

FIX Global Exchanges and Markets Committee Risk Limits Extension

September 30, 2010

Revision 0.5

Proposal Status: Approved

For Global Technical Committee Governance Internal Use Only							
Submission Date:	August 19, 2010	Control Number:	EP128				
Submission Status	Approved	Ratified Date	Nov. 11, 2010				
Primary Contact Person:	Hanno Klein	Release Identifier:	FIX 5.0 SP3				

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Document History

Revision	Date	Author	Revision Comments
0.1	2010-07-16	Hanno Klein, Group Deutsche Börse	Initial version
0.2	2010-07-26	Hanno Klein, Group Deutsche Börse	Changes based on GExMC review on July 26
	Aug. 19, 2010		Rev. 0.2 submitted to GTC
0.3	2010-08-26	Hanno Klein, Group Deutsche Börse	 Changes based on GTC review on Aug 19 Addition of incremental updates for risk limit reports Addition of transactional workflow (add/modify/delete and approval) for risk limit definitions Extension of workflow descriptions Addition of multiple examples
0.4	2010-08-31	Hanno Klein, Group Deutsche Börse	Changes based on GexMC review on Aug 30 Clarified usage of RiskLimitID vs <partydetailgrp></partydetailgrp> Aligned risk limit status with AllocStatus concept Changed risk limit result values Added reject text field
0.5	2010-09-30	Hanno Klein, Group Deutsche Börse	Finalized version for public review, preliminarily approved by GTC on Sep 29 for public review
0.5	2011-08-22	Jim N	As Built
	November 27, 2011	L. Taikitsadaporn	Edits to clean up wording of field usage and DD descriptions. Change all FIX message name references to camel case thoughtout document. Replaced "TBD" with actual assigned tag numbers or enum values.
	January 23, 2012	R. Shriver	Per jira SPEC 592, made minor revisions to RiskLimitRequestType(1760) comments in PartyRiskLimitsReport(35=CM).

1 Introduction

FIX protocol already supports Party Risk Limits (see EP105 – Parties Reference Data Extensions). Existing messages are designed only for static data related to limits, assuming that breaching a limit is tied to a single type of action, e.g. the rejection of any further trading activity.

No messages for dynamic data related to the current risk exposure are defined yet, i.e. where am I compared to my risk limit? Warning levels are supported at pre-defined percentages of the risk limit but not for absolute amounts. Also, risk limit types can only be based on positions but not on margin requirements calculated from these positions. Current messages don't allow to define actions after a limit or a warning level has been breached. It is also not possible to set risk limits from the outside, one can only ask for and receive the current risk limit settings.

This document proposes the following extensions:

- 1. Support for incremental risk limit reports
- 2. Support for risk limit utilization (consumption) information
- 3. Support for limits based on margin requirements
- 4. Support for actions to be taken when limits and/or risk warning levels are exceeded
- 5. Support for warning levels expressed as amounts and not only as percentages
- 6. New messages for risk limits definitions

The proposal addresses

- 1. Enhancements to:
 - RiskLimitTypesGrp (component block)
 - RiskWarningLevels (component block)
- 2. New component blocks:
 - PartyRiskLimitsAckGrp
 - PartyRiskLimitsUpdateGrp
- 3. New messages:
 - PartyRiskLimitsUpdateReport
 - PartyRiskLimitDefinitionRequest
 - PartyRiskLimitDefinitionRequestAck

2 Business Workflow

The goal of this document is to extend FIX protocol to support following the business scenarios.

2.1 Party Risk Limits Request and Report

The following gives an overview of the PartyRiskLimitsReport message components and the proposed new fields.

[Root level]	- add RiskLimitRequestType
<partyrisklimitsgrp></partyrisklimitsgrp>	
<partydetailgrp></partydetailgrp>	
<relatedpartydetailgrp></relatedpartydetailgrp>	
<risklimitsgrp></risklimitsgrp>	- add RiskLimitUtilizationAmount - add RiskLimitUtilizationPercent
<risklimittypesgrp> <riskwarninglevels></riskwarninglevels></risklimittypesgrp>	 add RiskLimitAction add RiskWarningLevelAction add RiskWarningLevelAmount
<riskinstrumentscopegrp></riskinstrumentscopegrp>	

The current structure of Party Risk Limits Report supports risk limits based on Type, Amount and Currency. Levels are used only for defining warnings based on percentage of limit amount. It doesn't allow binding risk limits and warning levels directly to actions taken after the limit or level is exceeded. Party Risk Limits Report should be enhanced to enable its usage for risk limits and warning levels directly bound to resulting actions, up to and including the level being equivalent to the risk limit itself. This can be accomplished by adding new fields **RiskLimitAction** (1767) and **RiskWarningLevelAction** (1769) to the Risk Limit Types and Risk Warning Levels component block respectively. The valid values for both fields are to be based upon the existing field ThrottleAction (1611). A single action for a given risk limit type can thus be defined without having to use the nested repeating group of warning levels.

FIX already supports Party Risk Limits Request and Response messages intended for risk limit definitions (reference data). FIX doesn't provide for dynamic data related to the risk limit utilization (consumption). Therefore, a new field **RiskLimitRequestType** (1760) is suggested to be added to both the request and the response message to be able to make a distinction. Some parties might only be entitled to see the defined limit but not the current utilization or vice versa. The utilization is to be provided with one of two new fields as an absolute value or as a percentage of RiskLimitAmount (1531), i.e. **RiskLimitUtilizationAmount** (1766) or **RiskLimitUtilizationPercent** (1765).

Warning information can currently only be provided as a percentage of RiskLimitAmount (1531). A new field **RiskWarningLevelAmount** (1768) is suggested alongside the existing field RiskWarningLevelPercent (1560).

Please see Chapter 9.1 Party Risk Limits Report for examples.

2.2 Party Risk Limits Update Report

A new message **Party Risk Limits Update Report** is proposed to support distribution of incremental changes to risk limits. It is not intended as initial response to the Party Risk Limits Request but can be used for additional, unsolicited messages if the request sets SubscriptionRequestType (263) to 1 (Snapshot + Updates). The new message has the same structure as the PartyRiskLimitsReport message but its own <PartyRiskLimitsUpdateGrp> component instead of <PartyRiskLimitsGrp>.

2.3 Party Risk Limits Definition

Existing Party Risk Limits Request / Response messages allow access to risk limit reference data. New messages **Party Risk Limit Definition Request** and **Party Risk Limit Definition Request Ack** should be added to FIX. They will serve to define new risk limits or to change existing risk limits, depending on the usage of the field ListUpdateAction (1324). Party Risk Limit Definition Request will be similar in structure to the Party Risk Limits Report and Party Risk Limits Update Report.

