## UNITED STATES OF AMERICA

COMMODITY FUTURES TRADING COMMISSION

## PUBLIC ROUNDTABLE TO DISCUSS

SWAP DATA RECORDKEEPING AND REPORTING REQUIREMENTS

Washington, D.C.

Friday, January 28, 2011

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1 PROCEEDINGS 2 CHAIRMAN GENSLER: I'm doing a little stand-in here for Rick Shilts, who is going to do 3 the intro. Rick is the head of our Division of 4 5 Market Oversight. Let me first just greet everybody. Thank you and the CFTC staff for 6 arranging this roundtable on these critical 7 issues. Rick would have been here, but given the 8 ice and shoveling and everything, yesterday he 9 broke his wrist. So, he's fine. He's home. He's 10 alright. But I'm the stand-in. 11 12 More than that -- thank you all for 13 doing this. I think we have six panels today on very important issues to a proposed rule that 14 15 we've put forward. I think some of our colleagues 16 and friends from the SEC are tying in by phone and 17 listening. I know this will be very helpful for the SEC. We are hopeful, I think, that some of 18

19 the folks from the OFR over at Treasury, which has

20 been so helpful with this on data collection, too,

21 is also tying in either here directly or

22 listening.

But the effort really is to move forward 1 with the proposal. I think a comment period 2 closes February 7th, so everything that goes on 3 here will be put in a transcript and be part of 4 5 the comment period as well -- and comment file. But more than that, it's about unique 6 7 identifiers for three areas, as you know. For counterparties. For products. And what we call 8 "swaps" or what I call "transactions." But I know 9 10 they are swap IDs. And somehow, as the whole financial industry would be relying on these 11 12 unique IDs for counterparties, products, and swaps to get the best advice on implementation -- on how 13 to bring this all together. 14 So with that I think I've probably 15 exhausted my role here and turn it over to David, 16 17 Irina, and the team -- and thanking everybody who is going to participate today. 18 19 MR. TAYLOR: Thank you very much, Gary. I need to ask the court reporter. Are you set 20 21 with names? [Inaudible.] 22 COURT REPORTER:

1 MR. TAYLOR: Okay, good. Well, we will dive right in. Thank you all for being here 2 today. It's going to be very helpful for us to be 3 sure that we get the technical aspects of these 4 5 issues that we're going to talk about today right in the final rule. 6 7 I thought I would begin by giving a brief overview of the current landscape regarding 8 unique counterparty identifiers, and then we'll 9 10 jump right in to the first panel. 11 Over the last decade virtually all 12 financial sector stakeholders have come to recognize the need for universal, accurate, 13 trusted methods of identifying legal entities that 14 15 are parties to financial transactions. A unique counterparty identifier, sometimes known as a 16 17 "legal entity identifier," will be a crucial 18 regulatory tool for enabling data aggregation 19 across counterparties, asset classes, and 20 transactions. That will enhance regulators' ability to monitor and mitigate systemic risk, 21 22 prevent market manipulation, enforce position

1	limits, and exercise resolution authority.
2	Full realization of systemic risk
3	mitigation and transparency, which are fundamental
4	purposes of the Dodd- Frank Act, cannot be fully
5	achieved without mandatory use of entity
6	identifiers in swap data reporting. And the
7	identifiers would also have great benefits for
8	financial entities in terms of transaction
9	processing, internal recordkeeping, compliance,
10	margin calculation, due diligence, and risk
11	management.
12	At present no industry-wide entity
12 13	At present no industry-wide entity identifier that is sufficiently unique,
13	identifier that is sufficiently unique,
13 14	identifier that is sufficiently unique, persistent, comprehensive, and open is available
13 14 15	identifier that is sufficiently unique, persistent, comprehensive, and open is available to serve as an industry-wide standard. In the
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13 14 15 16 17 18	identifier that is sufficiently unique, persistent, comprehensive, and open is available to serve as an industry-wide standard. In the absence of a universal entity identifier, vendors and firms and regulators have created a variety of identifiers. One of my colleagues at the Fed
13 14 15 16 17 18 19	identifier that is sufficiently unique, persistent, comprehensive, and open is available to serve as an industry-wide standard. In the absence of a universal entity identifier, vendors and firms and regulators have created a variety of identifiers. One of my colleagues at the Fed sometimes refers to these as "little silos of

1 also presents obstacles to regulators' ability to see a comprehensive picture of the market. 2 Such 3 partial solutions are often proprietary, restricted in use and redistribution, limited in 4 5 scope. We believe that at present we have a 6 window of opportunity to create an open entity 7 identifier that solves these problems. As noted 8 in the proposed rule, the Commission believes that 9 10 optimum effectiveness for a legal entity identifier would come from creation of entity 11 12 identifier system on an international basis

13 through a voluntary consensus standards body. The 14 proposed rule sets out principles that the

15 Commission believes must govern such a system. It 16 also calls for reporting of information concerning 17 affiliations of entities that receive a legal 18 entity identifier.

19The purpose of our first three panels20today is to explore the technical, operational,21and implementation considerations that the22Commission should address concerning unique

counterparty identifiers in its final data 1 reporting rule. 2 3 And with that, let's jump into the first I would remind you all, these microphones panel. 4 5 are "push to talk" so when you would like to talk, push the button -- the little red light will come 6 When you are done, push again to turn it off. 7 on. And if you can, don't let your BlackBerry or phone 8 be on the table because they do feedback. 9 10 We do have, in a way, an extra panelist 11 with us by phone this morning who is going to 12 speak to us now as we begin. Francis Gross from the European Central Bank. 13 14 MR. GROSS: Hello. Good morning. I'm 15 very pleased to be with you and I look forward to hearing the debate and contributing where I can. 16 17 MR. TAYLOR: We appreciate your being 18 here. 19 MR. GROSS: Thank you. 20 Okay. I quess we are MS. LEONOVA: ready for our first panel. Before we start I want 21 22 to thank CRTC staff for making it happen. Anna

1 Schubert and J.P. Rothenberg. Our administrative staff Margie Yates, Veda Allen and Joshua Griffin 2 3 and Mike Johnson. 4 The first panel has more of a technical 5 aspect for unique entity identifiers, or commonly known as "legal entity identifiers." I believe 6 most of you have a list of question that we would 7 like to discuss, but it is mostly for guidance 8 rather than "let's make it happen." 9 10 So, I guess let's start at the first 11 Are there any existing identifiers viable one: 12 for use as UCIs or LEIs? What is the opinion, and what are the solutions? 13 MR. TRAUB: I would be happy to speak 14 15 first to that one. I represent GS1 US, which is part of the GS1 organization. GS1 is a global 16 17 voluntary standards consensus body. We've been in the business of developing standards for supply 18 chains across a number of different sectors for 19 nearly 40 years. Those of you who have seen 20 21 barcodes on consumer products have seen the most 22 visible aspect of what the GS1 system is, but

1	that's just one type of identifier in a whole
2	system of identifiers that we have.
3	And in fact, one of the existing, widely
4	adopted standards within the GS1 system is an
5	identifier for legal entities. It's an identifier
6	that we call the "GLN" and it is a 13-digit
7	identifier, which can be used to identify a legal
8	entity, whether that be the parent of a
9	corporation or a subsidiary or any other legal
10	entity that requires identification.
11	The GS1 system is fully international.
12	It's supported through a network of 108 member
13	organizations, which is GS1's term for what are
14	effectively operating arms of the GS1 standards
15	body in 108 different countries around the globe.
16	There's also a global office in Brussels that
17	supports smaller countries that don't have a local
18	office of their own.
19	The GS1 system is designed to allow
20	identifiers to be globally unique and persistent
21	throughout the world, and that's done through

22

member organizations so that they can be distributed locally. And we can talk more about the technical details, but I'll just stop there and say that we believe that we believe that that identifier would be eminently suited as a UCI, and we believe it meets all of the requirements that have been set forth.

MR. BOLGIANO: I'll be glad to go next. 8 My name is Mark Bolgiano. I'm here actually with 9 10 three hats on -- as a member of XBRL US Board of Directors, as a member of the ANCI-X9 Board of 11 12 Directors, which is the U.S. jurisdiction of ISO for financial standards -- particularly ISO 2022, 13 and as the chair of ISO Working Group 5, which is 14 15 looking at semantic technologies to get harmonization across standards. 16

I should also add that up until December Is I served as the Founding CEO of XBRL US, which came out of leadership from the SEC and FDIC and the use of standards for regulatory reporting, and is now being led in industry by DTCC, SWIFT, the accounting profession, and the technology 1 profession.

We've obviously -- now that the SEC has 2 3 implemented data standards for the origination and the issuance of reporting -- we've encountered the 4 5 identifier many times as a limiting factor in the effectiveness of effective reporting and intake of 6 data into various systems. And we have really 7 addressed this by very aggressively pursuing the 8 ISO standards that apply, because they met the 9 10 criteria that we found were important. One is maturity of technology and the maturity of its 11 12 The other is the system of governance -- a use. stable and strong global system of governance. 13 The other was the economic model involved, 14 15 particularly where it applies to the intellectual property in any identifier. And really the 16 17 aggregate effect of all these, which is access, 18 really. Access by regulators, access by the public, access by the partners who rely on an 19 20 identifier for confidence in the information. 21 So, therefore, we are strongly 22 recommending that the BIC standard, not only as it

exists but as it will evolve under the governance
 that I've referred to, represents the best legal
 entity identify option.

4 MR. JANSSENS: I would just follow on to 5 what Mark was just saying. So, we also believe from a SWIFT perspective we are the registration 6 authority for BIC. BIC is in use in the financial 7 industry for more than 30 years -- is already 8 identifying entities in transactions and 9 10 counterparties in transactions for a long time. So yes, we believe that an existing identifier can 11 12 fulfill the role of legal entity identification.

13 We are bringing changes to the ISO standard. We are in the process of making a 14 revision of the standard so that it even better 15 16 fits the needs and the requirements as they have 17 been described in the requirement from the CFTC. So that there will be a BIC only for legal entity 18 identification, so that there will be a 19 20 distinction between the BICs that have been used 21 so far and the BICs that will be used for legal 22 entity identification. No confusion between the

two. Therefore we think that can serve the
 purpose.

3 I'm Ken Haase. I'm with the MR. HAASE: Those at the Commission I'm sure you know 4 NFA. 5 what NFA is and how long we've been working with an NFA ID. Over 25 years we have been assigning 6 these through out registration system. And to 7 date we have handed out approximately 450,000. 8 Currently there are about 55,000 in use that are 9 10 current at the moment. And we have had this system in place. We feel that it is a fairly 11 12 strong system. We have given the firms the ability to go in and electronically assign these 13 for the individuals that work for these firms. 14 And I guess the one think I would add on there, 15 from our point of view, is also the ability to go 16 in an ensure that it is unique to the individual 17 and the underlying functions that you need in that 18 system to go through and make sure that you are 19 20 not duplicating these IDs, either for firms or for individuals. 21

MS. LEONOVA: Going forward, you know

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1 what a great job you do individually. Now let's
2 try to get together and define what you can see
3 that to be in theory -- desired and optimal
4 structure of the identifier -- without referencing
5 your particular system.

MR. BOGLIANO: I'll be glad to start. I 6 think that my input would be on the question of 7 centralization -- on the assignment and validation 8 that I think that a lot of the questions we've 9 10 heard asked on this subject presume a certain level of centralization. And speaking as a CIO 11 12 for 25 years, and someone who is now just returned back to that type of role, I can tell you that 13 today's technology environment probably will not 14 15 tolerate what has historically been the optimum choice, which is absolute centralization of 16 17 validation, storage, registration.

18 If you look at the models that are 19 working today, whether it's for IP addresses or 20 for web URLs, while there certainly has to be a 21 central authority -- there has to be an 22 authoritative source -- I would say that "federation" is a concept that should be
 considered in any solution. Everyone at the table
 here has provided a certain level of trust and
 confidence through the numbers that are being
 assigned and validated, ensuring that they are
 unique going across supply chains.

My input would be that, while we do need 7 a central authoritative source, that the 8 federation of the assignment of numbers -- and 9 10 again with the objective of access being central to the thinking -- is very important. The other 11 12 concept, and then I'll conclude, is that we not try to give the numbers any payload of 13 information. The numbers should be abstract and 14 15 unique. I think most models today that try to include location codes, branch numbers -- I don't 16 17 think in the long term those are as sustainable. And this is what I'm referring to in the evolution 18 19 of the BIC number, not to mention the specific. But I think all of the options being examined, 20 21 that's a general trend. So that's my input. 22 I'd like to amplify some of MR. TRAUB:

the comments that Mark made. I think we're in complete agreement as to the principles there, and I'll just support that through some experience that our organization has had in assigning unique identification in an international environment in particular.

I think decentralization is absolutely 7 essential for success in an international 8 environment simply because -- particularly when 9 10 we're talking about legal entity identification in the financial industry -- for many nations this is 11 12 an issue of national sovereignty. And there are different laws and regulations that apply in each 13 jurisdiction, and it's only through a federated 14 15 model that one can accommodate all those, while still creating a framework in which there is 16 standardization worldwide and therefore the 17 ability to have that single unique identification. 18 19 Typically the way this is achieved is by having a global numbering space that is then 20 21 divided in some way across regulatory regimes, to 22 preserve uniqueness worldwide, and then within

each of those divisions, allowing the local
 regulators or authorities or issuing agencies to
 work within that space and then apply any local
 considerations that apply there.

5 We also believe there is merit in taking the decentralization concept one step further and 6 allowing individual counterparties to ultimately 7 be the issuers of individual identifiers by 8 allocating a range of numbers to companies that 9 10 need it. Then they can issue their own identifiers and then register them in a separate 11 12 operation.

13 And the decoupling between the issuance of the number itself and the registration of 14 associated reference data we think is also a very 15 important technical ingredient because it helps 16 facilitate different types of expertise. 17 One organization responsible for maintaining the 18 numbering space and being very neutral -- letting 19 20 other organizations that have deep expertise in the data and in financial services handle the 21 22 registration of the accompanying reference data.

1	And that's a feature of the GS1 system as well.
2	I think I would also just amplify the
3	points that Mark made about what we call the
4	"non-significance of the number," Meaning no
5	information or intelligence embedded in the
6	number. I think we can point to many examples
7	from experience that show that any attempt to
8	embed intelligence in the number usually runs into
9	pitfalls further down the road. And so we would
10	also support that as a technical characteristic
11	that's important. Thank you.
12	MR. TAYLOR: Let me ask a question to
13	follow up. If you have a system that
13 14	follow up. If you have a system that decentralizes the issuance of the identifiers
14	decentralizes the issuance of the identifiers
14 15	decentralizes the issuance of the identifiers themselves, can you elaborate a bit on how you
14 15 16	decentralizes the issuance of the identifiers themselves, can you elaborate a bit on how you would ensure that they all stay unique?
14 15 16 17	decentralizes the issuance of the identifiers themselves, can you elaborate a bit on how you would ensure that they all stay unique? MR. TRAUB: Yes, it's actually a pretty
14 15 16 17 18	decentralizes the issuance of the identifiers themselves, can you elaborate a bit on how you would ensure that they all stay unique? MR. TRAUB: Yes, it's actually a pretty simple principle. In the case of the GS1 system,
14 15 16 17 18 19	<pre>decentralizes the issuance of the identifiers themselves, can you elaborate a bit on how you would ensure that they all stay unique?</pre>

1	issues in the United States begin with a "0".
2	Numbers in the U.K. begin with a "5", and so
3	forth. Very similar to what you see with
4	International Dialing Codes for telephones.
5	That principle extends downward as you
6	decentralize through to individual companies
7	issuing identifiers. The key there is not to try
8	and associate any intelligence with that. You use
9	that as a means to divide up the issuance of the
10	numbers, but what you do not do is say that once a
11	number is issued you can then parse out those
12	components and try to learn who owns it. That has
13	to be done through associated reference data.
14	What all that dividing up the number is,
15	is a means for decentralizing the issuance of it.
16	And in the GS1 system, that's done actually with a
17	variable-length system, so the division lines
18	between the different parts are somewhat flexible,
19	which allows capacity to be tuned as you
20	distribute the codes through the world.
21	MR. HAASE: I guess I would just echo
22	both what Mark and Ken said in regards to keeping

1 the intelligence out of the number. Just about any time you've gone and built a system and you 2 3 thought this is exactly -- we've figured out everything that could possibly go in that number, 4 5 about a week after it goes live you find that one item that is not included or something else comes 6 up. So yes, definitely keep that intelligence out 7 of it. 8 9 Yes. MR. JANSSENS: Same comment. 10 Getting out all the intelligence from a code is essential, because what counts when a code has 11 12 been assigned, that the code does not change because something is happening. And that's really 13 important and that's what should be considered is 14 15 that not only there is no intelligence in there, but also that the code is perpetual and persists 16 whatever happens to the entity which has been 17 identified. When something is happening to the 18 identity, that must be processed through the 19 attributes, the reference data which is attached 20 to the number, not in the number itself. 21 22 MS. LEONOVA: Can we discuss what

1	reference data you consider to be important and
2	what characteristics it has to have?
3	MR. JANSSENS: Well the characteristics
4	are the attributes that we need to consider, and
5	in terms of attributes there are a certain number
6	of unique attributes that will enable
7	identification of the entity itself, which is its
8	legal name, which is its registered address in the
9	country of incorporation. Those is the basic
10	information that is needed.
11	Next to that you need to have data base
12	management attributes, which enable to sort out
13	when the code has been created, when the code has
14	been validated, when it has been updated, when it
15	eventually expires because a code can expire if
16	the entity disappears. But those elements will
17	help make sure that by looking across all the
18	entities you can identify them uniquely and that
19	there is no duplication of entities so that the
20	code is unique.
21	MR. BOLGIANO: What Paul is describing

is a discipline that's been awhile for a while,

1 called "master data management." This is marked 2 by identity, provenance of the data -- as Paul has 3 pointed out about the chain of custody, and then 4 the security and privacy of that data that results 5 from good management of master data and reference 6 data.

And I think that the challenge of course 7 comes, first, when the reference data changes, 8 because generally the reference data is not a 9 10 transaction, it's an entity. So changes to that, such as -- we're actually involved in work right 11 now with corporate actions. Corporate actions are 12 changes to the securities master. And also when 13 these are referenced across large networks. 14

15 And so a huge network like SWIFT, this is why, if you'll forgive me, I think one of the 16 17 big reasons why SWIFT is in the standards business, because the standards applied to that 18 reference data is so key to the integrity of the 19 movement of information across networks. And when 20 I say "networks" I don't mean the cables, 21 22 necessarily. I mean the network of business

actors, investors, general public -- for
 transparency here in the United States, and
 regulators.

MR. TRAUB: I would just add to that 4 5 that obviously we need to understand exactly what reference data we wish to associate with 6 identifies. I think equally important is 7 attention to the process by which those 8 determinations are made. And you can understand 9 10 that by considering that the answer to the 11 question "What is an appropriate legal entity 12 identifier?" -- the answer to that question is one 13 that we hope is very stable over time. The question of "What reference data do we need 14 associated with an identifier?" is an answer that 15 16 evolves over time, as business conditions change, 17 as new requirements emerge for understanding what 18 that data means.

19 And so therefore we believe it's very 20 important to have a very robust global standards 21 process for establishing the definitions of what 22 reference data is to be associated with

1	identifiers. In GS1 we have experience developing
2	reference data for consumer products and other
3	types of supply chain entities. And we have a
4	global network that allows that data to be
5	synchronized worldwide through a federation of
6	different databases. And we bring end users
7	together to develop the standards for exactly what
8	that data is.
9	One of the things we've learned in that
10	is that one has to balance core needs for
11	reference data that are shared among all
12	participants for virtually all applications. And
13	for legal entity identification those are basic
14	things such as name, location, contact
15	information, relationship to other legal entities.
16	But then beyond that you have more and
17	more specialized data that is maybe application
18	specific. So perhaps there's reference data that
19	applies to legal entities who are broker-dealers
20	as opposed to different information that would
21	apply to a different type of entity. It's
22	important to have a very extensible and manageable

1 modular structure there, because in order to actually get good reference data -- data that is 2 actually supplied accurately by the participants 3 -- one has to keep it as simple as possible, but 4 5 not too simple that it fails to meet business requirements. 6 7 MS. LEONOVA: May I ask follow up questions? How do you ensure extensibility of an 8 identifier? 9 10 MR. TRAUB: Well, for the identifier 11 itself -- and that's a separate question from 12 extensibility of the reference data -- but for extensibility of the identifier the basic 13 principle we believe is to reserve a part of the 14 structure for future expansion. So that may mean 15 that there's a first digit that has an unassigned 16 value that can be used to indicate an extension in 17 18 the future. There are a number of techniques for doing that that are fairly well established. 19 20 To give an example of our experience 21 doing that, the UPC code that you see on products 22 began as a 12-digit number in North America, and

1 then when it expanded to worldwide use, the capacity was too limiting, and so a 13th digit was 2 added. And the way the extensibility worked was 3 that digit was implicitly zero in North America 4 where it didn't exist. And so zero was not 5 allowed to be the first digit anywhere else in the 6 world, and that way the 12-digit and 13-digit code 7 could co-exist for a period of time. And then 8 there was a period of controlled migration and a 9 10 sunrise date at which information systems around the world were required to accept both forms. And 11 12 that's actually happened twice with the product code. Our legal entity identifier has not 13 required that extension because as of now it has 14 15 pretty large capacity compared with anticipated requirements. But that's the basic principle. 16 17 MR. JANSSENS: From an extensibility point of view of the code I think you need to make 18 sure that the code from the start is large enough 19 to cover the whole scope, because otherwise you 20 21 start to have intelligence in the code itself. So

22 I think that the code must cater for what is

1 needed from the beginning. Later on you have the extensibility in the attributes. If the market 2 evolves -- if the industry requirements are 3 changing, then you can manage that with the 4 5 attributes which are attached to the code, and you don't have to work with changes in the code 6 itself, which from a data base point of view --7 from a data base management point of view -- if 8 you have built your data model based on a certain 9 10 structure of the code itself, you have to change it because that is your root key. 11

So we think that the code should no longer change once it has been defined. But the attribute, you have all the flexibility that you want -- to add attributes, to remove attributes, or change them as you see fit going forward.

MR. BOLGIANO: I'm just going to add a very brief remark, which is general although relevant to this, and relate the experience of the XBRL introduction to issuers in the corporate, publicly traded world -- mutual funds -- that what you're hearing discussed here reflects a

1 combination of mandate and market acceptance. And in fact we found that one without the other has a 2 very reduced chance of success. 3 And so I would urge the CFTC, in 4 considering the plans to -- while it's possible to 5 mandate a system once a system is determined, that 6 more than half the battle is in thinking about 7 what contributes to market acceptance -- to the 8 user acceptance here. And your use of the word 9 "stability" -- even a perceived lack of stability 10 11 will have a drastic impact on market acceptance. 12 MR. HAASE: Let me just touch on two 13 things. In whatever system the Commission ends up going with, you have to understand and appreciate 14 the amount of time it will take the other systems 15 to accept this new number and what has to be 16 17 modified in those systems to allow everyone to 18 adjust to it. That's number one. 19 And number two, the other thing, is the 20 security behind it. For people to accept the system, there are going to have to know that the 21

data they are putting into it is secure.

22

They're

1	going to want to feel very comfortable before they
2	start giving out all this information. What
3	information varies on which country you are
4	dealing with. But the security, and then once
5	gain the time to modify other systems to accept
6	this number.
7	MR. TAYLOR: Let me ask you a follow up
8	question. Talk a bit about the time you think
9	would be needed.
10	MR. HAASE: The time needed. And that's
11	going to depend on the system you are dealing
12	with, so I surely can't speak for anyone else
13	sitting around this table. But the time needed
14	depends on the number. You're going to have to
15	have the ability to if you take one system and
16	try to impose it on a second system, there's going
17	to be a big matching process. Now it depends on
18	how many people and entities you're dealing with
19	to understand that all the Ken Haases over here
20	and the Ken Haases over here are actually the same
21	person, and make that match.
22	So the time is going to be dependent on

1	the size of the system and also the resources
2	behind going through and doing that match. So
3	it's very hard to put a specific timeframe on it.
4	MS. LEONOVA: But going back to this
5	implementation plan, what characteristics do you
6	believe a mandated code has to have in order to be
7	accepted comparable to adjustable to current
8	systems?
9	MR. TRAUB: I think it's critically
10	important that the timelines and the procedures
11	for that period of migration have to be developed
12	with consultation from the stakeholders. And
13	really, you have to get a lot of input from the
14	stakeholders involved to ensure that what is
15	actually mandated is ultimately doable, and doable
16	in an effective manner.
17	Our experience in doing various sunrises
18	of new codes and other things of that nature has
19	borne this out time and again.
20	MR. JANSSENS: I would build on what has
21	been said, and also referring to some of the other

22 questions that you have in there -- do we use an

1	existing code or not? Or should we start with a
2	totally new code? If you start building from an
3	existing standard, from an existing scheme, you
4	get adoption faster. And the processes are in
5	place, so the timeline will be shorter if you
6	start with something that exists already.
7	MS. LEONOVA: How much shorter?
8	MR. JANSSENS: That depends on the
9	quantity, and probably what Ken has said as well.
10	Depending on how many entities you need to
11	identity, if you talk about 10,000 or 100,000 this
12	is business as usual. If you talk about millions,
13	that needs to be a different perspective.
14	So if we talk about in the 50 to
15	100,000, it can be done in a couple of months a
16	handful of months, I mean, 5, 6 months, whatever.
17	If you talk about millions, I think we need to
18	have some more time to make sure that the process
19	is robust. The time is one thing. I think the
20	important element is quality. Because if you
21	launch something, it must be bulletproof from the
22	start, because as Mark was saying, adoption is
1	important as well. If you have leaks in there,
----	---
2	you will have resistance to usage of it, and you
3	have the risk that it's not global, that it's not
4	unique. And then you need to start to cleaning up
5	what has been done.
6	So I think it's more important to look
7	into making sure that starting small with good
8	quality I mean, 100 percent quality and then
9	build from there. So it's at the first stage and
10	the first building block, and then contribute to
11	that going forward.
12	MR. TRAUB: And I think in addition to
13	that there has to be a lot of support on the
14	ground from the agencies involved to support
15	end-users in understanding the new rules,
16	understanding how to adopt so that a forum for
17	sharing experience so that it gets easier and
18	easier as more and more companies join that
19	adoption process.
20	And if the goal is to create an
21	international standard an
22	internationally-accepted identifier then that

1	support network has to be available on a global
2	basis and available in a way that is tailored to
3	the local market conditions and cultural
4	conditions and language conditions that exist in
5	each of those places around the world.
6	MR. BOLGIANO: At the risk of
7	oversimplifying, I'm going to say it boils down to
8	usability and accessibility. Five hundred million
9	Facebook users have created a unique identity in
10	the last three years. Five hundred million. You
11	know, that's a reflection of a certain level of
12	usability and access. Again, I know I'm
13	oversimplifying here.
14	You can impose a mandate and it could
15	take forever. Or you can consult with
16	stakeholders, build on an existing standard that
17	already has global reach, and you could find the
18	timeline much shorter. This is a really difficult
19	question, and actually I was looking forward to
20	watching the operational and implementation panels
21	squirm over this question. I'm disappointed that
22	we got it first. [Laughter.]

1	MS. LEONOVA: Maybe a naïve question,
2	but where do you see more problems? On the
3	hardware side or software side?
4	MR. HAASE: Software.
5	MR. BOLGIANO: I'm going to point out
6	the obvious.
7	MR. TRAUB: Yeah.
8	MR. BOLGIANO: Hardware is trivial.
9	This is not a hardware problem.
10	MR. HAASE: I agree.
11	MR. JANSSENS: Yeah.
12	MR. TRAUB: You know, the quantity of
13	legal identifiers legal entity identifiers
14	is miniscule compared to the quantity of trades,
15	for example, that happen every day. So the volume
16	of data that we're talking about here, from the
17	financial industry's perspective, is not a stretch
18	at all. The difficulty here is in the business
19	processes around adoption of something new,
20	migration of systems, all of those things. And
21	that's really a software problem and a people
22	problem, and not so much a hardware problem.

1 MR. JANSSENS: Yeah, I would concur. MR. GROSS: If I may come in. 2 Francis 3 Gross from the ECB. Just a short remark. I think that observing the industry you see that they just 4 5 know where to converge, in terms of standards. And once a standard is backed by international 6 institutions and by law in several countries for 7 mandatory use in reporting, the industry will know 8 where to converge and then it's just about the 9 10 normal update of processes and system over time. It will take time to migrate, but once it's there, 11 12 they will go to it.

13 MR. JANSSENS: Yes, I confirm. It's not 14 a software or hardware, it's a process. It's the 15 analysis of the data on the one side, as I 16 mentioned, that the quality is there, so you need 17 to have robust processes to analyze and make sure that you don't duplicate entities or codes for 18 19 entities. That's the most important on the allocation of codes. And then on the usage of the 20 codes, it's to make sure that the processes and 21 22 the systems have been adapted to in-take that code and to transport it so that it can fill the
 requirements of reporting.

3 MR. BOLGIANO: First, I want to say hello to my friend Francis, whose speaking to us 4 5 from Frankfurt, and to recognize that two years ago he was a block away from here in my office 6 talking about the concept of a "data utility." 7 And I really think that's a very good description 8 that captures a lot of these characteristics that 9 10 you're trying to determine in this roundtable.

Francis, correct me if I'm wrong, but I think one of the first things that we discussed as a limiting factor to an effective data utility is identity management.

MR. GROSS: Yes.

15

MR. BOLGIANO: And the identity of entities. Now we're talking about a utility that's much like the electrical grid in the U.S., in that there won't be -- whether because of national boundaries or for just practical operational purposes -- it is going to be a network. It is going to be distributed.

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1 The things that are built into networks that are resilient now, I think, are worth 2 examining to apply -- even if they are translated 3 from other contexts -- whether it's power or phone 4 5 or telecommunications -- into this. It's the same kind of replication, validation, authentication. 6 But also the ability to decentralize and federate 7 as part of that decentralization. 8 9 The Internet was created to survive a 10 devastating attack on infrastructure, and it evolved into something that's now serving a huge 11 12 public good. I think there's just as much potential for the SEC and the CFTC and Treasury 13 with OFR to create just as big of a utility that 14 15 will have just as much of a profound effect on our 16 economy.

MR. JANSSENS: I link to that also the Europeans. Because you mentioned the U.S. regulators, but also together this is a global solution. It's globally adopted. It is to be combined and converged, because the firms which will have to comply with this, they are also in all areas. So it needs to be one system mandated
 globally by the regulators so that the firms can
 adapt. And that they only have one system to
 adopt.

5 MR. GROSS: Perhaps to that point, in his speech on 19 October 2010 at the ECB 6 Statistics Conference, Jean-Claude Trichet, the 7 President of the ECB, called for a reference data 8 utility that would be operated on the basis of an 9 10 international agreement. That could be something 11 now in reach if we take the OFR as the first step, 12 and similar efforts in Europe in the legislative sphere -- if that can come to fruition, others 13 will join as well. It can grow in a modular 14 fashion. 15

And then the technical structure of the data bases, whether they will be structured as a network or whether there will be a central repository somewhere, that matters less, as long as there is the assurance that the data is strictly standardized -- not just harmonized -but strictly standardized across the board.

1	MS. LEONOVA: And I want to follow up on
2	John Mulholland. Are you still on? John? Okay I
3	guess we lost somebody in the process. He got
4	excited.
5	Okay do we have any other issues you
6	think we should discuss to the interests of our
7	panel?
8	MR. BOLGIANO: No questions. Thank you.
9	MR. TRAUB: Thank you.
10	MR. HAASE: Thank you.
11	MR. JANSSENS: Thank you.
12	MR. TAYLOR: We're a bit ahead of
13	schedule, but I guess that's better than the
14	alternative. Let's switch to panel two. Would
15	the panel two people come up.
16	All right. This is our second panel.
17	We're moving to Operational Considerations
18	Concerning Unique Counterparty Identifiers. Some
19	of this was touched on by the first panel, but
20	that's nature. Let's move first of all to the
21	question of what utility or registration authority
22	can assign and maintain UCI in compliance with the

1	principles in the proposed rule and on the
2	timeline of our final rule.
3	MR. CHIDSEY: I guess I'll start. This
4	is Ed Chidsey from Markit Group. I'm responsible
5	for our pricing and reference data businesses. So
6	just to start off, I'd like to just thank the
7	Commission for the invitation to participate in
8	the panel today.
9	As many of you may or may not know,
10	Market has deep experience in the entity and
11	reference data identification space and has played
12	a critical role in providing identification
13	reference data for risk management trade
14	processing settlement purposes throughout the
15	financial markets and primarily in the OTC
16	markets. And we're looking forward to
17	participating in today's discussion and learning
18	from the other panelists and hopefully
19	contributing based on our experience.
20	So with respect to this particular
21	question, with proper governance and oversight,
22	our view is that really any third party service

1	provider, whether it be a data vendor or a utility
2	that has experience in the entity identification
3	space, could play this role. Again, the key here
4	would be adhering to whatever standards are set,
5	having some sort of an industry and regulatory
6	oversight committee that would be able to
7	participate and monitor the operation of such
8	entity and see that it adheres to the guidelines
9	that are agreed.
10	MR. HARRINGTON: George Harrington from
11	Bloomberg. Also thank you very much to the
12	Commission for the invitation to appear here.
13	We work as a provider of execution
14	services and more likely than a swap execution
15	facility. It is very attuned to the needs as far
16	as the unique universe of users that are out
17	there, not just from a data standpoint but from an
18	actual execution standpoint as far as identifying
19	who the counterparties are to a trade.
20	When you move to an execution mode in
21	today's world, obviously in OTCs derivatives and
22	other asset classes, it's a very bespoke market,

1	and I think the move towards a unique identifier
2	system is something that will increase efficiency
3	and certainly assist with vendors like ourselves
4	and our competitive being able to track and
5	certainly to identify from whatever our reporting
6	needs are also required, put information out to
7	the market as required by the legislation.
8	MR. MARNEY: Maybe I'll finish out this
9	side of the table. Pete Marney from Thomson
10	Reuters. Again, thank you very much.
11	So I don't think any of the existing
12	identifiers are fit for purpose in the guidelines
13	that have been laid out. They would require a
14	fair bit of change, which is possible, but I would
15	like to raise the point though that achieving the
16	guidelines of no intelligence, extensible
17	permanent, which means that you never delete and
18	so forth, is relatively straightforward to
19	achieve; and I think that can be done, but as soon
20	as you do that, then you're putting all the burden
21	on the reference data that sits behind it, the
22	data model, the business rules, the presentation

of the data, the relationships that come with the data. In effect then, the unique identifier really just become the tip of the iceberg, and so much more of it has to happen below the line. I think that's what really merits the most focus and the most attention in this because that's what is going to drive the value.

Doing that in a federated way I think would be extremely difficult, and it's very difficult to manage if you have all the individual participants who are responsible for managing that content. Not to say that necessarily centralized is the way to go, but having it all federated makes it very, very difficult to do.

MR. GROSS: Francis Gross. Just very briefly, I tend to agree with the last statement. However, the process is organized, it would be much better if every data set went through an obliquity point of passage, a unique one, wherever it comes from, wherever it goes after.

21 MR. PREISS: Thank you. I'm Scott 22 Preiss. I'm vice president for CUISP Global

1	Services, and I'll follow suit with my colleagues
2	and thank you for the opportunity to be heard
3	today.

4 I'm really here to share our experience 5 as being a numbering agency in the U.S. and Canada and 35 other countries for the past 40 years to 6 provide unique identification for issuers, 7 obligors, and underlying instruments. So that is 8 quite broader in the public markets than today's 9 10 specific discussion, but nonetheless, it seems to us that there are existing frameworks, including 11 12 the international standards bodies as well as 13 industry subject matter experts, including information providers, that have already existing 14 15 structures, know how to perform the duties and obligations of a registration authority, and have 16 17 existing infrastructure and expertise.

