lloyds Capital Markets and has a deposit product with another part of the Lloyds Banking Group, to link all identities. Should Joe have joint accounts, complex company ownership structures and cross border activities, the question of how to create this 'holistic' identity becomes even more difficult.

State management. Customer data changes fast. The scope of use of the identifier and its granularity over the lifecycle of the customer identifier's existence (e.g., requirements at creation, modification, update and deletion of the identity) need to be considered. These requirements will drive quality and service level requirements.

Data protection/secretcy. Data protection/banking secrecy issues vary and sometimes conflict across the globe.

Anti money laundering requirements. It is not clear whether an investment firm may be permitted or not to act on behalf of, or with, a client who does not have the appropriate client ID. The extent to which this may be incorporated into the "Know Your Client" procedures performed by each investment firm has yet to be determined.

Decentralised ownership. It is not practical or politically sustainable to have one central registry. Commercial data providers have, in part, filled the needs of the market but none of them covers the entire market.

Changing requirements. Both regulatory and business uses for reference data are constantly evolving. How are the requirements managed and maintained on an ongoing basis?

Liability. Because implications of getting customer data wrong are so high, i.e., liability, loss of business, there has been a commercial imperative to maintain an accurate view in every firm. For central repositories to be of value, the issues of legal liability, and the consequential losses in the event that a register provides incorrect data to an investment firm, need to be dealt with.

Linkage. Deutsche Bank noted in the EC's crisis management conference that it has 7,000 legal entities. CESR's own analysis of the Lehman failure found that they had close to 3,000 legal entities. It is not atypical for even medium sized institutions to have hundreds or thousands of legal entities. Many firms take advantage of commercial offerings to maintain these links over time and a similar requirement would be needed by any regulatory-driven repository.

Consequences. People don't use new standards unless there are incentives to do so.



Attachment 2: customer data regulatory initiatives 1H 10

Regulations/standards	Source	Date
1. FSCS requirements for 'single customer view'	UK PS09/11 report	07/10
2. Large exposure requirements to track 'economic interconnectedness'	CEBS CP26 FSA CP09/29	Q110 Q410
3. Liquidity requirements	UK PS09/16	06/10
4. Living wills (resolution)	HMT consultation	2010
5. Carbon reporting	UK CRC Order 2010	2010
6. AML consolidated group approach	EC 2005/60	2010?
7. Client assets (enhancing client assets sourcebook)	FSA CP 10/9	2010
8. Effective corporate governance	FSA CP10/3	2010
9. Liquidity risk measurement, standards and monitoring	BCBS 165	Q2 10
10. Conduct of business sourcebook: promotions, suitability, appropriateness	FSA COBS PIR	1H 10
11. Principles for enhancing corporate governance	BCBS CP168	Q4 10?
12. Guidance on Obtaining and Retaining Beneficial Ownership Information and sub account guidance	FIN-2010-G001 Finra 10-18	03/10 04/10
13. MiFID: transaction reporting client and counterparty identifiers	CESR 10-292	Q1/11?
14. US data center + Office of Financial Research	FSA 2010	2H 10
15. Solvency II	CEIOPS 73/10	12/12
16. SEC large trader reporting system – proposed rule	SEC 34-61908	06/10
17. SEC consolidated audit trail – proposed rule	SEC 34-62174	08/10
18. Central credit repository guidance (CEREP) on CRAs	CESR/10-347	2010
19. Target 2 securities	ECB T2S data model	05/10
20. Algo trading and market access review	ASIC	2H 10
21. CRD 'Skin in the game' rule, art. 122A	CEBS CP40	10/10
22. EU deposit guarantees/investor protection	EC	2H 10
23. Insurance guarantee schemes	EC	2H 10
24. CESR's comment letter on EFRAG's draft response on the IASB's Exposure Draft Conceptual Framework for Financial Reporting: The Reporting Entity	CESR/10-835	5/7/10

Source: CDMG analysis of G20 regulatory requirements as published in "Getting Value from a Single Customer View" July, 2010