It is proposed to extend the existing field ListUpdateAction (1324) with an additional value S=Snapshot to allow a non-transactional workflow of risk limit definitions. Snapshots represent complete definitions of risk limits for a given party and its related party(-ies). The recipient of such a definition needs to either add the definition if it does not have one for the specified party and its related party(-ies) or remove the existing definition and replace it with the definition found in the request.

More complex workflows can use ListUpdateAction (1324) to add, modify or delete individual risk limits of a given party and its related party(-ies). The Party Risk Limit Definition Request Ack message not only has the possibility to echo back the definition received but it can selectively approve or reject individual risk limits. Detailed terms and conditions for such a negotation of risk limits need to be bilaterally agreed between the counterparties.

The acknowledgement of risk limit definitions requires a number of new administrative fields as follows:

- RiskLimitRequestStatus (1762) to convey an overall status on the message level
- **RiskLimitRequestResult** (1761) to optionally convey details on the message level
- RiskLimitStatus (1763) to convey an overall status on the risk limit level
- **RiskLimitResult** (1764) to optionally convey details on the risk limit level

RejectText (1328) is available on the same level as RiskLimitResult (1764) as a generic means to give further information on lower levels of nesting because the latter field applies to the entire <RiskLimitsGrp>. For example, RejectText (1328) can be used to point to the specific risk limit type that was rejected, or to point to errors in the warning levels or instrument scopes.

The following gives an overview of the new PartyRiskLimitDefinitionAck message and the proposed new fields.

[Root level]

<PartyRiskLimitsAckGrp> <PartyDetailGrp> add RiskLimitRequestResult
 add RiskLimitRequestStatus

- add RiskLimitResult - add RiskLimitStatus

<RiskLimitsGrp>

Please see Chapter 9.2 Party Risk Limits Definition for examples.

3 Issues and Discussion Points

3.1 User Defined Values for RiskLimitType

The range for user defined should start at a higher value than 100 to allow more standard values. The value has been changed to 1000 and above.

3.2 Default for RiskLimitRequestType

The new field RiskLimitRequestType should not be conditionally required on the Party Risk Limits Report message as this conflicts with the definition of value 1 (Definitions) being the default and would require a change to existing

applications. The text will be changed to reflect that the usage is optional, i.e. the scope is limited to definitions if the field is not present.

3.3 Related Party in Risk Limit Definition Request

The proposed risk limit definition message only allows to define a single party but no related parties. This would prevent multiple definitions for a trader for each of his accounts. The definition request should thus use the <PartyRiskLimitsGrp> block also used in the report. This includes <PartyDetailGrp> which contains the block <RelatedPartyDetailGrp>.

3.4 Response to Risk Limit Definition Requests

Using the Party Risk Limits Report message as the response to the Party Risk Limit Definition Request requires an extension of the field RequestResult (1511) to cover various additional errors. It was chosen to be more explicit and to add a new, short Party Risk Limit Definition Request Ack message instead, similar to a TCRRequestAck responding to a TCRRequest.

3.5 Incremental Changes to Risk Limits

The Party Risk Limit Definition Request message only allows the complete replacement of a set of risk limits for a given party, similar to a Security Definition Request message. The question was raised whether an additional field such as PartyRiskLimitUpdateAction (similar to SecurityUpdateAction) was useful to allow incremental changes. It would increase flexibility but also complexity in having to apply changes to existing risk limits and comparing risk limits to avoid inconsistencies. One option is to define dedicated Party Risk Limit Definition Update Request/Report messages for this purpose. Securities messages currently only offer a report version (Security Definition Update Report).

Discussion at the GTC level resulted in the decision to add incremental capabilities to risk limit definition messages. The messages should also support approval capabilities, e.g. for workflows between buy side and sell side where definitions are only partially accepted by the counterparty.

3.6 Pending Workflow

The definition of risk limits might not be immediately accepted. Therefore a workflow is needed that allows to convey a pending status back to the submitter prior to accepting (with or without changes) or rejecting the risk limits. It was decided to look as existing allocation workflows based on AllocStatus (87) as an example.

3.7 Reject Information

It was discussed to add more than just a generic root level text field to convey reject information in the acknowledgement of risk limit definitions. There are up to four levels (root, party, risk limit, warning level) where this could occur. It was decided to add a dedicated reject text field to the first level of nesting where also the fields RiskLimitStatus and RiskLimitResult are located. This field can then also contain information about errors in deeper levels of nesting.

4 Proposed Message Flow

This flow represents the intended request and response flow for Party Risk Limits.

- **Party Risk Limits Request** is sent by participant to CCP in order to obtain currently defined risk limits, their current utilization or both
- **Party Risk Limits Definition Request** is sent by participant to CCP in order to (re)define party risk limits. It is either a complete replacement of an existing definition or an incremental update (see details below).
- Party Risk Limits Definition Request Ack is sent by CCP to participant as a (possibly short) response to Party Risk Limits Definition Request
- Party Risk Limits Report or Party Risk Limits Update Report is sent by CCP to participant as a response to Party Risk Limits Request (based on the value of SubscriptionRequestType, if provided) or as unsolicited follow-up message(s) to a Party Risk Limits Definition Request. The latter allows multiple subscribers to obtain risk limit information without being the one defining them.

4.1 Complete Definitions of Risk Limits (Snapshots)

The new messages PartyRiskLimitDefinitionRequest and PartyRiskLimitDefinitionRequestAck can be used without a transactional workflow (add/modify/delete), i.e. when definitions are always complete. This is done by always setting the required field ListUpdateAction (1324) to S=Snapshot. The business requirement for this mode is to have a basic and simple workflow for risk limit definitions where the counterparties do not have to support incremental changes or approvals. A definition is sent and either completely accepted or rejected. Furthermore, a new definition simply overwrites an existing one or is added if no such definition existed before.

PartyRiskLimitDefinitionRequest defines complete risk limits within <PartyRiskLimitsUpdateGrp> for one or more combinations of party and related parties. It is not possible to provide incremental updates below this level. <PartyDetailGrp> and RiskLimitID are always present whereas <RiskLimitsGrp> is optional and its omission can be used to implicitly ask for a deletion of all risk limits for a given <PartyDetailGrp>.

The counterparties need to bilaterally agree on any constraints in terms of permissible combinations of parties and related parties. For example, is it allowed to send definitions with overlaps, i.e. overall risk limits that apply to a trader and additional risk limits that apply to a trader for a specific account or instrument. The proposed messages provide a high degree of flexibility to support different requirements but analysis and design are needed to ensure a proper implementation.