So we very much see this progression as a collaborative model and really one of the key challenges, of course, is putting one's arms around who the key stakeholders are, who the subject matter experts are, and in the end only execution and sustained investment and commitment
 over a long period of time will meet the industry
 requirements.

4 MR. JORDAN: Hi. I'm Ron Jordan. I'm 5 wearing two hats here today, Avox and DTCC. Briefly, DTCC is a participant on ad cost utility 6 that is based in New York but is certainly global 7 in reach. And Avox, which is a wholly owned 8 subsidiary of DTCC, is one of the world's leaders 9 10 in the maintenance and validation of legal entity 11 identification. It has been around for about 10 12 years. It is UK-based and was purchased by DTCC 13 back in July.

We believe that, obviously, this is not just a CFTC issue. Whatever happens here, the SCC is watching and in particular the OFR, and whatever solution comes out of here needs to be a single solution that can apply to all plus eventually European regulators.

20 We believe there are two functions here, 21 and I think Peter touched upon this briefly. 22 There is the assignment of the number or the registration authority, but then there is the
activity to validate and maintain the database,
the attributes of the database, and make that
available to the public or to whomever else, which
is, we think, a lot more challenging than simply
the number assignment.

7 And then finally, we believe that the characteristics that a utility or registration 8 authority need to have is several, really three. 9 10 Number one, there needs to be proven capabilities, we think, to get to market quickly. Second, we 11 12 believe that this needs to be a global solution, and there needs to be global acceptance to 13 whatever solution is undertaken. Third, there 14 15 does need to be proper governance because the facility will change over time, and those who are 16 17 most affected by it, those who are paying the cost, need to have a place at the table in 18 19 governing the utility on an ongoing basis. 20 MR. JANSSENS: Complementing on that is that you asked which utility. So first, what is a 21 22 utility? I mean, we are serving the financial

1	industry, governed by the financial industry now
2	for more than 30 years and considered as a utility
3	by the largest firms.
4	I think to come to a solution for legal entity
5	identification, it must work through collaborative
6	models because it is too important for the industry at
7	large to look only at it from a unique perspective.
8	It has to be between partners this can work, and I
9	think that's how it will be utility; and the
10	governance beyond these utilities is important as
11	well.
12	MR. TAYLOR: Let me ask you all a
13	followup question. I think I heard, but tell me
14	if I'm right, a general view here that you all

15 believe there ought to be a single

16 utility/registration authority for the issuance

17 rather than multiples; is that correct?

18 MR. JANSSENS: I would say what's 19 important is the responsibility. It can be 20 distributed, but somebody must have the 21 responsibility to make sure that the criteria that 22 must be defined about quality and adoption and distribution of the data are met; and that is one
 responsibility. All that is distributed is the
 responsibility of that registration authority or
 the partners in this picture.

5 MR. GROSS: Francis Gross. Perhaps we could differentiate the debates by considering 6 that the process will have several stages, and 7 that each stage could be subject to different 8 organizational settings. Some stages data 9 10 production, for instance, might be decentralized, but this obliquity point of passage could be 11 12 central.

MR. CHIDSEY: I would argue that what's most critical is a global standard and global agreement on how the utility or utilities or firms that are running this would operate.

17 Theoretically, you could divide responsibility 18 amongst jurisdictions, but the most important 19 thing is to ensure that there is a global set of 20 standards and guidelines.

21 MR. JORDAN: I would second that, but I 22 would also say we do believe there is a

1 distinction again between the registration authority and the utility which is managing this. 2 So while you don't need the same entity to perform 3 both functions, we do believe it's probably most 4 5 effective if you have a single organization responsible for each. 6 7 MS. LEONOVA: Again, let us catch up our new participant, Ola Persson from FINRA. 8 We already started 15 minutes, so if you want to make 9 10 a quick introduction. 11 MR. PERSSON: Sorry. Yes. I'm Ola 12 Persson from FINRA. I'm the director of trace and 13 fixed income strategy within transparency services. So to the extent I can help by shedding 14 15 light on transparency services. 16 MR. TAYLOR: We started a bit early, but 17 we've begun just with the first question about what utility or registration authority can assign 18 and maintain a unique counterparty identifier. Do 19 you want to jump into that discussion? 20 21 If you don't mind, MR. PERSSON: No. I'll listen for a little bit since I just walked 22

1 in.

Sure. That's all right. 2 MR. TAYLOR: Thank you. Another followup question. Our first 3 panel, if I understood properly, was saying they 4 5 thought the time to implementation for a unique counterparty identifier would be quicker if we can 6 find a way to use an existing identifier and 7 elevate and adapt it as needed but not to go down 8 the road of creating something new from scratch. 9 10 I think I hear you all saying something similar here that we might move more quickly to 11 12 implementation if the utility registration authority is an existing organization adapted for 13 the purposes. Am I hearing that right? 14 I would like to react to 15 MR. PREISS: 16 that. To the extent that any collaborative model 17 already exists in the industry and is at least satisfying some of the requirements that have been 18 19 set forth, I wholeheartedly agree that existing 20 infrastructure and subject matter expertise should 21 be used. 22 And if I can just add on a comment to

1	your prior question in terms of is a single
2	utility the best model. Now I agree with several
3	of my colleagues around the table that there seems
4	to be a difference between a registration
5	authority and the underlying utility function.
6	Ultimately, there needs to be a single accountable
7	source, and being in the unique ID business for as
8	long as CUISP has, we know firsthand whenever that
9	cannot be tolerated is duplication. And so if we
10	have multiple parties generating multiple
11	identifiers simultaneously in any sort of shared
12	pool model, that sort of defeats the very purpose.
13	So there is room for collaboration, but in the end
14	there needs to be a single accountable party.
15	MR. JANSSENS: That confirms what we
16	said, and I don't think there is anything to add.
17	MR. MARNEY: So to the prior question,
18	we agree. I think it could be a hybrid solution,
19	and it could work very well.
20	To the current question on the table, I
21	think using the existing is a good bias for
22	entering into the decision or entering into the

1	analysis, but I don't think it necessarily is a
2	foregone conclusion. Again, to tell you for sure,
3	for us internally, we decided to go new rather
4	than adopt something that was existing. It made a
5	lot more sense for us. I think it just requires
6	thorough analysis.
7	MR. TAYLOR: Now when you say "going
8	new," you're talking in terms of a utility
9	registration authority?
10	MR. MARNEY: Right. Rather than
11	adopting an existing standards.
12	MR. TAYLOR: Right.
13	MR. MARNEY: But I think going in with
14	the bias at the outset to look to extend an
15	existing because there is infrastructure in place;
16	there is networks in place; there's processes, and
17	there's software that can be extended and so forth
18	is probably a good place to start but not
19	necessarily the obvious answer or the foregone
20	conclusion.
21	MR. HARRINGTON: I think from the
22	perspective of Bloomberg, our firm connects to

1	everyone around the table in one format or
2	another, and I think we're all experienced with
3	the matching tables that we have, which is our
4	identifier to another identifier to another
5	identifier. Therefore, the move to use some
6	existing infrastructure I think is definitely a
7	good idea, but it is the question of how do you
8	start that process because, you know, there are so
9	many standards that are out there right now. And
10	they're mainly disparate obviously. You know,
11	DTCC in this space has done a lot of excellent
12	work as far as at the legal counterparty
13	identifier level. So I think, you know, that's
14	someplace where you can certainly look to start,
15	but I think that because there are so many
16	standards out there that it's going to be
17	something that has to be evaluated carefully as
18	far as a system that everyone can use.
19	Then the next question, and I think
20	there will probably be a separate roundtable on
21	this, will be the interconnectivity standards as

22 far as how those are going to be communicated.

1	MR. MARNEY: One further thought too is
2	scale, right. Depending upon exactly what you're
3	trying to address, and some parts of the
4	documentation talks about extending this to all
5	financial instruments in all jurisdictions. And
б	then that just explodes it expedientially, and I
7	think that makes it a very, very different game
8	than if you're talking about a relatively finite
9	universe.
10	MR. JANSSENS: This ties back to what we
11	said in the first panel, is adoption by the
12	industry and the cross- referencing is a key
13	element because all the industry, as constructed
14	one way or another, it's internal system for
15	identification of entities. And this is bespoke.
16	This is legacy, but it is embedded in all the
17	systems in any large firm.
18	What is important if we want adoption
19	and global view so that what needs to be
20	consolidated can get consolidated based on one
21	foundation block, which is this unique legal
22	entity identification, in order to make that

1	adoption, it need to cross-reference to all the
2	existing codes which are out there, which each
3	firm has already cross- referenced to its internal
4	legacy system. And that is where this will gain
5	traction and adoption.
6	MR. CHIDSEY: I think the next panel
7	will clearly be interesting to get a perspective
8	on the implementation challenges and what we need
9	to consider because ultimately whoever the
10	authority is really needs to ensure that it's
11	something that is going to work and be easily
12	integrated, or as easily integrated as possible
13	into the various processes and systems.
14	But, again, you know, similar to some of
15	the earlier points, the relevant thing here is for
16	whatever authority and whatever firms are involved
17	in this should have experience, should have the
18	infrastructure in place.
19	I think the identifier itself is
20	something that, you know, collectively will come
21	to what that ultimately should look like, and

22 there's probably not a specific solution out there

1	today that's perfectly fit for purpose or will
2	adhere to those standards. So the identifier
3	itself will need to change, but ultimately having,
4	you know, the infrastructure, the capability, and
5	the knowhow within the organization in this space
6	is going to be critical to make it successful.
7	MR. TAYLOR: You actually started on the
8	very next question I was going to put to everyone.
9	Let's do that.
10	Can we sort of collectively list here
11	what you think the characteristics are that it's
12	essentially for the utility or registration
13	authority to have?
14	MR. JANSSENS: Let me start. I think
15	the first characteristic is experience and
16	infrastructure in place, and that is also adoption
17	already of the code by the financial industry is
18	also a key to start because that will help making
19	the whole thing glued together and going forward.
20	MR. PREISS: I can add to
21	MR. GROSS: Such a utility should
22	certainly be nonprofit, be placed under

1 irreproachable internationally accepted governance with technical competency, neutrality, and 2 3 permanence. MR. TAYLOR: All right. Scott, I think 4 5 you were next. Thank you. Getting back to 6 MR. PREISS: the characteristics of a UCI and ensuring that 7 there is uniqueness. You know, in addition to 8 Paul's comments, certainly there needs to be 9 10 assurance upfront that records of legal entitles are vetted, both from a system perspective, and 11 12 although I know there are different viewpoints on this, you know, probably in a manual or personal 13 fashion as well, the key attribute of any unique 14 15 identification system is exactly that. We need to 16 guarantee uniqueness, and so whatever utility is 17 ultimately arrived at needs to be confronted day 18 in and day out with simple examples, ABC, Incorporated, ABC Limited, ABC LLC, and that 19 20 decision needs to be made in real time to the 21 earlier point about time to market and 22 effectiveness.

1 So one of the key characteristics perhaps should be guaranteeing that there is 2 3 primary source documentation to back that up. An analogy in the public markets would be having a 4 5 draft perspicuous in the pre-trade space to ensure unique identification of an issuer, an underlying 6 instrument, perhaps an obligor. The same sort of 7 construct, we think, would be essential to a 8 characteristic of a system here. 9 MR. JORDAN: Yeah. I think we agree 10 that the characteristics outlined in the release 11 12 are all valid, and many of those have been discussed here, proven capabilities, global 13 14 acceptance, governance, et cetera. 15 I would say though that if you look at 16 -- you know, Scott just mentioned some of the registration components. If you look at the 17 utility components, I do think the expertise piece 18 in maintaining and validating legal entities is 19 very important. That really does mean how is the 20 database populated? How do you go from 0 to 21 40,000 or 0 to 2,500,000 if you go to the full 22

extent of OFR? How do you do that, and how do you 1 do that quickly and accurately? 2 3 I also think the maintenance component about how do you continually validate things that 4 5 change and how do you have a process to do that is a key characteristic of what needs to happen as we 6 move forward. 7 MR. MARNEY: So I completely agree with 8 Ron's comments. I think there are challenges with 9 10 the uniqueness and the assignment of the codes, but I really think the real challenge here is in 11 12 the management of the data in the background. 13 And going back to the previous panel, I think it was Mark's comment about Master Data 14 15 Management, and you need some real proven 16 capability there. Absent that, you know, right 17 now you have very little transparency and insight because there isn't the standard. 18 If you create a standard for the unique identifier but not what 19 flows below it, all you've done is push the 20 21 problem one step downstream and you're back in the 22 same place.

1 MS. LEONOVA: May I ask a followup 2 question. Sorry to interrupt you. It looks like 3 we're talking about assignment of ideas by 4 centralized (inaudible) and self- certification of 5 an ID of guidance number. Do I understand you 6 correctly?

7 MR. MARNEY: I think for me, my view would be that the assignment of the number can be 8 very distributed or federated. I don't think 9 10 that's really where the challenge is. There are plenty of examples of telephone numbers, IP 11 12 addresses, and so forth, Facebook -- not Facebook. I'm sorry. It's not a good one, but IP addresses 13 or phone numbers that work very well. I think 14 it's what follows on from the data that supports 15 those IDs is where the challenge is. 16

MS. LEONOVA: Yeah. But that's what I'm trying to get. So if you go with an assignment process, it's going to be centralized by the function to validate the accuracy of this data. If it is self-certification, we would assume that the party who self-certifies provides us data, and

1	somebody has to scrub it for accuracy.
2	What is the benefit and drawback for
3	each model, or do you have references?
4	MR. CHIDSEY: So I think both models
5	probably need to be explored. Self-registration
6	is something that certainly could add a lot of
7	benefit and efficiency to the process in terms of
8	legal entities coming forward, registering
9	themselves, potentially providing documentation.
10	That documentation would ultimately need to be
11	validated, but that could go a long way in terms
12	of improving the efficiency and timeliness of
13	these entities that need to be created and
14	maintained.

And just one brief point to the prior question. One thing that shouldn't be underestimated is the amount of effort required to, you know, not only maintain but distribute and support the information that is going to be put into the marketplace, support the clients, the consumers of this information.

Whoever the authority is will be a core

22

part of the market infrastructure and really needs to have experience in those sort of support processes and addressing issues and concerns, and many of us around the table do, but it's just something that should not be, you know, looked over because it will be a very important part of the overall process.

8 MS. LEONOVA: I'm sorry to be one-trick 9 pony, but what is the most efficient, both from 10 technological standpoint and from cost standpoint, 11 the way it validates the data? Is the reference 12 data for (inaudible) you're talking about?

13 MR. JORDAN: So I think there's two primary methods that keeps getting bunted around. 14 15 One is a self-registration model, and one is a contributing model. Our opinion is that you need 16 both, that one is not sufficient. A self-17 certification model or having the entity register 18 themselves, the information would still need to be 19 validated. You need to validate, did the person 20 who is submitting it have authority to do that? 21 22 Was the information accurate, et cetera? And then there needs to be some type of change management process, even with self-validation. If something changes is that entity now required to submit that? We believe that some of that, if not all of that, may require some rulemaking to enable people to do that.

7 If you look at the other model, which is contribution, this is really the model that the 8 Avox is based upon today, although the Avox does 9 10 incorporate self- registration as well. But that's where a systemically important firm or any 11 12 entity submits their information on their counterparties, and that could be 10s or 100s of 13 thousands of them to a database. And that gets 14 15 scrubbed by a group of analysts, including being able to be self-certified. It goes to public 16 17 reference sources, registration authorities in the jurisdictions as well as other sources. 18

19 This is a very important component as 20 well because what happens is, as we know, if you 21 look at the top dozen broker dealers or banks in 22 the world, they have a large overlap of clients

that they deal with, counterparties. So what 1 happens is you start to develop a network science. 2 3 Now I know Wiki is a bad word, but if you look at it in the best sense where you get a 4 5 network contribution where seven firms or eight firms are dealing with the same entity, and 6 they're all submitting information. They help 7 cleanse that information themselves, so you do get 8 a network effect. And what we have found in 9 10 experience is if you have seven firms saying that an entity is defined with certain characteristics 11 12 and then you have an eight firm who says it is different, it is usually the eighth firm who is 13 right because they have some new information. 14 15 They've been doing business with the client, and there are some updates. So those events will 16 trigger scrubbing, additional scrubbing. 17 18 So there is a place for self-registration or self- validation, and there 19 is a place for the contribution model. And we 20 believe that the right solution should combine 21 22 both, and, again, that's what Avox is based upon

1 today.

2 MR. JANSSENS: Yeah. Confirming that we 3 should not make a selection between one or the The two are important, and the two will other. 4 5 build upon each other. Also you had a question before about timing. If you look at self-6 registration only, your time lap will be much 7 longer before everybody comes voluntarily to 8 register itself. Whereas if you work by 9 10 combination of both, the contribution model will help you gain the first layer of the data faster. 11 12 MR. MARNEY: So I understand the distinction in the question you're trying to ask. 13 I guess in practical application of that I 14 15 struggle to see where it's very different, but, again, I come from the bias of a vendor I suppose 16 17 and the certain ways that we operate. One quick 18 example would be corporate actions. So if you're going to allow the self-registration and the self 19 20 update of that data and you're going to scrub it centrally, the person that's central still has to 21 22 go collect corporate actions to be able to

1 validate. There is no source to go get it. Corporate actions is one of the biggest 2 3 things that plagues the finance industry in keeping that accurate and keeping that up to date. 4 5 It is still very, very difficult today even with standards out there that are really growing and 6 getting adoption. So I think it helps it and 7 having the combination is good, but you certainly 8 can't have the self- scrubbing and not the 9 10 self-registration. You're still going to end up having just as large an effort in the central to 11 12 make sure that you got it right.

13 I'd like to build upon some MR. PREISS: of the issues that Peter just raised. We're very 14 15 intrigued by the notion of self-registration since we have so much experience in the contributed 16 17 model. It seems to us that there's a bit of moving the burden of applying in a standardized 18 fashion from a central utility to the entities 19 20 themselves, and we wonder out loud what the motivation would be for entities to not only 21 22 self-register but, to Peter's point, track the

1 life of that entity over time and contribute corporate action information, which is critical to 2 3 efficient financial markets. So your original question was about 4 5 benefits and drawbacks. I wouldn't call that a drawback but really an open question. How does 6 that model work in practice? 7 And so that leads directly to the second 8 part of your question related to cost. In the 9 10 end, if we don't end up with a single unique identifier, then what seems to be very cost 11 12 efficient upfront in the end is not. So we wonder out loud as well. 13 MR. CHIDSEY: And just one final 14 15 comment. I think we're probably all in agreement 16 in general, but, you know, it is a combination 17 because ultimately if I look at personally what we have today in market red, which is reference 18 entity information for the CES market or a market 19 entity identifiers, which are used to identify 20 counterparties transacting in the loan market, it 21 22 has to rely on a combination of a contributed
1 model, a self-registration model, and a proactive model where we're actively going out and looking 2 3 for events or actions that have happened on those entities. 4 5 So it's a combination of all those things which will make a successful and robust set 6 of information that can be relied on within the 7 financial markets, but ultimately the validation 8

10 entity named the jurisdiction has to come from 11 source documents to what Scott was saying. And 12 the utility itself is going to have to be 13 responsible for that to ensure the integrity of 14 that data.

9

of that information, the confirmation of the legal

MR. TAYLOR: Before we move further down 15 16 the question list, there is a question on here 17 that I would sort of like to get an answer to. I was thinking how to put it. This used to come up 18 in school elections for student government, if you 19 20 remember. I should say, in terms of this 21 question, it is perfectly permissible to vote for 22 yourself, but the question is are there existing

1	candidates for this role and who are they? And I
2	guess I should flush that out a bit by saying, if
3	you look at the proposed role, it is assuming that
4	at least as a first step we want a UCI for swap
5	counterparties. That's in a sense a finite
б	universe. It's not yet the entire financial
7	sector. Although we want something that can
8	broaden out to the whole financial sector, the
9	immediate goal is an identifier for swap
10	counterparties, and the rule contemplates we would
11	like to have that in place by the time that swap
12	data reporting begins.
13	With that in mind, are there existing

15 authority role and who are they?

14

MR. JANSSENS: Yes. We are a candidate. NR. JANSSENS: Yes. We are a candidate. So I vote for myself, but not on our own. I mean, we can certainly be the registration authority because we are playing that role already, but we also want to work in collaboration. As Francis said before, the characteristics that are out there for the registration authority that are

candidates to play this utility registration

1	neutral, that are governed by the industry, that
2	are not for profit, we fit those, and we have been
3	working with the DTCC, who also is utility to see
4	how we could corporate and come to a common
5	solution. So, yes, the answer is
6	MR. JORDAN: I will put on my DTCC hat
7	and vote for Avox so I don't have to vote for
8	myself.
9	No. We do think that Avox has some core
10	capabilities here. Avox today has about 800,000
11	legal entities in its database, which it has
12	scrubbed on behalf of its commercial clients, and
13	we believe that the swap data repository is about
14	a universe of about 40,000 legal entities. We
15	don't know the overlap of how many of the
16	counterparties or parties in those repositories
17	are part of the current database, but we would
18	imagine there's a large overlap so that we could
19	utilize what we already have to get this going
20	very quickly.
21	We also believe, when it goes back to

22 governance, that, again, the cost-based utility

1	governed by its participants who are largely the
2	financial firms that we're talking about as being
3	the SIFIs and the other participants to the
4	markets really fit well.
5	When it comes to a registration
6	authority, we have been talking with all of them
7	potentially, and we think there is pros and cons.
8	As Paul just mentioned, we've had some extended
9	conversations with SWIFT as well.
10	MR. PREISS: I'm very grateful to my two
11	colleagues to my left for jumping on this question
12	first and setting the tone. I'm not going to
13	specifically vote for myself or my institution,
14	but it has seemed to us, you know, similar to my
15	opening comments, about existing international
16	standard framework.
17	There is an organization, a Belgium
18	corporation, known as ANNA, the Association of
19	National Numbering Agencies. It was created in
20	1991 with 22 founding members but today represents
21	over 200 countries in terms of issuer and
22	instrument unique identification. The membership

1 is more than 100 countries but, more importantly, those members are truly international in nature. 2 3 These are international exchanges, securities, depositories, and some vendor participation as 4 5 well depending on the market. So this is truly a global approach with an existing infrastructure 6 and a very, very large database of issuers and 7 quarantors already. 8

There has been talk in recent months 9 10 about expanding what is known as the IGI, the issuer and guarantor identifier, which is a draft 11 12 ISO standard, to expand that to cover counterparties, and a lot of the major market 13 participants within ANNA, you know, think that's a 14 very viable model. And CUISP is just one of those 15 100 plus members of ANNA, but we do think that's 16 one viable model that should be examined. 17 18 MR. MARNEY: As a not for profit endeavor, I think I vote for my colleague from 19 Bloomberg. Now on a serious note -- but I do 20 really vote for George. Can we strike that from 21 22 the record?

1 MR. HARRINGTON: I think it's on. 2 MR. MARNEY: We do have something like 3 Thomson Reuters or any of the other vendors I think have quite a lot of capability to bring to 4 5 bear for this, but clearly there would be considerations for how and why and what and so 6 forth; but it's what we do. 7 MR. HARRINGTON: So I guess I need to 8 comment now. Obviously Bloomberg does play a role 9

11 with our Beason Strategy as far as publically 12 disclosing, you know, our identifiers for use of 13 market participants.

in this space, and I think we've been very public

10

14 At the end of the day, I know that the 15 regulators try and avoid picking winners for obvious reasons, but I do think that this is a 16 space where -- and I want to credit the CFTC for 17 taking this up, taking this particular issue up 18 because it's a bold move because it really is 19 going to be the first step in not just U.S. 20 21 regulatory policy but international regulatory 22 policy as far as, you know, the move towards a

1 centralized identifier, which will, you know, really affect the entire global system. 2 3 And also I want to add one more point, which is we need to make sure that we're also 4 5 thinking about not just identifiers from a legal counterparty standpoint but also from a trade 6 counterparty standpoint because there are two 7 different components of that as far as the 8 counterparties who actually execute the trade and 9 10 the actual legal counterparts that underlie that Therefore, that needs to be brought in as 11 trade. 12 well.

13 You know, from an overall perspective, I think there is certainly, you know, a space for, 14 15 you know, a provider, a not for profit provider to 16 put something into the market that all 17 counterparties can use. And we're all going to have mapping tables at the end of the day that 18 19 will identify our own customer relationships, but I really think it will increase the efficiency of 20 the market and, you know, lead to overall more 21 22 effectiveness of the proposed legislation.

1 MR. CHIDSEY: So just to throw our hat in the ring and make sure people are aware, Markit 2 has implemented a somewhat similar system for the 3 loan market where we've rolled out market entity 4 5 identifiers as part of the automation efforts that are happening today within the primary and 6 secondary loan market to automate the processing 7 or settlement processing of trades happening in 8 that market. And we've identified over the past 9 10 18 months 30,000 entities ranging from borrowers, administrative agents, fund managers to the fund 11 12 themselves. So that identifier, although it doesn't meet the standard but the underlying 13 process in concept could certainly be applied more 14 15 broadly to the swap counterparties and the model 16 that we've rolled out is really an open access model where those identifiers can be used broadly 17 by market participants for the purpose of 18 facilitating automation of the settlement 19 processing in that market. 20 MS. LEONOVA: Can I go back to George's 21

22 comment? Let's define terms. So I assume we are

1	talking about LEI as a legal entity that is
2	incorporated and registered as part of a corporate
3	structure. That's where we are right now. If we
4	are going to execution trade branch, whatever
5	level, it doesn't mean it has to have been
6	incorporated in the system from the beginning or
7	it is one of the expendable functions of LEI can
8	be taken care of later?
9	MR. HARRINGTON: That's a great
10	question. It almost opens up a broader question
11	in this new, you know, swap world that we're
12	moving towards. You know, there are a number of
13	identifiers where you're going to want to have
14	some sort of identification.
15	For example, for our swap execution
16	facility that we're building and listening to the
17	regulators, there is relationships that we need to
18	understand with the central counterparties. So
19	that's sort of like the first step as far as, you
20	know, where is this trade going to clear.
21	Therefore, that's a level of identification as far
22	as who is using the system from an acuity taker

1	standpoint. Who is their DCM, how their
2	accessing, and then obviously what is the actual
3	CCP? So there is a string of identification
4	there. There is a string of identification as far
5	as the actual executor as far as who is actually
6	seeking liquidity, which is often times an
7	entirely different level where an advisor is
8	executing on a group of legal counterparties.
9	So I think that there are levels of
10	identification. I don't think we can finish this
11	job and say, okay, you know, one, two, three, four
12	is this firm, and, therefore, we're done. There
13	really is a string of identification that needs to
14	be done.

So the complexity of this effort is very 15 high, you know, and I think that around the table 16 we all have experience, you know, in providing 17 18 levels of that. I think to push this off on a 19 regulator and say, you know, come back to us and 20 give us an answer is not fair. I do think that this kind of collaboration around the table is the 21 22 only way that we're going to come up with a

1 successful strategy.

2 MR. MARNEY: So I don't think you can 3 stop at just a legal entity identifier or just legal entities. In managing a counterparty 4 5 database you need to get down to subsidiaries, branches, divisions, affiliates, all that stuff, 6 and that gets -- you know, I'm getting some nods 7 around the table -- that gets very, very messy and 8 complicated; but it's essential if it's going to 9 10 work.

11 MR. GROSS: Francis Gross, just short 12 I think that we are trying to tackle a remark. problem that we have patiently been building over 13 the last 30, 40 years of globalization and IT 14 intensification. So we might as well sort it in 15 stages over the next few years, learning along the 16 17 way. Let's be patient but start with things we 18 can do now.

MR. JORDAN: I think there's a phase implementation that we have to look at here, and I agree with Francis. And I think there's really two distinct conversations that I see here and the

1	first panel started to get in. What is the core
2	information that is required to identify a legal
3	entity? And I would even add to that, that would
4	be publically available or could be validated from
5	publically available sources. And the core of the
6	utility that we're talking about to me is
7	narrowing defined that way, at least for the first
8	phase, but there's a whole series of information
9	after that, some of which was just discussed. We
10	also have to talk about hierarchies of information
11	and how you create hierarchies, et cetera.
12	Once you open it up, the complexity
13	becomes much more difficult, number one. The
14	costs go up. Because a lot of this information is

not based upon publically available sources, the ability to validate this becomes not only more difficult, but the reliability may go down as to accuracy.

19 And I think while all of these
20 components are over time important, I think this
21 is a question about if we can establish a core set
22 of publically available information on which all

vendors, users, et cetera can build on and start
 building these other types of functions, that's
 the right way to start.

A facility could certainly collection 4 5 information and make it available, and whether that's available publically or not publically is 6 going to be determined by regulators and by the 7 industry themselves. But I do think this is case 8 where if we can walk before we run and get a core 9 10 set of information that the whole industry can use in the appropriate ways, that is the right way to 11 12 approach this.

13 MS. LEONOVA: Just to make sure I understand to you correctly, so you are saying 14 15 that (inaudible) or starting from LEI and going down is technological feasible way to do it? 16 17 MR. MARNEY: Absolutely. Definitely 18 feasible, but it's a matter of having the 19 extensibility within the system, the ability to handle it and adapt to it and take it on. 20 But 21 it's true for any database that you're building, 22 certainly for a counterparty database. No one has got one that's absolutely completely. They're
 always constantly building.

3 MR. JANSSENS: Maybe one comment, I would say it's bottom up because let's first have 4 5 the first building block stable, and there we can build upon. And the base has to be solid, and 6 then we can start to add to it and build stages 7 upon it in phases with all the expertise, which is 8 in the market, which is around the table today. 9 10 We can work and come up to solutions easily, but the first element has to be clear from the start. 11 12 MR. HARRINGTON: I agree with you, Paul. I think that if you look at where the market is 13 today, it is absolutely bottom up. So obviously, 14 15 Ronald with DTCC, you know, that is the bottom,

16 right. So in other words, that is just the pure 17 counterparties who face one another. They are 18 identified against one another.

19 It works, obviously, very well globally, 20 but now we really need to start from that building 21 block and start moving up the chain. You know, 22 obviously, if you look at the goal of a swap data 1 repository where you have reporting and all those
2 things around that, we're very much at the bottom,
3 and there's, you know, a succession that needs to
4 be built up from there.

5 MR. JORDAN: So I just want to chime in 6 and agree that the LEI is a logical starting 7 place, but now I'm confused whether that's top 8 down or bottom up. I'll call that sideways.

9 But I do want to agree with some earlier 10 comments made by Ed. I think there's a tendency 11 in the industry to underestimate the amount of not 12 only sustained investment but heavy lifting that 13 goes into maintaining that database overtime, and 14 that should be repeated at every possible moment.

15 I would also say there are some 16 conflicts in the various proposals out there speaking about legal entity identifiers, and so 17 simultaneously I hear phrases thrown around like 18 utility, and cost recovery, and entirely free, and 19 20 then just now I heard about hierarchies. And 21 anyone that's been engaged in the business of building hierarchies and who owns whom and to what 22

1 percentage, and I'm sure most of my colleagues have been in that business and still are, that's 2 not something that's done cheaply, especially if 3 you need something that's done particularly well. 4 5 MR. TAYLOR: We've done these questions a bit out of order but that always happens, and 6 it's perfectly all right. 7 You all have emphasized that quality 8 assurance is a key to making this work. Let's 9 10 talk a bit in detail, if we can, about what quality assurance purposes are going to be needed 11 12 to be used by the utility registration authority, whoever it is, and what data is going to be needed 13 to ensure that we have a trusted auditable method 14 of verifying identities. 15 16 MR. CHIDSEY: And we've touched on some 17 of this but, again, it comes back to robust 18 operational process. You know, as new requests come in, however, they come in, the initial step 19 20 is to make sure that the entity doesn't exist and that you're not creating any duplication in the 21

22 system.

And then importantly is ensuring that 1 the scrubbing that takes place and access to the 2 3 source documentation, review of the source documentation has to be from whatever the accepted 4 5 sources are in a particular jurisdiction or, you know, what is agreed ultimately by some sort of a 6 governance committee. But it really comes back 7 to, you know, the source documentation and 8 ensuring that a consistent process is followed 9 10 before the entity is ultimately committed to the database or at least flagged in some way as 11 12 validated.

13 And that speaks to a timeliness element, which we haven't addressed, but around the service 14 15 levels that will need to be agreed. And a request comes in; there's an amount of verification that 16 17 needs to happen before you would consider it validated and really want to use it in earnest 18 throughout the financial system. So that's 19 something we'll need to consider is, you know, 20 21 what is that stage process for an entity to go 22 through so that it gets into the system and people can begin using it; but at some point it becomes
 validated based on source documentation that's
 been reviewed.

4 MR. MARNEY: So I would entirely agree 5 with that. I think the entire process from end to end, all from the initial business analysis, and 6 the rules, and what's acceptable sources that can 7 be used, how it gets populated, how you make 8 editorial decisions around that, through to inline 9 10 quality control, quality assurance at the end, independent auditing, secondary sources to look 11 at, multi- sourcing content, especially something 12 like corporate actions that go back to something 13 we referenced before. Everybody has to have 14 15 multiple sources for corporate actions. No one has got it complete. 16

And then as Ed just mentioned, having the transparency to be able to go back to source document and have that available to end users so that they can validate themselves I think is very important. Everybody likes to be able to get back to the registration documents or whatever it might

1 be that was determined, and having that available in the system I think is very key. 2 3 MS. LEONOVA: Since you mentioned primary source documents and registration 4 5 documents, what is currently being used to verify the entity or organization you're interested in, 6 in the organizations right now? 7 MR. PREISS: It sort of dovetails with 8 my comments. Beyond my colleagues' initial 9 10 comments, there's a multitude of official legal documents that are used broadly today, tax 11 12 filings, financial statements, clearly in the 13 public markets, prospectuses, but there's also an element of timing. When is that information 14 available and to whom? What's the earliest 15 possible view of the truth that we can, as an 16 17 industry, coalesce around. And I would add that there needs to be a 18 greater understanding of the global rule set. So 19 in certain jurisdictions perhaps tax documents are 20 not readily available on public and/or private 21 22 institutions. The same holds true for

prospectuses, and so I agree with my colleague,
Peter, I believe made the statement earlier. It's
this type of forum, this collaborative spirit
that's really going to bring these issues to the
surface, and so I applaud CFTC for bringing us
together.

In each jurisdiction there MR. JORDAN: 7 are also some authorities, which in the United 8 States is usually the secretaries of each state, 9 10 where you're required to register. In the United Kingdom it's something called the Company's House, 11 12 et cetera. But, you know, we caution there 13 because there are update requirements in each one of those jurisdictions which may not meet the 14 requirements of a database. For instance, 15 Company's House I think you have to publish once 16 17 every six months, so information can be outdated by six months. 18

19 So I do think, you know, beside the 20 challenge capability that we talked about, and the 21 self-validation, and the corporate action feed 22 reading, and even periodic scrubbing of

1	information against these sources, I think there's
2	a few other things. Each jurisdiction there is,
3	we'll call it the meta-data layer here, where
4	there is a series of documents and a way in each
5	jurisdiction that you can go and validate those.
6	We have developed, over the period of the last 10
7	years, a very elaborate meta-data layer on a
8	country by country basis.

9 It's also against publically available 10 sources, and that needs to be transparent. That's 11 the other thing. The database needs to articulate 12 where the information is coming from and how it 13 was derived so that any user of the database can 14 see the sources, and we think those are some of 15 the ways that you ensure the quality.