Please see Chapter 9.2.1 Risk Limits Definition Snapshots for examples.

4.2 Incremental Definitions of Risk Limits (Updates)

The new messages PartyRiskLimitDefinitionRequest and PartyRiskLimitDefinitionRequestAck can also be used with a transactional workflow (add/modify/delete), i.e. when partial definitions are needed. This is done by using the field ListUpdateAction (1324) and adding, modifying or deleting a set of risk limits for a given party and its related party(-ies).

The usage of RiskLimitID (1670) simplifies processing of <PartyRiskLimitsUpdateGrp> instances as follows:

- RiskLimitID is unique per <PartyDetailGrp> instance (single party with or without related parties).
- RiskLimitID is issued either by the submitter or by the receiver of risk limit definitions but not by both.
- An instance with an unknown RiskLimitID is rejected unless ListUpdateAction is A=Add, instances with duplicate RiskLimitIDs in case of ListUpdateAction A=Add are also rejected.
- The choice of issuer for RiskLimitIDs and the side responsible for consistency of risk limit definitions are subject to bilateral agreement.
- Use of RiskLimitID is optional but optionality refers to the entire workflow between the counterparties, i.e. either it is never used or used on every risk limit definition message with the exception that, in cases where

the receiver issues RiskLimitID values, the submitter must not use RiskLimitID when ListUpdateAction is A=Add.

• <PartyDetailGrp> should not be used as soon as a RiskLimitID has been issued for it and sent to the counterparty (which could be the submitter or the receiver of the definition request).

It is important to note that <PartyDetailGrp> and RiskLimitID (1670) should refer to one and the same entity within <PartyRiskLimitsUpdateGrp>. The identifier is a convenient shortcut for the update mode but can also be used for the snapshot mode. It always requires a complete definition of <PartyDetailGrp> to be sent together with RiskLimitID (1670) prior to using only RiskLimitID (1670). The current definition of RiskLimitID (1670) defines it to be unique for a complete instance of <PartyRiskLimitsGrp> which would include <RiskLimitsGrp>. The recommendation is to use RiskLimitID only to identify the party and related party in <PartyDetailGrp> and to avoid sending the same <PartyDetailGrp> more than once in the repeating group. Note that multiple instances still occur for parties that have risk limits with or without related parties, for example overall limits for a trader as well as limits for the same trader when he trades through specific accounts.

This is the structure of <PartyRiskLimitsUpdateGrp> and its risk limit identifier.

<PartyRiskLimitsUpdateGrp>
<PartyDetailGrp>
<RiskLimitsGrp>
<RiskLimitTypesGrp>
<RiskInstrumentScopeGrp>
RiskLimitID

Please see Chapter 9.2.2 Risk Limits Definition Updates for examples.

4.3 Approval and Rejection of Risk Limits

The new message PartyRiskLimitDefinitionRequestAck is used to acknowledge or reject the definition of risk limits. The complete rejection of the entire request is covered by the root level field RiskLimitRequestStatus whereby additional information can be conveyed through RiskLimitRequestResult.

Additional granularity is available on the level of a given combination of party and related party, i.e. for each instance of <PartyRiskLimitsAckGrp>. This is also the level of the field RiskLimitID which identifies risk limit entities. This optional field needs to be used in order to approve or reject individual risk limits. For each occurrence of RiskLimitID there is also an instance of RiskLimitStatus (1763) which conveys whether the risk limit was approved with or without changes or if it was rejected.

Please see Chapter 9.2.3 Risk Limits Definition Approval for examples.

The approval of risk limits might need to be deferred but requires an immediate response to confirm receipt of the request. This can be done by sending two PartyRiskLimitDefinitionRequestAck messages, the first of which shows that the acceptance is pending. The second then either accepts (with or without changes) or rejects the request and completes the workflow.

Please see Chapter 9.2.4 Risk Limits Definition Pending Approval for examples.

5 FIX message tables

This proposal suggests a single new message Party Risk Limits Definition Request as defined below and minor changes to two existing messages related to risk limits.

5.1 PartyRiskLimitsRequest

PartyRiskLimitsRequest is used to obtain information about risk limits. This can be a request for only the static reference data or also for the current utilization (consumption) of the risk limits.

Tag	Field Name	Req'd	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y			MsgType = CL
1666	RiskLimitRequestID	Y			
<mark>1760</mark>	RiskLimitRequestType	N	<mark>New</mark>		Scope of risk limit information
263	SubscriptionRequestType	Ν			
Compo <requi< td=""><td>onent block estingPartyGrp ></td><td>N</td><td></td><td></td><td>May be used to identify the party making the request and their role</td></requi<>	onent block estingPartyGrp >	N			May be used to identify the party making the request and their role
Component block < Parties >		N			Scope of the query/request for specific party(-ies)
Component block <requestedpartyrolegrp></requestedpartyrolegrp>		N			Scope of the query/request for specific type of party roles where the result is a list of results. For example, "all information for PartyRole=24"
Compo <requi< td=""><td>onent block estedRiskLimitTypesGrp ></td><td>N</td><td></td><td></td><td></td></requi<>	onent block estedRiskLimitTypesGrp >	N			
1533	RiskLimitPlatform	Ν			
Component <riskinstrumentscopegrp></riskinstrumentscopegrp>		N			Scope of the query/request for specific securities. Absence means all instruments for a given party or party role.
58	Text	Ν			
354	EncodedTextLen	Ν			
355	EncodedText	N			
	Standard Trailer	Y			

5.2 PartyRiskLimitsReport

The PartyRiskLimitsReport returns information about defined risk limits. The report is only enhanced to show that the request ID could also come from a definition request for risk limits.

Tag	Field Name	Req' d	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y			MsgType = CM
Comp	onent block <	N			
Applie	cationSequenceControl >				
1667	RiskLimitReportID	Y			
1666	RiskLimitRequestID	N			Conditionally required when responding to PartyRiskLimitsRequest(35 =CL).
<mark>1760</mark>	RiskLimitRequestType	N	New		Can be used when responding to a PartyRiskLimitsRequest(35 =CL).
1511	RequestResult	N			Conditionally required when responding to a PartyRiskLimitsRequest(35 =CL).
1512	TotNoPartyList	N			
893	LastFragment	N			
Comp	onent block	Ν	Modify		Optionally includes
<part< td=""><td>yRiskLimitsGrp></td><td></td><td>Comment</td><td></td><td>utilization (consumption) information.</td></part<>	yRiskLimitsGrp>		Comment		utilization (consumption) information.
60	TransactTime	N			
58	Text	Ν			
354	EncodedTextLen	Ν			
355	EncodedText	N			
1328	RejectText	N			
1664	EncodedRejectTextLen	Ν			
1665	EncodedRejectText	Ν			
	Standard Trailer	Y			

5.3 PartyRiskLimitsUpdateReport < PtyRiskLmtUpd/>

PartyRiskLimitsUpdateReport is used to convey incremental changes to risk limits. It is similar to the regular report but uses <PartyRiskLimitsUpdateGrp> instead of <PartyRiskLimitsGrp> to include an update action.

Tag	Field Name	Req'	Action	Mappings and Usage	FIX Spec Comments
		d		Comments	
	Standard Header	Y		New message type	MsgType = CR
Comp	onent block <	Ν	Add		
Applie	cationSequenceControl >				
1667	RiskLimitReportID	Y	Add		
1666	RiskLimitRequestID	Ν	Add		Conditionally required when sent as part of a subscription requested by a PartyRiskLimitsRequest(35 =CL).
<mark>1760</mark>	RiskLimitRequestType	N	New		Can be used if sent as part of a subscription started by PartyRiskLimitsRequest(35 =CL).
1512	TotNoPartyList	Ν	Add		
893	LastFragment	Ν	Add		
Comp	onent block	Ν	New		
< <u>Part</u>	yRiskLimitsUpdateGrp>		component		
60	TransactTime	N	Add		
58	Text	N	Add		
354	EncodedTextLen	Ν	Add		
355	EncodedText	Ν	Add		
	Standard Trailer	Y			

5.4 PartyRiskLimitsDefinitionRequest < PtyRiskLmtDefReq/>

PartyRiskLimitDefinitionRequest is used for defining new risk limits. The structure is based on the PartyRiskLimitsReport.

Tag	Field Name	Req'd	Action	Mappings and Usage Comments	FIX Spec Comments
	Standard Header	Y		New message type	MsgType = CS
1666	RiskLimitRequestID	Y	Add		
Component block <requestingpartygrp></requestingpartygrp>		N	Add		May be used to identify the party making the request and their role.
Component block <partyrisklimitsupdategrp></partyrisklimitsupdategrp>		N	Add		Risk limits to be enforced for given party(-ies) and related party(-ies).
58	Text	Ν	Add		
354	EncodedTextLen	Ν	Add		
355	EncodedText	Ν	Add		
	Standard Trailer	Y			

5.5 PartyRiskLimitsDefinitionRequestAck <PtyRiskLmtDefReqAck/>

PartyRiskLimitDefinitionRequestAck is used for accepting (with or without changes) or rejecting the definition of risk limits. The structure is based on the PartyRiskLimitsReport (including changes proposed by this document).

Tag	Field Name	Req'd	Action	Mappings and Usage	FIX Spec Comments
				Comments	
	Standard Header	Y		New message type	MsgType = CT
1666	RiskLimitRequestID	Y	Add		
<mark>1761</mark>	RiskLimitRequestResult	N	<mark>New</mark>		
<mark>1762</mark>	RiskLimitRequestStatus	Y	<mark>New</mark>		
Comp	Component block		Add		
<requ< td=""><td>uestingPartyGrp ></td><td></td><td></td><td></td><td></td></requ<>	uestingPartyGrp >				
Comp	onent block	Ν	New		
< <u>Part</u>	y <mark>RiskLimitsAckGrp></mark>		component		
58	Text	Ν	Add		
354	EncodedTextLen	Ν	Add		
355	EncodedText	Ν	Add		
	Standard Trailer	Y			

6 FIX component blocks

6.1 PartyRiskLimitsGrp Component Block

This existing component block is shown here with additional comments to provide usage guidelines, especially due to new, similar blocks being proposed to update and acknowledge risk limits. The block is only used on the PartyRiskLimitsReport message to provide risk limit information.

<component block="" ptyrisklmt=""></component>								
Tag	Field Name	Req'd	Action	Mappings and Usage	Comments			
				Comments				
1677	NoPartyRiskLimits	Ν						
à	Component block	Ν			Required if			
	< <i>PartyDetailGrp</i> >				NoPartyRiskLimits(1677) >			
					0.			
à	Component block	Ν	Add		Required if			
	<risklimitsgrp></risklimitsgrp>		comment		NoPartyRiskLimits(1677) >			
					0. Omit to implicitly report			
					removal of risk limits.			
à	1670 RiskLimitID	N						

6.2 PartyRiskLimitsUpdateGrp Component Block

This new block is a repeating group based on the existing block <PartyRiskLimitsGrp> with an additional field ListUpdateAction (1324) to support incremental changes of risk limit definitions. The group is part of the definition request as well as part of the update report for risk limits.

	<component block="" ptyrisklmtupd=""></component>							
Tag	Field	Field Name		Action	Mappings and Usage Comments	Comments		
1677	NoPar	tyRiskLimits	N	Add				
à	1324	ListUpdateAction	Ν	Add		Required if NoPartyRiskLimits(1677) > 0.		
à	Composed com	onent block yDetailGrp >	N	Add		Conditionally required when ListUpdateAction(1324) = A(Add). Conditionally required when ListUpdateAction(1324) = M(Modify) or D(Delete) and RiskLimitID(1670) is not provided.		
à	Compo < <i>Riski</i>	onent block LimitsGrp >	N	Add		Conditionally equired when ListUpdateAction(1324) = A (Add) or M (Modify).		
à	1670	RiskLimitID	N	Add		Conditionally required when PartyDetailGrp component is not provided.		

6.3 PartyRiskLimitsAckGrp Component Block

This new block is a repeating group based on the existing block <PartyRiskLimitsGrp> with an additional field RiskLimitStatus (1763) to accept (with or without changes) or reject individual risk limits. It is only used in PartyRiskLimitDefinitionRequestAck, the response to the request to define risk limits. An approval with changes requires to send <RiskLimitsGrp> with the complete set of risk limits that have been accepted for the party defined.