16 I would sort of credit MR. HARRINGTON: some of the work that Ed's firm Markit has done in 17 18 the space as far as looking at the credit default 19 market where you have obviously defaulting events. 20 You have a process of sort of a lead up to the 21 actual auction. Then you actually have the auction settlement. 22 I think that, that type of

1 format of disclosure is something that can be looked at as a potential model. 2 3 Now obviously we're talking about, you know, the actual. That's sort of a small window 4 5 into a much larger world when you're talking about the legal entities. So obviously there's a lot 6 more information that would go through there, but, 7 you know, if we could move that type of a model, 8 you know, into the public forum with some sort of 9 10 regulatory oversight, I think that would benefit all market participants. 11 12 MS. LEONOVA: Ola, I feel like you're 13 left out. Do you want to say something? I mean, certainly the 14 MR. PERSSON: No. 15 problems we face just maintaining our very limited universe is echoed, and this is going to be 16 17 plentiful. I mean, one thing that comes to data maintenance that I think is regulated we want to 18 consider is how do you ensure a proper audit trail 19 so you for regulatory purposes can go back on an 20 audit trail. 21 22 We know this universe moves very quickly

1	over time. For us, it is obviously a key
2	component. How do you ensure that you can go back
3	and look at events that have taken place over time
4	and then link them together? That is a key
5	component of a regulator.
6	MR. TAYLOR: A couple of you touched on
7	a question we were going to do a little later, but
8	let me ask it now. What turnaround time frame is
9	needed for assignment of a UCI to an entity that
10	seems one?
11	MR. JANSSENS: Well, in the turnaround
12	time there is first of all, we need to make
13	sure that the data has been vetted and is of
14	quality. So I, again, think that's more important
15	than the time. But then the processes that need
16	to be in place can probably be in phases as well,
17	that the data is made available in less than 24
18	hours but validated in maybe 24 hours as well,
19	depending on the jurisdiction, if the public
20	sources are available. It can be done in 24
21	hours. If not, they should be marked as not
22	validated yet and distributed because if an entity

needs a code in order to trade or to enter into a
 transaction with a party, you cannot hold it from
 doing a transaction because a code has not yet
 been identified.

5 MR. CHIDSEY: The only comment I guess to add to that would be that, you know, we're 6 talking about identifying parties to financial 7 transactions. So in order for that financial 8 transaction to happen between two institutions, 9 10 there normally is, you know, some sort know your client and upfront due diligence that happens 11 12 between those two counterparties.

So it speaks to at what point do you 13 insert the creation of the legal entity into the 14 15 overall financial process. And, you know, the 16 further upstream that you go in interacting with 17 market participants and, again, coming back to some sort of self-registration to alert the 18 19 authority that a new entity needs to be created will be critical because, you know, I think the 20 21 timeliness, once the request hits, you know, 22 ideally it would have to be created in the same

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1 day.

4

2 MR. MARNEY: So I think -- I'm sorry,
3 George.

MR. HARRINGTON: Go ahead.

5 MR. MARNEY: I think it depends on the use case and what you're trying to solve for. 6 So on the creation, is it to enable workflow, or is 7 it for reporting purposes? I think that gives you 8 very different answers. And then for the utility 9 10 or the reference data that we're talking about, I 11 think that's also a very different thing where 12 there could be timeliness requirements for keeping it up to date maybe different than timeliness 13 requirements for the availability of the service. 14 Because if you want to look to see if an entity 15 already exists, you have to have a live credible 16 service that's available all the time. If a new 17 18 entity is going to be created and it's for reporting purposes, then maybe the timeliness 19 20 requirement is a lot different. So I think it 21 really depends upon the use case that you're 22 looking at.

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1 MR. TAYLOR: We are -- go ahead. MR. GROSS: A very brief one on the use 2 3 I think that if we want to have an cases. identifier that's accepted everywhere, we should 4 5 create an identifier that's really useful for everyone and that ultimately perhaps after a 6 longer phase will be used also for all business 7 processes, therefore, the registration and the 8 utility too. It should serve the fastest needs of 9 10 all the using business processes. 11 MR. TAYLOR: We are actually out of

12 time, even though we had 15 extra minutes. I'm pleased that this topic was so interesting. There 13 are a couple questions I hoped to get to that we 14 just didn't, which were to talk in more detail 15 about how and by whom the system should be 16 governed and what level of fees are sufficient to 17 make it work. If any of you have thoughts about 18 that and would like to send us them in writing, 19 we'd be happy to put them in the comment file as 20 well, but I don't --21

22

MR. TAYLOR: So, if people on Panel 3 1 could come up to the table. Bring your name tent. 2 3 Start filling from down by us if you will, but you're going to need all of both sides, I think, 4 5 because this is a large panel. (Pause) 6 7 MR. TAYLOR: All right, we are back. This is Panel 3 of the roundtable, Implementation 8 Considerations Concerning Unique Counterparty 9 Identifiers. 10 11 I think the first two panels thought 12 this panel was the one that was really on the hot 13 seat. We will see. And I think maybe the participants did, too, because we had more 14 15 requests to be on this panel than maybe any of the 16 others. So, let's start with the first question 17 18 we had posed, which is: What are the technical challenges for timely implementation of a UCI? 19 20 Anybody want to go first? 21 MR. PUSKULDJIAN: I quess I'll start. 22 I'm Paul Puskuldjian from Citi. I've been

1	involved in infrastructure operations in the
2	financial services industry for over 20 years, so
3	I've seen many identifiers created whether it be
4	by an industry participant, a vendor, an industry
5	utility many different identifiers created. We
6	view this certainly as something that is very much
7	needed in the financial services industry and,
8	quite frankly, I think a really good idea.
9	It should be noted, though, when you
10	think about the technical considerations that most
11	of the financial services firms have a lot of
12	technology that has adopted to all of these other
13	identifiers in the past, and, you know, to bring
14	that all together and create some harmony across
15	all of those internal applications is going to be
16	a huge mapping task.
17	But that being said, I think it's

17 but that being said, I think it is
18 certainly a good idea. We certainly support the
19 fact that there be one identifier globally, if
20 possible, and that if that identifier could be
21 developed by an industry utility, that would make
22 much more sense than having it done by a vendor or

1	a for-profit institution.
2	MR. GRODY: Yes, my name is Allan Grody.
3	I'm President of Financial InterGroup Holdings.
4	We basically develop joint ventures in the
5	financial services industry. And my partner is,
6	in this joint venture, a GS1, who if you were here
7	in the earlier panel you heard Mr. Traub
8	describe the GS1.
9	I'm here both in representing my company
10	and representing that joint venture. We call it
11	the Global Financial Services Data and Standards
12	Alliance. And in the last month we have opened up
13	what was private deliberations among 16 global
14	financial institutions and global standard setting
15	bodies and a few other interested parties to broad
16	discussion across the entire globe. We invited
17	500 people of which 100 were on the call, and then
18	we had another call in inviting that subsegment to
19	our discussions.
20	Basically I'm here to tell you that
21	there is a global numbering system that exists in
22	the world that is used by companies. It's called

1 the GS1 system of standards. It's basically developed for the trade supply chain; and the 2 3 members of that organization, 1.5 million who are basically collected around 108 registration 4 5 authorities, would like to take the same methodology and offer it to the financial industry 6 in cooperation with the folks here today and the 7 people around our table so that we can begin to 8 quickly identify all the legal entities that they 9 10 have already identified and the others that need to be identified. 11

12 The identification systems endured for 40 years. Its manifestation for most of you is in 13 the 40 million product codes that you see on 14 15 commercial products -- basically, the bar code. In that bar code is unique, universal, and 16 unambiguous numbers. Those numbers represent the 17 companies, the locations, transportation 18 intermediaries, and, obviously, products. 19 20 We think the implementation could be 21 accelerated if we simply look at an existing 22 system that basically came about not because of

1 regulatory compulsion but because there was a business need 40 years ago. The most interesting 2 3 thing about the solution is that none of the commercial interests then nor now in the trade 4 5 supply chain were disenfranchised, and none of the commercial interests and business users of the 6 existing systems would be disenfranchised. We're 7 basically presenting a global mapping system that 8 everyone can use and a universal numbering system. 9 10 Thank you. I'd like to introduce 11 MS. GOLDMAN: 12 myself, Melissa Goldman from Goldman Sachs, and also I'd like to thank you for inviting us to 13 participate at the panel. 14 I'd also like to reiterate the point in 15 terms of being supportive of a single UCI and 16 17 encourage the implementation of that across the markets, across the globe. We estimate that there 18 are approximately 40,000 entities participating in 19 20 the OTC markets and that the complexity around a 21 rollout of that would need strong support from the 22 regulators in a unified way. We believe that the

1	firms, including the broker-dealers, would need to
2	engage in what would be a complex mapping
3	exercise, as referenced earlier, and that the
4	challenges around being able to do that is very
5	much dependent on the complexity of the
6	implementation within the firms impacted.
7	And we also would just like to note that
8	we believe that the identification of a registrar
9	should involve an open call to the market where an
10	RFI can be put forth and an evaluation of the
11	response to that RFI should be evaluated by the
12	marketplace.
13	MR. MAGNUS: Hello. My name is Arthur
14	Magnus, and I'm with JPMorgan Chase, and I also
15	would like to thank you for the opportunity to
16	speak here today.
17	Like my colleagues, we strongly support
18	the creation of a legal entity identifier within
19	the financial services industry. One of the
20	things that I think we need to be very clear on,
21	
21	though, is exactly what is the purpose and we

1	question is what are we trying to identify, and
2	what are the risks we're trying to manage?
3	If we're looking at the type of
4	reporting I understand if there's marketing
5	manipulation, which is one of the things this
6	Commission is supposed to be looking at, then you
7	need to understand who are the counterparties
8	executing the trade. If you're looking at credit
9	and understanding where there's concentration of
10	risk, you need to understand who the beneficial
11	owners are. The legal counterparty to a trade is
12	frequently a combination of the two of those. And
13	that is not a legal entity, by the way; some
14	people call them an account.

15 So, we need to understand what we are identifying so we can understand the universe of 16 what we are trying to do. I do believe that the 17 18 technical challenges are we're going to have to 19 get in a room with the supervisors, the regulators, the financial industry, and the 20 vendors; understand what we are trying to 21 identify; and then we can come up together with a 22

1	way of solving this problem. This problem is one
2	that we've been talking about in the industry for
3	a while. We have multiple solutions out there.
4	And it's not something that's going to be easily
5	solved through regulation but through working
6	together and understanding how corporate actions
7	and other things will affect those identifiers
8	over the life of transactions that are going to be
9	in the data repositories.
10	MR. SULLIVAN: This is Todd Sullivan
11	from Morgan Stanley. I also thank you
12	MR. TAYLOR: Excuse me one second.
13	It'll help if people push again to turn their mike
14	off when they're done. I'll try to do it, too.
15	MR. SULLIVAN: Thank you for the
16	opportunity to speak today. Like, all of my
17	colleagues here, we strongly support the use of a
18	unique kind of party identifier. Specifically,
19	the technical challenges raised by this issue
20	I'll make two comments. I'm sure there will be
21	additional that I'll no doubt agree with, but
22	first and foremost is a definition of what is a

1	legal entity, because I think there certainly is
2	an acute need under the proposed rules to talk
3	about counterparties to a swaps transaction.
4	However, without understanding or at least taking
5	into account other uses for LEI, whether it be
6	under OFR or other systemic risk supervision
7	analogies or, frankly, things outside of the OTC
8	derivatives market. So, certainly the requirement
9	to make filings as public corporations resides at
10	different levels within the corporate structure,
11	and those entities, when they make those filings,
12	are identified. To the extent we can anticipate
13	or at least plan for a contingency where there
14	might be unique levels of reporting requirements
15	or unique levels of relationship between those
16	entities, the more we think about that before we
17	implement a process, the easier it is to make that
18	extendable to cover those same requirements.
19	The second is, following on from the
20	previous panels that discussed the extension of
21	current existing platforms and potentially

22 extending the use of one of those current

1	identification systems to cover this requirement,
2	while the frameworks they've used certainly should
3	be considered as we build something, the challenge
4	for us as users and most of us sitting around
5	this table are the parties responsible for
6	reporting their numbering
7	systems/identification systems are fully embedded
8	in the hundreds or thousands of systems and
9	processes across the industry already.
10	You know, simply examples of a couple
11	things that have come up: DTCC participant IDs in
12	the OTC derivatives market-read identification
13	numbers under the market service are so fully
14	embedded in other processes that to change the use
15	there to extend it to cover UCI runs the risk of
16	significantly affecting the use for other
17	purposes. So, I think we should certainly look at
18	the frameworks they've used to build the systems
19	as certainly a starting point, but simply taking
20	one of those and extending it and saying it now
21	qualifies as a UCI runs a significant knock-on
22	effect risk to the other uses of those numbers.
1 Hi. My name is Ray MR. TUBRIDY: I'm with State Street, but today I'm 2 Tubridy. here representing the FIA. We kind of came into 3 this discussion a little bit late, so I apologize 4 if I misstate or mischaracterize anything. 5 I'm part of a subcommittee for the OCR 6 rules that were published by the CFTC, and we 7 spent some time looking at the requirements and 8 comparing them to the existing requirements that 9 exist in futures. And within the futures 10 industry, we do various levels of reporting, and 11 12 we use unique identifiers today, mainly three: One, the executor ID, the one who places the order 13 to the market; the controller, the one who makes 14 15 the trading decisions; and the beneficial owner. 16 And so, you know, I echo Arthur and 17 Todd's comments about we really need to define what this counterparty definition is, and the 18 recommendations coming out of the subcommittee are 19 that we try to leverage existing data where we 20 21 can, minimize the amount of development in systems 22 impacted, but, most importantly, be consistent

1 across the products.

And now with the swap market come in to 2 clearing, we have markets that are already 3 clearing and that are struggling with some of the 4 5 same requirements, and so we want to make sure that we are looking across these products and 6 developing these new reporting requirements so 7 that they will be useful across products when that 8 time arises. So, consistency, keeping in mind 9 10 straight-through processing, leveraging systems and technology where we can, and reasonable data 11 12 requirements.

And so, you know, we have a lot of work to do between now and July, and we need to be reasonable about what we're asking for and knowing that maybe we can't get everything we want in by July but having a plan for where we're going to get that data.

MR. McCLYMONT: Hi. I'm Stuart
McClymont with Deutsche Bank. Again, thank you
for also to participate in this roundtable.
I certainly think that we definitely

1	agree with the mutual standards. I think we need
2	to be careful, though, in terms of really
3	understanding the process, the functions within
4	the process, and making sure that we don't try and
5	retrofit existing solutions into that process. I
6	think we need a period of design amongst the
7	industry both in terms of vendor supplies, users
8	using our prior experiences getting industry
9	together to work hard. Whatever we need. What
10	should it look like? What are the current
11	incumbents, and how do they need to be modified,
12	and relegating that design, that understanding out
13	first to redraw through what are the requirements
14	of it. Let's get more clarity around why do we
15	need these standard identifiers, and what is the
16	report of (inaudible) to be able to support those
17	standard identifiers and as a group of
18	institutions, as users, as vendors agree that
19	design, that infrastructure.
20	I think what we've done in the past is
21	we kind of jumped into very specific areas like
22	resembled that registration authority or we jumped

1 into the distribution mechanism or we jumped into the cleansing and process. I think we understand 2 the whole request for identifier, the generation, 3 the storage, the distribution, and the 4 5 consumption. Restart thinking about (inaudible) a provider prospectus -- who's the provider of the 6 service and what is the service they're providing 7 and how do they fit within other providers of the 8 end-to-end service. And then ultimately what are 9 10 the consumers, what are they consuming, why are they consuming, and what they need to then to 11 12 provide that downstream, and again consumers. Ι think without that we will probably go down 13 certain routes, we will probably spend a little 14 15 money, and I think, given the time frames that 16 we've got to try and achieve some of this, we need 17 to get to the table very fast as a group to start designing what the solution looks like and working 18 out where the deltas are today. 19 20 That's -- sorry. MR. TAYLOR: My name is Lindsay Yee. 21 Hi. MS. YEE: 22 I'm from the Bank of New York Mellon, and I

1	actually work on the Derivatives Trading Desk
2	itself where I manage the Trade Capture Support
3	Group, and I support the traders' products and
4	implementations.
5	I also agree that the unique
б	counterparty identifier should be agreed upon. We
7	need to figure out, first of all, what is the
8	universal standard, agree to it, and then publish
9	it.
10	Other things that we do need to also
11	think about are the operational deployment within
12	our existing systems, interface modification
13	between our company systems and anything that we
14	can leverage operationally within the
15	organization, what maintenance needs to be
16	maintained through the internal systems, and the
17	upkeep who's going to be responsible for that.
18	We're going to need extra funds for it and
19	resources with people as well.
20	MR. TAYLOR: Anyone else want to weight
21	in on technical challenges for implementing the
22	UCI? If not, we had a minute ago

1	MR. SULLIVAN: One more comment.
2	MR. TAYLOR: Sure.
3	MR. SULLIVAN: It's just that there was
4	discussion before about the timeliness and how
5	fast we get this back. The technical limitation I
6	think should be looked at in two different ways.
7	One is ongoing once it's running what is the
8	service level agreement expected by the users of
9	the service? The other one is obviously the day
10	you turn this on, right? how fast do we expect
11	to get data back? because, I think, you know, a
12	lot of the debate about a contributed versus a
13	self-registration model raises issues. If it's
14	contributed and you have the top 20 banks
15	contributing all the data at once, you're likely
16	to have at least 15 repeats of everything, all the
17	major participants in these markets. So, you
18	know, thinking about how we go through that
19	process and how long it takes to get through that
20	initial scrub. And then there's an ongoing new
21	entrance and maintenance exercise, which I would
22	expect to be looked at in different timelines.

1 MR. MAGNUS: I would also suggest that the creation of data might take -- you might have 2 more time to create something once it's up and 3 running because of the time it takes to do all the 4 5 KYC as was mentioned earlier versus some change to the data, which might need to be made rather 6 quickly if we want to be able to use the data in 7 the repositories in a timely manner. 8 9 MR. TAYLOR: Anyone else on technical Well, let's move to -- it's a big 10 issues? question: How can industry consensus on a UCI be 11 12 achieved? I mean we've heard from all three panels, I think, this morning a general agreement 13 that we need a UCI. It's heartening to hear, you 14 15 know, volunteers, people voting for themselves as being the utility or the registration authority. 16 17 Obviously, there's a question about how do we pick a solution, and I think it's clear from what we 18 19 said in the proposed rule the Commission, at any rate, prefers not to pick, that the industry would 20 21 come together. You all are the ones who are going 22 to pay for it. You all are the ones who are going

1	to use it. You are all the ones who have the
2	technical expertise in it. So, the question is
3	how can an industry consensus be achieved. And
4	maybe let's start with we have to break that
5	into its components what institutions need to
6	be involved in that process?
7	MR. GRODY: I'd like to discuss that.
8	MR. TAYLOR: Go ahead.
9	MR. GRODY: First of all, let me just
10	besides announcing my affiliation and my company,
11	I would like to give you a little background,
12	because I've lived through six decades of the
13	financial services industry, and I've had 50 years
14	on Wall Street, and people say I can't be that old
15	but that was my first job out of school, working
16	in a luncheonette on Wall Street, so I like to
17	date my experience from that point. But I've had
18	45 years of business experience over six decades.
19	I was there when CUSIP was thought of,
20	and when DTCC was first invented I was there at a
21	bank when we installed SWIFT. And I've been
22	through a number of generations of this. In 1995,

1	I called the first cross-industry standards
2	conference where we had the world standards
3	organizations around our table to discuss the
4	problems. And the chairman of the standards, a
5	board that was called at that time, was the
6	chairman of the World Federation of Exchanges
7	then it was called something else and he had
8	worked for three years to try and build consensus.
9	And he concluded that the standards organizations
10	were in competitive businesses and they couldn't
11	be brought together as a group.
12	What's different today is very simple.
13	Unlike all of these other attempts, we have
14	regulatory compulsion. And you are the most
15	important part of getting us around a table to
16	solve this problem. Every one has a vested
17	interest, and they should. They have done a
18	Herculean job in supporting the industry. What's
19	different today in our world, in our global
20	financial services data and standards alliances,
21	we brought the corporate issuers to the table and

21 we brought the corporate issuers to the table and 22 their auditors, people who heretofore have never

1 been involved in the thought process of solving this problem, people who we want to give numbers 2 General Motors, IBM, Kroger, Walmart, all 3 to: They have given themselves numbers in right? 4 5 their other business, producing their commercial trade products. They are now at our table in the 6 form of GS1 saying we believe straightening out 7 the financial supply chain is important. They 8 never knew what happened after the board met and 9 10 approved a corporate event. They never understood what the investment bankers, the accountants, the 11 12 lawyers were doing with those pieces of paper. 13 We have a role for XBRL in translating

the success of financial statements translated 14 into XBRL. We all understand how successful that 15 16 project is. We want to move that project forward 17 to get the data from the prospectuses, the 18 memorandum, the ISD master agreements. Even the 19 financial announcements, the corporate events, from paper documents into XBRL templates so we 20 could provide the data for the extensions of these 21 22 uniform codes that we wish to provide to the

1	financial industry and to databases and do it in a
2	straight-through processing way that we've always
3	wanted and never included the people who were at
4	the top of the financial supply chain.
5	MR. SULLIVAN: I might suggest perhaps a
б	different way of saying it and probably a very
7	similar message, but we have very active industry
8	groups formed across the financial service
9	industry, a number of which you have already met
10	with numerous times representing both buy-side and
11	sell-side institutions. They have to be at the
12	table.
13	You, your colleagues at the SEC, your
14	colleagues at Treasury, your colleagues around the
15	world, the FSA, the European regulators en masse,
16	Asia-Pacific regulators need to be at the table,
17	and I think obviously the service providers who
18	are vying to play different roles within this
19	process need to be there. And those are the three
20	major constituents that need to be represented

21 the participants in the market, the regulators22 across that market, and the people providing the

1 services. The ideas are going to come collectively probably from all three, but the 2 service providers are going to be there as a 3 sounding board for how to come up with a solution. 4 5 The participants in the market are going to know how they're going to implement that, and 6 the regulators play the most key role in ensuring 7 that we have a single, global, consistent set of 8 rules that we're trying to comply with. Having 9 10 solutions that are different in North America from what they are in Europe or what they are in Asia -11 12 or that diverge over time will make this unimplementable. But the three groups together 13 can come up with the mandate -- I think Stuart was 14 15 specifically addressing that -- defining what is the problem set that we're trying to solve for. 16 And then we can derive consensus from that group. 17 18 And then, you know, I think Allan's absolutely correct, the world is different than it 19 was 40 years ago. There is no passive sitting by 20 and just let things happen. Those options have 21 22 been taken off the table. So, I think that group

1	sounds daunting. It's huge. But, frankly, we've
2	proven over the last five years, certainly in
3	specific asset classes we've done this. You know,
4	that is the only model that's going to make an
5	effective answer.
6	MR. TAYLOR: Let me ask a quick
7	follow-up for that, because I thought I heard
8	this. From both of you are saying, you're talking
9	about getting those three classifications of
10	stakeholders, shall we call them, around the
11	table. Do you think there really needs to be a
12	table? Does someone need to convene a giant
13	meeting of all those folks? Or if it's not
14	literally around a table, how do you do it?
15	MR. GRODY: Well, there's a model in the
16	world today that did just that. That's the Basel
17	Committee under the G20. And they created a
18	capital standard for the world. It's modified.
19	It's Basel III now. But it's the best thing we
20	have, and they recognized of course that the
21	weakest link will bring down the whole system.
22	Systemic risk is what we're ultimately trying to

1	resolve. So, there is a table there, a bully
2	pulpit, all right? And we're suggesting that the
3	Financial Stability Board, while they have a
4	framework concept around systemic risk, also
5	create the framework concept around a global data
6	standard and then push it through to the
7	regulators across the world so that we can have a
8	table up there that will watch over this data
9	standard.
10	MR. PUSKULDJIAN: You know, just
11	listening to the few panels that have talked about
12	this, the fact that this hasn't been done before,
13	you know, doesn't mean that it's not a good idea.
14	Every single person that sat here said it's a good
15	idea. The problem that I think we've had is that
16	it there hasn't been some consensus global
17	consensus. So, I think working the regulators,
18	setting the framework, working with the industry
19	participants can help us set that framework, and
20	the industry participants working through what it
21	is that the regulators actually want to be able to
22	see I think will come up with a strong solution.
1	

1	But I will say that it definitely has to be a
2	global solution that all the regulators are
3	supportive of and agreed to.
4	MR. McCLYMONT: Paul, I would just echo
5	that. I think we've been tremendously successful
6	in the last five years as an industry to deliver
7	solutions to improve our operation efficiency.
8	Our approaches to our control reduce the risk in
9	the market, and that's because we've had a group
10	the OTC Derivatives Regulators Forum where's
11	we've got a number of regulators around the world
12	coming together with the community (inaudible) buy
13	and sell sides to firstly set out what people's
14	requirements are, what their objectives are, and
15	there's some negotiation in that process but we
16	always end up every year and we have done
17	(inaudible) of the regulatory commitments letters
18	to agree what those commitments are going to be
19	both from a regulator perspective and also from a
20	delivery perspective and from buy side and sell
21	side. We then work with the vendors to identify
22	solutions to (inaudible) commitments. But

1 throughout we've been very clear what are those commitments, what are the requirements? Do we 2 both agree, and are they going up against what we 3 both want? Yes. Okay. Now, what (inaudible) 4 5 providers actually deliver a solution within appropriate time frames. So, I think it's that 6 collaboration between regulators globally, the 7 users globally, to identify the "what." Then we 8 work through with the vendors to identify the 9 10 "how." And then we work through again the time frames built to deliver against it. But I think 11 we need to be very organized, very clear. 12 And again it goes back to my original point. I think 13 if we don't design the "what" as a community, we 14 15 will end up spinning our wheels and we will try and retrofit infrastructure that exists and is 16 perfectly good, but I think we should learn the 17 lessons that we've experienced over the last five 18 years in terms of building out standards around 19 red IDs, around standard calculations, standard 20 documents, how we approached that in the past and 21 22 how successful we've been by that approach.

1 MR. MAGNUS: Yeah, I would like to 2 support what Stuart said, because that model has 3 worked incredibly well, and allowed us to bring 4 things to market very quickly. We've made 5 commitments on an annual basis and within a year 6 made significant progress against those.

You know, I was actually involved in the 7 Microform's Basel II program. That took probably 8 15 years before I even got involved, and it's now 9 10 many years later and it's still being implemented, though it's not the time frame we're looking for 11 12 in this particular endeavor. (Laughter) So, you know, I think if we can get around the table with 13 the right subset using one of the industry groups 14 15 -- and I would recommend to you SIFMA/ISDA to help drive either one of those two forums -- to get 16 17 around the table and do what Stuart suggested, 18 which is to identify what the objectives are and 19 agree between the regulatory and supervisory 20 community and the players in the market what the 21 objectives are, we can then very quickly engage 22 the vendors and figure out what is the right

1 technical solution to that. And that would be certainly my recommendation for a quick fix -- or, 2 3 not quick fix but a quick way to a solution. MR. TAYLOR: You're talking about, you 4 5 know, once you've got the principles you can look at the vendors and make a decision. One of the 6 questions here is who makes that decision and how 7 does it get made? 8 9 MR. MAGNUS: The industry through the 10 IIGC in the past has done this in several different forums, and the process for creating the 11 12 credit repositories that exist -- the equity repositories, the fixed income -- went through 13 similar processes where the industry picked the 14 15 vendors to meet the requirements at the cost that 16 they thought was competitive. It was an RFP 17 environment. In some cases they issued an RFI and 18 then an RFP. The community that was ultimately going to pay for it decided which vendor they 19 going to go with, with the help of the supervisors 20 21 to make sure that all the participants that were 22 bidding on it were actually delivering on what

1 they were looking for.

So, I think you have roles to play for 2 different groups. The regulatory and supervisory 3 community can help make sure that the vendor that 4 5 is selected meets the requirements, and the people who are going to pay for it, which are the market 6 participants, get to actually pick the vendor and 7 their governance structure's in place that can be 8 used to do that. 9

10 And we can also make as part of the 11 requirement that we need that international 12 threshold, because there are things that can be divided up around the world. If you look again, 13 the internet model was a very good model. 14 Ιt 15 isn't consistent across the world. There is one 16 body that issues and maintains sort of consistency 17 but then each nationality in each country does sort of their own thing. And so there are 18 definitely lots of models that can be leveraged, 19 but that would be the way I would recommend to 20 21 move forward quickly.

22 MR. GRODY: I would like to engage the

1 panel here in discussing what is in fact the narrow focus that we are now discussing with 2 3 regard to a quick solution to an immediate need by one regulator here in the United States versus the 4 5 broader goals that are articulated by the SEC, the CFTC, and the Office of Financial Research with 6 regard to the U.S. Treasury; and, of course, the 7 signature on what they call the lynchpin report by 8 many organizations in the government as well as 9 10 FINRA.

11 It is a vision that is hoped for to be 12 implemented. What we're talking about here today is the same, same-ol', same-ol', the silo 13 solutions to get a relief in a particular 14 15 jurisdiction, a particular market with particular regulator, when in fact the goals are much 16 17 broader. And if we don't have a concept, like the internet registry for example, around legal 18 entities that traverse every product within the 19 20 financial space across the globe, we'll never get 21 the permanent solution or reach the vision that 22 we're looking for.

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1 So, I'm suggesting that we are 2 continuing to respond to the individual regulators 3 for their immediate needs with immediate solution 4 when in fact the vision is much broader and the 5 interest in solving this problem permanently has 6 always basically thwarted us.

MR. MAGNUS: With all due respect, that 7 is not what I suggested. The IIGC is an 8 international body of market participants. 9 They have delivered international solutions in the 10 financial market space, and they have worked with 11 12 the international regulatory bodies to solve what are problems. While it would be a lovely thing to 13 try and create identifiers that solve absolutely 14 15 every problem in the financial services space, across every single aspect of financial services, 16 17 I also believe that you need to walk before you can run and you shouldn't try and boil the ocean. 18 19 And the space that we're talking about, the OTC derivative market, the global OTC derivative 20 market, is a reasonably good proxy that if we 21 22 solve it here we will end up with a solution that

can probably be used in a much broader concept,
 because the concept of who you're trading
 counterparties with, the legal entities I am
 trading with and the roles that they play in the
 market, are not inconsistent in other parts of the
 market.

7 And if we use the comments that Raymond mentioned earlier about the futures market, those 8 same concepts, by different names, are used in 9 10 other parts of the market. So, I do think that the solution that I suggested -- and I'll let my 11 12 colleagues in the other financial institutions -you know, they can contradict me if they like --13 but I do think that will be an approach that would 14 work and we can get a small number of people 15 around the table to actually get to a solution 16 quickly. 17

MR. SULLIVAN: I certainly would echo a lot of what Arthur just said. I think the key here is not that we're trying to get every possible use ever for some concept called the legal entity and find that solution right now.

1 But there are certainly a number of legislative mandates already issued, certainly a lot of global 2 discussion currently underway about what the 3 expectation is in other jurisdictions. And we 4 5 know the vast majority of the participants on that side of the table, and getting them together to at 6 least identify the places where although we don't 7 have the rules written yet or even drafted yet we 8 understand the concepts trying to be solved so 9 10 that when we do build a solution that very narrowly focuses on solving the CFTC rules for a 11 specific set of instruments in a specific market, 12 it's an extendable solution that will fit the 13 SEC's requirements, the OFR's requirements, FSA's 14 15 requirements -- because those are being discussed in a collaborative and cooperative framework 16 around the world. 17

The original question that started this current debate is do they all need to be at the table? I think the short answer is yes, to make sure that we agree high level the "what" and if there are still gaps we at least acknowledge where

1 we've got to build in contingency, because we've yet to define some of the possible uses so we 2 3 don't build a framework that we end up throwing away two years from now because we finally got to 4 5 understanding those other needs. MR. McCLYMONT: I think, just to build 6 on that, I mean what was the statement we said 7 right at the start of today. It was we would like 8 a unique and counterpart ID to be able to deliver 9 10 effective, efficient transparency from a regulatory reporting perspective in OTC 11 12 derivatives. That was our immediate open stance. So, if that's our objective, we need to say okay, 13 what is the design? What is the process? 14 What are the solutions to go to immediate objective? 15 16 I absolutely agree with Allan. We need

17 to ensure it's not a silo solution. But I think 18 again we've demonstrated in the past that a lot of 19 the ways we've approached the derivatives 20 structure in OTC have actually been (inaudible) 21 cross into other products such as futures and cash 22 equity. And even though they may be the more

mature products in terms of mature derivative 1 structure, they've learned a lot of lessons from 2 3 the build-out in OTC over the last 5, 10, 15 years and are now replicating in those asset classes. 4 5 So, I think we would be foolish to build an OTC solution, and I don't think we would do that, but 6 I think we just need to be very clear on what's 7 our objective, what's our time frame, what our 8 design would look like, and how we can accommodate 9 10 that.

11 MS. GOLDMAN: Just to add on to those 12 points, I would echo, you know, those same sentiments in terms of scope. I also think that 13 the scope applies to not only the coverage but in 14 terms of what data we're collecting and so to the 15 extent that we understand the uses of that data 16 17 and sort of plan our approach in a way that we collect the most critical information up front, 18 and to some of the points discussed earlier 19 regarding entity hierarchies, that we really 20 21 identify a scope in the initial rollout that is 22 specific to, you know, core information but we

1	also include major legal ownership in that
2	information in order to accomplish the kind of
3	systemic risk management that we're trying to
4	achieve here.
5	MR. PUSKULDJIAN: When you think about
б	the identifiers, you know, one of the things that
7	struck me was that the regulators actually use
8	different nomenclature when they refer to them.
9	The OFR uses LEI; you guys use UCI. We should, I
10	think, harmonize that so that we're all using the
11	same nomenclature.
12	And, you know, I think it's a great
13	thing that the people around the table actually
14	are familiar with the different regulators and
15	what they want to do, and as an industry we don't
16	want to do the small pull times. We don't want to
17	do something for the CFTC, SEC, and OFR. We want
18	to do it one time and be able to service the needs
19	of all the regulators. So, you know, I don't
20	think it's a very silo-based approach at all, and,
21	you know, with the right cooperation of the
22	industry participants and all the regulators who

are involved, I think we'll come to a very good
 solution.

3 I should maybe provide a MR. TAYLOR: word of explanation on that last point, because 4 5 I'm the guy who wrote UCI in the rule. (Laughter) We did it on purpose. What we intend agrees 6 exactly with what you say. We said "UCI" rather 7 than "LEI" trying to recognize -- I mean, to me 8 LEI is the term for the broad use of the 9 10 identifier across the entire financial sector. That goes way beyond identifying swap 11 12 counterparties. And identifying swap counterparties is sort of the job that was handed 13 We were handed a situation. Somebody said 14 to us. 15 to me in the break, you know, the difference between the situation we all face today and what's 16 17 existed for the last 40, 60 years when people have been recognizing for a long time that this was 18 maybe useful is that you have regulatory 19 20 compulsion. I guess we do. And on the schedule, 21 the first thing that comes up is us coming up with 22 an identifier for swap counterparties and swaps

under the CFTC's jurisdiction. But it's
 absolutely not our intent to be a separate silo.
 We're trying to walk in lockstep with SEC, you
 know, and to make a UCI, because maybe that's a
 finite early achievable thing, but to do it in a
 way that it can become the LEI -- if that makes
 sense.

MR. GRODY: Well, I can only tell you 8 this. All right, as we have diverse interests 9 10 around our global financial services data and standards alliance, the table that we would have 11 12 to draw would be huge, because while these people represent domain knowledge in the over-the-13 counter derivatives market and in the futures 14 15 market, there is a huge amount of siloed products, 16 markets, infrastructure entities that support it 17 with its own terminology in its own and within different geographies. It is a huge undertaking. 18 It has defied solution to this point. It only 19 gets more complex. That's why the difference 20 being regulatory compliance to get us to do this. 21 22 It's not easy. It's not going to be quick. But

1	if we don't come up with a framework, all right,
2	we're going to wind up with siloed implementations
3	against silo regulators, and we're going to have
4	another level of complexity beyond what we already
5	have.
6	MS. LEONOVA: Okay, can I ground this
7	conversation? So, what is the first step?
8	MS. GROSS: Could I intervene? Francis
9	Gross, ECB. I think we have two different sets of
10	problems or challenges to overcome. The one is
11	design of a standard, which needs to be done and
12	agreed by the stakeholders. That means industry
13	and the authorities that will use the reporting
14	data. And the second one is to reach
15	international agreement among the lawmakers in the
16	various countries that will mandate that standard.
17	One aspect we have already repeated many times is
18	that we can't boil the ocean and serve all the
19	needs at once, so I think we need to start with
20	something feasible and where the need is immediate
21	and try to design as much as possible upward
22	compatible so that it can solve in service steps

1 the next generation of problems.