<component block="" ptyrisklmtack=""></component>							
Tag	Field	Name	Req'd	Action	Mappings and Usage Comments	Comments	
1677	NoPar	tyRiskLimits	Ν	Add			
à	1324	ListUpdateAction	N	Add		Required if NoPartyRiskLimits(1677) > 0.	
à	1763	RiskLimitStatus	N	New		Required if NoPartyRiskLimits(1677) > 0.	
à	<mark>1764</mark>	RiskLimitResult	N N	New New			
à	Comp <part< th=""><th>onent block yDetailGrp ></th><th>N</th><th>Add</th><th></th><th>Conditionally required when RiskLimitID(1670) is not provided. Changes to party or related party(-ies) defined in the request are not permitted.</th></part<>	onent block yDetailGrp >	N	Add		Conditionally required when RiskLimitID(1670) is not provided. Changes to party or related party(-ies) defined in the request are not permitted.	
à	Comp < <i>Risk</i>	onent block <i>LimitsGrp</i> >	N	Add		Conditionally required when RiskLimitStatus(1763) = 1 (Accepted with changes) and must then be complete, i.e. omissions compared to the request represent risk limits that were removed, additional risk limits are possible.	
à	1670	RiskLimitID	N	Add		Conditionally required when PartyDetailGrp component is not provided.	
à	1328	RejectText	Ν	Add			
à	1664	EncodedRejectTextLe n	N	Add			
à	1665	EncodedRejectText	Ν	Add			
		•	<th>nponent block</th> <th>k PtyRiskLmtAck></th> <th></th>	nponent block	k PtyRiskLmtAck>		

6.4 RiskLimitsGrp Component Block

The existing block for risk limits is to be extended with an identifier field to support transactional workflows to add, modify and delete individual risk limit types together with their warning levels and instrument scopes.

<component block="" risklmt=""></component>								
Tag	Field Name	Req'd	Action	Mappings and Usage	Comments			
				Comments				
1669	NoRiskLimits	N						
à	Component block	Ν	Add		Required if			
	<risklimittypesgrp></risklimittypesgrp>		comment		NoRiskLimits(1669) > 0.			
à	Component block	Ν						
< <i>RiskInstrumentScopeGrp</i> >								

6.5 RiskLimitTypesGrp Component Block

The existing block for risk limit types is to be extended with utilization (consumption) information and actions to be taken when the limit is exceeded. The utilization information is only applicable for risk limit reports and not for requests related to such limits. RiskLimitType must always be provided and one of RiskLimitAmount, RiskLimitUtilizationAmount/ Percent or <RiskWarningLevel> must be present. It is then possible to only convey the risk limit, its utilization or its warning levels.

			<cc< th=""><th>omponent bloc</th><th>k RiskLmtTyp></th><th></th></cc<>	omponent bloc	k RiskLmtTyp>		
Tag	Field	Name	Req'd	Action	Mappings and Usage Comments	Comments	
1529	NoRis	kLimitTypes	N				
à	1530	RiskLimitType	N			Required if NoRiskLimitTypes(1529) > 0.	
à	1531	1531 RiskLimitAmount		Delete Comment			
à	<mark>1767</mark>	RiskLimitAction	N	New 1			
à	<mark>1766</mark>	RiskLimitUtilization Amount	N	New		Not applicable in a request.	
à	<mark>1765</mark>	RiskLimitUtilization Percent	N	New		Not applicable in a request.	
à	1532	RiskLimitCurrency	N				
à	1533 RiskLimitPlatform		Ν				
à	à Component block < RiskWarningLevels >						

6.6 RiskWarningLevelGrp Component Block

The existing block for risk warning levels is to be extended with an amount as an alternative to the definition of a percentage and with a warning level action based on the existing field ThrottleAction (1611). Currently, it is implicitly assumed that warning levels lead to some kind of warning and that the breach of the risk limit (outside of this component block) leads to some kind of rejection of orders and quotes.

<component block="" warnlvl=""></component>							
Tag	Field I	Name	Req'd	Action	Mappings and Usage	Comments	
					Comments		
1559	NoRis	kWarningLevels	Ν				
à	<mark>1769</mark>	RiskWarningLevelAc tion	N	New		Required if NoRiskWarningLevels(155 9) > 0.	
à	1560	RiskWarningLevelPer cent	N	Modify Comment		Conditionally required when RiskWarningLevelAmount(1768) is not provided.	
à	<mark>1768</mark>	RiskWarningLevelA mount	N	New		Conditionally required when RiskWarningLevelPercent(1 560) is not provided.	
à	1561	RiskWarningLevelNa me	N				
			0</td <td>Component blo</td> <td>ck WarnLvl ></td> <td>·</td>	Component blo	ck WarnLvl >	·	

7 Appendix A - Data Dictionary

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
<mark>1760</mark>	<mark>RiskLimitRequestType</mark>	New	int	Type of risk limit information. Valid values are: 1 – Definitions (default) 2 – Utilization 3 – Definitions and utilization	@ReqTyp	Add to messages PartyRiskLimitsRequest, PartyRiskLimitsReport
1761	RiskLimitRequestResult	New	int	Result of risk limit definition request.Valid values are:0 - Successful (default)1 - Invalid party(-ies)2 - Invalid related party(-ies)3 - Invalid risk limit type(s)4 - Invalid risk limit ID(s)5 - Invalid risk limit amount(s)6 - Invalid risk limit amount(s)7 - Invalid risk instrument scope(s)8 - Risk limit actions not supported9 - Warning levels not supported10 - Warning level actions not supported11 - Risk instrument scope not supported12 - Risk limit already defined for party(-ies)13 - Risk limit already defined for party(-ies)98 - Not authorized99 - OtherValues of 100 and above are subject to bilateral agreement.	@ReqRslt	Add to message PartyRiskLimitDefinitionReque stAck

Risk Limits Extension

FIX Protocol Gap Analysis - Risk Limit Extensions v0.5_ASBUILT

September 30, 2010 - Revision 0.5

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
<u>1762</u>	RiskLimitRequestStatus	New	int	Status of risk limit definition request. Valid values are: 0 – Accepted 1 – Accepted with changes 2 – Rejected 3 – Acceptance pending	@ReqStat	Add to message PartyRiskLimitDefinitionReque stAck
1763	RiskLimitStatus	New	int	Status of risk limit definition for one party. Valid values are: 0 – Accepted 1 – Accepted with changes 2 – Rejected	@Stat	Add to PartyRiskLimitsAckGrp component block
<mark>1764</mark>	RiskLimitResult	New	int	Result of risk limit definition for one party. [NOTE: Uses enums from RiskLimitRequestResult (1761)]	@Rslt	Add to PartyRiskLimitsAckGrp component block
<mark>1765</mark>	RiskLimitUtilizationPer cent	New	Percentage	Percentage of utilization of a party's set risk limit.	@UtilztnPct	Add to RiskLimitTypes component block
<mark>1766</mark>	RiskLimitUtilizationAm ount	New	Amt	Absolute amount of utilization of a party's set risk limit.	<mark>@UtilztnAmt</mark>	Add to RiskLimitTypes component block
1767	RiskLimitAction	New	int	Action to take should risk limit be exceeded. [NOTE: Uses enums from ThrottleAction (1611)] Valid values are: 0 - Queueinbound 1 - Queue outbound 2 - Reject 3 - Disconnect 4 - Warning	[@] Actn	Add to RiskLimitTypes component block Requires a change to ThrottleAction(1611).
<mark>1768</mark>	RiskWarningLevelAmo unt	New	int	Amount at which a warning is issued.	<mark>@Amt</mark>	Add to RiskWarningLevels component block

Risk Limits Extension

FIX Protocol Gap Analysis - Risk Limit Extensions v0.5_ASBUILT

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
<mark>1769</mark>	RiskWarningLevelActio n	<mark>New</mark>	int	Action to take should warning level be exceeded. [NOTE: Uses enums from ThrottleAction (1611)]	<mark>@ Actn</mark>	Add to RiskWarningLevels component block
35	MsgType	New enums	String	CR - PartyRiskLimitsUpdateReport CS - PartyRiskLimitsDefinitionRequest CT - PartyRiskLimitsDefinitionRequestAck	@MsgTyp	
1324	ListUpdateAction	New enum	Char	If provided, then Instrument occurrence has explicitly changed Valid values: A = Add D = Delete M = Modify S = Snapshot	@ListUpdActn	
1530	RiskLimitType	New enums Modify descripti on	Int	Used to specify the type of risk limit amount of position limit quantity or margin requirement amounts. Valid Values: 1 - Gross limit 2 - Net limit 3 - Exposure 4 - Long limit 5 - Short limit 6 - Cash margin 7- Additional margin 8- Total margin Values of 100 and above are subject to bilateral agreement.	@Typ	Update existing enumeration descriptions to comply with style guidelines.
1670	RiskLimitID	Modify descripti on	String	Unique identifier for a specific NoRiskLimits (1669) NoPartyRiskLimits (1677) repeating group instance	@ID	

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* See FIX Gap Analysis - Message Throttle (EP116)

8 Appendix B - Glossary Entries

Term	Definition	Field where used

9 Appendix C - Usage Examples

The following examples are not always complete in terms of the FIX syntax rules, e.g. PartyIDSource fields have been omitted as they do not add to the understanding.

9.1 Party Risk Limits Report

The report message conveys risk limits for one or more parties by means of <PartyRiskLimitsGrp> which consists of the following sub-components:

- <PartyDetailGrp> defines the party for which risk limits are being defined
- <RiskLimitsGrp> defines the risk limits that apply to this party
- RiskLimitID is a single field to uniquely identify a combination of a party and its risk limits

9.1.1 Party Detail Group

<PartyDetailGrp> is a repeating group for technical reasons to allow a single(!) party (from a business point of view) to be defined through multiple party roles, e.g. firm, desk, location, trader. It has its own sub-components:

- <PtysSubGrp> for optional information about the party regarding one specific role
- <PartyAltIDs> for additional identifiers of the party regarding one specific role
- <RelatedPartyDetailGrp> to further restrict the party regarding one specific role

<RelatedPartyDetailGrp> is the most important of the three. It is required if the risk limits for a trader should only apply to one or more specific accounts for example. In this case the trader is the party of <PartyDetailGrp> and the account(s) is (are) the party(-ies) of <RelatedPartyDetailGrp>.

9.1.2 Risk Limits Group

The second element of <PartyRiskLimitsGrp> is <RiskLimitsGrp> which is a repeating group conveying one or more risk limits for a given party. It has the following sub-components:

- <RiskLimitTypesGrp> defines actual risk limits as well as optional warning levels for each of them.
- <RiskInstrumentScopeGrp> optionally details the limits to include or exclude specific instruments

9.1.3 Report Example

A PartyRiskLimitsReport message number 4711 is created to convey risk limits for two parties A and B as follows.

- Party A is a trader T1 from firm ABC and party B is a trader T2 from the same firm.
- Trader T1 may trade any instrument up to a total gross limit of 10,000 and a total net limit of 7,000.

- T2 may trade IBM and Intel for account 1111 up to a net limit of 500, no other instruments
- T2 may trade Microsoft for accounts 2222 and 3333 up to a net limit of 400.
- T2 needs to receive warnings at 50% and 75% when trading Microsoft.

```
1667 RiskLimitReportID = 4711
```

```
1677 NoPartyRiskLimits = 3
                                                            Trader T1, any account, risk limit ID 1
      1671 NoPartyDetails = 2
>
            448 PartyID = "ABC"
>
      >
            452 PartyRole = 1 (Executing Firm)
>
      >
            448 PartyID = "T1"
>
      >
            452 PartyRole = 12 (Executing Trader)
>
      >
      1678 NoRiskLimits = 1
>
            1529 NoRiskLimitTypes = 2
>
      >
                  1530 RiskLimitType = 1 (Gross Limit)
>
            >
      >
                  1531 RiskLimitAmount = 10000
>
            >
      >
                  1530 RiskLimitType = 2 (Net Limit)
>
            >
      >
                  1531 RiskLimitAmount = 7000
\geq
            >
      >
      1670 RiskLimitID = "1"
\geq
                                                            Trader T2, account 1111, risk limit ID 2
>
      1671 NoPartyDetails = 2
            448 PartyID = "ABC"
>
      >
            452 PartyRole = 1 (Executing Firm)
>
      >
            448 PartyID = "T2"
>
      >
            452 PartyRole = 12 (Executing Trader)
>
      >
            1673 NoRelatedPartyDetails = 1
>
      >
                  1563 Related PartyID = "1111"
>
      >
            >
                  1514 NoPartyRelationships = 1
>
            >
      >
>
                        1515 PartyRelationship = 4 (Trades Through)
            >
                  >
      >
>
      1678 NoRiskLimits = 1
>
            1529 NoRiskLimitTypes = 1
      >
>
                  1530 RiskLimitType = 2 (Net Limit)
            >
      >
                  1531 RiskLimitAmount = 500
>
      >
            >
            1534 NoRiskInstrumentScopes = 2
>
      >
>
                  1535 InstrumentScopeOperator = 1 (Include)
      >
            >
                  1536 InstrumentScopeSymbol = "IBM"
>
            >
      >
            >
                  1535 InstrumentScopeOperator = 1 (Include)
>
      >
>
            >
                  1536 InstrumentScopeSymbol = "INTL"
      >
>
      1670 RiskLimitID = "2"
                                                            Trader T2, accounts 2222/3333, risk limit ID 3
>
      1671 NoPartyDetails = 2
            448 PartyID = "<mark>ABC</mark>"
>
      >
            452 PartyRole = 1 (Executing Firm)
>
      >
            448 PartyID = "T2"
>
      >
            452 PartyRole = 12 (Executing Trader)
>
      >
            1673 NoRelatedPartyDetails = 2
>
      >
                  1563 RelatedPartyID = "2222"
>
      >
            >
                  1514 NoPartyRelationships = 1
>
      >
            >
                        1515 PartyRelationship = 4 (Trades Through)
>
      >
            >
                  >
                  1563 RelatedPartyID = "3333
>
      >
            >
                  1514 NoPartyRelationships = 1
>
      >
            >
                        1515 PartyRelationship = 4 (Trades Through)
>
      >
                  >
      1678 NoRiskLimits = 1
>
            1529 NoRiskLimitTypes = 1
>
      >
                  1530 RiskLimitType = 2 (Net Limit)
>
      >
            >
```