Now, under the design of standards, we 2 3 talk about the very large table. Well, we could use an existing infrastructure. For instance, 4 5 there is ISO. ISO is an international organization that has a lot of experience in 6 building standards that are accepted by industry 7 worldwide for the most successful ones. There 8 might be other such bodies where industry comes 9 10 together through these standards. Usually those bodies do not get a lot of attention, because 11 12 people (inaudible) by firms are not very much empowered to do anything, but perhaps this time 13 the attraction could be larger. So, that could be 14 for the design of standards. 15

For the adoption of standards and mandating the standards (inaudible) I think we will have two things - one, the powers that be among the countries not come together. Now, I can say from Europe that thee awareness in Europe for this kind of issues is now growing. We are in contact with the Office of Financial Research.

1	Louis Alexander has visited Europe last week and
2	talked to everyone whom I talk to here in Europe.
3	And therefore we have a process of building a
4	political will that's well on its way.
5	Now, in the U.S. legislation is in
6	place, and the U.S. is one country. It can go
7	very fast and won't wait. Certainly not. Europe
8	is a little bit more complicated, so what we need
9	is to have as well in the U.S. standards or a set
10	of standards adopted that will be acceptable to
11	all and here if we adopt the solutions that, one,
12	to go through a group like ISO, then it would be
13	acceptable in Europe more easily.
14	The next stage is to initiate
15	discussions, and here perhaps a forum like G20
16	could be the one. And also to include in the
17	discussion institutions with a global reach, such
18	as the Bank for International Settlements and the
19	IMF. That could then bring together the countries
20	that want to participate in the first round. And
21	then I count on settlement of development of
22	international pressure and through government and

through the industry as well for having further 1 gone to an end, and that way we could have a 2 3 mechanism that grows in a modular fashion. MR. TAYLOR: All right, I thank everyone 4 5 on the panel. This has been very, very useful, and there were some interesting suggestions on how 6 to answer these questions. 7 So that we don't run out of time, we 8 would like to move to our question-and- answer 9 10 session, and this is designed to let people who 11 are in the audience ask questions of the panel in a sense over the whole discussion we've had all 12 morning about unique counterparty identifiers. 13 There is a microphone in the aisle over there and 14 a microphone over by the pillar over here so that 15 you can be heard asking a question. Please feel 16 free to chime in. 17 18 MS. LEONOVA: Arthur, I know you want to 19 do something. 20 MR. MAGNUS: Well, while we're waiting 21 to get the microphones, I was just going to answer 22 your question about how you can move very, very

1 quickly.

There is a SIFMA working group that is 2 3 already set up that is looking at this problem that I believe the CFTC has already met with, and 4 5 that includes representatives from the industry. The IIGC is ready to get involved also. I think 6 as supervisors you can set a deadline, which I 7 think you actually did in that forum, to come up 8 with a blueprint or straw man for what those 9 10 objectives are and get them on paper, and then we can move to an RFP-type phase. So, I do think we 11 12 can move very quickly to get something that is practical in place, and it may change over time 13 but let's get something in place that we can start 14 15 working with.

MR. TAYLOR: Really quickly, as audience me up to ask questions let me just ask around the panel, is that SIFMA-led sort of virtual consensus process, if I can call it that, do you all see that as a viable way to run this and is it inclusive enough? Are there others who need to be added into it? 1 I mean, I certainly MR. McCLYMONT: think in the past using is during CFMA we've very 2 3 effective at delivering solutions to market. So, I think it's got a history that shows that that 4 5 consensus collaboration approach between regulator, industry user, and also vendor and 6 solution provider is effective, is the right way 7 to go. 8

9 MR. SULLIVAN: Certainly given the changes to the governance model across the 10 creation of the IIGC I think addresses a number of 11 12 the legacy concerns that have been about the scope of representation. I would say that there is both 13 buy-side and sell-side full-market participation. 14 15 So, certainly for the industry participants and 16 users of this process, we are well represented. Ι 17 think ODRF is a great framework to look at for coordinating the regulatory side of the equation. 18 I think both you and the SEC have been added to 19 that group, so, you know, that's certainly the 20 right foundation, and it needs to be expanded to 21 address this more globally. Certainly we'd be 22

1 open to that. But I think there is both a global industry and global regulatory forum now in place. 2 3 So, that certainly gets the two mainstream holders together. 4 5 MR. TAYLOR: Are there questions from anyone listening in the audience for the panel? 6 There's always this moment of dead 7 silence. And unfortunately I'm not a law 8 professor. I can't call on you guys by name. 9 But 10 I'm sure someone has a question. 11 MS. GOLDMAN: No, I was just going to 12 add to the question about -- to the message, and that we would agree as well that SIFMA has been a 13 very productive way to sort of identify the items 14 15 and propose some solutions around that, and so it's been a very productive forum. 16 MR. McCLYMONT: So, just also I think --17 again I've said it a couple times now -- I think 18 clearly defining the objectives and the 19 20 requirements with the various stakeholders is a must, because we will do what we always do as I 21 said a couple of times. We'll spin our wheels and 22

1	go off in different directions. So, I think that
2	fall that we had with, for example, the ODRF, we
3	managed to discuss with them what their thoughts
4	and what their requirements are to actually
5	solidify (inaudible) requirements, because often
6	people think they know what they want, but when
7	you actually discuss and explain well, how can you
8	get it, it's actually not quite what they wanted.
9	So, I think that open dialog to really clarify and
10	crystallize the objective of the requirements will
11	allow us to move much faster than into a
12	identification or a review of the process or the
13	functions that could deliver that solution and
14	then actually then the vendors and the design of
15	what the solution is itself.

MR. GRODY: I would like to ask the simplest of the questions. Do the auditors of the public companies have a role at the table? And the reason I ask that is because the auditors basically are given the task with the legal entity that we're trying to identify to actually lay out the structures of their hierarchies every quarter
1	and sometimes the bigger companies have permanent
2	staffs to actually resolve the legal structures so
3	they could apply their attestation function and
4	sign off on the materiality of their audits. And
5	we have always considered them in our construct to
6	be important, because they in fact organize
7	themselves around a database of those legal
8	structures the big four at least and they
9	have shared that knowledge with us, and I pass
10	that on to you to be a consideration.
11	MR. MAGNUS: I would consider we have to
12	go back to what's Stuart said a moment ago: What
13	is the objective? If it's to identify swap
14	counterparties, which are specific entities and a
15	hierarchy, when the client is a corporate that's
16	fine, but if the client is a fund manager,
17	managing multiple funds, a fund may have multiple
18	fund managers, there are multiple hierarchies, one
19	needs to look at. And so the question goes back
20	to what Stuart said a moment ago: What is the
21	objective? Is our objective to understand
22	counterparty risk? Is it to look at systemic

1 risk? Does it look at market manipulation or look for market manipulation? These are different 2 objectives, and they have different hierarchies. 3 And the financial auditors that you refer to are 4 5 only looking at the corporate hierarchy, not necessarily all the other hierarchies. So, I 6 think that you need to understand what the problem 7 is and then you can bring the right people to the 8 table to help solve that problem. But you've got 9 10 to start with what is the problem we're trying to 11 solve?

MR. GRODY: Well, the auditors do audit the investment managers, their structures, and mutual funds, and what they own and don't own in the same way that they audit corporations.

16 That's number two, we continue to have a 17 dialog about what I consider to be a narrow focus, 18 which of course is the focus of the CFTC but 19 always within the broad framework of the SEC's 20 rulemaking and the OFR's rulemaking and the 21 thought beyond that of a global solution. And so 22 that's why I continue to suggest that the solution we have here has to be framed within the context
 of the overall rulemaking.

3 MR. SULLIVAN: I think there is definitely consideration for that and probably 4 5 hundreds of other uses for this data. The key is identifying the "what," which is the framework for 6 writing a process to identify parties. And I use 7 "parties," not "legal entities" because as Arthur 8 has correctly said, there are multiple ways. A 9 10 database that creates an identifier for parties, which then can be used as inputs to hierarchies of 11 12 different uses, whether it's supervisory or accounting validation or, you know, counterparty 13 credit risk management or market risk management. 14 Those are all obvious extensions of this data, but 15 if we think about solving all of those in a single 16 implementation, we're back to boiling the ocean. 17 And the key here is to agree on the "what," which 18 I think we're saying let's not focus solely on the 19 20 term "UCI" but extend, look at the broader 21 Dodd-Frank legislation and the legislation being 22 discussed in other major jurisdictions and say is

1	there a way to come up with a common identifier
2	for parties that could be utilized to meet the
3	requirements of each of these rules such that
4	don't end up having to build a solution for UCI
5	and a database and a solution in LEI for another
6	database and a solution what the SEC needs and
7	another database and that's before we've left
8	the North American post.
9	So, I think, Allan, your point is valid.
10	I think the key is making sure that we don't try
11	to scope the solution to this project to be so
12	broad that we try to solve every one of those
13	implementations in a single solution.
14	MR. TAYLOR: I hope it's clear from the
15	proposed rule we want the UCI, which is, you
16	know, our sort of narrow mandate, to be designed
17	in a way that it can become the broader LEI and
18	that it can serve all of those regulatory purposes
19	that Arthur was talking about, not just the ones
20	that are the mandate of the CFTC but, for
21	instance, prudential and systemic risk
22	supervision. So, all of those purposes would need

1	to be taken into account, even as we design the
2	first step avoiding boiling the ocean by just the
3	UCI. We want it to be such that it doesn't create
4	what needs to come later if that makes sense.
5	MR. SULLIVAN: I think I agree. I think
6	the issue we might spend some time looking at
7	it from both directions which is identify the
8	legal entity, define that term, build a decision
9	where UCI could be a special-use case of that
10	data, right? And then other hierarchies are going
11	to use that in other ways. But I think it was
12	clear to me in reading in the proposal that that
13	was the goal, so.
14	MS. LEONOVA: It looks like everybody is
15	tired and undernourished and needs lunch.
16	(Recess)
17	MS. LEONOVA: Now we proceed to Panel 4,
18	Unique Product Identification, UPI, disclaimer.
19	All persons had the passionate desire to switch
20	from Panel 5 to Panel 4 and we are happy to
21	accommodate the switch.
22	Questions have been distributed prior to

1	that and I guess we need to give a small
2	background to begin with our marvelous rule about
3	what we are taking about. As a concept, we need
4	product identifiers is geared mostly to boards
5	specifying their underling nature of the swap. We
б	tend to think that it's going to be somewhat
7	different from equity credit type instruments and
8	commodity type instruments and we are willing to
9	differentiate those classifications as we feel
10	appropriate, but as we go forward, let's start
11	from the first question. What is the most
12	effective and efficient system for product
13	identification for the purpose of data aggregation
14	keeping in mind those underlying asset class
15	differences?
16	MR. ARORA: Let me start. I'm Kulbir
17	Arora from Goldman Sachs. First of all, thank you

19 Irina, you hit the heart of the problem in the 20 sense that if we are not clear about the purposes 21 and the usage of these identifiers, things are 22 going to become very complicated. Aggregation

18

to the Commission for having us here. I think,

1 across various dimensions is obviously one of the I think price transparency is another 2 use cases. use case. The CFTC has started a very detailed 3 and prescriptive product topology, attributes such 4 5 as contract type, subcontract type, asset classes, option types and so on, and I think those are very 6 necessary and critical attributes to distinguish. 7 But I think we need to understand that one of the 8 key features of this marketplace in the last 9 10 several decades is the very dynamic, evolutionary nature of this market. There is a lot of product 11 12 innovation that happens.

13 One of our worries is that if this product topology is over prescriptive and owned as 14 15 part of the rules, then constantly upgrading it or changing it will be very burdensome and probably 16 would require rules rewriting. I think a better 17 way to own this would be to bring regulators and 18 19 industry participants to the table under the auspices of organizations such as ISDA, more 20 21 appropriate here than SIFMA, because that way the 22 maintenance and constant evolution could be part

and parcel of -- there are a range of value sets for each of these attributes that a good starting point has already been achieved but the constant evolution that's going to happen is one of the issues.

Irina mentioned the distinction between 6 credit type instruments where some standardization 7 in the marketplace can happen and one could 8 conceive a CUSIP style identifier that references 9 10 a very standard FpML as an example description, but for the large other part of the market, 11 12 interest rate products for example where every deal arguably is a product unto itself, I think 13 referencing the product topology in the data 14 15 requirements is the unique identification part of The question here is that when you regulators 16 it. 17 talk about aggregation, along with dimensions are 18 you intending to aggregate based on the purposes of the rules? And some of the attributes allow 19 for that aggregation to happen across asset 20 21 classes or underlying assets for example, but I 22 think that clarity is very necessary today. Thank

1 you.

2 MR. HAASE: I'm Ken Haase and I'm with 3 the NFA, and also we would like to thank the Commission for inviting us here. I really will 4 5 agree with very much of what you have just said. We do need some definition, but it can't be 6 terribly tight at this point. You have to allow 7 for the future of the unknown and that's always a 8 concern with any type of system data field or 9 10 anything you're trying to put out. In this area 11 in particular I think it's quite different than 12 futures simply due to the amount of underlyings you could have and some of the very, very unique 13 types of products you could be trying to identify 14 15 and that may not just fit into a small defined This may end up being almost descriptive 16 field. 17 in some instances. MR. CUTINHO: This is Sunil from the CME 18 Group or CME Clearinghouse. I don't want to 19

20 repeat what has been said before but I agree with

21 some and most of the comments made. Over-the-

22 counter derivatives are not as specific or

1	standard as some of the commodity derivatives that
2	are trading on exchanges. But one of the things
3	I'd like to add is it's very important that we
4	understand the need and the aggregation and based
5	on that we could come up with an algorithm.
6	Rather than have an entity designated to create
7	these identifiers, our preference would be to work
8	with industry and come up with an open,
9	transparency algorithm so that these identifiers
10	can be generated in a very deterministic manner.
11	I did hear the comment of descriptive.
12	We support that idea because unlike the
13	counterparty identifier where you cannot be
14	descriptive to maintain anonymity, here in this
15	case it's a product identifier so that based on
16	its need we presume it's reporting and real-time
17	price dissemination so that descriptive is of the
18	essence here and the more descriptive the better.
19	MS. DREW: This is Eleanor Drew from
20	Citi. I'm in charge of the Master Data Management
21	Program, both the technology implementation and
22	the operations space. We're very supportive of

1	industry standardization. In my particular role
2	in the firm I've been waiting for this for 10
3	years because my life is miserable trying to
4	string together all these different identifiers.
5	One point I wanted to bring up is when
6	you look at security data across cash and
7	derivatives, there is a life cycle associated to
8	it so that when we look at data management on this
9	there is entity, there is issuer, there is product
10	specific data and there are corporations actions.
11	In addition to that, there are hierarchies
12	associated with those domains so that it is very
13	important that we take a step back and model it so
14	that we could fully understand the life cycle of
15	the instruments through the different flows to
16	make sure when we design something we do it once
17	and not continue to go back and back and redesign
18	because we're very on our design so that that
19	is one of the points. I very appreciate you
20	inviting us to this panel.
21	MR. CHIDSEY: Since it seems like we're

21 MR. CHIDSEY: Since it seems like we're 22 going around, this is Ed Chidsey from Markit

1 I think it comes back to what some of the Group. others were saying in terms of what problem are we 2 trying to solve, what use case are we trying to 3 solve, and if it comes as an example of 4 5 understanding what instrument is referenced for a given price, there are going to be different data 6 fields that are required for a particular 7 instrument or asset class. So if you take credit 8 default swaps as an example, you really need 9 10 reference entity tier of debt which today is typically derived from the reference obligation, 11 12 maturity date, clause and currency so that there are five fields that are required to understand 13 what instrument you're reference in a credit 14 15 default swap transaction that would be attached to a given price and each of those fields could 16 17 potentially be identified through some sort of an alphanumeric identification scheme. 18 Tying all of those together is something that could be 19 20 considered, but then when you look at another 21 instrument whether it's interest rate swaps or 22 other derivatives, there are going to be a

1	different set of fields that are required in order
2	to understand that instrument you're describing.
3	So I think it's important to decompose it to a
4	point where you understand the fields that you
5	need to identify, the instrument that you want to
6	describe for a particular purpose and then think
7	about what standards can be applied to each of
8	those fields. Some of those are very common,
9	maturity date, currency, you can have standards
10	for that. Others may be very asset class specific
11	and we'll need to think about what those standards
12	could be.

MR. LITKE: Adam Litke from Bloomberg.
I'd like to thank you for having me here and I'd
like to echo what everyone else said, so I won't
repeat it.

17 I think from what I've read of the rule, 18 you've talked about using the identifiers to set 19 limits but you're not actually collecting any risk 20 information with that and derivatives aren't 21 really like futures contracts. It is possible 22 using other parts of the rule where you're

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1	requiring the confirm data to then go and compute
2	risk information, but since an over-the-counter
3	derivative can have multiple legs and multiple
4	underlyings, I think the purpose in the rule the
5	way it's written now it's a little confusing. I
6	think if we're talking about having enough
7	identifiers so that the Commission and other
8	regulators are able to see the risk of the deal
9	and say there is so much risk in the market to
10	these products, then you're talking about within
11	the context of the confirms having for each field
12	a specified bit of information. In a swap it's
13	not even obvious. You might say I can do a plain
14	vanilla interest rate swap. It's cash. There's
15	cash and there's the fixing rate which may be
16	LIBOR. Do I identify that as a single asset or do
17	I identify that as each leg, one leg is cash in
18	dollars and the other leg is a series of LIBOR
19	fixings and dollars? I would argue you'd probably
20	want to go to the very atomic level of the second
21	of you'll end up extremely confused because cash
22	on a swap and cash on an interest rate swap would

1	no longer be the same thing just to give a simple
2	example. So I think the discussion in the rule is
3	in the wrong place, but if you moved it over to
4	the confirm descriptor then I think there's a very
5	good discussion to be had and the main thing is to
6	be as atomic as possible to say for each
7	individual think and then you get a lot of
8	consensus where everyone agrees on what all the
9	fixings are for example.
10	MR. TUPPER: My name is Bruce Tupper and
11	I work for the Intercontinental Exchange or ICE
12	and I manage the Commodities Confirmation and
13	Warehouse. To follow-up on some of the comments,
14	I think it's become clear that there are solutions
15	in the market by asset class. There are many
16	services, whether they be warehousing compression,
17	confirmations and each of them have to come up
18	with their own scheme in order to capture the
19	concept of a product or trade type. I do agree
20	with earlier comments to try and understand that's
21	the purpose because we, or at least I can speak
22	for Intercontinental, create products for a very

specific reason as an exchange and as a trade 1 warehouse but in order to trade the correct 2 products for the Commission, for example, if 3 you're trying to aggregate up exposure on a 4 5 particular index, that may be a different way than in some of these products. We say at least in the 6 commodity space, when we were creating our product 7 schemes we looked toward our customers' trade 8 capture systems and the trade capture systems that 9 10 were offered by the vendors to come up a scheme that people could collectively write to and adopt, 11 12 but we did that for a specific purpose. So I think probably some clarity on what you're trying 13 to do with the products as far as from the 14 Commission's perspective would help us. 15

I do agree that once you have that and there's a working group, that can be solved. I do agree that we should probably look at this from more of an asset class perspective because I think each asset class has its own ways of doing it. Like I mentioned earlier, CDS has a certain way and commodities may be different and I'm sure it's

1 different in other asset classes so that that is probably a consideration for the Commission. 2 3 MR. PERSSON: I'm Ola Persson from FINRA TRACE. I'd like to echo what Sunil mentioned on 4 5 the dissemination side and the investor protection issue in terms of -- either can understand what 6 they're looking at based on the identify that came 7 out or that sufficient descriptive information is 8 made available together with that record so that 9 10 they understand how to interpret that data. The 11 other thing I'd like to tie back to with what you 12 mentioned that we are obviously in the process of expanding TRACE to cover securitized products at 13 this point and we're going through some of these 14 issues because there are a fair amount of 15 securities that trade assigned CUSIP and clearly a 16 17 joint industry regulatory solution is a very good 18 way to go because whatever as a regulator we come up will have to work for everybody anyway so that 19 sitting down at the table is very, very helpful. 20 21 MR. ARORA: I think that the subset of 22 products that is highly standardized like the ones

1	that trace on ICE for example, an identifier that
2	if an canonical representation of standardized
3	products which is a subset of the broader market,
4	I think that probably is not a controversial topic
5	here. It's the rest.
6	I want to comment on the verbal
7	description comments that Sunil and Ken already
8	referenced. If you look at the C.F.R. Part 43
9	that CFTC has put up and I've gone through it in
10	gory detail, I think it's a very good starting
11	point. There is a very detailed set of attributes
12	with possible values for example as I said earlier
13	what a contract type is, what a subcontract type
14	is, what an asset class is, what the underlying
15	asset is, there is a topology or tree-based
16	topology that is a very good starting point for
17	this and I think that that would be a description
18	for the nonstandardized products part of the
19	market and it's almost descriptive because it
20	pretty much lays out the hierarchy. I'll
21	underscore that the main point I'm talking about
22	is that this topology is going to be an organic,

1	living topology that's going to innovate and
2	change so that the ownership of that and how you
3	delink it from the rules themselves is a key
4	point.
5	MS. LEONOVA: What is an efficient way
б	to accommodate the innovation of those
7	instruments?
8	MR. ARORA: I think make the industry as
9	a whole responsible to maintain that in
10	conjunction with the regulators because the
11	regulators will ultimately keep specifying
12	purposes. Purposes themselves may change over
13	time, but I think that way a consortium of
14	industry participants co-owning that topology
15	would probably make it easier to maintain that
16	prescriptive topology from just one of the players
17	in the marketplace.
18	MR. CHIDSEY: Again I think looking at
19	is then what's been done with FpML is a standard
20	way to describe financial transactions across a
21	variety of asset classes and instrument types is a
22	good example and when a new instrument needs to be

created or added there is a working group that opines on that and ultimately it gets defined via FpML and the necessary fields to describe that particular transaction or instrument are utilized so that a similar sort of model can be used going forward to manage this topology.

I think I agree for the vast 7 MR. LITKE: majority of contracts that FpML is good. I think 8 for exotics you have to be a little more careful 9 10 and you need some sort of scripting language. 11 There are vendors that sell them. There is also 12 one of your fellow regulators. The SEC has proposed for example for securitizations using 13 Python code that's made available. You'd still 14 have to have standards for it because this would 15 16 be a different than their use so you'd have to 17 standardize what the terms meant, but you need something like that in order to accommodate 18 innovation. The vast majority of transactions 19 20 will still be done in the standardized format, let's say something like FpML and you could have 21 22 some rule that said if some class got over a

certain size there would be a way to we recognize these are all sort of the same, create an extra FpML class and then to come back to the industry, but without that you're going to standardize everything which sort of goes against what the whole OTC market is about.

7 MR. ARORA: May I comment on that? I think on the highly exotic part of the market, the 8 one way as you said is to essentially have Python 9 10 code level standardization. The potential problem 11 there would be how much transparency to the players in the market want to give each other to 12 what may be proprietary stuff and that speaks to 13 competitiveness. I think one of the approaches 14 15 that within the FpML groups, the various participants have discussed for the highly exotic 16 17 market is again going back to what ultimately will be the purpose of these descriptions for the 18 marketplace. It may be possible, I'm putting it 19 out there as an idea, to have the notion of a 20 21 generic description which essentially captures 22 just the bare minimum that may be sufficient for

the regulatory purposes and a full-blown 1 description is right at the outset taken as not a 2 possible thing to do in a highly dynamic way. 3 Internally we have attempted that and I think we 4 5 have succeeded with it pretty well and we're pretty happy with having this subset and we call 6 it the generic exotic instrument. Just a thought. 7 MR. TUPPER: I'd like to follow-on on 8 that point. I do want to caution the Commission 9 10 against prescribing a particular messaging 11 protocol. For example, FpML has had a lot of adoption in some asset classes but probably not so 12 much in energies. To follow-up though, I do agree 13 with the idea of having a more generic reference. 14 For example, within ISDA there is the Commodity 15 Definitions Working Group and their purpose is to 16 update these indexes that are used in the various 17 swap transactions. Ideally they can be very 18 complicated and exotic but many of them always tie 19 20 back to some kind of description or particular index regardless of the asset class. 21 We spend a lot of time working with that 22

1 group in particular because by having those kind of generic codes that are really the building 2 3 blocks of most swaps and having clarity with those it allows you to process a lot more transactions. 4 5 I don't want us to confuse having those building blocks versus a very robust messaging protocol in 6 order to communicate the trades. When you start 7 getting into exotics and processing them, it comes 8 back to what is the Commission's goal. Are you 9 10 trying to find a particular exposure for an index? Even though it's an exotic trade, I'm sure that 11 this group could probably easily do that for you 12 so that it could come back to that. Specifically 13 for commodities, you could use the example of the 14 15 Commodity Reference Price Index Working Group. They regularly update that and that's something 16 that you could look at for product definitions. 17 18 I don't often agree with MR. CUTINHO: 19 my colleague, but this time on the panel I do 20 agree with him that we cannot prescribe a specific 21 language. As an example, as a business we support 22 multiple standards. Some are prevalent in the

securities market, some are prevalent in the standardized futures market, some are prevalent in the over-the-counter markets and it's less disruptive to market participants across the board. If I were not a technologist I would have thought you guys are talking about snakes.

To emphasize one point, I think we talk 8 about what is the desired use of this product 9 10 identifier? To put it another way, you can't 11 expect the product identifier to be everything. You can't expect it to be very unique capturing 12 13 all the details of the trade. You can't expect it to be at the same time very generic. So we have 14 to choose between the two. When the Commission 15 says specify the underlying nature of the swap, 16 17 what do we really mean by that? 18 I quess it's time to MS. LEONOVA: 19 narrow down what we are talking about. If we are 20 trying to achieve too big a goal of capturing the exposure metrics and at the same time trying to 21 22 control the speculative position limit mechanism,

1 do we follow the same system of product identification or do we have to go in different 2 3 ways? MR. LITKE: I think unfortunately 4 5 they're different. I think as soon as you get to the speculative position limit you need to capture 6 risk information. Let's say you knew it was 7 something like LIBORs or you're going to do it in 8 future equivalents, the mere fact that you have a 9 10 swap or various kinds of options, just in a simple 11 option the delta changes every day depending on 12 the time to maturity and the price. As you get 13 into more exotic instruments it can vary quite wildly. You could capture that as a risk field, 14 but that's a computed number that would have to 15 get reported every day and what gets reported at 16 the time of trade is not particularly relevant. 17 You might want to specify all of the risk fields 18 that a transaction needs to be mapped to, but even 19 20 that depends on the underlying model you're using so that you're asking for somebody to report 21 22 something that's really something unfortunately

the Commission is going to have to do for itself
 which is decide how they want to measure the risk
 on the transaction.

MR. CUTINHO: Since I asked the 4 5 question, I have to respond. I echo Adam's point. It's not just the counterparty information, when 6 we talk about exposure we need to understand the 7 specifics. Exposure to what and position limits? 8 Let's say, I'll give you an example, if you're 9 10 looking at the very granular level and you say 11 that I want to just look at limits on 1-year --12 that means very little because you can have a party trade very little on the short end of the 13 curve but take greater exposure to the middle part 14 15 of the curve or the end part of the curve. In terms of exposure and position limits, what we are 16 17 trying to understand is what is the overall goal. We are starting from the premise that it is 18 systemic risk to understand if that a single 19 20 entity has undue exposure or very large exposure 21 to a certain market or a certain part of the 22 market and the effect that the economy can have on

1 that single counterparty and then how it translates to the rest of the market. If that's 2 the case, maybe we need to have a discussion as an 3 industry with our participants around here as to 4 5 what exactly is the Commission looking at and perhaps we can come up with some of the principles 6 as far as creating the product identification 7 before we get into the details of how we should 8 generate one. 9 10 MS. LEONOVA: Going to levels of 11 aggregation of data based on the product 12 identifications and we don't know, where should at 13 least we cut the line off? What levels are there and what is the appropriate level that we should 14 15 be targeting? MR. ARORA: It would help if you would 16 17 articulate the purposes to which this aggregation 18 will be used. That will help because that's a very multidimensional problem. 19 20 MS. LEONOVA: Thank you, Kulbir. Our 21 immediate market oversight goal again is 22 speculative position limits so that when we are

1	talking about that aspect of oversight, we are
2	going back to the futures equivalents and some
3	type of conversion. That's one problem for us,
4	how we convert something in futures equivalents.
5	The second question is systemic risk exposure.
6	When we are trying to capture the system and
7	decrease exposure, what should we be focusing in
8	on? Is it overall net asset value or whether we
9	should build in some kind of curve or what do you
10	think should be the focus?
11	MR. LITKE: I think for the position
12	limits which fortunately I guess primarily you're
13	changed with doing that on the agricultural
14	commodities to avoid people cornering the market.
15	MS. LEONOVA: We used to be.
16	MR. LITKE: But I don't think there's a
17	requirement to have position limits on for example
18	interest rates for a bank. I thought under
19	Dodd-Frank the banks were specifically exempt in
20	terms of proprietary trading, that interest rate
21	proprietary trading was still allowed.
22	MS. LEONOVA: Let's not go into the

exemptions but assume that we are trying to cover
 everything.

3 MR. LITKE: If you're trying to cover everything then you're going to have to for each 4 5 asset class define what you mean by risk. In commodities it's fairly easy because you're in 6 some sense worried about how much can a speculator 7 corner the market. In interest rates, nobody is 8 going to corner the market and what you're really 9 concerned about therefore is how much can they 10 11 make or lose and it becomes more of a prudential 12 supervision issue than a market control issue. For that you're back to defining how do I want to 13 measure risk. For systemic risk, you're 14 15 interested very much in stress tests in the sense 16 that you've got to have some series of stress 17 tests around people's portfolios and see how much margin is going back and forth. But it's 18 ultimately it's model driven so capturing fields 19 20 is not the issue, it's capturing confirm data in a 21 standardized way so that you can apply models to 22 that confirm data and compute the risk.

Effectively what you're saying is you want to be a super- clearinghouse. You want to do the same thing that a clearinghouse does but you want to do it across all the clearinghouses so you can watch all the margins moving through the system and all the clearinghouses have to have their systems for modeling these things.

MR. CHIDSEY: One comment in thinking 8 about it from a systemic risk of exposure 9 10 perspective I think trying to tie it back to the 11 product identifier question is that probably 12 argues for a very segmented set of identifiers across again the different fields to identify a 13 particular instrument because ultimately you may 14 want to look at risk from a number of different 15 angles so that an identifier that collates a 16 number of different fields across a number of 17 different variables I don't believe will actually 18 aid you in that goal. In fact, the more finite 19 20 the description is the better off you'll be to be able to run scenarios and look at exposures across 21 22 a variety of different attributes.

1 MS. DREW: From the identifier aspect of things, in us segregating the cash and derivative 2 product identification process and registration, 3 we should look at that and study of it across 4 5 industry. As to the overall net aggregate exposure you're going to need across cash and 6 derivatives. Us looking at it segmented just in 7 the derivatives space and not being able to roll 8 up, probably we need to look as a unit to see if 9 10 that makes sense. If there is going to have to be some single entity, there's going to be one 11 12 hierarchy tree. When you look at a company such as Lehman you're going to have to be able to fold 13 all the positions into one, and not looking at it 14 15 like that I think across asset class and having 16 common asset categorizations, product 17 classifications across both markets, that's where you're going to do your aggregation in the OFR and 18 in your organization. So I think bringing the 19 20 trade groups together across cash derivatives 21 having a common taxonomy, having a common set of 22 trade transaction specifications that go out all

1 the investment banks' doors is needed and that 2 common taxonomy is probably something not trivial 3 for us to put together.

Purely in the cash space, we don't have 4 5 a product identifier even though this is in the most mature product. We look at ICE, we look at 6 CUSIP, we look at SEDOL, all fail providing for 7 the cash market how you look at a product. 8 So when we bring in the derivatives space we need to 9 10 know the underliers. We can't even tell you should you put a SEDOL, should you put a CUSIP 11 12 depending on what asset you are so that this is a real taxonomy modeling session that we have to 13 have everyone sit down as an industry and really 14 model this to talk about a life cycle and it's not 15 going to happen cheaply or quickly or else we'll 16 do it wrong and we'll have to be doing it again is 17 18 how I look at things.

MS. LEONOVA: How far is the industry in developing the systems of classification or are there any developments in the industry right now? MS. DREW: Within my firm there are

1 different varieties of asset classification so that each vendor or supplier supplies their own 2 taxonomy. As a community we need to have a 3 high-level matrix of what these categorizations 4 5 should be and that's going to be a lot of heated debate and I'm sure others could add to that. 6 7 MR. ARORA: Arguably FpML is the first serious attempt at standardization. Keeping aside 8 imposing a particular protocol, the fact that 9 10 instead of looking at FpML as a protocol, if you look at it as an agreement on what set of 11 12 attributes describes a particular kind of derivative, it's as far as I'm aware the first 13 serious attempt across players. You're right, 14 15 Eleanor, that each one of us has internal systems, but the need to bring it all together is more 16 17 recent. 18 MR. TAYLOR: Let me ask, when I was

19 teaching I used to tell my students there is no
20 such thing as a dumb question. I might be about
21 to disprove the rule. I'm hearing people say lots
22 of things about the need for the important level

1	of granularity in this area and I feel moved to
2	ask you all, the concept here I guess is that each
3	swap that's reported to a swap data repository is
4	going to carry a single product identifier. Is
5	that the right way to do this? Is it possible?
6	Will it work given the multifarious nature of how
7	many products there are, millions if you want to
8	look at it that way in some asset classes?
9	MR. TUPPER: This is Bruce from ICE.
10	There's a subset that you could definitely achieve
11	what you're saying, but it's going to be difficult
12	and Kulbir has definitely touched upon this, we've
13	been taking to a lot of our customers about is how
14	do you capture exotics when that comes up? As to
15	your question, it's obviously your interest is
16	exposure and stress testing. With exotics by
17	nature there may not be a lot of trade records or
18	submissions to the future SDR, however, there is
19	usually very high notional value to those
20	transactions and that's what you're after. The
21	trick is going to be I think you can get the
22	common trades and I would say many of those will

be in process today, but with trying to get your arms around how you're going to classify exotic transactions and do that in a manner where you get enough information so you can fall through on your stress tests and exposures is going to be difficult. That's the hard part.

MR. LITKE: One thing you might have for 7 things that have become standardized have 8 standardized terms and then I think you mentioned 9 10 in the rule having something called multiasset and you could also have something called exotic and as 11 12 long as the exotics are below a certain percentage of what gets traded, then you wouldn't worry too 13 much and if it gets above that percentage then you 14 15 have and go into a deep drive and ask is there a new standardized name we have to add, but there 16 17 would have to be a process there. It won't give you risk reporting, but it will give you 18 information about volumes in the marketplace which 19 I think is useful information. 20 MR. TAYLOR: Following right on from 21

21 MR. TAYLOR: Following right on from 22 that, if we're going to make a system that says we

1	have Buckets A, B, C and D and however many and
2	then we have a bucket called exotic where we
3	haven't classified it, where are the buckets that
4	we can classify and has somebody done the
5	classification system at least for them that we
6	ought to be looking to?
7	MR. LITKE: Everybody has done them and
8	they're all different. You even acknowledge that
9	in the rule where you talk about people talking
10	about whether cross-currency swaps should be
11	considered a foreign exchange product or a rate
12	product. In fact, in most concerns they're
13	considered both. The FX Desk considers them to be
14	a foreign exchange product and the Swap Desk
15	considers them to be an interest rate product and
16	every firm has a single maturity line usually that
17	they've fought over for many years where one
18	business gets to trade them as the market maker
19	and the other one gets to use it as a hedger so
20	that they're called different things once you get
21	inside that line. We all have them but there
22	isn't a standard.
1 MR. ARORA: David, isn't the heart of your question if the exotic bucket has numbers 2 that worry regulators that that's when it becomes 3 standardization? I think one of the ways linking 4 5 it back to my point about generic, if volumes however we define them because it's not just the 6 number of trades, it could be on a particular 7 dimension be it notional exposure or risk or 8 whatever, where the risk is "worrisome" then an 9 10 attempt should be made it define it into a standardized product because the volumes have 11 12 reached that level of threshold. I think up until that point -- you've alluded to there is no such 13 thing as a dumb question, I have an analogous 14 15 thing. Whenever you make a taxonomy or a classification there always has to be what's 16 17 called the miscellaneous category or the garbage 18 category so you just can't figure it out. And I think some kind of a process, I echo Adam's point, 19 has to be agreed upon to keep changing this 20 topology or this classification. 21 22 MR. TAYLOR: A follow-on question to

that as well, would it make sense to approach UPIs separately by asset class or not? Are there asset classes where it's easier to do this or where it could be done more quickly? Are there asset classes where we ought to allow more time for it? Is distinguishing by asset class something we ought to do?