>	>	>	1531	RiskLimitAmount = 400
>	>	>	1559	NoRiskWarningLevels = 2
>	>	>	>	1560 RiskWarningLevelPercent = 0.5 (50%)
>	>	>	>	1560 RiskWarningLevelPercent = 0.75 (75%)
>	>	1534	NoRis	skInstrumentScopes = 1
>	>	>	1535	InstrumentScopeOperator = 1 (Include)
>	>	>	1536	InstrumentScopeSymbol = " <mark>MSFT</mark> "
>	1670	RiskL	imitID	= "3"

Note that the risk limits for each combination of party and related party have been identified by means of tag 1670 RiskLimitID. The tag is optional but can be useful to support basic maintenance of risk limit definitions.

It is recommended to group all risk limits for a given combination of party and related party into a single instance of the repeating group <PartyRiskLimitsGrp> even though it is technically not necessary when using RiskLimitID as unique identifier.

9.2 Party Risk Limits Definition

The component <PartyRiskLimitsUpdateGrp> is part of the request as well as the response (ACK) message and can be used in multiple ways. Two fundamental modes (snapshots vs updates) for the definition of risk limits need to be distinguished and are described in this chapter.

9.2.1 Risk Limits Definition Snapshots

The message looks very similar to the report example above but needs to include an update action. A PartyRiskLimitsDefinitionRequest message is created by party A (risk manager R1 from firm ABC) to convey risk limits for party B (trader T1 from firm ABC) that is allowed to trade any instrument up to a total gross limit of 10,000.

```
1666 RiskLimitRequestID = 4711
```

- 1657 NoRequestingPartyIDs = 2
- > 1658 RequestingPartyID = "ABC"
- > 1660 RequestingPartyRole = 1 (Executing Firm)
- > 1658 RequestingPartyID = "R1"
- > 1660 RequestingPartyRole = 12 (Executing Trader)
- 1677 NoPartyRiskLimits = 1
- > 1324 ListUpdateAction = "S" (Snapshot)
- > 1671 NoPartyDetails = 2
- > > 448 PartyID = "ABC"
- > > 452 PartyRole = 1 (Executing Firm)
- > > 448 PartyID = "**T1**"
- > > 452 PartyRole = 12 (Executing Trader)
- > 1678 NoRiskLimits = 1
- > > 1529 NoRiskLimitTypes = 1
- > > > 1530 RiskLimitType = 1 (Gross Limit)
- > > > 1531 RiskLimitAmount = 10000

Now the risk manager decides to add a net limit of 7,000 for T1, applicable to all instruments. This requires to send the following PartyRiskLimitsDefinitionRequest message.

- 1666 RiskLimitRequestID = 4712
- 1657 NoRequestingPartyIDs = 2
- > 1658 RequestingPartyID = "ABC"

>	1660	RequestingPartyRole = 1 (Executing Firm)
>	1658	RequestingPartyID = "R1"
>	1660	RequestingPartyRole = 12 (Executing Trader)
1677	NoPa	rtyRiskLimits = 1
>	1324	ListUpdateAction = "S" (Snapshot)
>	1671	NoPartyDetails $= 2$
>	>	448 PartyID = " ABC "
>	>	452 PartyRole = 1 (Executing Firm)
>	>	448 PartyID = " $T1$ "
>	>	452 PartyRole = 12 (Executing Trader)
>	1678	NoRiskLimits = 1
>	>	1529 NoRiskLimitTypes = 1
>	>	> 1530 RiskLimitType = 1 (Gross Limit)
>	>	> 1531 RiskLimitAmount = 10000
>	>	> 1530 RiskLimitType = 2 (Net Limit)
>	>	> 1531 RiskLimitAmount = 7000

To illustrate the difference between <PartyDetailGrp> and <RiskLimitGrp>, the following example assumes that the risk manager wanted to add the net limit of 7,000 for T1 (see previous example) but only when he trades through account 1111. This requires a separate, second risk limit on the first level of nesting.

```
1666 RiskLimitRequestID = 4713
1657 NoRequestingPartyIDs = 2
      1658 RequestingPartyID = "ABC"
>
      1660 RequestingPartyRole = 1 (Executing Firm)
>
      1658 RequestingPartyID = "R1"
>
      1660 RequestingPartyRole = 12 (Executing Trader)
>
1677 NoPartyRiskLimits = 2
      1324 ListUpdateAction = "S" (Snapshot)
                                                                B snapshot for trader T1
>
      1671 NoPartyDetails = 2
>
            448 PartyID = "ABC"
>
      >
                  PartyRole = 1 (Executing Firm)
            452
>
      >
            448 PartyID = "T1"
>
      >
            452 PartyRole = 12 (Executing Trader)
>
      >
      1678 NoRiskLimits = 1
>
            1529 NoRiskLimitTypes = 1
>
      >
                  1530 RiskLimitType = 1 (Gross Limit)
>
      >
            >
                  1531 RiskLimitAmount = 10000
>
      >
      1324 ListUpdateAction = "S" (Snapshot)
>
                                                                B snapshot for trader T1 and account 1111
      1671 NoPartyDetails = 2
>
            448 PartyID = "ABC"
>
      >
                 PartyRole = 1 (Executing Firm)
>
            452
      >
            448 PartyID = "T1"
>
      >
            452 PartyRole = 12 (Executing Trader)
>
      >
            1673 NoRelatedPartyDetails = 1
>
      >
                  1563 RelatedPartyID = "1111"
>
      >
            >
>
                  1514 NoPartyRelationships = 1
      >
            >
>
                        1515 PartyRelationship = 4 (Trades Through)
      >
                  >
            >
>
      1678 NoRiskLimits = 1
            1529 NoRiskLimitTypes = 1
>
      >
                  1530 RiskLimitType = 2 (Net Limit)
>
      >
            >
                  1531 RiskLimitAmount = 7000
            >
      >
```