MR. CHIDSEY: I think if the fundamental 8 premise is a requirement that's around the 9 10 taxonomy and defining that taxonomy, I think 11 logically to make any headway it's going to have 12 to be by asset class because again there are distinguishing characteristics by asset class. 13 So I think that drives the need to divide the 14 15 discussions and decisions up by asset class and then from there see if and how a UPI could then be 16 17 applied to each asset class.

18 MR. TUPPER: I agree. I think there is 19 probably some guidance or some commonality at a 20 very high level for the Commission's benefit you 21 could prescribe some type of way. I know in the 22 proposed rules you did where you were trying to

1	put in an asset class identifier as part of the
2	code and you could begin there, but there are
3	definitely a lot of unique attributes to each
4	asset class and I think in order to have people
5	accept potential unique product identifiers you're
6	going to want to look to the existing systems and
7	how they're doing and if you can work around that
8	you'll gain an adoption rate that participants are
9	going to be able to submit you the data and the
10	way data is arranged, it is different by asset
11	class. That's just the nature of it.
12	MS. DREW: I think the way that you roll
12 13	MS. DREW: I think the way that you roll out could be by asset class, but as a system
13	out could be by asset class, but as a system
13 14	out could be by asset class, but as a system designer when I look to build systems, what I like
13 14 15	out could be by asset class, but as a system designer when I look to build systems, what I like to do is gather all artifacts and create
13 14 15 16	out could be by asset class, but as a system designer when I look to build systems, what I like to do is gather all artifacts and create relationships in my modeling as well as my domain
13 14 15 16 17	out could be by asset class, but as a system designer when I look to build systems, what I like to do is gather all artifacts and create relationships in my modeling as well as my domain values and my taxonomy and then once I have it
13 14 15 16 17 18	out could be by asset class, but as a system designer when I look to build systems, what I like to do is gather all artifacts and create relationships in my modeling as well as my domain values and my taxonomy and then once I have it modeled then I would roll it out on an asset class
13 14 15 16 17 18 19	out could be by asset class, but as a system designer when I look to build systems, what I like to do is gather all artifacts and create relationships in my modeling as well as my domain values and my taxonomy and then once I have it modeled then I would roll it out on an asset class basis. Just the thought of the entity and how it

1	segment it, we'll do it really good once for one
2	asset class and the model will completely fall
3	apart when we look at the next asset class. Based
4	on the experience of building a consolidated cash
5	and derivatives environment, I made a lot of
6	mistakes in my past by just doing it segment by
7	segment only to have to redo it. So I would
8	approach it that way as a system builder.
9	MR. HAASE: This is Ken from NFA. I
10	would agree exactly with Eleanor. You really have
11	to at the whole thing. You can roll them out
12	separately but they really have to work with each
13	other. Going back to one other point as far as
14	aggregation and things coming up and what the
15	regulator might want to use the data for. The
16	other question I guess I would ask the Commission
17	is do they view themselves then as the endpoint or
18	is this data being passed up even further to other
19	agencies where they may be doing combinations so
20	that any type of standards or anything that you're
21	setting up obviously has to work with them if
22	there's a place to bring it all up to one place on

1 top.

2 MR. TAYLOR: I'm thinking of a question 3 and I was trying to think how to put it and I may put it badly. I think I've heard probably several 4 5 of you suggest that it would be a good idea for the industry to be involved in defining this 6 taxonomy and that there be some mechanism for 7 allowing for future development in that and not 8 setting it in stone in the rule. It's always a 9 10 goal for a regulatory not to have to amend rules 11 and I'm sitting here thinking on February 7 we 12 have to go behind a curtain and we can't talk to you guys anymore and we have to put something in 13 the rule. What sort of mechanism might it be 14 useful to establish for industry and regulator 15 cooperation on defining and maintaining and 16 17 evolving a taxonomy over time? In other words, what could we say in the rule that isn't going to 18 have to be amended later that sets up a mechanism 19 20 that can do those things? Did I make sense with 21 that? 22 MR. ARORA: Very much. That goes to the

1	
1	heart of one of my points. I'm not a lawyer and I
2	don't know how to say this, but I think a
3	professional industry organization whose purpose
4	is precisely cross-industry participant
5	standardization with I think the regulators being
6	at the table, if somehow the rules could reference
7	such an arrangement where the ownership of to be
8	specific the part of the topology is held and if
9	the rule could reference a mandate, or what should
10	I say, a demand to abide by that topology for
11	every person in the industry, that might be one
12	way. It's sort of a level of indirection if you
13	will, but it seems to me how that's wordsmithed is
14	your expertise, but I think that may be one
15	starting point.
16	MR. TAYLOR: I'm going to put Ken on the

16 MR. TAYLOR: I'm going to put ken on the 17 spot. I know if people here are looking for a 18 body like that that could hold this thing, NFA 19 will cross people's minds. Does that sound 20 conceivable?

21 MR. HAASE: I'll give a good party 22 answer to that and say that just about anything is

1	conceivable, but it's up to the board of directors
2	at NFA to make that final decision.
3	MS. LEONOVA: I want to go back to
4	multiasset classes and mixed swaps. What is an
5	effective system to classify multilayered things?
6	Should it follow the same system for any product
7	ID or to have one identifier and break it down
8	by components?
9	MR. LITKE: I think if you move the
10	product identifier from the trade level to the leg
11	level you would carry the vast majority of
12	multiasset trades. That would just leave out
13	things like basket options. But if you put it
14	down at the leg level then you effectively say
15	this leg is this type of product, this leg is that
16	type of product and that would get you a long way
17	because then a trade is just a portfolio of those
18	legs. If I trade an option on three stocks or
19	even worse on one stock, one commodity and one
20	foreign exchange, there is no way to really handle
21	it because it's just going to come in as multi.
22	MS. LEONOVA: It doesn't really help us

1	in a way that if we accept the fact that we have
2	multiple underliers, what are you doing about
3	speculative limit position aggregation? Do we
4	double aggregate them or do we single aggregate
5	them? How do you handle it?
6	MR. LITKE: You can't aggregate that
7	way. That gets back to my earlier comment about
8	risk based. Ultimately for things that go through
9	a clearinghouse, the clearinghouse is not using a
10	standardized formula. I don't know if our friends
11	from DTCC are still here, but for example if you
12	look at SPAN margining, there's a formula but
13	behind it there are models and they change the
14	numbers when the models change and if you don't
15	have a risk-based system for those things there's
16	no way to do a standardized formula. In many of
17	those transactions for example there is something
18	called the gearing factor so that I can have an
19	option on 5 times X or I can have five options on
20	X and economically they're the same thing, but if
21	you did your speculative limit without a model you
22	would think they were two completely different

1	trades. So if you really want to have speculate
2	limits, you're going to have to build some sort of
3	risk-based system for all of those things and
4	whether that means requiring people to submit
5	models to you or having your own models, that's
6	going to be up to the Commission but you can't do
7	it in a simplified way and you can't just trust
8	firms to report their numbers because of course
9	every firm has its own models.
10	MR. CUTINHO: Adam, I'm going to
11	disappoint you. It's not the DTCC who is going to
12	help with this, but it will be the CME. So you're
13	right that when we look at risk we don't look at
14	product identifiers. It's across products so that
15	we look at it on a portfolio basis.
16	MR. TUPPER: Just to try to expand on
17	Adam's description, when we take in data, we try
18	to take in data and break it down into its
19	simplest parts and then those models are going to
20	do what they need to do. So from the Commission's
21	perspective, I think if you're going to try to
22	tackle this, what you're looking to do is create a

1 model for whatever purpose, you need those inputs and you need them in their smallest parts and as 2 3 clean as possible and then you're going to develop whatever models around those inputs to get the 4 5 reports that you need. I hope that makes sense. To summarize, whenever we're taking in 6 7 data we always break things down to a leg level or individual reference price level and customers 8 always report exposures based on those particular 9 10 legs on that reference in the amount of notional 11 dollars they have on that whether they're paying 12 and receiving and then we pass that trade data on to various systems that do different things with 13 that trade record. 14 MS. LEONOVA: So it should be called not 15 unique product identifier but unique model 16 identifier? 17 18 The model is your MR. LITKE: No. 19 model. You could change your model. One day you 20 might decide that you have the best model in the

22 come up with an improvement on the model so that

21

world for this product and a year later you've

you would change that. So that's not a unique identifier per se, it's whatever the Commission decides to use. What you need is enough information in the confirm record that is submitted by the participants to be able to reconstruct the trade so you can take that trade and put it into your model.

8 MS. LEONOVA: This model is going to be 9 asset class specific and is going to identify all 10 the legs that will allow to capture the exposure 11 if you link it back to the confirm?

MR. LITKE: There is a data model and there is an analytical model to price it and then there's a risk model that has to run all the data models so that there are three different models there. Only one of them is the data which is the data model for the confirm. The other two are really analytical models.

19 MR. TUPPER: But there are sources out 20 there for you to get the individual pieces. With 21 CDS obviously there's Project RED, on commodities 22 there are commodity price definitions which are

1	done by ISDA so that there are places for you to
2	create those if you're thinking of these
3	individual inputs that are out there that are
4	listed. It's what you're going to do with them
5	afterwards that's really not a product.
6	MR. CHIDSEY: Another way to look at it
7	is there may be an opportunity for unique
8	identifiers almost at the field level and again
9	for certain fields within a taxonomy for a
10	particular instrument it may make sense to have
11	identifiers as a way to ensure that there is
12	consistency and standardization for that
13	particular field so that it could actually be
14	several different types of identifiers for
15	different types of fields, but to try to roll off
16	of that together into some sort of aggregate
17	product identifier I think is complicated and I'm
18	not sure serves the purpose of what you're looking
19	for around risk and speculative position limits.
20	MS. LEONOVA: I'm trying to process the
21	information. It sounds like what you're saying is
22	that we have to come up with a set of some kind of

1 data fields that will be sufficient in order to in general terms describe whatever something is going 2 to be is reflective of this product notion. 3 Do I understand it correctly? 4 5 MR. CHIDSEY: I think the short answer is yes. 6 7 SPEAKER: The long answer is maybe. I have a question passed to 8 MR. TAYLOR: me from one of your Data Recording and Reporting 9 10 Team members who's listening on the phone from New We were talking earlier about the exotic 11 York. 12 bucket among the other buckets and he prompts me to ask, and it's a good question, how big do you 13 think that bucket is? We have some information 14 15 that suggests that vanilla is probably some high 16 percentage, 80 to 90 percent of all swaps and we shouldn't be all that scared about the exotic 17 18 bucket, but what's your sense? 19 MR. LITKE: What we see in our pricing service, it's probably less than 1 percent, but if 20 you want to know what somebody's risk is and you 21 22 have a exotic hedged by a vanilla, that could be

1	the unbalanced part of their book so that it's 99
2	percent of the work and 1 percent of the product.
3	MR. ARORA: I'd echo that.
4	MS. LEONOVA: I want to go back to the
5	product identifier question that we were
6	discussing before. You probably saw that we came
7	up with some kind of proposed minimum list of data
8	fields that we tried to describe this particular
9	product by asset class. Is it a feasible
10	approach? I shouldn't say feasible. Everything
11	is feasible. Is it a reasonable way to try to
12	capture these risk metrics that we were mentioning
13	and product classification metrics that we were
14	discussing?
15	MR. CUTINHO: For risk purposes, you
16	can't just look at that minimum set of
17	information. I think Adam was pointing out to

18 this panel many times that all the information in 19 the confirm is essential. That's important for 20 the analytics and it's important for risk as well. 21 I think Kulbir mentioned this before that it's a 22 great start to have a taxonomy and a structural

1 hierarchy. What is important is it has to be extendable and then I think we're going back to 2 what is the original purpose. I think if the 3 purpose is if you want to find out if a certain 4 5 derivative is traded across execution venues and you want to see at what price it's traded across 6 these venues, that has one level of requirements. 7 If you are looking at a counterparty and you want 8 to find their total risk exposure and then that is 9 10 exactly your interest, then we are questioning I 11 think to some extent how a product identifier 12 would help you get there.

13 MS. LEONOVA: Are we talking about transactional level reporting versus portfolio 14 15 level reporting here? It's not a question of particular data, it's a question of level of 16 aggregation of data on the reporting entity level? 17 18 Yes. In essence embedded MR. CUTINHO: 19 in my question is what is the purpose of the level 20 of aggregation? If you're trying to find out 21 there is a certain type of derivative that's traded across execution venues, if your objective 22

is to find out the price ranges where does it 1 What is the market? Where is it trading? 2 trade. Then that has a certain set of aggregation or a 3 certain set of fields you would use. If you're 4 5 looking at a portfolio basis, if you're looking at risk and if you're trying to identify risk, then 6 when you look at a counterparty I think it was 7 mentioned before that you have to look at the 8 underlying positions, you have to look at the 9 10 derivative positions, you have to look at their exotic positions, so we don't understand what a 11 product identifier will help in that respect. 12 You don't need to look at the product identifier. 13 You look at the risk using the data within the 14 15 transactions that is at your disposal. It sounds like in your 16 MS. LEONOVA: 17 world our notion of product identifier is something like futures equivalents type measures 18

of swaps that we are trying to aggregate for the speculative position limit but it's absolutely useless for the risk measure?

22

MR. LITKE: I think a futures equivalent

1	is a potentially useful risk measure. The problem
2	is it's a calculated field that is based on a
3	number of things that are different than the
4	description of the transaction. You have to make
5	some additional assumptions and know something
6	else about the market. It's useful, it's
7	sometimes necessary but it's almost never
8	sufficient.
9	MS. LEONOVA: I guess we have 15 minutes
10	for questions and answers. I see that the
11	audience is impatient with asking questions.
12	MR. TAYLOR: We couldn't get any
13	questions out of the audience before lunch.
14	MS. LEONOVA: Here is a microphone.
15	Would you mind?
16	MR. AXILROD: I just wanted to throw
17	something out and see what the panel thinks of it.
18	MR. TAYLOR: Please identify yourself
19	for the reporter.
20	MR. AXILROD: Peter Axilrod from DTCC.
21	In diving deeper into using these sorts of
22	identifiers for risk-management purposes or

risk-oversight purposes, I tend to share the 1 skepticism. It's a little like trying today to 2 manage monetary policy through the money supply. 3 Ten years ago or twenty years ago people thought 4 5 they knew what money was. Today it's very, very hard to define so that it's not going to be a good 6 instrument. I think what you're hearing is that 7 product types, and one way to think of them is 8 sort of how ISDA master confirms are there? There 9 10 are a lot of them, and systems tend to divide up 11 the world that way. I don't know how many there are in equity derivatives, there might be 50 or 60 12 now, credit derivatives have about 30 or 40, 13 commodities, they're not only ISDA, there are 14 15 elite product types and other product types and it goes on and on. They're very useful. 16 They're 17 used for as a sort of shorthand and when people see them they know what type of instrument it is. 18 But I guess I would urge for risk purposes or 19 20 position limit purposes, you're going to have to 21 use a blunter instrument. You're going to have to 22 look at exposure to underlyings, what direction it

1 is and whether it's linear or not and add it up and you're going to have to not be afraid of false 2 3 positives. You're going to have a lot of data in front of you and if some of it indicates that 4 5 there is a problem and you ignore it because you're worried that the data is incomplete, you're 6 going to be in trouble. What's wrong with having 7 sort of a rough approach which looks at underlying 8 exposures that is structured in such a way as to 9 10 give you some false positives but that just means you've got a phone call or two to make? 11 12 MR. TAYLOR: Are there any reactions from the panel? 13 MR. LITKE: I think it's fine if you're 14 trying to use it as a first step to look at risk. 15 I think the dealers and the market participants 16 might find it somewhat problematic if it were used 17 for hard position limits. So I think it really 18 depends on whether you're using it for a limit or 19 you're using it as an early warning signal. 20 21 MR. AXILROD: Early warning. I don't

know that hard position limits is something that

22

actually works given that it's almost impossible
 to find a good measure of this so that it was
 something that would be an early warning and cause
 somebody to drop a dime.

5 MR. ARORA: I had the same concerns. If 6 it's going to start affecting workflow on a daily 7 basis, that would worry me. If it is more about 8 an indicative kind of sense to the regulators, I 9 suspect, Peter, there are going to be a lot of 10 follow-up phone calls in your example, sir.

11 MR. TAYLOR: Are there any other 12 questions from the audience? Clearly they know everything they want to know. I have one. A lot 13 of you were here for all the panels this morning 14 and obviously I was and I listened all the way 15 through the discussion of unique counterparty 16 identifiers and there seems to be universal 17 18 agreement that we need them and everybody has a fairly good idea of what at least they think they 19 20 ought to be and how they ought to work and the debate is in the details. I listened to this 21 22 discussion and I'm not quite hearing it. How

important do you think it is that we have these
 identifiers? Am I wrong? Is the appetite for a
 UPI somehow less than for a UCI?

MR. ARORA: I think it's because of the 4 5 complexity involved and that's why my initial point was what purpose might help. Maybe one way 6 to look at it would be to do a volume analysis and 7 I hasten to add that what we mean by volume needs 8 to be defined. And maybe if we take it one step 9 10 at a time, the more standardized products do make up the highest volume debt, it may not address one 11 12 of your concerns about risk hiding somewhere in 13 the system, but at the very least that's where something can be done. I think the worry that you 14 15 hear if I can speak for all is around where the definitions are much more complex and much harder 16 17 to come a consensus on.

18 MR. TAYLOR: You all are asking in a 19 sense what for about these. One sort of obvious 20 answer that occurs to me, and I thought maybe I 21 should this because the existing universe of 22 repositories and if I'm not overstepping to say

1 so, I think more the European concept about repositories, tends to be that there might be one 2 3 repository in an asset class and so in this one place you can see all at least for that universe 4 5 and that's not the Dodd-Frank concept. Ιt contemplates multiple repositories. The market 6 may end up dictating otherwise, but at least for 7 some period of time one of the purposes I quess of 8 a product identifier would be able simply to see 9 10 of this thing, what all is out there across all of these repositories. That's kind of simple and 11 12 basic.

13 MR. CHIDSEY: Again I think what you're hearing is the need for a common taxonomy or 14 15 common topology, there seems to be universal agreement there. Then again within that there may 16 be an opportunity for identifiers, but the idea of 17 having a comprehensive product identifier at this 18 point, until you solve the common topology or 19 20 taxonomy, the common product identifier is 21 probably something that would need to be considered later. 22

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1 MS. LEONOVA: So that you're talking 2 about an aggregate system of product description 3 and now it's quasi-agreed is FpML a legal 4 confirmation type but it may be a good way of 5 doing it or maybe not a very good way of doing it 6 but that's a change of direction that you think we 7 should follow?

MR. LITKE: For capturing the 8 information for risk purposes, yes. For answering 9 10 the simpler question of what's here and what's there for volume studies, you could use a broader 11 12 solution. And for price reporting where you want to see if there is market abuse, for the 13 standardized trades you're going to get all of 14 15 your information out of standardized names.

MR. TAYLOR: One follow-up question on the comment that we need the taxonomy first which I think makes sense to me, do you all think there is a way to come together in some consensus on a taxonomy on the timeline that the rule has which in rough terms at least would mean doing it this year?

1 MS. LEONOVA: I can narrow down a question. Is it possible to agree on a limited 2 3 set of confirmations that are going to describe the whole universe of products? You can say 4 5 maybe. MR. ARORA: They're both tough questions 6 7 and I'll be optimistic because the number of players in this marketplace is small and I think 8 that's a positive, but the complexity is not and I 9 10 think that's the negative. It's an aggressive 11 timetable. 12 MR. TAYLOR: If more time than that were needed, what do you think it is? Rules can be 13 structured for things out there further, but too 14 much further won't sit well. 15 MS. DREW: I think the working groups 16 17 that are participating in the LEI conversation, some of those folks have been in discussion on the 18 on the common product ID for the last 10 years and 19 20 nothing happened. Realistically I think looking 21 at what's going on in those working groups and 22 evaluating after a month or so after they have

1	some straw man or hear the finite set of fields we
2	need to get agreement on and then readjusting the
3	July date accordingly, but you have to sit down
4	and model and you have to sit down and not rush
5	this because if we rush it we'll have to do it
6	again. The working group that's in place right
7	now I think is very effective. All the right
8	players are at the table. My advice would be give
9	it a month, come back and then set an appropriate
10	time limit once the modeling is done.
11	MS. LEONOVA: Does anybody have good
12	news?
13	MR. TUPPER: It's a rule of thumb
14	typically is a product is standardized enough that
15	a clearinghouse is going to accept it, then
16	there's the first set. If you're looking for a
17	set of trades, cleared swaps, you're at a point
18	where all the data values are pretty standardized,
19	people agree, clearinghouses are clearing on it,
20	there's your first set. Once you leave that
21	product set, each traunch of products depending on
22	how complicated they and you've heard a lot about

1	the exotics, it's how hard you want to work. The
2	last 1 percent is 99-percent of the work. I agree
3	with Adam wholeheartedly on that. You could spend
4	a lot of time on the exotics which we have
5	discussed at length. But if you're looking to put
6	timelines, there is a lot of mention of reporting
7	cleared swaps and that would be a great first
8	start. And then maybe adding a concept into the
9	rules with the exotics, and then you're going to
10	have some products that are kind of in the middle.
11	I do think when you prescribe rules you
12	do need to provision whatever standardization body
13	is going to be tasked by asset class to do this
14	work. The industry will invent products quickly.
15	I think everybody here has probably been told I
16	have the greatest project. You need to list it on
17	your system. You do that because you're a
18	provider of central services. And then you have
19	this miscellaneous bucket and out of that bucket
20	some things do make it but a lot of them don't,
21	but you do need to allow that innovation in the
22	market because there will be times where you're

1	going to have to amend and list new products as
2	they come up and I'd hate to see the rules be so
3	prescriptive that it wouldn't allow windows for
4	these updates.
5	MS. LEONOVA: I guess it's time to call
6	it a day. We are done with this panel. Thank you
7	very much for making the trip to Washington, D.C.
8	and talking to us and we will see you in 15
9	minutes.
10	(Recess)
11	MR. TAYLOR: So would the people for
12	Panel 5 come up and take their seats, and bring
13	your name tag with you, if you have it. Are the
14	rest of the Panel 5 folks here? We're going to go
15	ahead with that, and then we'll take our break
16	after that. It makes the afternoon too long if we
17	do it now.
18	(Pause)
19	MR. TAYLOR: We're missing a couple of
20	folks. Let's see Arthur and Ola.
21	MR. MAGNUS: Arthur's here.
22	MR. TAYLOR: Oh. Oh, hello. Right

1	under my nose. We're missing Ola.
2	MS. LEONOVA: No, no. Ola is going
3	Ola made a switch.
4	MR. TAYLOR: Okay.
5	MS. LEONOVA: Okay, sorry about that.
6	So now we are going into our next panel.
7	Hopefully it will be not as controversial as the
8	previous one. Now we are talking about Unique
9	Swap Identification, or Unique Transaction Type
10	Identification and to give a brief explanation
11	of why we use this terminology. We discovered
12	that industry has so many interpretations of what
13	a "transaction" or "deal" is, that we ended up
14	calling it just "swap." So there is no hidden
15	meaning here. The underlying notion of these
16	identifiers to keep track of a transaction, and we
17	understand that everybody does it one form or
18	another. When it comes to the unique ID for swaps
19	in our world, we understand that we're going to
20	have to deal with some system of compressions,
21	(inaudible) that is kind of dilute. So it's
22	unique.

1	So by this and it has to come up into
2	something else that brings a notion of what is the
3	most, again, efficient and effectiveness system of
4	tracking, and so it's individual transactions that
5	will accommodate regulatory needs and at the same
6	time will fit into the current systems of
7	counterparties. So, anyway, it has an (inaudible)
8	how it should be done, where it should start, and
9	how it should drip down into the SDR.
10	MR. TAYLOR: And
11	MR. CUTIHO: Sorry.
12	MR. TAYLOR: Go ahead.
13	MR. CUTIHO: I beat you to it. Very
14	quickly, I think I'm trying to understand the
15	purpose or if just to rephrase you want to
16	track the transaction and its life-cycle. We do
17	have a concept today, when we receive swaps for
18	clearing. It's called a "Platform Identifier,"
19	because we don't have execution facilities yet.
20	We do think it will be helpful, but we think it
21	should be linked to the execution venue, and
22	should have some form of an intelligence to

prevent collisions. 1 If the purpose is just to track a 2 transaction and its life-cycle, one way to -- I 3 mean, it has to be unique, of course -- things to 4 5 keep in mind are not all transactions are executed in execution venues. Some of them are 6 voice-confirmed, or affirmed, on platforms. So, 7 to the extent that these IDs are easily available, 8 they have a very transparent algorithm, I think it 9 10 will help -- and not just the clearinghouses, but it will help the regulators, as well. 11 12 MS. LEONOVA: Okay, so to expand it -so, in case of centralized execution we are more 13 or less confident that staff for the CM will be 14 15 able to assign some kind of number. When we are 16 talking about non-centrally-executed transaction,

17 it goes to clearance, we would assume the

18 clearinghouse going to assign the number when it's 19 not going to clearance, or who is going to assign 20 the number, or how will the flow be (inaudible). 21 What are we talking about here.

22 MR. MAGNUS: So, if I may -- I'm Arthur

1	Magnus from JP Morgan I still think first, I
2	do think there's a big difference between cleared
3	and non-cleared, but even in the cleared
4	environment, I think we need to be very pardon
5	the pun clear on what we mean by "transaction."
6	Let me talk about the uncleared, and
7	then I'll come back to the cleared one in a
8	second. When we put on a position with a
9	counterparty I'm just going to make an example.
10	I do a trade with you, Irina, and it's \$100
11	million transaction. I've now done it, it's an
12	event, a new transaction.
13	At some later date, something may happen
14	to that. It may move to a clearinghouse. Now, it
15	moves to a clearinghouse and we'll say David's
16	the clearinghouse is that a new transaction?
17	Or is it the same transaction? But now the
18	clearinghouse is sitting in the middle.
19	Now, if your expectation is and I saw
20	David shaking his head, "No, it's not a new
21	transaction" it does need a new identifier,
22	though. Because my transaction with David, and

1	Irina's transaction with David are gone, and we've
2	created a new transaction. And it has to be that
3	way, because I can't report, in any way, shape or
4	form, on my transaction with Irina any more,
5	because I don't have the relationship with her.
6	So we have a new transaction ID of some sort.
7	A different scenario is I have \$100
8	million transaction with you that's bilateral, it
9	stays bilateral. And then at some point I want to
10	lower the risk to \$75 million. I can do that two
11	ways. In some markets, I would do an offsetting
12	transaction a \$25 million trade with you in the
13	other direction and we'd have two transactions
14	on the books. I have a \$75 million position, but
15	two transactions. In other markets, I might do a
16	partial unwind unwind \$25 million of that,
17	which is an event on the same transaction.
18	What I'm trying to get to here is to say
19	that we have to be very, very clear, and sit down
20	and figure out what are the different U cases
21	we're trying to solve for, so we can figure out
22	what we are identifying, and which identifiers

need to live throughout their life, and which
 don't.

3 We clearly have a view at JP Morgan that if you're doing a compression, we in effect are 4 5 unwinding all the trades that are being compressed and replacing them with a smaller number of new 6 trades -- which is fine, and the compression 7 utility can actually provide those new identifies, 8 but not clear if that's actually what the CFTC is 9 10 looking for, in terms of what they're trying to find traceability of. 11

12 In the cleared environment, we're not sure the concept of "transaction" is meaningful 13 over a period of time. Because, again, there's 14 15 reporting requirements to the swap data repositories of a transactional nature throughout 16 the entire -- quote -- "life of the transaction." 17 18 Now, while many markets, we believe, that will never lend themselves to a standardized 19 product -- and each individual transaction, which 20 is perfectly clearable because we can think about 21 the risks holistically are usable -- we are going 22

1	to be able to, in other products, or instruments,
2	be able to identify them singularly by a contract.
3	So if you think of the CDS Index market,
4	that's a pretty standardized contract. We could
5	compress that to a position, very similar to the
6	way futures work today. And we would not want to
7	have to continue to carry around, every day,
8	information about the events associated with that
9	transaction. We'd want to associate it with the
10	position. In other markets, where we can't get
11	that level of standardization, we're going to have
12	to do it at a transaction level.
13	So I just think one of the things we
14	need to do here, very practically, is get, again,
15	the market practitioners together, who understand
16	the different markets, outline what the different
17	use cases are, and then come up with what is it

18 you're trying to identify. Are you trying to 19 identify for, again, trace-type purposes, to 20 understand the transactional life-cycle over its 21 life to look for market manipulation or things 22 like that? Are you trying to understand what is 1 the systemic risks presented by the trades that
2 are on the books at a moment in time? Are you
3 trying to do both? Are there other things you're
4 trying to accomplish with understanding what all
5 these things are.
6 And once we understand that, we can
7 probably come up with a nomenclature, an

8 identification that would work for this. And if
9 you have the answers to some of those questions,
10 we might be able to help you now.

11 MS. LEONOVA: Okay, then let's start from the simple solution. If you are focusing on 12 how to trail a particular trade from the moment of 13 execution until the moment of time in the future, 14 15 do you follow the swap transaction idea that is mutating through the life-cycle events? Or we try 16 17 to track the original swap transaction? MR. AXILROD: Can I take a shot at that 18 We've been doing that for a while. As 19 one? 20 Arthur said, in some cases it's virtually 21 impossible. No one wants to take a bunch of 22 trades that have been compressed -- there are lot

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1 of one-to-many, and many-into-one clearing give-ups, prime-brokerage give-ups -- you know, 2 block executions with splits. 3 If you want -- if the requirement is 4 5 just to keep an audit history, then, really, as long as the system that's doing that can relate 6 the new trades to the old trade -- so, for 7 instance we know which terminations are 8 compressions. We know when the compressions were 9 10 done, because we get them from a compression provider. And we're getting to the point where we 11 12 know which new trades also came as a result of 13 that compression. Those are reported by the firm, so it's not quite so clear at the moment. 14 But 15 it's getting there. Or do you report us new trades? 16 No, 17 just the terminations. Yes. But as long as you 18 have that information, and you know what the links are -- and particularly, know that these new 19 20 trades that were coming on were as a result of a 21 compression rather than some economic activity --

isn't that enough? You know, and as long as

22
1 there's the link somewhere -- these 10 trades link back to these two, or these two link back to these 2 10 through a compression -- wouldn't that be 3 enough? 4 5 MR. PRITCHARD: I can say a few words here. This is Raf Pritchard from TriOptima. 6 I think, you know, talking generally about these 7 universal IDs, there's no controversy about the 8 value or the justification or the motivation of 9 10 what is being described here. And the rule-making goes into some lengths about the value of 11 12 aggregating across different entities, across different transactions, and forcing limits, 13 surveillance, et cetera. So I don't think there 14 15 will be any controversy in these discussions about the value or the motivation of what is being 16 described. 17 18 And also, in technical terms -- we've 19 seen at the prior panels today -- there's no real controversy about the ability to create universal 20

21 unique IDs. We start off with venues that

22 generate these IDs, and we can combine those with,

1	you know, prefixes or suffixes for those venues,
2	and we can come to a universal scheme of unique
3	IDs. So that's not controversial, I think.
4	You know, what Peter and Arthur are
5	alluding to is the practicality and the
6	feasibility. I think Arthur made an excellent
7	point that, you know, what having these universal
8	swap identifiers implies is a certain uniformity
9	of behavior in the market that where a certain
10	scenarios arises and he very clearly enumerated
11	several good examples that everybody's going to
12	behave the same way. And that doesn't happen at
13	the moment. Participants in the OTC market do, by
14	and large, perform on their contracts, but they
15	don't necessarily record them in the same way.
16	And so somehow we're going to have to
17	come up with a rule book as Arthur said, a
18	prescription of what each scenario is, and how
19	to behave, in terms of do we create a new trade do
20	we retire an old trade and create a new one, like
21	Peter is talking about? Or do we create two? Or

22 what exactly happens?

1 And somebody has to write that rule book and maintain that rule book so that everybody can 2 3 follow it. And that is where, I think, the controversy around this is going to come in. 4 5 And secondly, an issue is that, you know, there's a lot of infrastructure. Somebody 6 earlier was talking about these identifiers are 7 embedded in thousands of systems around the 8 industry. And they are. And often, those party 9 10 systems create records, you know, very early on, when the trade is agreed to. And so we'd have to 11 12 feed back these unique trade identifiers into those systems. And that's a significant amount of 13 rework. You know, when you design a software 14 solution -- and that's what our business is, 15 16 software solutions -- you design the data model 17 first. And when you design the data model, you design the identifiers and keys first. And if you 18 19 try to change the keys to the data models of 20 thousands of systems, then that's, you know, digging up every street and avenue in the city to 21 22 -- you know, nobody's arguing about the benefit

1 But it's really the amount of re-work here. involved in universally applying them. 2 3 And so I think some of the solutions Peter is talking about, about using what's there 4 5 at the moment and, you know, linking backwards and forwards to identifiers, and using some of the, 6 you know, identification systems that are out 7 there and linking across them is going to give a 8 much more faster delivery of this benefit. 9 10 MR. TAYLOR: Does it help with that 11 particular issue -- you know, the re-working of 12 systems -- if the use of these USIs applies to new swaps going forward after the implementation date, 13 but doesn't apply, in the same way, at least, to 14 15 what are going to get called "pre-enactment swaps," or "transition swaps," the one between 16 17 July last year and the implementation date? 18 MR. PRITCHARD: I think that's -- just 19 quickly, it's going -- OTC swaps, one of the things we've pointed out in our discussions here 20 is the rate of turnover in the market. We see 3.9 21 22 million live contracts in our rates repository,

1	but only 4,000 or 5,000 a day. And it's going to
2	take years and decades for that approach to get to
3	a place where everybody's got these unique swap
4	identifiers.
5	MR. TAYLOR: Okay.
6	MR. PRITCHARD: So this approach of
7	reusing and linking amongst the identifiers that
8	are there will deliver value. It may be a good
9	thing to do in the long term, but it's going to be
10	a long wait.
11	MR. MAGNUS: I would also just add to
12	that that the systems that, you know, the major
13	swap dealers use today, and other market
14	participants use today, whether you start using
15	these new identifiers on a particular date in the
16	future or say it applies retroactively is almost
17	immaterial. Because I have to make the changes to
18	the system in order to capture and record those
19	identifiers, and be able to pass them in every
20	single message that we have, among systems, in
21	
	order to fulfill the requirements that you're

So once I can do that, we can probably very quickly come up with a way, in a relatively short amount of time -- it might take a year or two, but relatively short compared to the term of our derivatives book -- be able to go and get to identifiers that are for the uncleared derivative population.

MR. AXILROD: I quess I think you can't 8 solve this problem by trying to map to lots of 9 various different identifiers just because you 10 then have no way of enforcing -- I lose my grip on 11 how you do inventory control. In other words, 12 unique identifiers, especially under a system 13 where, you know, something's getting reported one 14 15 place for public dissemination, and another place for regulatory reporting, you can have those out 16 17 of sync very quickly, and no check on whether you're capturing everything, unless there are 18 unique identifiers. 19

I do think the technological problem, though, is -- Raf is right, everybody -- these identifiers are essentially the key to everybody's system. And maybe just adding two digits requires
 a rewrite of every single table in somebody's
 system.

So I think if they are being created 4 5 from multiple sources -- say, for instance, the execution venues -- they ought to be standardized 6 -- in other words, so that the people to whom 7 these things are reported can deal with them. 8 And, in a way, I would say that the SDRs, if they 9 10 don't create them, at least should say, "Here's the format in which these identifiers have to be 11 provided." And maybe if there's a prefix for 12 other, for different execution venues, you know, 13 for sure that prefix should not be made public, or 14 the individual identifier should not be made 15 16 public, because there's just not enough trading to 17 -- if people know which platform it came from, they'll know who did it. 18

So, as long as these identifiers are private, or only for the regulators, that's okay. But you really have to make sure that the SDRs can handle all of this stuff once they're reported to 1 them.

2	MR. WILLIAMS: If I might Jon
3	Williams from Tradeweb. And, by the way, thank
4	you very much for the opportunity to participate.
5	You know, I think one of the things, you
6	know, as we look at our execution business
7	currently, across a number of different asset
8	classes, both cash and derivatives, you know, we
9	feel very strongly that from a unique swap, or a
10	unique transaction ID standpoint, there does need
11	to be kind of a point of initiation. And that
12	point of initiation is the point of execution.
13	Because I would think that, you know,
14	contained within the notion of a transactional
15	identifier is the concept of not to borrow from
16	earlier panels but the counterparties involved
17	in the transaction. And so the notion of trying
18	to report enough of the details that encompass the
19	physical transaction not just the details, the
20	mechanics of the swap to do that at the point
21	of the SDR, when actually the uniting of the
22	counterparties and the components of the swap

1	happens at the point of execution, would be
2	problematic from kind of a sequencing perspective.
3	One of the things that, you know, that
4	we certainly do now again because, you know, we
5	traffic across a number of different asset
6	classes, with a large number of counterparties,
7	and interact with a lot of, you know, other
8	participants in the trade, like TTCC, like
9	MarkitSERV is we certainly create a new
10	transaction identifier. And it varies. There's a
11	fair amount of, you know, homogeneity, in terms of
12	the logic behind the construction of the
13	identifiers, but each asset class has an
14	appropriate number of characteristics that
15	describe it. We then transmit those identifiers
16	for example, to TTCC, and they respond in kind
17	with whatever identifier they have created for
18	that particular transaction, and we associate the
19	two together, and are able to track them in
20	lockstep with each other throughout the life-cycle
21	of the trade.
22	You know, I guess one of the other

1	things, you know, from listening to some of the
2	other panels is, I think, the key is going to be,
3	obviously, a very and this is where there's
4	going to be a fairly, a need for a fairly
5	broad-based amount of cooperation across market
6	participants is a very kind of agreed upon, as
7	close to standardized as possible, methodology or
8	taxonomy for describing not just, you know, the
9	larger transaction but the pieces of the
10	transaction again, those unique counterparty
11	identifiers, and then ultimately those unique
12	product identifiers.

MR. CUTIHO: I just want to acknowledge,
and actually highlight one of Arthur's points
before.

16 It doesn't matter whether we're talking 17 about seasoned swaps, or things that are 18 bilateral, or swaps going forward. But if a 19 product is standardized, and if clearing is 20 provided on a positional basis, then there is no 21 ability for a clearinghouse to then report the 22 transaction identifier on an ongoing basis. So it

means nothing. It's just a net position at that 1 point in time. 2 3 CDS as a SNAK is a good example. Then again, I do want to 4 MR. MAGNUS: 5 caution that many asset classes you will not be able to do that. And so we just have to be very, 6 very careful when we use that terminology. 7 Again, I want to go back and -- there 8 are one or two other attributes I think are very 9 10 important. One is, if we have identifiers out there, the identifiers itself should adhere to the 11 general policies of good data management, which is 12 they should not mean anything. There should be no 13 meaning ascribed to the digits, characters, that 14 15 make up that alphanumeric or numeric or character string -- in terms of who the parties were, where 16 17 it was executed or anything else. Those are 18 attributes of the transaction, and they should go somewhere else. 19 20 And I think maybe it might make sense 21 just to think about the whole work flow. In 22 addition to the use cases, one of the concerns

1	that we certainly have, as we look at all of the
2	NPRs, not just the data one, is how the
3	information is going to flow between the various
4	parties in the system, and how it's all going to
5	fit together.

And a transaction ID is an interesting one, because that's something that's going to have to cut across, and isn't as well defined as the earlier discussion this morning, on counterparty or legal entity identifier, which is a little bit clearer, because they do have contracts for those.

12 And so I think we do need -- you know, 13 again, and I'm going to use -- I think the way to move this forward, again, is to get a very small 14 15 group of people in a room to define the problem 16 we're trying to solve. Because there is a 17 difference between a transaction, and I'll call it 18 a "deal" on my books. And this is a problem -- I started in derivatives back when we were 19 converting all of our -- Morgan was converting all 20 21 of its parallel loans into swaps under an ISDA 22 Master Agreement. And I remember having

discussions, whiteboard discussions, in the room
 about the difference between a transaction and an
 instrument.

And the reason I bring this up, because 4 5 when we do, in the OTC market, an instrument effectively is a unique instrument -- well, say, I 6 do a trade with Bruce, where Bruce and I have done 7 a trade together, that instrument only exists for 8 the two of us. And no one else needs to know 9 10 about it in today's market, that we've done that particular instrument. So any transactions on 11 12 that instrument are really between us, and we use 13 our own nomenclature.

We're now moving into a market where we 14 15 have to share that with other people. And we have to think about the difference between what is my 16 17 position in that instrument at the end of the day, that might only exist between two parties, and the 18 event and the way that might change through some 19 transaction that might occur which is a one-time 20 21 event.

22 And the way you talk about the SDR and

1	the continuation data, we talk about what is the
2	mark-to-market of a transaction over its life?
3	But a transaction only exists at a point in time.
4	The position I have, or that instrument, the
5	position in that instrument, occurs for the life.
6	And that's where this data modeling
7	exercise becomes really complicated. But if you
8	break it down into its parts, we might be able to
9	come up with a nomenclature that actually will
10	allow us to get to a solution.
11	MR. TUPPER: Thanks, Arthur. This is
12	Bruce Tupper with ICE. I'm actually just to
13	kind of summarize, I'm really glad you got all
14	this feedback.
15	Because when I read this section I had a
16	lot of concerns, because operating a repository
17	for intercontinental exchange, I quickly got a
18	call from the clearinghouse. And they said to me,
19	"Oh, my God. We just roll up the open interest.
20	And I'm not really interested in an ID, nor do I
21	have the systems to do that."
22	And then to Arthur's point, you got a

great view into how one, you know, one large
dealer handles trades, although -- that's not to
say it's right or wrong -- other dealers may just
amend a trade, and keep the life -- the trade
open. And as a central provider of services, we,
in our system, we're required to architect a
system that could do both.

And then, you know, Peter also said 8 that, you know, you're going to be generating a 9 10 lot of IDs, and then this is going to be very 11 burdensome on the SDR, because we're going to be 12 ultimately the one where all this stuff's coming into, and I need to tie out everyone's trade ID --13 which is a lot of columns. Because every time 14 15 someone gives you another ID, you're trying your best to manage your tables, and link back all the 16 17 IDS.

And from the suss perspective, I think the old -- they could easily generate unique IDS, but once they report, they're really -- they're not really involved in what life-cycle processing, or what's going to happen post-trade. So, you 1 know, this is not to -- because we also, our 2 exchange guys are doing this and they're like, 3 "Yeah, great. I can issue an ID." And I'm like, 4 "Yeah, that's great. You're just -- you're around 5 for one night, then you're gone -- " and we're 6 going to be living with these trades for possibly 7 years.

8 So I think, going back to what Arthur's 9 saying, I think it would helpful to know what 10 you're trying to do with this ID. I think you're 11 going to run into difficulties trying to get every 12 potential, just call them "market participant" to 13 be able to manage them, because not all of them do 14 it.

15 I can't tell you that the SDRs probably are best suited to do it. Because when we deal 16 17 with -- I'll speak to it from our perspective, when we deal with it, we get unique IDs from each 18 person, and we show that to them, where we process 19 20 But to us, we always put our own behind it. it. 21 So that's fairly easy for me to do that in one 22 single system. And if I had to handle maybe a few

other, or foreign entities, it would be some work,
 but it's doable.

3 Once you start stepping out of that central processor, and if you quickly get to a 4 5 clearinghouse, or you go back to other customers -- if you get out of the world of the swap 6 dealers, the idea of adding other columns to their 7 database, and tracking other IDs is going to 8 become very difficult. You know, they're going to 9 10 have to go back to their vendor, the vendor is going to give them a quote in order to do this, 11 12 because they don't do it today. Whereas a firm like JP Morgan will just add the column. 13

So I think we need to kind of figure you 14 15 -- and I'm echoing Arthur -- is that what would you like to do with the ID? And it's not so much 16 17 the creation ID, but it's the ability to keep that ID appended to the trade correctly, and move 18 throughout all the different reporting entities. 19 20 I guess I don't know that MR. AXILROD: it's really that hard. As long as your 21 standardizing the number of digits, and it's not 22

1	too big, and everybody knows and can deal with it
2	I know that, you know, the smallest municipal
3	utility may not be able to do that. So I think
4	commodities is sort of a little bit different when
5	you get to you know, there's a lot of end-user
6	to end-user trades in commodities. And the
7	technological abilities of municipal utilities and
8	other small players may not be there. So I think
9	you need to sort of consider that somewhat
10	separately.
11	But for the large financial derivatives,
12	most people who have to report are technologically
	mobe people who have to report are reembrogrearly
13	sophisticated enough. Almost everybody has their
13 14	
	sophisticated enough. Almost everybody has their
14	sophisticated enough. Almost everybody has their own trade identifiers. And I think, you know,
14 15	sophisticated enough. Almost everybody has their own trade identifiers. And I think, you know, giving up trades for clearing is just another
14 15 16	sophisticated enough. Almost everybody has their own trade identifiers. And I think, you know, giving up trades for clearing is just another instance of many-to-one, or one-to- many. There
14 15 16 17	sophisticated enough. Almost everybody has their own trade identifiers. And I think, you know, giving up trades for clearing is just another instance of many-to-one, or one-to- many. There is a contractual relationship between the

21 not -- actually, we don't necessarily do it the 22 greatest today. We can do it, but it's a little

1	bit convoluted. As long as you can do that, I
2	think you will have your universal identifier.
3	Maybe I'm missing something.
4	MR. MAGNUS: Peter, I just think about
5	applying that in the uncleared market. Because I
6	think when you get to clearing, and you have that
7	central counterpart and you can apply an ID to it,
8	it's one thing. But there are going to be deals
9	that are going to end up being bespoke, and will
10	be bilateral. And the Dodd-Frank Act, and all the
11	draft rules I've seen cater for that.
12	And so we need to make sure that
12 13	And so we need to make sure that whatever identification system we come up with
13	whatever identification system we come up with
13 14	whatever identification system we come up with also caters for that.
13 14 15	whatever identification system we come up with also caters for that. MR. AXILROD: No, I agree. I just
13 14 15 16	whatever identification system we come up with also caters for that. MR. AXILROD: No, I agree. I just didn't think it was that difficult for people that
13 14 15 16 17	<pre>whatever identification system we come up with also caters for that.</pre>
13 14 15 16 17 18	<pre>whatever identification system we come up with also caters for that.</pre>
13 14 15 16 17 18 19	<pre>whatever identification system we come up with also caters for that. MR. AXILROD: No, I agree. I just didn't think it was that difficult for people that are used to technology. It's going to be very difficult for people who are not. And you just I do think that if you I mean, what we do is we</pre>

1 But as long as the SDR is sure that they can track things with a unique identifier, I don't 2 3 know that the people communicating with the SDR need to use that identifier. They could use their 4 5 own if the SDR has linked it to a unique identifier. 6 MR. MAGNUS: And that probably is the 7 practical solution for implementing something 8

9 sooner, is to make that a requirement of the SDRs, 10 to provide that -- potentially provide that 11 capability.

12 MR. PRITCHARD: Yeah, I think Arthur and Peter have got it just right there. For the 13 non-cleared example that we spoke about, as long 14 15 as parties report their trade to the same SDR -which I think is foreseen in the rule-making --16 17 and they use a consistent internal ID, which is unique from their point of view, consistently over 18 that reporting, then the SDR itself can be 19 20 responsible for prefixing with it's own bit to provide the universal unique feature when 21 22 reporting upwards to the Commission.

1 MR. MAGNUS: As long as we still get standardized market practice. Because the example 2 I gave before, of that \$100 million deal going to 3 \$75 million, in certain asset classes it's done 4 5 one way, in other asset classes it's done another way, and we have to decide if we -- or certain 6 firms will do it one way or another way. And we 7 have to decide if we need to standardize that. 8 MR. AXILROD: It's not only across asset 9 10 classes, actually. Within each asset class JP Morgan does it one way, and Morgan Stanley does it 11 12 another way. And it gets -- (laughs). MR. PRITCHARD: And I would think that 13 you'll get pretty much the same value with a lot 14 less expense if you let the SDR translate it, and 15 don't impose standardization on every last end-16 17 user. 18 MS. LEONOVA: Okay. Then if, say, ID is generated on the SDR level, it has to drip down 19 back to the original execution clearing and 20 everything else. 21 Is it feasible from --22

1 MR. MAGNUS: Right. MS. LEONOVA: So how do you envision 2 audit trail of individual books if you cannot 3 track the SDR trail to, say, documentation of a 4 5 particular counterparty in their books? MR. AXILROD: That's part -- I mean, 6 there's a little bit of latency, but it's part of 7 the Act -- Act. In other words, when we get it --8 I mean, Jonathan described it. When we get a 9 10 trade in, when we send that trade back, if -- or if we get a confirmed trade in, when we send it 11 12 back it has our identifier on it. We don't apply identifiers to information with unconfirmed 13 trades, because you have this double-counting 14 15 issue. You potentially get two legs of the same trade in with different identifiers, and then you 16 17 have to make one go away once it gets confirmed. You can do that, but it's a technological -- more 18 of a technological hurdle. 19 20 MS. LEONOVA: So you are talking about a system of mapping of identifiers? 21 22 MR. AXILROD: Of?

1	MS. LEONOVA: Mapping.
2	MR. AXILROD: Well that's correct.
3	In other words, when you have a central identifier
4	you can map it to the firm's identifiers. But
5	once trades are confirmed, they go out unique
6	identifier generation can be done pretty quickly,
7	and then your acknowledgment back, you can have
8	your own identifier attached to it. So firm's can
9	use it or not, as they see fit. Most firms don't
10	use it. Most firms use their own identifiers and
11	it works fine.
12	MR. CUTIHO: As a technologist, I think
12 13	MR. CUTIHO: As a technologist, I think it's not very efficient to have a central system
13	it's not very efficient to have a central system
13 14	it's not very efficient to have a central system just issue IDs, and every system in the chain,
13 14 15	it's not very efficient to have a central system just issue IDs, and every system in the chain, just go and contact it every time. I don't
13 14 15 16	it's not very efficient to have a central system just issue IDs, and every system in the chain, just go and contact it every time. I don't believe that will work very well.
13 14 15 16 17	it's not very efficient to have a central system just issue IDs, and every system in the chain, just go and contact it every time. I don't believe that will work very well. I think if the goal is to have an
13 14 15 16 17 18	<pre>it's not very efficient to have a central system just issue IDs, and every system in the chain, just go and contact it every time. I don't believe that will work very well.         I think if the goal is to have an identifier at different points in time and</pre>
13 14 15 16 17 18 19	<pre>it's not very efficient to have a central system just issue IDs, and every system in the chain, just go and contact it every time. I don't believe that will work very well.         I think if the goal is to have an identifier at different points in time and recognize them as events for a life-cycle, you</pre>

But I don't think polling a system to 1 get an ID every time is a very efficient approach. 2 3 MR. TAYLOR: Let me summarize a bit, and get feedback from you all am I summarizing 4 5 correctly. What we've got in the proposed rule is 6 not a system where there's a central giver of all 7 the swap identifiers. We called it a "first 8 touch" approach. The way we've got it is, if 9 10 there's a platform involved here, a (inaudible) or a DCM, they create the swap identifier. 11 12 No platform, but you've got a dealer or an MSP who presumably has sophisticated systems, 13 and is going to be the reporting counterpart, the 14 15 way the statute is set up, they create the identifier. And if it's end-users on both sides, 16 17 where there may not be systems, the SDR creates the identifier. 18 I think I hear you all saying you like 19 that, as opposed to -- you know, in terms of who's 20 creating it. Am I right or wrong about that? 21 22 MR. MAGNUS: As long as there's no

1 intelligence in the identifier. And by definition, if a SEF or swap dealer is issuing 2 3 identifiers, there has to be some controlling mechanism to either give it a block of identifiers 4 5 they can use or whatever. And that immediately means that it has some intelligence in it, and 6 someone can reverse-engineer based on the 7 identifier. 8 The only intelligence, if 9 MR. TAYLOR: 10 -- I don't know whether you should call this "intelligence" or not. But if there is any built 11 12 in the way we wrote it in the proposed rule, the proposed rule is saying that each of these 13 "creators" of an identifier would get a small code 14 that just identifies them. And that would be 15 either the beginning to the end of the identifier 16 17 itself. I mean, to be honest, we modeled that on 18 Tag 50 distribution from CME where, you know, each clearing member can give Tag 50s, and once piece 19 of the identifier says which clearing member. 20 And that keeps them all unique. 21

22

I don't know whether you call that

1	"intelligence" or not. But is that problematic?
2	MR. MAGNUS: Well, it certainly
3	identifies parties to the transaction
4	potentially. So we have JP Morgan does a private
5	transaction with somebody, and our little tag at
6	the beginning, and everyone knows we have the
7	number "5." If there's a "5" at the beginning of
8	the transaction identifier, they know it came from
9	JP Morgan, they know that JP Morgan did the deal.
10	So I guess part of it would be what is
11	the how will that data be used, and what is the
12	publication of that data?
13	If I assign that deal to somebody else,
14	does it keep that same unique identifier, or "deal
15	identifier" I'm going to use, instead of
16	"transaction" or is the very nature of the fact
17	that I'm now not in that, and now someone else is,
18	is the transaction, and the actual instrument, you
19	know, has a unique identifier?
20	Again, this goes back to the modeling
21	issue that I said before, and we just have to be
22	careful.

If only the SDR and the supervisors get 1 to see that, probably less of a problem -- but not 2 clear how the supervisors are all going to share 3 this information, how widely spread it will end up 4 5 being. MR. AXILROD: Two things. One is, if 6 you accept that as true, then the SDR has to 7 create the identifier. You have to have -- if 8 there's more than one SDR for a particular product 9 10 type, you have to have some way of assuring that each SDR is producing unique identifiers.

12 And I guess I would say, generally, the program by which you use the reporting parties' --13 remember, the -- right, the initial, in some ways 14 -- right -- the initial trade, if it comes from a 15 platform, that identifier is going to become 16 irrelevant later, because it's really the dealer 17 with the continuing reporting obligations. 18

11

I don't think it will work at all just 19 to use the dealer identifiers. And the reason is, 20 what we found is the dealers like to change them. 21 22 And for various good reasons. There's a merger,

1	there's something on. They're changing their
2	internal systems, they're changing their
3	identifiers. There's lots of reasons why dealers
4	might want to change their identifiers. And we've
5	actually had to put in a program that allows
6	dealers to go in at will and change their
7	identifiers. And the way we manage that is we
8	have our own identifiers, so that's what keeps the
9	audit trail.
10	So I don't really thing you can get away
11	from the repository maintaining their own
12	identifiers at some level.
13	MR. TAYLOR: So, if I'm understanding
14	right, if you were redesigning this you would say,
15	yes, if it's executed on a platform, the platform
16	should create the identifier at the beginning.
17	But if it's not, forget the dealers, the SDR
18	should create the identifiers or all of the
19	non-platform executed.
20	MR. AXILROD: I don't know that it
21	really matters who creates it. I honestly don't
22	think it does as long as the SDR can manage a

1	single identifier all the way through. In that
2	case, I would suggest it's probably easiest for
3	the SDR to create it, because it's its systems
4	that have to maintain this over their life. And,
5	frankly, we could work with a lot of providers and
6	say, "Here's how you have to give it to us," but
7	it's easier and safer if we create them ourselves.
8	MR. TAYLOR: And then the other thing I
9	thought I heard some consensus on was you all
10	don't think the swap identifier is useful after a
11	swap is cleared.
12	Am I right about that?
13	MR. CUTIHO: For a position-based
14	clearing yes. After that point, it's just a
15	position, and that position.
16	MR. AXILROD: I guess I
17	MR. CUTIHO: Net long, net short. For
18	trade-based clearing, we keep the trade open. But
19	there are terminations. Once they're terminated,
20	the IDs go away I mean, the swaps go away. A
21	clearinghouse doesn't maintain trades.
22	MR. AXILROD: I guess I'm not sure I

1	agree with that. You have to when a trade is
2	executed, you want to know whether it went to
3	clearing or not. So you have to still you
4	know, unless we get to the point, and I hope we
5	do, that, you know, there's automatic clearing at
6	point-of-trade.
7	But under most models not all
8	that's not the case yet. And you're going to have
9	to say, "This trade went to clearing here."
10	So what you really want is, you know,
11	you have a cleared position that has an
12	identifier. It goes up and down, but you really
13	want to be able to say, "This trade went to
14	clearing," and be able to sort of document that,
15	and "This trade didn't."
16	MR. MAGNUS: But that actually
17	reinforces, I think, exactly what Sunil said, and
18	what I was saying earlier is that "transaction"
19	is an event, and a "position" is a position. And
20	in certain cases where you have position-based
21	cleared instruments, you will not care about the
22	transaction once it moves to cleared.

1	And you basically said, "I have the
2	transaction. It gets me to cleared. But once
3	it's cleared, I don't want to do continuation
4	reporting which is the other piece of this
5	NPR on a transactional level. I want the
6	clearinghouse will want to only report on the
7	position that, let's say, JP Morgan has, or its
8	clients have, in, you know, in ID-6, settling in
9	December, you know, 2016.
10	MR. AXILROD: Arthur, I think we're
11	violently agreeing.
12	MR. MAGNUS: Yes, we are violently
13	agreeing.
14	MR. AXILROD: I think there's, at that
15	point there's no difference
16	MR. MAGNUS: Right.
17	MR. AXILROD: between the contract
18	and the position.
19	MR. MAGNUS: Right. But
20	MR. AXILROD: They're the same thing.
21	You don't have the independent trade anymore.
22	MR. MAGNUS: but for those things

that are maintained on a trade basis, that you 1 can't get to a position, you're going to have to 2 maintain some semblance of what that individual 3 unique deal is for its life. 4 5 MR. AXILROD: All I was saying is, for us it's the same thing. It looks -- a position or 6 a trade looks exactly the same to us. It's just a 7 contract between two parties. 8 MR. CUTIHO: And another nuance I would 9 10 like to add, post-clearing, is that there is a --I think Arthur pointed to this before -- there is 11 12 a swap identified at the point where it's affirmed or executed, but once cleared, it's broken into 13 And we're both -- you know, with the CCP 14 two. 15 being the counterparty on both ends. 16 At that point in time, on an ongoing 17 basis, you know, it would make more sense for us to report on a cleared identifier of that 18 position, even if it is trade-based clearing, 19 rather that, you know, the original execution. 20 Because we have broken the connection between the 21 22 two counterparties.

1 If a regulator is wanting MR. TAYLOR: to follow this "thing" over its life, and this 2 thing gets cleared -- this may be another dumb 3 question. But suppose we have a swap identifier 4 5 that doesn't live very long. You know, you're following the life of this swap identifier for, 6 you know, two hours or something, and then it 7 says, "This went to clearing." Thereafter, in 8 what you just said, is your ID would get replaced 9 10 by a cleared-trade identifier, or whatever we call Is that a useful -- how would that work? 11 it. 12 MR. CUTIHO: It's based on the purpose. 13 So if your purpose is to track the life-cycle post clearing, then you want to know the cleared 14 15 identifier. Because at that point in time, the 16 CCP is the counterparty, not the (inaudible). MR. TAYLOR: I think that would be the 17 18 purpose. 19 MR. AXILROD: That's what happens today, both in clearing and in prime brokerage, where 20 it's exactly the same process, where you have a 21 22 lot of prime brokers net and compress with their

1 counterparties. That's what happens. 2 When the CCP, or a prime broker, steps 3 in the middle and becomes a counterparty to the trade, we get fed the identifier of the person who 4 5 stepped in the middle. Sometimes we can attach that to a particular transaction as an assignment, 6 and sometimes we can't because it's a many-to-one, 7 so we just keep a record that that's what 8 happened. 9 10 But if we know what the cleared 11 positions are, and we have the clearer's 12 identifier, it's just the same as a counterparty giving us an identifier. We just want to make 13 sure that we've kept them all separate, and we've 14 15 got the appropriate inventory. MR. MAGNUS: Again, if I do a 16 17 transaction with Bruce, the moment I move it to clearing, I no longer have a relationship with 18 That transaction does not exist. So 19 Bruce. 20 there's no way you can -- or that deal does not 21 exist in my records anymore. I now have a deal with -- I'll use Sunil -- with Sunil as the 22

clearer, in that particular example. And Bruce
has a position with Sunil.
Now, I may do another trade with
somebody else that flattens my position out, so I
actually have no position anymore. I'm not going
to track anything, because those two positions are
equal and offsetting and I'm done. I've assigned
it, or whatever. Bruce may go add on to his
position.
And this is not terribly dissimilar to
what you're doing in the futures market today,
where an FCM in the futures market is required to
keep the transactions that led to the end-of- day
position. But once you get to the end of the day,
and everyone's confirmed and agreed the end-of-day
position, they basically stick those in an archive
somewhere, and will make it available if you ask
them for it. But they don't report it anywhere.
And that's not a terribly dissimilar
concept. And, again, it goes back to what are we
trying to trace? What is it that you want to
trace quote "through its life-cycle?" Do

1	you want to understand what JP Morgan's position
2	is over time and how we got there? Or are you
3	trying to understand, literally, an individual
4	transaction, and keep it alive much longer than it
5	really is alive, for some purpose that, quite
6	frankly, I'm not sure about?
7	MR. TUPPER: Yeah, and just, if I may
8	if the SDR is providing the reporting function
9	the SDR is mandated to provide reporting
10	functionality to the Commission right? So if
11	we're able to provide you that rolled-up reporting
12	functionality each day, that gives you the net
13	positions, I think you know, I kind of agree
14	with Arthur I'm trying to struggle with what is
15	the need for the Commission to know, behind the
16	scenes, the audit trail, how it calculated that
17	net?
18	Because if, you know, the SDR would be
19	receiving the cleared positions from the DCOs, and
20	then the uncleared positions would come in from
21	the reporting entities, and then they could
22	aggregate up these net positions for you
1 MR. AXILROD: I mean, I think the regulators -- I don't think anyone's saying trying 2 to trace a trade that you can't trace anymore 3 because it doesn't exist anymore. But I think the 4 5 regulators probably want to know if the world has changed from today to tomorrow, why that happened. 6 7 And whether you call that, you know, "audit trail" or whatever, you're going to want to 8 know "This went to clearing," and you're going to 9 want to make sure that it foots -- that everything 10 that went to clearing actually results in the net 11 12 position that the clearer is reporting, that sort of thing -- would be my guess. 13 14 MR. PRITCHARD: I think, you know, we

15 run a rates repository (inaudible) where we get 3-point-something million live contracts in, and a 16 lot of them are cleared. So, you know, we simply 17 18 get a set of live contracts every reporting cycle, and some of them are cleared and some of them 19 aren't. And if they want to look at something 20 else, like the history, then they can construct 21 22 that in some way.

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1	But fundamentally what's being reported
2	is a set of live contracts. And whether they're
3	with a party and a clearinghouse, or party and a
4	party but it does point up, for some of the
5	sort of clearing scenarios that were alluded to
6	over there, that these rules if you want to
7	have a universal set of identifiers, will need
8	rules for what constitutes a new ID being
9	generated or not.
10	MR. TAYLOR: Let me ask both Pete and
11	Raf because you illustrate the conceptual
12	universe here, I think, on continuation data
13	reporting.
14	Take a cleared trade. A swap was made.
15	It went to clearing. And now, over its existence,
16	it is being reported to you.
17	Pete, you're getting life-cycle events,
18	if I understand properly. And Raf, you're getting
19	snapshots.
20	What's in those, and who's giving it to
21	you? Is it coming from the clearinghouse? I
22	mean, walk through that.

1 It depends. If the MR. AXILROD: clearinghouse is doing its own life-cycle event 2 processing and reporting it, then we're getting it 3 from the clearinghouse. 4 Most clearinghouses -- I mean, not 5 everyone at this table, but one of the two at this 6 7 table -- oh, this is going to change -- is actually using DTCC's sort of trade warehouse to 8 do it. So, in a sense, we would -- the 9 10 repository, if you will -- would get that information from the warehouse. 11 For other credit events, we either 12 13 generate it. For the non-standard trades -which, by the way, given the last session, I 14 believe include all the AIG trades, so I am 15 wondering whether a category of "non-standard," 16 17 and throwing everything into that bucket would help us much. 18 That aside, I think -- I mean, this will 19 -- you'll see this in our comment letter. 20 But I think you ought to be, repositories ought to have 21 22 the flexibility of using whatever method is

1	easiest and best for the market participants.
2	For the trades that are non-standard, it
3	may be easier and better, you know, for us,
4	instead of asking people to report the life-cycle
5	events, to just have them report the snapshots
6	especially if there's a lot of life-cycle events.
7	When there are not too many life-cycle
8	events, you know, it might be easier to have
9	people just report the changes, or report the
10	life-cycle events.
11	So, right now, for
12	electronically-confirmed trades which is what
13	we deal with for credit, but not for equities,
14	where we're sort of going to have to change what
15	we do, because it's actually much more like what
16	TriOptima does but for electronically-confirmed
17	trades, I would expect that it's just easier for
18	everybody to have the life-cycle events reported,
19	because they're either going to be computed
20	centrally, or they're going to be confirmed.
21	They're confirmable life-cycle events, they'll be
22	confirmed electronically, and they'll come in for

1	trade. So they're not electronically confirmed,
2	it may be that the only way you can get them is by
3	snapshots.
4	But I think, I really think that
5	repositories right? if one is good enough,
6	and the other if both are good enough right?
7	then the repositories ought to have the
8	flexibility to use whichever they want to use.
9	You know, if it's good enough for credit, it
10	should be good enough for rates. If it's good
11	enough for rates, it should be good enough for
12	credit.
13	That's our view.
14	MR. PRITCHARD: Well, I'll just follow
15	on briefly there. I think that the two you
16	know, from the point in time of the state
17	reporting approach to repositories, the two
18	advantages and I think Peter was saying it's
19	easier in circumstances, but we'd totally agree,
20	is that it's more robust, because you're not
21	dependent on anything that was ever previously
22	reported. You simply get a full refresh. If

1	somebody's got a zero position, they don't report.
2	If they've got a non-zero position, they do
3	report. And you just get that fresh, from scratch
4	every day, so it's more robust and
5	self-correcting.
6	And, secondly, you don't need any of
7	these rules about the scenario under which the
8	trade was done, or the history of how it got to be
9	there, because you simply just report all
10	outstanding positions every day. And it makes it
11	a lot simpler to know that you're in compliance,
12	and that you just report
13	MR. AXILROD: I can't let that go
14	un-commented on. I actually think it's a lot less
15	robust. And the reason I think it's a lot less
16	robust is because a snapshot simply won't tell you
17	why something happened. It will just tell you
18	that positions changed, and you won't really know
19	was this a tear-up? Was this a compression? Was
20	this an assignment? Was it a price-forming event?
21	Was it not a price-forming event? Is it relevant
22	to the market? What's going on?

1 So I think, I mean, that would -- I know we could go back and forth for a while. But I 2 would take the opposite view. 3 MR. MAGNUS: I would just add one thing 4 5 to that, which I think you've highlighted in both of your comments, and there's truth to both of 6 what you're saying -- is that this goes back to 7 saying we need to be objective-based in what we're 8 trying to accomplish with the reporting and with 9 10 the identifiers. 11 And, you know, I would argue from JP 12 Morgan and from many of the industry groups that I sit in, we believe that the regulation should not 13 stipulate the technical method for accomplishing 14 15 the objectives. It should state, "Here's the objectives of what I want to see at the end of 16 17 every day for continuation reporting, " and the industry should figure out what is the best way to 18 do it for that asset class, which may be the right 19 way to do it today. And it may be that three 20 21 years from now, you know, the industry may change, 22 and it might be better to do it a different way.

And for CDS it may change and you want to do it a 1 different way, also. 2 3 But it should be objective-based, and not actually dictated in the regulation, what 4 5 method of reporting to the repositories you should use, whether it's life-cycle or totally placed. 6 You should state what the objectives are, and 7 we'll figure out how to meet those objectives. 8 And we'll work with you to figure that out. 9 10 MR. TAYLOR: We've let this discussion -- because it was so interesting -- bleed a bit 11 12 into the Q&A time. I suppose I don't feel too bad, because I think Pete's the only person in the 13 audience -- and he's not in the audience anymore 14 -- who asked a question. So we're probably safe. 15 16 But I will open it up. Is there anyone 17 who wants to ask a question relating to any of There's a couple microphones out there if this? 18 19 anyone does. 20 (No response.)

21 MR. TAYLOR: Passive investors. What 22 can we say? What else do you think?

1	MS. LEONOVA: Okay, then. I guess we're
2	going to have a 20-minute break for coffee. Thank
3	you. I really appreciate your making it here.
4	MR. TAYLOR: Okay. We're ready for
5	Panel 6, the last of the day, but some very
6	interesting topics. I think everybody is here.
7	Does everyone have their name tags? Yes.
8	We've moved, you know, into a different
9	arena. Not identifiers now but there were
10	interesting questions before us about whether
11	there would be utility in some sort of master
12	agreement library or some sort of portfolio data
13	warehouse and we wanted to get more input about
14	that. So that's the topic here.
15	And let's start with the first question
16	we have, which is should a separate collateral
17	warehouse system be established as part of an SDR
18	to enable the systemic risk and prudential
19	regulators to monitor collateral management and
20	gross exposure on a portfolio level for swap
21	participants? And if so, how do we do that?
22	MR. MAGNUS: So allow me to take a stab

at that. We've been talking about that. This is
 Arthur Magnus from JP Morgan.

3 One of the other hats that I wear though is co- chair of ISDA's Collateral Committee. 4 And 5 it's something that we've been discussing in that forum for a long time. And then in reading the 6 NPR we got a little bit concerned because there 7 are concepts in there that do not work at all in 8 the bilateral space. So particularly, we cannot 9 10 ascribe -- in the valuation data that you have, we cannot ascribe collateral to an individual 11 12 transaction. The bilateral OTC space is on a contractual or portfolio basis. We have ISDA 13 master agreements and CSAs primarily, credit 14 15 support annexes, and they dictate what transactions are part of that portfolio and how 16 17 that collateral is to move. And we provide a call to our counterparties if we are the valuation 18 agent for collateral and they provide it to us on 19 a portfolio basis. We reconcile the transactions 20 that underlie that on a transactional basis but 21 22 the collateral is pooled.

1 And for what I'm going to call exposure collateral -- not variation margin, and that is 2 3 just because the term variation margin as we use it in the bilateral space is different than the 4 5 draft definitions that you've provided and the way it is used in the future space. And I want to 6 suggest that we need to keep them separate and be 7 consistent. And that will be in several of the 8 comment letters I think you'll get in the not too 9 distant future. 10

11 So I'm just going to call it exposure 12 margin when I'm talking in the bilateral space and I'll use variation margin for the cleared space. 13 But for exposure margin, it generally is an offset 14 for mark-to-market. So you could argue that the 15 collateral we have you could prorate it among all 16 the deals based on the mark-to-market but it's 17 18 never an exact match because of the point in time. 19 Initial amount, which is a separate amount that we 20 get from certain counterparties, can be calculated 21 any number of ways. Sometimes it's on a deal 22 basis but frequently it's on a portfolio basis

1 also.

So in thinking about that and thinking 2 3 about the prudential and systematic risk oversight that the regulatory community abroad needs, the 4 5 only way that you're going to understand what our true risks are and what our true counterparty 6 exposures are is on a portfolio basis. Therefore, 7 we would strongly support the creation of a -- I'm 8 not going to call it a warehouse because that 9 10 actually has other connotations and collateral, including physically where the collateral might be 11 12 stored. So I'm going to call it a collateral evaluation repository. Just to be clear, it looks 13 like other repositories and it's on a portfolio 14 basis where it would have in it a variety of 15 attributes, including the mark-to-market of the --16 the mark-to-markets of the portfolio or the 17 exposure that we have to each other on a net basis 18 19 -- sorry, on a gross basis without any benefit of any credit support. And what is it after 20 21 collateral, which is a specific type of credit 22 support. Obviously, there may be other credit

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1	support which is very hard to it's very hard to
2	put in there what is the value of a particular
3	lien we may have on property, plant, and
4	equipment, or whatever it happens to be.
5	So we would recommend that type of an
6	approach. And then we could also provide for you
7	what is the cash and marketable security
8	collateral that is behind that. And if you want
9	to know where it is we can tell you that also,
10	which we think would serve the purposes of the
11	systemic oversight that you are trying to
12	accomplish.
13	So I'll stop there. We can talk about
14	how you get that and build such a thing if you're
15	interested.
16	MR. TAYLOR: We are but maybe let's go
17	around on the first question first and then we'll
18	come back to how do we do it.
19	MR. PRITCHARD: Maybe I can talk a bit
20	there. This is Raf Pritchard from TriOptima
21	again.
22	So we've talked in some of our previous

1 discussions about repositories, about the diversity of goals that have been set out for 2 repositories, systemic risk monitoring being one 3 but not the most important one, but an important 4 5 one, but also market risk surveillance and enforcement, and realtime reporting. And one of 6 the things that we've alluded to is that that's a 7 different -- that's got a diverse selection of 8 goals and as a software architect it kind of sets 9 10 up some challenges as to which one you're going to 11 meet when you design the repository. So I think, 12 you know, what Arthur is describing there, a collateral valuation repository does definitely 13 address the systemic risk goal much more directly. 14 15 And we've been providing an exposure management service for some time now whereby 16 17 parties can exchange their data on their line item OTC swap basis and evaluations. And what that 18 enables them to do for their collateral process is 19 20 to reconcile the total exposure they have between 21 each other early in the 24-hour cycles so that 22 they can get to moving and settling the collateral

1 and delivering the risk mitigation that that provides. And I think, you know, from what we can 2 see we get 75 percent of the noncleared OTC swap 3 live contracts through that service and the large 4 5 number of dealers and firms on that. And you can see that if you took that and extrapolate it 6 upwards a layer so that you aggregate it across 7 the firm's positions you would get to a pretty 8 good view of systemic risk. And so we, you know, 9 10 I think it's a good approach towards systemic risk monitoring and it's a feasible one, too. 11

12 MR. WILL: It's Michael Will here from docGenix. I would agree with Arthur to the extent 13 that a different beast is required as far as the 14 15 nature of the repository here. We are definitely looking at a portfolio animal, if you like. Where 16 I would slightly disagree with him is really in 17 terms of the level of information that is stored 18 within that particular repository. We're here 19 today to discuss two central themes that have been 20 21 enshrined by Congress in the Dodd-Frank Act, and 22 namely these are transparency and accountability.

1 To achieve these objectives, it's my view that you, as regulators, will require access 2 to information that's been reduced to data from 3 three distinct but related document types. 4 These 5 are the confirmations, which (inaudible) very well, the economic terms. But we also need some 6 information concerning enforceable master 7 agreements and enforceable credit support 8 agreements. The master agreements themselves 9 10 include the legal and credit terms, and the credit support agreements contain the margin terms. 11 12 As I've watched you promulgate these rules, I think it's right and proper for me to 13 perhaps be a little concerned that you are, in 14 15 fact, missing an important part of the picture by focusing primarily on the economic data to the 16 exclusion of legal credit and margin data. And as 17 a result there's perhaps a risk that you might be 18 unable to achieve the transparency and 19 accountability objects of Dodd-Frank. 20 21 In short, if you only have access to the

22 economic data, in my view you'll have a mere

1	one-third of the information you need to evaluate
2	counterparty credit risk. And counterparty credit
3	risk is, of course, a key component of systemic
4	risk. In any crisis or legal proceedings, in my
5	view it's inevitable that the legal credit and
6	margin terms enshrined in the master agreement and
7	credit support agreement will take center stage.
8	The events of the past couple of years are no
9	exception.
10	Why is data from these legal agreements
11	important? Well, it's really quite simple.
12	They're the primary mechanism by which the parties
13	manage and mitigate their counterparty credit risk
14	exposure to each other. So I do believe it's a
15	good idea to have a collateral agreement data
16	repository and that swap dealers and major swap
17	participants should be asked to submit data to it.
18	Once you have this repository and you have access
19	to the credit support data, you're going to have
20	access to a number of key pieces of information.
21	For example, is a relationship actually
22	collateralized? I think currently data released

1 by ISDA indicates that 22 percent of all bilateral relationships are not supported by collateral 2 3 arrangements. You'll be able to have a very 4 5 transparent view as to the nature of the collateral the parties are using. You'll have 6 indications of whether they're using cash, 7 government or agency securities, perhaps any other 8 collateral agreed between the parties, and 9 10 sometimes in these agreements one of the parties will have the right to say I unilaterally decide 11 12 that this is eligible collateral and the other party will have nothing to say about it. You'll 13 learn about valuation percentages and haircuts, as 14 well as minimum credit requirements for the 15 collateral. Frequently collateral will need to be 16 17 highly rated to be eligible. Thresholds also are of great interest 18 because they're used to calculate exposure. 19 I'm referring here, of course, to independent amounts, 20

21 thresholds, minimum transfer amounts, and initial 22 margin. And this is important. These thresholds 1 are extremely sensitive to minor changes in credit ratings and asset value declines. 2 3 Another important factor will be the nature of the relationship. Is it bilateral or 4 5 unilateral? In some agreements only one party has the obligation to post collateral. You'll be able 6 to find out rights of the parties to substitute 7 collateral, valuation procedures and dispute 8

9 mechanism, the rights of the parties to reuse or 10 rehypothecate the collateral, as well as the scope 11 of the collateral coverage. Indeed, it's not 12 uncommon for parties to actually exclude 13 transactions from the collateral arrangements. So 14 I think we need to go a little bit further.

MR. PICKEL: Bob Pickel from ISDA. Far be it for me to suggest that there's not a wealth of information in master agreements and credit support annexes. (Laughter.) There is plenty, and it is very important, and as Mike suggests, at critical times it is, you know, in many ways the most important information.

22

I guess I would circle back to a theme

1	that we've been sounding in some of our comment
2	letters. I think it's been sounded to some extent
3	today. We certainly sounded it yesterday with the
4	New York Fed and Sarah Josephson from the CFTC and
5	other global regulators, and that is let's figure
6	out what the critical first steps are here in
7	terms of the information that you feel you need.
8	Yes, I think there's a lot of the risk that get
9	created, the exposures that get created are
10	created through those transactions that are put
11	on. And so it's important for you to have a
12	window into that information.

13 It may very well be that it's important for the CFTC to have the kind of information that 14 Mike suggests and we can look at that over time. 15 I think most importantly you should have -- make 16 sure that the prudential regulators are requiring 17 their regulated entities to maintain this 18 19 information. Obviously, make sure they've got 20 master agreements in place and there are other 21 master agreements. I think the LEAP one was 22 measured earlier today. That they know what the,

1 you know, obviously you have access to the master agreement. You know what's in that. There's a 2 3 schedule to that. That's the structure. It's really those variations from the master that are 4 5 most relevant in many things like cross defaults and the credit support annexes, various thresholds 6 and triggers and things like that that are very 7 important. 8

9 So I think it's important for the 10 regulators to require the institutions to have that in place. And there can be -- there are 11 12 mechanisms, and Mike I'm sure would be happy to 13 talk about them, that may facilitate the more ready access of the entity to that information. 14 15 And we'll see how that develops over time. But I guess I would, you know, circle back to the notion 16 17 of phasing in. Let's think about what's most 18 important, what the first steps are as we consider 19 these other issues of master agreements and credit support annexes. 20

21 MR. TROZZO: Pat Trozzo from Reval.
22 Just to extend some of the good points that have

1	been brought forward here today, taking it up to
2	maybe a little higher level first, is, as I read
3	the rules, I believe there still needs to be
4	further definition of what are the goals in the
5	area of overseeing or measuring and tracking
6	systemic risk. Like many things in our business,
7	the devil is in the details. And those details
8	will drive a lot of the issues that we're hitting
9	upon here today and answer to some of the
10	questions many of the questions here in this
11	panel. So I think that first needs to be
12	questions of if you are looking to what degree to
13	measure it, right now potentially the rules are
14	written that you're limited to more of a current
15	exposure approach of looking at counterparty
16	credit exposure as opposed to maybe some
17	alternative means. So I think that definition
18	needs to be further extended and clarified. And
19	then that will help drive a lot of, if you will,
20	some of the answers to these questions.
21	And then one other thing I'll add is
22	there's the legal aspects of netting and so forth.

All the points brought forward here are correct 1 and I agree but there's one other area what I 2 3 would call more of the economic look of the exposure across an enterprise between one 4 5 enterprise and another enterprise and looking at the overall exposure, that on the bilateral mass 6 agreements doesn't necessarily cover it. There is 7 a related party effect of multiple agreements that 8 may come into play here and I call that more the 9 overall economic look. So that also I think needs 10 11 to be taken into consideration when looking at 12 overall systemic risk and counterparty credit 13 exposure.

MS. GOLDMAN: Hi. I'm Melissa Goldman from Goldman Sachs. I would also like to reiterate the points made by both Arthur and Robert in terms of the way we view the collateral risk and being at portfolio level and the need to be able to represent it that way to get the most accurate view of where the risks live.

I would, to Mike's point, I would like the agreement sort of data similar to some of the

1	conversations that we had around the product
2	identifiers in that the you could think of the
3	masters and the CSAs as a almost as an exotic
4	in how we need to model that data and represent
5	that data. And it's not always at all
6	straightforward in terms of how that becomes
7	represented within a data model.
8	Additionally, I think there's, you know,
9	a significant amount of interpretation that
10	happens with that data and so to be able to sort
11	of go through that the cost of going through
12	that interpretation and then systemically
13	representing it in a central repository would be a
14	quite expensive exercise.
15	MR. AXILROD: Can I just make it
16	unanimous in the sense that I think, you know, the
17	obvious missing piece from what everyone had been
18	doing was the collateral. You simply are not
19	going to understand this may not be sufficient
20	but you simply are not going to understand
21	systemic risk or exposures unless you understand
22	what collateral is held where and essentially

1	parties' legal rights to it. So yes, I fully
2	support making that fact transparent to
3	regulators. I think that I also agree that on a
4	bilateral basis, just as on a cleared basis,
5	right, nobody collects collateral, whether cleared
6	or uncleared, on a trade by trade basis entirely.
7	They do it on a portfolio basis generally. So
8	you're stuck with portfolio- based collateral
9	reporting, which means that you're going to have
10	to put together all the various valuations that
11	you got in the individual repositories, assuming
12	that they're complete and accurate. You probably
13	ought to include in what's reported to
14	repositories as maybe static data or something
15	else, whether this particular counterparty or this
16	particular group of transactions actually is done
17	on a collateralized basis or not. But the
18	important thing really is to compare the value of
19	the portfolio with the value of the collateral.
20	If there's a very big disparity, you know you
21	probably have to make some more inquiries.
22	The other thing that you really need to

1	get a handle on is, you know, and this will come
2	down to concentrations, but what collateral might
3	a counterparty have to put up with very small
4	movements in the market or a particular event. So
5	if you've got if it looks like a party is going
6	to have to come up with collateral upon the
7	occurrence of certain events that they're just not
8	going to be able to come up with. And this
9	includes across cleared and uncleared trades. And
10	you won't understand it unless you get the whole
11	picture across cleared and uncleared trades.
12	You're not going to know whether a
13	particular event will drive that party under and
14	essentially, you know, cause the system to
15	collapse. And in that event, the legal right to
16	require people to post collateral isn't so
17	important as the practical realities really. Is
18	this guy extended to the limit of the amount of
19	collateral he can post? Will certain sorts of

20 events make it so it's going to be impossible for 21 him to post variation margin? Should people be 22 collecting additional either CCPs or bilateral counterparties? Collecting additional sort of initial margin because these positions are just too concentrated and you need to do something to protect yourself against the fact that when the position starts to deteriorate, generally this firm won't be able to come up with anything to provide anybody.

8 So I think you need to concentrate. A, 9 we need to have a repository like this. You need 10 to know where the collateral is and you need to do 11 something to figure out, you know, these sort of 12 exposure to events over concentrations that are 13 going to make it difficult if not impossible for a 14 firm to put up additional collateral.

I would just add to that 15 MR. MAGNUS: 16 that, you know, JP Morgan has spent tens of 17 millions of dollars to build systems to take the 18 data that we have in our master agreements and in our transaction and data repositories to look at 19 our exposures in different ways to understand what 20 21 happens when a counterparty gets downgraded or a 22 trigger or something happens in the market to

stress test the portfolio. These are very, very
 complex calculations and we make them available to
 our prudential regulators already on a regular
 basis.

5 I think this is incredibly important information and, you know, my first, you know, the 6 first thing I would say is, you know. Dodd-Frank 7 is going live in this year. If you're going to 8 collect this data and do something with it it's 9 10 going to take years to do. It's taken us years to 11 build the infrastructure as we have to manipulate 12 this data and use it effectively in our risk management regime. As has been pointed out in 13 numerous other places, you know, a huge percentage 14 of the market share -- I think the CFTC has quoted 15 over 90 percent of the market share is 16 consolidated in five dealers which are all subject 17 to prudential regulation in this country. And we 18 already share with those prudential regulators 19 20 significant information about our portfolios and what happens in various scenarios. 21

22 My short term recommendation, certainly

1	until we can sort of what we're doing because I
2	think this is important and I think Dodd-Frank
3	says you should have you need we need to
4	make sure this information is available in some
5	form you should look through the Financial
6	Stability Counsel, as well as working with the OCC
7	and the Fed who are generally the prudential
8	regulators through the I guess it's the
9	memorandum of understanding (MOU) process that you
10	have between regulatory agencies to share this
11	information because that will give you a huge view
12	of the risks that are currently being run in the
13	market place.

14 I think that a master agreement library is probably, you know, an expensive definition of 15 what is in Dodd-Frank. And quite frankly, I think 16 17 we have so many fish we have to fry, if you will, in order to implement what we have to implement. 18 19 We ought to focus on that first and then come back 20 to this one at a later date because this one --21 there's so many different ways you can use that data that just collecting it without understanding 22

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1 how you're going to use it I think would be difficult and just incredibly complicated and 2 3 expensive. So we're going to put it into repositories and we're not going to use it because 4 5 we can't figure out what we're going to do with it. And if we're not going to spend the tens and 6 hundreds of millions of dollars you're going to 7 have to spend to actually crunch it, then we're 8 probably not the best use of our time at this 9 10 moment in time. And it's probably something we 11 should be coming back to after we move somewhere 12 down the road. And I would echo what Bob said 13 earlier and what we suggested to the ODSG yesterday through the IIGC, is that we need to 14 move in incremental steps to implement this. This 15 is a sweeping piece of legislation, as we all 16 17 know, and it contains many structural changes to 18 the infrastructure. And we need to work together and we need to do it in a stepwise fashion in 19 20 order to implement this in a way that is not going to disrupt the market and disrupt commerce in the 21 22 United States and potentially move jobs and

1	business out of the United States.
2	MR. AXILROD: I would agree.
3	MR. TAYLOR: Before
4	MR. AXILROD: Oh, sorry.
5	MR. TAYLOR: Before he does that
6	follow-up, I thought somewhere in the course of
7	that you shifted over from information about
8	collateral to master agreement library. And I
9	just want to make sure which one we're talking
10	about.
11	MR. MAGNUS: I was I was particularly
12	talking about the master agreement library. As I
13	said before
14	MR. TAYLOR: Let's save that one.
15	MR. MAGNUS: I support as I said,
16	I support and JP Morgan supports the idea that we
17	should create a single portfolio repository for
18	looking at exposure-related information and the
19	credit support and collateral against it to be
20	very clear.
21	MR. TAYLOR: Okay. Let's let's beat
22	one horse to death before we do the other one.

Okay, I would actually 1 MR. WILL: disagree with that and the reason why, perhaps not 2 3 surprisingly, is that the only way you can get a complete view of the exposure you have to a 4 5 counterparty is a combination of economic data contained in the confirmations, the master 6 agreement, and the credit support agreement. I 7 understand the points and actually would endorse a 8 phased approach. I think that's a good idea. But 9 10 I think if you as prudential regulators want to be 11 -- want to have advance knowledge of say a ratings 12 downgrade hedge trigger that it impacts a particular party, I'm not sure with Arthur's 13 proposal that you would actually have any advance 14 15 notice. It would just happen. However, if you had access to information in the master agreement 16 17 which required a party to post collateral, then 18 you would. You would know it was coming. 19 MR. AXILROD: I would say amen. First 20 -- first, I'm sorry, to Arthur. (Laughter.) 21 You've got to understand the collateral. 22 Right? The last place anybody wants to be is, you

1	know, big counterparty exposures and not having a
2	clue what the collateral is. And I can just see,
3	you know, Senator, I don't know why I didn't know
4	but we didn't know. I guess my successor will
5	figure that out. I think that's a I think you
6	really have to get that first things first.
7	MR. WILL: I think some senators have
8	actually been told, Senator, I didn't know.
9	(Laughter.)
10	MS. GOLDMAN: And just to echo Peter's
11	point, I mean, you have to walk before you run and
12	I think there's a whole slew of data that's out
13	there that's going to be relevant from a risk
14	management perspective even beyond the stuff that
15	we're talking about here but it's really about
16	where, you know, the core of the risks exist. And
17	in fact, I think the industry is moving towards,
18	you know, some of the biggest risks around
19	portfolio reconciliations and dispute resolutions.
20	And so where, you know, we see the biggest issues
21	focusing our time and our resources around that
22	rather than on some of the collection of this data

1 which then would absolutely need to be, you know, invested in the collection and then beyond that 2 modeled in a way, that would give meaningful kind 3 of risk information. 4 5 MR. PICKEL: And I think -- and I realize for certain types of entities, the CFTC 6 might become a prudential regulator. But of 7 course, the most active participants in these 8 markets are going to be the large financial 9 institutions who will be -- have a different 10 prudential regulator. And obviously, as Arthur 11 12 and Melissa mentioned, you know, there needs to be coordination with them on this information. 13 You know, collateral is critical. 14 15 Whether that just means that -- whether that means the prudential regulator has to know all the 16 details or whether it needs to be confident 17 through its oversight of the entity, that the 18 19 entity has a good handle on that and that the prudential regulator has the opportunity at any 20 21 time to find out what that position will be or is, 22 I think that's a different scenario than kind of

1 everything getting, you know, flowing into the prudential regulator. It's a guestion of making 2 sure that the regulated entity has the 3 methodologies in place, the practices in place to 4 5 make sure that they are tracking it properly and in turn the prudential regulator can see that. 6 7 MR. PRITCHARD: Can I just comment there? I think (inaudible) swapped out a 8 repository hat on again and it's interesting what 9 Melissa said. She characterized the collateral 10 terms as an exotic because there's a sort of walk 11 12 before you run aspect to this which is, you know, we've heard about the exotics bucket today already 13 and I think you really need to be sure that you're 14 15 capturing all those trades in some detail and capturing the valuations of all those because if 16 you're not doing that effectively, then knowing 17 about the what if scenarios on your 18 collateralization is really of secondary 19 20 importance. So I think to Arthur's point about 21 the phasing and putting things in order, then it's 22 really important the repository captures accurate

-- the accurate complete population, exotic as
well as standardized, and gets values on that on a
continuation basis. Then captures the exposure at
the relationship level and then can start looking
at the more exotic sort of scenarios on the
collateral.

7 I guess I would never MR. AXILROD: disagree with a statement that they swap data 8 repository out have the best possible, most 9 10 accurate, most up-to-date swap data that the regulators want to see. And I agree with that. 11 12 But I honestly think that you could equally say without understanding the collateral the swap data 13 information isn't very relevant either. 14 This is 15 one of those cases where you really need to have 16 both and it's not -- you're not -- I don't think 17 you ought to sequence the -- what Arthur called the collateral reporting repository with the swap 18 data repositories. They ought to be, whether 19 it's, you know, sequenced maybe by a couple of 20 months but that's the basis. You need to see all 21 that information. 22
1 No, no, Peter, I agree with MR. MAGNUS: What I was saying sequence was if you want 2 that. 3 detailed master agreement information. 4 MR. AXILROD: No, no. 5 MR. MAGNUS: I totally agree that the swap data repositories and this portfolio 6 repository probably need to come into existence. 7 There's relationships potentially between them 8 that we could devise through interesting use 9 10 But they're going to be separated by cases. whatever the practicality is of building them. 11 12 We'll probably build them on independent tracks and they'll be done when they're done but it'll be 13 around each other. It's the more detailed master 14 15 agreement information that I was commenting on. MS. GOLDMAN: 16 And by the way, I was 17 echoing that same comment. Okay. 18 MS. LEONOVA: Can we focus on independent tracks for collateral data warehouses 19 20 and whatever else we are talking about right now? 21 You can't keep names straight. 22 MR. TAYLOR: And let's do -- let's do

1 the collateral piece first. There seems to be
2 passionate unanimity around the table that the
3 answer to our very first question, should we have
4 a separate collateral warehouse system, is yes,
5 absolutely.

Well, the next question was, how should 6 this be done? And I thought I was hearing in what 7 some of you were saying the notion that there 8 might be one SDR warehouse repository or whatever 9 10 you want to call it here, that that information might not be sitting in each of the SDRs but might 11 12 be sitting in one location. Obviously, the other possibility is that it sits in each SDR with 13 respect to the swaps that got reported there. 14 It doesn't really matter 15 MS. LEONOVA:

16 whether it sits in the same SDR, not whether it's 17 the same system or not.

18 MR. TAYLOR: Yes.

MS. LEONOVA: Whether we want to keep two separate systems and if they are separate how we link them or we try to merge it all together. MR. MAGNUS: So logically -- forget

1	about where it physically resides there should
2	be one as we will probably end up with one
3	hopefully asset class repository for each asset
4	class, the regulations, the draft regulations
5	provision that we might end up with more than one,
6	that information cannot be housed with the asset
7	class information. It needs to logically be kept
8	in a portfolio that cuts across asset classes
9	because the information is across asset classes.
10	The portfolio I described before, which I did not
11	put that adjective on it, is across asset classes.
12	The ISDA master agreement and the CSA cover all
13	asset classes simultaneously between two legal
14	entities. So therefore, it needs to be in a
15	separate place.

Now, whether or not we have multiple Now, whether or not we have multiple repositories that have this information, that could become inefficient and then you have to figure out, well, which one does it go in and who is doing the reporting, which are other things we'll figure out over time. There are probably advantages when you start talking about that, at

1	least for the large players, to have large players
2	put their entire portfolio in it and not have, for
3	example, I'm going to use Goldman because Melissa
4	is sitting next to me. If Morgan has if one
5	Morgan entity has a portfolio with Goldman to say
б	that Morgan is always going to be reporting it
7	actually probably makes some sense for both of us
8	to report it from our vantage point because that
9	actually provides with the biggest players some
10	useful information to you about whether or not
11	we're valuing those portfolios roughly the same.
12	MR. TAYLOR: No, I have had prudential
13	regulators say to me it's interesting, it's useful
14	to know that AIG, just to take a random example,
15	thinks this collateral is worth, you know, \$100
16	billion and the counterparty things it's worth \$10
17	million.
18	MR. MAGNUS: Thing that that I would

and I would absolutely agree with that. The other thing that I would say is the biggest issue that we had around transparency with that situation was the fact that there was a longstanding dispute of

1 a very large size that was not transparent to the supervisory community. As we told the -- as we 2 told the ODSG yesterday, we believe that we've 3 actually solved that through the commitments 4 5 process of providing reporting of large disputes on a regular basis to our prudential regulators. 6 At least now they have the tools to identify that. 7 We also have portfolio reconciliation and a few 8 other tools that are coming out in your draft 9 10 regulations also that would prevent that type of 11 situation. But I absolutely agree that you would 12 want to see both sides of that if you can. And obviously there are certain counterparties in the 13 market if I'm dealing with a smaller corporate, 14 15 for example, that probably would not be reporting into that portfolio repository. It probably 16 doesn't make sense to force them to do that to be 17 a player. 18

19 MR. TAYLOR: Two follow up questions to 20 that. One of them is I take the point. I think I 21 thought some agreement to this that this goes 22 across asset classes. And I think it's obvious 1 that the statute at least permits a repository for
2 a single asset class. I mean, it doesn't say that
3 repository can't do multiple asset classes but it
4 doesn't say it has to either. Does that suggest
5 then this really needs to be in a separate place
6 as opposed to each SDR?

MR. MAGNUS: Again, to the point I 7 started to answer Irina's question is it needs to 8 logically be separate from the asset class 9 repositories. I mean, if there was one uber 10 11 repository that we had globally that covered the 12 entire derivative world, that's a different story. That's not going to happen under any scenario I 13 can think of. 14

15 So we're going to have asset class specific repositories. We'll probably have 16 17 multiple repositories in an asset class as we start going international. But if a prudential 18 regulator wants to see, and particularly a 19 20 systemic regulator wants to see what JP Morgan's 21 position is to any other counterparty, we should 22 be reporting that somewhere so that our prudential 1 regulators can see that at a summary level. We provide that information today by the way and they 2 3 have access to that information. They have to come to us to get it and they have regulators and 4 5 supervisors onsite who go into our systems on a regular basis to see that but if they want to see 6 it in aggregate then you need to report it 7 somewhere. 8 MR. PICKEL: I think that having the 9

10 repository -- I'm not going to contradict my 11 members here. If they want to have it, they'll build it, they'll make it, and they'll make it 12 available to the regulators. But ultimately, that 13 can't be any substitute for the prudential 14 15 regulators really getting in there and understanding what the collateral positions are, 16 what the policies are. That's what I would get 17 18 back to. The repository may be a good first look to see what the big picture issues are but if the 19 20 work's not being done at the regulatory level in the institutions, then the repository is not going 21 to be all that useful I don't think. 22

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1 MR. MAGNUS: And Basel II actually supports that because we have to actually do some 2 3 fairly complex exposure calculations that take into account all of this information in order to 4 5 produce risk graded asset requirements under Basel And our prudential regulators are the ones 6 II. who have to sign off on the models that we're 7 actually using. And so they are -- I can assure 8 you they are spending a huge amount of time 9 10 digging through how those models work and what 11 information goes in the controls over those models and everything else. So one would hope that we're 12 doing a reasonably good job calculating in a way 13 that the supervisory community is comfortable with 14 so that the results that come out of that would be 15 of use to the various regulatory bodies and we 16 17 would not try to replicate those calculations externally. But again, reporting it could add 18 value. And if you're going to want that 19 20 information, I can understand many reasons why you 21 might want to see it in a data store so you can 22 look across organizations and not only see how

1 much exposure JP Morgan maybe has to a particular MSP or an end-user, but how much five other 2 3 dealers have and see it in some aggregated way. That becomes useful in a repository. But short of 4 5 that I would go with Bob's approach, which was the prudential regulation approach. 6 MR. TAYLOR: Let me ask all of you, are 7 you thinking that this information needs to sit at 8 least in a separate system, as opposed to, you 9 10 know, this is (inaudible) all the regulator 11 assets? 12 SPEAKERS: Yes. 13 MR. PRITCHARD: Yeah, I think if I can just go back to your original multiple repository 14 15 question, I mean, in order for parties to agree their exposure between each other which they then 16 subsequently collateralize, they submit that live 17 18 contract on a cross asset class basis to a single 19 venue, exposure management service, that then 20 reconciles them. 21 And secondly, as both Arthur and Melissa 22 allude to, you know, collateral is not really

1	meaningful at the transaction or life contract
2	level in OTC derivatives. It's only really at the
3	relationship level. And so the fundamental, you
4	know, the trade repositories are at the trade
5	level and then this collateral or this exposure
6	view would then be at the relationship level. And
7	that would be there's some advantages of that
8	because it, you know, as we've seen there are
9	multiple repositories and this would pre-aggregate
10	that.
11	MS. LEONOVA: May I? I didn't get
12	(inaudible) discussions on Panel 4 and 5. Does it
13	mean that we want to ultimately track the master
14	agreement identifier rather than transaction
15	identifier itself and link all individual
16	positions (inaudible) master agreement?
17	MR. AXILROD: I guess eventually but I
18	think you'd want I'm sure this thing is going
19	to evolve but you need to stop right you need
20	to stop the bleeding. And you know, so far not
21	much of what we've been talking about actually
22	affects the AIG type of situation which was the

1	largest single contributor of TOC derivatives to
2	the 2008 crisis. And this sort of thing does.
3	Right? If you have if you have the positions
4	and if they get very concentrated, which means
5	that the concentrated positions are sort of
6	dominating the portfolio, if you will, to relate
7	it back to the other discussion, the exotics are
8	now a large part of a systemically important
9	firm's portfolio. The next thing you want to know
10	is what's the valuation. Do parties agree and is
11	there collateral? And I guess the only the way
12	to do that is by having a separate collateral
13	reporting portfolio. I understand that
14	supervisors need to do their jobs, too, but I
15	agree. I'm sort of a belt and suspenders guy.
16	I'm not going to rely on one thing to prevent the
17	system from going under. Yes, it's very important
18	that prudential supervisors make sure that firms
19	do the type of risk management they're supposed to
20	do but I'd also like to have the suspenders as
21	sort of an early warning system. And it's
22	positions concentration values collateral, and if

you see those getting out of whack you've got a 1 problem. 2 3 I actually think --MR. WILL: MS. LEONOVA: I'm sorry. ON what level 4 are you tracking collateral? You have to tie it 5 to something. What are you tying it to? 6 7 MR. AXILROD: Oh, you're tying it to the portfolio because that's what the firms do. So, 8 but it's just going to be the case if you have --9 10 if you've written \$80 billion in notional exposure to mortgage securities and the rest of your 11 12 portfolio is, you know, \$10, \$20 billion, that's going to drive your collateral requirements. And 13 it's just because the firm's position is very 14 concentrated. So you'll be able to -- it doesn't 15 have to all be tied together perfectly in a nice, 16 17 you know, in an all singing, all dancing model 18 base system to get some use out of that. I think at a very rough level you need the basic data. 19 20 And as long as you have the basic data, some of 21 the things are just going to pop out at people. 22 And that's the stuff you'll get, you know, and

1	that's likely to be the most obvious stuff that's
2	going to create systemic risk. If there's stuff
3	you won't see unless you apply a very exotic,
4	fancy model, okay, so you'll miss it. What you
5	don't want to miss is this simple, obvious stuff
6	that just some basic informational sort of
7	throw in your face.
8	MR. WILL: Irina, I actually think you
9	do need two new categories of identifier. One for
10	the master agreement, one for the CSA.
11	MR. PRITCHARD: I think if it's helpful,
12	Irina, in our exposure management service, what
13	corresponds to the relationship most directly is
14	an agreement. That's when parties set up
15	something that they're going to resolve the
16	dispute over the exposure on, often the
17	relationship that they're modeling there is an
18	agreement, some kind of collateral agreement.
19	MS. GOLDMAN: Yeah, I mean, I would
20	agree with the points that you need to be able to
21	roll up your transactions under the appropriate
22	agreement and then apply the appropriate

collateral to that and sort of bring that
 altogether. And I think you also probably want
 the ability to then look at, you know, maybe
 separately the broader uncollateralized exposure
 in which case you might go back to the SDR to, you
 know, to pull that using again a common identifier
 to bring that picture together.

MR. MAGNUS: But the definition of an 8 agreement in that particular instance, Raf, is 9 10 just the fact that, let's say Morgan and Goldman again, using that example, have agreed that we 11 12 have an agreement and we're telling you that there's an agreement there. It's an ISDA Master 13 and you don't have any other information about 14 that agreement. 15

16 MR. PRITCHARD: Correct, yeah. For the 17 avoidance of that, that is true.

18 MR. MAGNUS: Yeah. And, you know, the 19 minimal amount of agreement you need to know is 20 this particular Morgan entity, this particular 21 Goldman entity, this is the agreement name and 22 this was the date it was executed.

1 MR. PRITCHARD: Yeah, I was just saying that's what it corresponds to. 2 3 MR. MAGNUS: Yes. 4 MR. PRITCHARD: We don't have any data 5 about it. MR. MAGNUS: Right. And that's the 6 important thing. And that is how we actually pull 7 portfolios together today, and that does work. 8 9 MR. TROZZO: You know, again, if you 10 look at it you're going to have, you know, we're going to take, without mentioning names, say 11 12 Counterparty A, Counterparty B. Their whole portfolio is going to be spread across the 13 relative SDRs. Whether there's multiple SDRs in 14 15 an asset class or one in each. But they're spread 16 across asset classes and multiple SDRS. Okay, so 17 first of all, the first step is you've got to find some mechanism and rule to net those. 18 That's 19 driven by an agreement. Okay? So there has to be 20 some connection there. I agree with Arthur that 21 this gets very (inaudible). It takes years to 22 build. No doubt about that. But maybe there is

some phase-in approach or first layers. 1 2 MS. LEONOVA: Okay, what is a phase-in 3 approach? That's what we're trying to get out of 4 you. 5 MR. TROZZO: We'll come back. But you have to connect those because there's been some 6 7 discussion on whether -- I think you need not only the transactions with the SDR and some rules too 8 net those which are driven by the master 9 10 agreements so you're going to need something from there. And it will then connect to a CSA which 11 12 should be housed in a separate warehouse. That's what we all agree. You need all those pieces. 13 Without all those pieces, regardless of whatever 14 phased-in timeframe it is, you will not have your 15 counterparty credit exposure. You will not have a 16 feel of systemic risk. So you need them all. And 17 the phase, you know, how do you phase it in? You 18 know, that starts getting into some of the other 19 20 points below regarding the technology and timeframes. 21 22 MR. WILL: I think you could have

1	actually parallel phased approaches for the CSAs
2	end also. I know I'm touching on ground I
3	shouldn't really go to in terms of master
4	agreements, but the master agreements.
5	MR. AXILROD: Can I just very quickly,
6	in terms of phasing in, I know you sort of want to
7	have the roadmap of where you're going but I think
8	to try to figure out what the end state is going
9	to look like now is just going to get people sort
10	of running around in circles. And I would say,
11	look, this is the most important thing is that we
12	need to get done in the next year, you know,
13	before year end or the first half of 2012. And
14	just fair warning, by the way, another shoe is
15	going to drop but we need to get some we need
16	to get some experience with this. And I would say
17	given, you know, the industry is just now trying
18	to deal with because they've been dealing with
19	SEFs and clearing and everything else. They're
20	just now sort of waking up to, oh, we've got all
21	these reporting requirements and it's a big
22	technical challenge. And they'll do it. I mean,

1 everyone's determined to do it but it's a technical challenge to get it done. So I think 2 for really through the middle of 2012, if you can 3 focus on getting accurate trade data into the 4 5 repositories and accurate data around, you know, collateral collected under CSAs into another 6 repository, that's going to be very difficult to 7 do but that will be a huge step forward in terms 8 of, you know, regulators' ability to oversee the 9 10 markets and their counterparties. And I think a lot of good would come of that. 11

12 MR. TAYLOR: Let me ask, I think you all are envisioning, and, you know, Bob is sitting 13 here on behalf of his members and a couple of the 14 members are here, you know, who will have to do a 15 16 lot of reporting, counterparty reporting. Ιt 17 sounds as though this vision would mean we are adding a reporting stream for the reporting 18 counterparty. You have to report the transaction 19 20 data, you know, that's required for the swap to an 21 SDR and you have to report to some collateral SDR 22 let's call it, collateral information. Am I right

1 that's what you're envisioning and can that be
2 done?

3 MR. MAGNUS: Well, I'd actually take a slight step back. Again, I use the words 4 5 "collateral" and "valuation repository" originally and intentionally because what you're looking at 6 is the exposure under -- is the master agreement 7 or any other master agreement. And first of all, 8 not everything is collateralized under it, so the 9 10 first question that you want to ask yourself if 11 you're looking at systemic risk is what is the 12 exposure, you know, that JP Morgan has to AIG if AIG were to default? I'll use AIG as an example. 13 If we did SpotFX with them or we do certain 14 15 transactions with them that are not covered by the CSA, they would never be in a portfolio just 16 looking at collateral or the collateralized risk. 17 So that's sort of one piece of it. 18

So what you really want to understand is what is our exposure to the counterparty, that's question number one. And then what is the amount of exposure under the CSA and what is the value of the collateral against it? You may additionally want the -- what is that collateral made up of, so you can look for other concentrations and things like that in the collateral, which, to me, that's a second order. Let's just get the first bit I just said first.

The linkages is going to be some kind of 7 a portfolio identifier, which will link to a legal 8 agreement. But we have to be careful what legal 9 10 agreement we do and we want to keep it very, very simple in its initial incarnation. But the reason 11 12 why we're recommending this is as a practical response to what you have in the NPR where you're 13 asking for valuation of collateral data because 14 15 you believe you need that for your supervisory 16 functions. And what we're suggesting is we would 17 rather do it that way in a single repository where we can give you it on a portfolio level, which is 18 a logical way to make sense of it, than a 19 20 transactional level where we would only be able to 21 do it arbitrarily and we can't provide that information in a useful manner. 22 So to us, we're

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1 trying to help you get to a solution that we think is a practical solution to achieve what you want, 2 but we're also trying to say yeah, but don't make 3 us give you information at a transactional level 4 5 that doesn't make sense. MS. LEONOVA: Okay, going to portfolio 6 7 level data, do you propose universal reporting of the portfolio level or only on the levels for 8 dealers and MSPs? 9 10 I'm sorry, when you say as MR. MAGNUS: a swap dealer would we have to report on all our 11 counterparties or are you saying --12 13 MS. LEONOVA: No, I'm saying --14 MR. MAGNUS: -- everybody who plays in 15 the market? 16 MS. LEONOVA: You're here talking about 17 portfolio valuation, (inaudible) house, whatever we are calling it right now. Are we talking about 18 universal reporting requirement of all 19 20 counterparties or are we talking about reporting requirements imposed only on swap dealers and MSPs 21 22 who actually have large portfolio exposures --

1	MR. MAGNUS: I would certainly recommend
2	that only sophisticated players would be able to
3	do that. Many of the smaller players rely on
4	their dealers to actually provide that information
5	to them anyway, and to impose on that portion of
6	the market the technical requirement that they go
7	and provide that doesn't, to me, feel like it
8	makes a lot of sense. I would
9	MS. LEONOVA: How much market do you
10	believe it can recover?
11	MR. MAGNUS: Well, we if you get
12	if most of the deals today are between a swap
13	dealer and other players in the marketplace,
14	there's very little there's very few deals that
15	I'm aware of between and maybe Bob has industry
16	data that I don't have privilege to, between let's
17	say in between MSPs or between MSPs and end users
18	by using your definition.
19	MR. AXILROD: Outside of commodities.
20	MR. MAGNUS: Outside of commodities.
21	And again, I'm talking derivative transactions,
22	not physical. So even commodities I would argue

1 that, when you talk about derivatives, they're generally between executing brokers or dealers. 2 3 So I think if you had the dealers doing the reporting, you would capture the vast majority 4 5 of the transactional data, most of the risk. Ιf you discover through the trade repositories, which 6 will have all of the transactions and all the 7 positions that parties have, that there are 8 players who are doing deals with each other that 9 10 are not reporting to this portfolio level 11 collateral and valuation repository, then I would 12 suggest they might be more systemic than they've let on to. Maybe they should be registered as an 13 MSP, and that's a different dialogue which you as 14 15 a prudential regulator can go and have a conversation with that about. 16 17 MR. TAYLOR: Let me do a follow-up to 18 Are you all suggesting, you know, as part that.

19 of the continuation data that we wanted to get 20 over the existence of a swap, we were asking for 21 valuation data, are you suggesting that all of 22 that valuation data reporting ought to go into

1	this collateral SDR rather than into the regular
2	SDR, if I may call it that? You know, unpack
3	that. And then you might also talk about, I mean,
4	you know, the statute has this setup where one
5	counterparty reports, it's not two. And I heard
6	you all saying, you know, it'd be nice to know the
7	view of each counterparty about what the
8	collateral is worth. How do we deal with that?
9	MR. PICKEL: Yeah.
10	MR. TAYLOR: Go ahead, Bob.
11	MR. PICKEL: Well, I was going to say
12	that I think, you know, realistically, you know,
13	once the trades are on, they're being managed, as
14	we've talked before, as part of a portfolio, so it
15	really is this portfolio level information.
16	Because you're going to have thousands of trades
17	potentially underneath the master agreement,
18	governed by the master agreement, and they're all
19	going to be, you know, fluctuating in value based
20	on market prices versus the price of the contract.
21	You're going to be looking at your exposure across
22	all those on a netted basis. You're going to be

calling for collateral on that basis. So, yes,
 actually I think it probably is far more relevant
 to be looking at that valuation at that level than
 to be valuing every single contract as
 contemplated.

MR. PRITCHARD: And I think, you know, 6 7 from the current industry practice, a huge amount of the industry is currently comparing their 8 exposure and reconciling their values of the live 9 10 contracts. If, you know, we are piloting some 11 parties who want to reconcile the collateral held 12 in respect to that is a newer addition to that 13 service. But we're seeing 6 million live contracts on a regular basis being -- having their 14 15 values reconciled centrally.

MR. WILL: I guess what would be interesting actually is to see whether the parties agree in terms of the events that trigger the obligation to post collateral (inaudible). I mean, it's something that doesn't happen in the legal agreement area, so to speak. With confirms, you know, you have a reconciliation agreement

1 between the parties, but currently you have -there's not very much translation of the text into 2 data, so it's very difficult for the parties to 3 actually reconcile their particular views. 4 5 MR. AXILROD: I guess I would take -- I know I'm owned by the community generally, not the 6 banks, but the banks, the investment managers, and 7 so forth and so on, and the custodians, but I'll 8 risk taking a somewhat contrarian view. I'm just 9 10 going to note that it's not incoherent to report trade level valuations or position level 11 12 valuations, if you will. That's not incoherent. You know, individual positions are valued. 13 There's a lot of them and, as Raf noted, a lot of 14 15 people report them anyway to various service 16 providers. Banks report them to their customers,

17 so forth, and so on.

You can't deal with collateral that way because collateral relates only to the entire portfolio. So let me just leave it there. It's certainly possible to, you know, sort of report market-to-market for each position that's in a 1 repository. I think there's a lot of use for it. 2 I don't know how -- I'll let others address, you 3 know, whether that should be phase one or phase 4 two.

5 MS. LEONOVA: If I may follow up on your 6 comments. So before you mentioned that when there 7 is a difference between collateral and net 8 exposures, then we have a problem. If you do a 9 de-evaluation on a transactional level, what is 10 the margin of error when we start to pull it all 11 together that gets exposure?

12 MR. AXILROD: Well, I was going to say, you know, you've got the exact same problem with 13 cleared transactions, right? Cleared transactions 14 are valued daily, but the initial margin is 15 collected on a portfolio basis. It's the same 16 17 thing. And if you want to start looking, when you see something alarming, the first thing you're 18 going to ask yourself -- and you can either call 19 20 someone up or it could be right at your fingertips 21 -- is, wait, there's a big disparity between the 22 portfolio value and the amount of collateral. The

first thing you want to look at is what's making 1 up the portfolio and what's the value of the 2 pieces of the portfolio? 3 MR. TROZZO: I would just comment that 4 5 -- this is Pat Trozzo from Reval. If you just look at and have data reported on the portfolio 6 level, yes, collateral, I agree, is posted on a 7 portfolio level. But then the Commission or the 8 users of this information would lose some data, 9 10 would lose some information. You talk about, you know, for an example looking at potentially 11 12 concentrations. What caused this net exposure? You might find in many cases you could have 1,000 13 transactions between 2 dealers and you might find 14 some small fraction of those make up 90 percent of 15 the exposure. You would lose that if you don't 16 have it on a trade-by-trade basis. 17 18 MR. TAYLOR: So I think I hear you all saying leave the transaction level valuation 19 20 reporting that we asked for, add collateral 21 reporting to a collateral SDR. 22 MR. PRITCHARD: Because one opportunity

1	there, David, is that you can cross-check between
2	the two. You could see some of the exposures at
3	the transaction level and see the alleged total
4	exposure on the relationship level.
5	MR. MAGNUS: I think, again, you have to
6	look at holistically how all these different rules
7	fit together. And the way the SDRs are being
8	defined is they're one-sided reporting, not
9	two-sided reporting, the way we report to you
10	today, Raf. And so the valuation and there's
11	another NPR out there on portfolio reconciliation
12	which the industry very much supports. We've been
13	pushing portfolio reconciliation for a while to
14	get at the disputes that underlie that.
15	We volunteered and we have already
16	delivered information to supervisors where there
17	are disputes in our portfolio. The regulations
18	will probably require us to do more reporting on
19	that. Our prudential regulators are going to be
20	checking that we are capturing that information
21	because it's now enshrined in Basel III. So
22	there's a whole bunch a panoply of things to

1	make sure that these portfolios are accurate and
2	tie-up. The question is what are you looking for?
3	And I want to be careful when you talk
4	about collateral, Peter. There's the exposure,
5	the net exposure, between two parties on a total
6	portfolio basis. There is the gross
7	collateralized exposure, i.e., the exposure I
8	would have to you, Peter, without any credit
9	support. And then there's the amount of
10	collateral supporting that agreement. And there
11	may be a difference because of things in the
12	agreement or whatnot.
13	The point you're making, which I think
14	is really the valid one, banks take risks every
15	day. That is what we're in the business of doing.
16	The question is, are we controlling those risks?
17	Are we managing it well?
18	And a certain amount of risk is okay and
19	you want to have the information available to
20	prudential regulators so they ask the right
21	questions. Had this type of reporting that we

22 have today without these repositories been in

1 place back a couple of years ago, the prudential regulators would have said, my god, you have a 2 3 huge exposure to AIG, tell us more about it. And we would have had a very interesting conversation 4 5 and they would have started learning all kinds of interesting things that they wouldn't have been 6 very happy with. And they would have had much 7 more visibility on that long before it became a 8 headline. 9

10 So I'm in total support, but I'm not 11 sure you necessarily want that market-to-market 12 information on a transactional basis. I don't think you need it. I do think we do need to do 13 reconciliations of portfolios, which we are doing 14 and the industry supports. And I think the most 15 important thing you need to look at from a 16 17 systemic point of view are the big numbers and use that to drive the conversations that you have with 18 the entities that you're regulating. 19 20 MR. AXILROD: I guess it depends on how

21 quick a reaction that you want, right? I think22 that, you know, the more -- if it's not too hard

1	to provide those marks, and it must not be because
2	you're providing them today, you know, I guess the
3	question is, that information could be valuable
4	because you could relate it to, you know,
5	concentrated positions or so forth. And I guess,
6	you know, whether you need it or not, it's likely
7	to be a building block to something else, maybe
8	you could do it later. All I'm saying is it's not
9	incoherent to ask for it at the position level.
10	MS. GOLDMAN: Yeah. The only thing I
11	would argue is, you know, to the extent that it
12	ends up being needed based on sort of triggering
13	
14	MR. AXILROD: Yeah.
15	MS. GOLDMAN: a conversation that
16	that information should be deemed readily
17	available, you know, to the regulators upon, you
18	know, an inquiry, so.
19	MR. AXILROD: Yeah.
20	MR. WILL: Are you saying that they have
21	to come to you or you go to them with the
22	information?

1 MS. GOLDMAN: It would be them coming to 2 us. 3 MR. WILL: Okay. 4 MR. MAGNUS: We go to our regulators 5 every day and give them tons of reports about our positions, our large positions, and a whole bunch 6 of other reports that our prudential regulators 7 get on our credit exposures. So they have that 8 information available. 9 10 MR. WILL: And I think what's 11 interesting here is there's much talk about 12 exposure, but what I'm particularly concerned about having been a lawyer is potential exposure. 13 You know, what's actually going to happen just 14 15 around the corner? You as regulators really need to decide what level of interest you have in that. 16 17 MR. TROZZO: Well, if I may, that's what 18 I was trying to comment on before, defining what you mean by looking at and monitoring and 19 20 measuring systemic risk. What is being put 21 forward currently in the rules is can it lead to a 22 measure and monitoring of systemic risks? But as

1 it's written right now it's limiting to current exposure and not saying something like "potential 2 future exposure" or some other method. Not that 3 I'm necessarily saying you have to do that, but it 4 5 is -- right now you are limited to one specific form. 6 7 MR. MAGNUS: But I would just -- again, I'm not sure Dodd-Frank actually suggests that we 8 would be required to report potential exposure of 9 10 these data stores. We do calculate it, we do 11 provide that information to our prudential 12 regulators already in numerous forms and it is reviewed again as part of our capital 13 calculations. 14 MR. AXILROD: No, Arthur, I agree. And, 15 again, I'm not suggesting it. All I'm just 16 17 pointing out, as currently written, you are limited to this one form of exposure. That's all 18 19 I'm saying. 20 MR. PICKEL: And I would get back, I 21 mean, I don't know the -- what people here may 22 mean by "potential future exposure," that, you

1 know, typically in the Basel context means some estimation of how prospective market price 2 fluctuations may affect your exposure. Mike's 3 talking about, you know, what's embedded in the 4 5 contract that given circumstances might, you know, spring to present an issue. And there I think 6 it's important for -- again, I get back to the 7 prudential regulators. It's important for them to 8 understand and to grill, frankly, their regulated 9 10 entity, where do you have these types of triggers? Where do they exist? Who are they -- which 11 12 counterparties are they with? Where are these areas of potential concern? So that the 13 regulator's alerted to where those things might 14 15 pop up in the future. 16

MR. WILL: I would prefer instead of the term "grill," perhaps "learning." (Laughter) I mean, a serious point here, there is actually a lot of expertise available around this table in terms of risk management, et cetera, and I would encourage you to learn as much as you can from everybody here and also from the law firms,

1 frankly, because they're looking at these as users as well. 2 3 MR. PICKEL: I mean grill. (Laughter) MR. TAYLOR: Let me ask one more 4 5 question as quickly as we can about collateral warehouse, and then just have to ignore the other 6 We'll shift over to master agreements horse. 7 before we're done here. 8 This was the last question on the list, 9 10 but in this picture of a collateral SDR that we have begun to talk about, are you all envisioning 11 12 that it's doing anything more than having a warehouse function with this data? And then the 13 question was, if there's more, does that transform 14 that warehouse into some sort of SRO? 15 16 MS. GOLDMAN: I would just say I think 17 part of the reason why we're kind of labeling it as opposed to a "warehouse," a "repository" is 18 19 because the expectation that it's not doing a 20 whole lot more than just the sourcing of that --21 MR. TAYLOR: Okay. 22 MS. GOLDMAN: -- and just the ability to
1	aggregate, you know, across the balances that end
2	up being in there.
3	MR. TAYLOR: So you're not seeing it as
4	an SRO.
5	MS. GOLDMAN: Right.
6	MR. TAYLOR: It's just the data's there
7	and the regulators can't use it.
8	MS. GOLDMAN: Yes.
9	MR. AXILROD: I would say no. You know,
10	it's there. It's going to be a big task to get it
11	there.
12	MR. MAGNUS: I also think there are
12 13	MR. MAGNUS: I also think there are enough systemic and prudential regulators and, for
13	enough systemic and prudential regulators and, for
13 14	enough systemic and prudential regulators and, for that matter, as we do push-out under Dodd-Frank,
13 14 15	enough systemic and prudential regulators and, for that matter, as we do push-out under Dodd-Frank, there'll be other SROs and other bodies who will
13 14 15 16	enough systemic and prudential regulators and, for that matter, as we do push-out under Dodd-Frank, there'll be other SROs and other bodies who will be looking at that data and have an interest in
13 14 15 16 17	enough systemic and prudential regulators and, for that matter, as we do push-out under Dodd-Frank, there'll be other SROs and other bodies who will be looking at that data and have an interest in that data, who will look for concentrations and
13 14 15 16 17 18	enough systemic and prudential regulators and, for that matter, as we do push-out under Dodd-Frank, there'll be other SROs and other bodies who will be looking at that data and have an interest in that data, who will look for concentrations and other issues that they might find in that data.
13 14 15 16 17 18 19	enough systemic and prudential regulators and, for that matter, as we do push-out under Dodd-Frank, there'll be other SROs and other bodies who will be looking at that data and have an interest in that data, who will look for concentrations and other issues that they might find in that data. So I certainly would not suggest that the

would also suggest that you don't just call it collateral." What we're really talking about is rexposure and collateral" or "valuation and collateral" or something along those lines because it is more than just collateral information that we're suggesting you put in there.

7 MR. TAYLOR: All right. Let's shift the 8 discussion -- we have a bit of time left -- to the 9 master agreement issue. Should there be a master 10 agreement library of some sort? How should we 11 handle -- you know, what information about master 12 agreements do we need and how should we get it?

13 MR. WILL: Lots. I think it's critical that we do actually have a master agreement 14 library. We'll come on to whether it actually 15 should be combined with a collateral library. But 16 17 the master -- credit report agreements and confirmations constitute a single agreement. And 18 we're coming up to the Oscars, so I'm going to 19 20 give you a very interesting analogy here. 21 In many ways, an ISDA relationship is

22 like a Hollywood movie. It has a script, it goes

1	through many drafts, it gets heavily negotiated.
2	There's a cast of characters, and there's one or
3	more events that can place these characters into
4	jeopardy and, of course, there are consequences
5	that flow from these events. So let's take a look
6	at the cast of characters. It's more than just
7	the party executing the contract that you need to
8	be concerned about. I characterize these guys
9	really as the parties in the leading role.
10	There are characters in a supporting
11	role that can actually trigger a default or some
12	kind of event in relation to the master agreement.
13	These might be a credit support provider, a
14	guarantor, or someone providing a form of
15	security. And also this category known as
16	"specified entities." These are third-party
17	entities, frequently established in different
18	jurisdictions, whose fortunes are closely
19	correlated to those of the contracting party
20	itself. Now, there might be no specified entities
21	for a particular agreement, but there can be
22	sometimes four or five specified entities and it

can go even broader to all affiliates. So if
 you're a large organization it might that a
 default on payment of a bond will trigger some
 pretty significant consequences for you in terms
 of the master agreement.

The point to take away here is the 6 relationship of necessity establishes a complex 7 web of interconnectedness that can extend to 8 entities other than the contracting parties. So 9 if you're going to effectively monitor systemic 10 11 risk, then you need to know with a great deal of 12 specificity for any given relationship precisely 13 who is connected to whom. Access to master agreement data will provide that particular aspect 14 15 of transparency.

MR. PICKEL: I guess I'd have to say I agree with everything that Mike says and I disagree with his conclusion. I don't know -- I don't see why the need for all that information -and it is very important information and every one of these institutions who engages in derivatives activity ought to be charged with making sure that

1 they have that information, they understand all those details, but I just don't see why that has 2 to be put into some central repository. I don't 3 know what that gains the system. I don't know 4 5 whether that gains the CFTC in its oversight. But certainly, again, grill or hold people to the 6 charge, they need to have that information and 7 they need to be able to access it and they need to 8 use tools that may be available to them to 9 10 facilitate the access to that information. I just don't see why that leads -- the need for that 11 12 leads to a central data repository of master 13 agreements.

14 MR. WILL: I mean -- sorry. There's 15 currently a proposal for an affiliate's database that's going to be accessible, I believe, on a 16 private basis. If you maintain that affiliate's 17 18 database, if everybody has to report all their 19 affiliations, then you might actually get an inaccurate picture because you may assume that 20 21 everybody is associated with a particular master 22 agreement when, in fact, it's just a small subset

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1 of entities that are associated with that particular master agreement. So if you really 2 want to understand who's connected to who, I think 3 you do need to go to that level. But I do take 4 5 Bob's point about the effort involved in that. MR. TAYLOR: Since there are two views 6 about that let's explore a little bit. If we need 7 information about master agreements, but we assume 8 for the moment in arguendo that it's too costly, 9 10 too burdensome to put it all into some master agreement SDR, how do we get that information? 11 12 Does master agreement information somehow need to flow into a regular SDR with the transaction 13 information or what? 14 15 MR. AXILROD: I would say no to flowing That's even harder, I think, to have it 16 that in. flow in with the trade information. Because 17 18 typically today, the way trade information works when it's submitted to a repository or a confirm 19 engine is that one agreement is referred to, 20

21 sometimes it a master confirmation agreement,

22

sometimes it's a master confirm, it's whatever the

1	lowest level master agreement is. That agreement
2	actually refers then to you can chain then
3	through agreements to find all of them.
4	But I guess I agree that, you know, when
5	you want when something else is ringing an
6	alarm bell you want a pretty good basic alarm
7	system when something else is ringing the alarm
8	bell, you know, the market participants should be
9	able at a moment's notice to tell you here's how
10	it works.
11	MR. PICKEL: And, again, I think that
12	that's certainly true, you know. The question's
12 13	that's certainly true, you know. The question's whether that's a before the fact or an after the
13	whether that's a before the fact or an after the
13 14	whether that's a before the fact or an after the fact or not the fact, but is there a way to get
13 14 15	whether that's a before the fact or an after the fact or not the fact, but is there a way to get that information when you need it? And do you
13 14 15 16	whether that's a before the fact or an after the fact or not the fact, but is there a way to get that information when you need it? And do you rely on the fact that you're regulating these
13 14 15 16 17	whether that's a before the fact or an after the fact or not the fact, but is there a way to get that information when you need it? And do you rely on the fact that you're regulating these entities and you've got requirements for them to
13 14 15 16 17 18	whether that's a before the fact or an after the fact or not the fact, but is there a way to get that information when you need it? And do you rely on the fact that you're regulating these entities and you've got requirements for them to have the procedures in place, to understand what
13 14 15 16 17 18 19	whether that's a before the fact or an after the fact or not the fact, but is there a way to get that information when you need it? And do you rely on the fact that you're regulating these entities and you've got requirements for them to have the procedures in place, to understand what their exposures are, and have the details that

MS. LEONOVA: So say it's nice to have,
 but it's not critical.

3 MR. PRITCHARD: Yeah. As a repository, I think, to agree with Peter, we wouldn't see 4 5 ourselves as a great channel for you to receive master agreement information. I mean, as Melissa 6 characterized it as an exotic, it's very hard to 7 summarize sort of the primary terms of a master 8 agreement. You either have the detail or you have 9 10 nothing at all. And as a repository it's kind of 11 far from what we're managing.

12 MR. TROZZO: But I would think at least at a minimum level, you know, one of the first 13 keys of the agreement is to decide with all this 14 data across the various SDRs between two 15 counterparties is it netables and not netables? 16 What is netables? Those little first level 17 18 definitions are in the agreement. So at a minimum 19 you need that, so you have a roadmap to decide 20 what do you -- and it's tracked against each 21 other.

MR. MAGNUS: But, again, we're providing

22

the portfolio level netting --1 MR. TROZZO: Well, that's assuming if 2 you provide it on portfolio level. 3 MR. MAGNUS: Well, but I'm going to 4 5 assume that they're going to do that because while a master agreement may specify the netting that is 6 theoretically allowed in the event of bankruptcy 7 of a counterparty, it will only be if the 8 bankruptcy regime in that country allows it that 9 10 it happens. So one of the other factors, for example, that a firm like mine uses is we have 11 12 confidence factors around both the ability to perfect a security interest in collateral and the 13 netting opinions for different jurisdictions. 14 And when we have multijurisdictional agreements, which 15 we do frequently with certain types of 16 17 counterparties --18 MS. LEONOVA: Arthur, may I clarify? So 19 what you're saying is that your portfolio exposure already is kind of having built-in netting 20 arrangements that are in (inaudible)? 21 22 Yes, we've done the math MR. MAGNUS:

1	for you taking into factors that are both in the
2	agreement and our business judgment or our legal
3	judgment and the legal opinions that would allow
4	us to manipulate that data.
5	MR. TROZZO: But then
б	MS. LEONOVA: And what makes you think
7	that you're right?
8	MR. MAGNUS: Well, one, we are
9	supervised and these calculations and whatnot are
10	reviewed on numerous bases. Many of the legal
11	opinions have actually been reviewed and are built
12	by the industry by law firms around the world and
13	are put together by ISDA. But as any of the
14	lawyers in this room would probably tell me,
15	nothing in law is absolutely certain until it gets
16	before a judge, which is why we look at data on
17	both a net and a gross basis.
18	MR. TAYLOR: And if you think it's
19	certain then, you're smoking something.
20	(Laughter)
21	MR. MAGNUS: That's also true.
22	MR. TROZZO: True. But if I again, I

1 think we're mixing a little two different things here. 2 3 MR. MAGNUS: Yeah. I agree. If the rules 4 MR. TROZZO: 5 state that you're reporting valuations on a net portfolio basis between two counterparties, 6 whoever the reporting counterparty is, reporting 7 entity, then that's fine. But if you -- within 8 the rules right now, you're reporting valuations 9 10 on an individual transaction basis. So if that 11 stands, you need to have some roadmap of deciding 12 what you add and what you subtract. And that's the only point I'll make. 13 14 I mean, there's actually an MR. WILL: 15 important point here is the existence of a master agreement in the CSA doesn't necessarily mean that 16 17 that agreement's going to be enforceable. So if you want to add an extra layer of complexity here, 18 you actually start to have to go and look at legal 19 20 opinions, something very close to my heart. 21 MR. AXILROD: Yeah. I mean, you can 22 sort of imagine a process that might work over

1	
1	time. I mean, if these CSAs are standardized
2	enough and they're enough accepted legal opinions,
3	right, CCPs in some jurisdictions are in the same
4	place as normal counterparties. In the U.S.,
5	they're not they all have to get opinions sort
6	of for each jurisdiction that their counterparties
7	are in. All the banks get opinions with respect
8	to each jurisdiction that their counterparties are
9	in. A lot of these are published. So if you get
10	to sort of, you know, a set of standard CSA
11	positions and standard sort of jurisdictions in
12	which we're not too worried about closeout risk
13	and the courts won't allow you to net, then
14	there's something useful in understanding where,
15	due to some relation or other, somebody isn't
16	following that standard. It's a good client of
17	mine; I'm not following the standard. I'm talking
18	off the top of my head, but I think it requires a
19	lot more information gathering even to know how
20	you could make this useful.

21 MR. PICKEL: I would point out we have a 22 very good model for this. It's the Basel process.

1 In the early 1990s, they recognized closeout netting under the ISDA contract -- well, not the 2 ISDA contract, under an industry master agreement, 3 so long as there were legal opinions obtained and 4 5 updated annually. And we've provided access to those opinions to many regulators around the 6 world; happy to do so with the CFTC and the SEC. 7 But the regulators rely on the banks to do the 8 analysis on the legal opinions subject to the 9 10 regulators again questioning them, probing them, grilling them, and asking them why they feel in 11 that particular circumstance, with that 12 counterparty and that jurisdiction, they feel that 13 that opinion is of a sufficient level of certainty 14 15 that they can net. So that process has worked. And, I think, let's reflect on the fact 16

17 that whatever the situation with AIG was, this
18 architecture is there, it works. Yes, there are
19 questions in terms of making sure that you've got
20 the legal opinions. And we're happy to, you know,
21 work with the Commissions to help them understand
22 what exists and how it has worked very well and

how it can work, you know, well under the new
 structure going forward.

3 But I think if we start -- Mike, if we start saying, well, you know, the agreement might 4 5 be, you know, subject to -- you got to -- it may be subject to question until you get all these 6 legal opinions, that's all built in already. 7 Let's not suggest that there's some question as to 8 the enforceability of these contracts. Otherwise, 9 10 we've got a serious, serious problem here, Mike. MR. WILL: I'm not saying that, Bob. 11 12 Believe me, I'm not saying that. 13 MR. PICKEL: I'm sure you're not because you've worked too closely with us over the years. 14 15 MR. WILL: Yes. No, absolutely, and I 16 designed --17 MR. PICKEL: But let's not suggest that 18 there's some doubt. 19 MR. WILL: No, I'm not doing that. 20 It's -- I'm trying mostly MR. TAYLOR: 21 just to ask questions, but let's put it this way: 22 If you assume for a minute -- and I do -- if you

1	look at the recordkeeping rules, basically they
2	say you have to keep records of anything that has
3	anything to do with your business in swaps, and
4	you have to be able to produce them when asked
5	a fair enough summary that would mean master
6	agreements are available to regulators for the
7	asking if something else says to them, gee, we
8	need to go look at this master agreement. Does
9	that sound satisfactory to you all as opposed to
10	getting them all in a warehouse somewhere?
11	MR. MAGNUS: Yes. I would say yes and I
12	would say we actually have those requirement today
13	because there are other rules, at least for
14	dealers, that require us to keep documents and
15	whatnot for periods of time. And so we have them
16	and we do produce them for our prudential
17	regulators today and we could product them for
18	you.
19	MR. WILL: I should say that'll be a lot
20	of pages that you'll have to review, so you won't
21	be able to access the data immediately. And the

22 one thing you might want to think about is if

1 you're dealing with a dealer in distress, for example, and you have to come in and regulate that 2 3 particular entity, you're going to be reading a lot of paper. It might be better to have the data 4 5 available even if it's not reported to you in that particular circumstance. 6 7 MS. GOLDMAN: Yeah, I would just add you're reading the data and then you're 8 interpreting the language as well in terms of, you 9 10 know, what the representation means. 11 MR. TAYLOR: Maybe we'll send the 12 prudential regulators. 13 We've bled a little bit into our O&A time, which, again, I don't mind because it's not 14 15 an active question- asking audience. But I will say if anyone's got any questions for this panel 16 17 or that you'd like us to kick around, please feel 18 free to come to a mic. There are a couple out 19 there. Anyone? 20 Is there more? 21 MS. LEONOVA: Okay. Any final comments? 22 Any burning issues that you want to utter right

1	now? Of course, Mike, you have it. (Laughter)
2	MR. WILL: Actually I apologize. I
3	always have to have the last word. What I would
4	actually like to just pose is whether it actually
5	would be a good idea to combine the collateral
6	warehouse with the master agreement warehouse. I
7	personally think that in certain circumstances the
8	credit support agreement is actually deemed to be
9	part of the master agreement, and consideration
10	should be given to actually merging the functions
11	together.
12	MR. TROZZO: I agree.
13	MR. MAGNUS: Again, I think there are
14	terms that are in agreements that are very hard to
15	quantify and put in there, and so you'll never get
16	a complete characterization that you can
17	standardize and put into a repository and know
18	that if you're looking at it in the repository
19	with the attributes that were specified, that you
20	have the correct interpretation and there isn't
21	something else. These are bilateral contracts
22	between people. And yes, they do follow a

1	standardized template, but they are allowed to
2	and they do contain customized terms.
3	And I will tell you that one of the
4	several functions that I do at JP Morgan is I run
5	our credit risk middle office and I support a lot
6	of our credit executives. And the moment a name
7	gets into distress we have a procedure that we
8	follow. And one of the first things we do is we
9	pull the master agreements and get the lawyers to
10	look it over to see what's in it. And we do not
11	rely on the (inaudible) that we've done of that
12	agreement because it's just too much of a risk at
13	that moment in time when that event occurs to rely
14	on any interpretation that might have been done
15	three years ago.
1	

So I think that the right approach -and certainly at the onset of this so as not to create a burden, and we have enough things that we have to do -- is to focus on that which we have to do, get the high-level information to sound the alarm bells as a first step. And we can come back and we can explore with you, you know, when we're 1 all a little bit more calm and not writing -- I
2 forget how many rules are being written, and we're
3 implementing those rules. We can then go back and
4 calmly figure out what we want to do.

5 I also think, in a couple years, the landscape is going to look very different than it 6 does today. There'll be a lot more in the 7 clearing sector, which will be governed by much 8 more standardized agreements because of the very 9 10 nature of clearing than the bespoke agreement. And that might yield different risks or different 11 12 things that we might think are important. And so we shouldn't jump the gun and do that. 13

14 I think we definitely have to recognize 15 that master agreements exist; that's how we define our portfolios. But beyond the existence of the 16 17 master agreement, I think you need to rely on, in a crisis, getting those master agreements and 18 require, you know, the prudential regulator firms 19 20 will look at it. And there are technologies 21 available that, theoretically, look at this stuff 22 and get it in different ways. But I still think

1	nothing is going to change that in a crisis we're
2	going to have a lawyer review the agreement.
3	MR. TAYLOR: If nobody else has anything
4	substantive, I do have one thing I'd like to close
5	with, and I address this there are people in
6	the audience who are on panels and all of you
7	in the audience for that matter, but I
8	particularly address it to the panel. We've had
9	this conversation with a few people during the
10	breaks, but I just thought I would emphasize it.
11	It seems so obvious to us, but you all may not
12	think of it this way.

13 The comment period for our rule closes on February 7, and the effect legally is that 14 after February 7 we go behind a curtain and we 15 can't talk to you anymore. So if there is any 16 17 input that you would like to give us beyond what you've said here today, please send us comment 18 19 I mean, feel free. I mean, I'm asking letters. 20 for an increase in our workload, but it's going to 21 actually be very valuable. I mean, no matter how 22 valuable it is, after February 7 we can't get it,

1	so I encourage you. You have positive/negative
2	comments about, you know, any of the issues we've
3	talked about today, please do send things in.
4	MR. WILL: Well, I, for one, now know
5	who the Wizard of Oz is.
6	MR. TAYLOR: I'm sorry?
7	MR. WILL: I, for one, now know who the
8	Wizard of Oz is.
9	MR. TAYLOR: Pay no attention to the man
10	behind the curtain, yes.
11	MS. LEONOVA: Again, I thank you very
12	much for making this trip to Washington, D.C., in
13	such horrific weather. We greatly appreciate your
14	time and look forward to hearing from you again.
15	MR. TAYLOR: Thank you all.
16	(Whereupon, at 4:55 p.m., the
17	PROCEEDINGS were adjourned.)
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CERTIFICATE OF NOTARY PUBLIC 1 2 DISTRICT OF COLUMBIA I, Christine Allen, notary public in and 3 for the District of Columbia, do hereby certify 4 5 that the forgoing PROCEEDING was duly recorded and thereafter reduced to print under my direction; 6 that the witnesses were sworn to tell the truth 7 under penalty of perjury; that said transcript is a 8 true record of the testimony given by witnesses; 9 10 that I am neither counsel for, related to, nor employed by any of the parties to the action in 11 12 which this proceeding was called; and, furthermore, that I am not a relative or employee of any 13 attorney or counsel employed by the parties hereto, 14 15 nor financially or otherwise interested in the outcome of this action. 16 17 18 19 Notary Public, in and for the District of Columbia 20 My Commission Expires: January 14, 2013 21 22