It is possible to implement a deletion of all risk limits for a given party and related parties by omitting <RiskLimitsGrp> as follows. Note that the request deletes all risk limits for trader T1 but does not change anything for trader T1 trading through account 1111.

```
1666 RiskLimitRequestID = 4714
1657 NoRequestingPartyIDs = 2
      1658 RequestingPartyID = "ABC"
>
      1660 RequestingPartyRole = 1 (Executing Firm)
>
      1658 RequestingPartyID = "R1"
>
>
      1660 RequestingPartyRole = 12 (Executing Trader)
1677 NoPartyRiskLimits = 1
      1324 ListUpdateAction = "S" (Snapshot)
>
      1671 NoPartyDetails = 2
>
            448 PartyID = "ABC"
>
      >
                  PartyRole = 1 (Executing Firm)
>
      >
            452
                  PartyID = "T1"
            448
>
      >
>
      >
            452
                  PartyRole = 12 (Executing Trader)
```

9.2.2 Risk Limits Definition Updates

Updates require more complex workflows while allowing to reduce the message sizes involved. The following examples use the ones from the previous chapter on snapshots to show the differences.

First, the request 4711 to add a gross limit of 10,000 for trade T1. There is no change other than the usage of IDs to ease future reference to the risk limits. Note that in these examples, the submitter issues RiskLimitID values.

```
1666 RiskLimitRequestID = 4711
1657 NoRequestingPartyIDs = 2
      1658 RequestingPartyID = "ABC"
>
      1660 RequestingPartyRole = 1 (Executing Firm)
>
      1658 RequestingPartyID = "R1"
>
      1660 RequestingPartyRole = 12 (Executing Trader)
>
1677 NoPartyRiskLimits = 1
                                                          B new definition for trader T1
      1324 ListUpdateAction = "A" (Add)
>
>
      1671 NoPartyDetails = 2
                  PartyID = "ABC"
>
            448
      >
>
            452
                  PartyRole = 1 (Executing Firm)
      >
                  PartyID = "T1"
>
            448
      >
>
            452
                  PartyRole = 12 (Executing Trader)
      >
>
      1678 NoRiskLimits = 1
>
            1529 NoRiskLimitTypes = 1
      >
>
                   1530 RiskLimitType = 1 (Gross Limit)
      >
            >
>
                   1531 RiskLimitAmount = 10000
      1670 RiskLimitID = 1
                                                          B refers to all risk limits for T1
\geq
```

The second request 4712 was to add a net limit of 7,000 for T1. Note that <PartyDetailGrp> was omitted due to the fact that RiskLimitID 1 is a shortcut to trader T1 of firm ABC. Note that the gross limit of 10,000 needs to be repeated as there are no update actions on the lower level. This would significantly increase complexity.

```
1666 RiskLimitRequestID = 47121657 NoRequestingPartyIDs = 2
```

- 1057 NoRequesting range 2
- > 1658 RequestingPartyID = "ABC"
- > 1660 RequestingPartyRole = 1 (Executing Firm)
- > 1658 RequestingPartyID = "R1"

1660 RequestingPartyRole = 12 (Executing Trader) > 1677 NoPartyRiskLimits = 1 > 1324 ListUpdateAction = "M" (Modify) **B** update requested, definition must exist, >1678 NoRiskLimits = 1 > > 1529 NoRiskLimitTypes = 1 > > > 1530 RiskLimitType = 1 (Gross Limit) 1531 RiskLimitAmount = 10000 > > > 1530 RiskLimitType = 2 (Net Limit) > > > 1531 RiskLimitAmount = 7000 > > > 1670 RiskLimitID = 1 > **B** ID can be used to find existing definition

The third request 4713 was to add a net limit of 7,000 for T1 but only for account 1111. Note that the first limit can be completely omitted now as it relates to a different combination of party and related party.

1657	MoDo											
1657	NORE	NoRequestingPartyIDs = 2										
>	1658	8 RequestingPartyID = "ABC"										
>	1660	RequestingPartyRole = 1 (Executing Firm)										
>	1658	RequestingPartyID = " $R1$ "										
>	1660	RequestingPartyRole = 12 (Executing Trader)										
1677	NoPa	rtyRiskLimits = 1										
>	1324	ListUpdateAction = "A" (Add)										
>	1671	NoPartyDetails $= 2$										
>	>	448 $PartyID = "ABC"$										
>	>	452 PartyRole = 1 (Executing Firm)										
>	>	448 PartyID = " $T1$ "										
>	>	452 PartyRole = 12 (Executing Trader)										
>	>	1673 NoRelatedPartyDetails = 1										
>	>	> 1563 Related PartyID = " 1111 "										
>	>	> 1514 NoPartyRelationships = 1										
>	>	> > 1515 PartyRelationship = 4 (Tra	des Through)									
>	1678	NoRiskLimits = 1										
>	>	1529 NoRiskLimitTypes = 1										
>	>	> 1530 RiskLimitType = 2 (Net Limit)										
>	>	> 1531 RiskLimitAmount = 7000										
>	1670	RiskLimitID = 2	B new ID, repesenting trader T1 for account 1111									

The fourth request 4714 was to delete the overall limits for T1 without impacting the limits when he goes through the account 1111.

1666 RiskLimitRequestID = 4714
1657 NoRequestingPartyIDs = 2
> 1658 RequestingPartyID = "ABC"
> 1660 RequestingPartyRole = 1 (Executing Firm)
> 1658 RequestingPartyID = "R1"
> 1660 RequestingPartyRole = 12 (Executing Trader)
1677 NoPartyRiskLimits = 1
> 1324 ListUpdateAction = "D" (Delete)
> 1670 RiskLimitID = 1

B existing ID, repesenting trader T1

As an additional example to show the power of RiskLimitID, the following would delete all risk limits for trader T1 including the trades going through account 1111.

1666 RiskLimitRequestID = 4715

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```
1657 NoRequestingPartyIDs = 2
```

```
1658 RequestingPartyID = "ABC"
>
```

```
>
      1660 RequestingPartyRole = 1 (Executing Firm)
```

```
>
      1658 RequestingPartyID = "R1"
```

```
>
      1660 RequestingPartyRole = 12 (Executing Trader)
```

1677 NoPartyRiskLimits = 2

```
1324 ListUpdateAction = "D" (Delete)
>
```

- 1670 RiskLimitID = 1 >
- > 1324 ListUpdateAction = "D" (Delete)
- > 1670 RiskLimitID = 2

B existing ID, repesenting trader T1

B existing ID, repesenting trader T1 + account 1111

9.2.3 Risk Limits Definition Approval

The following example shows how a definition request may be partially approved by the counterparty. The request from the risk manager R1, firm ABC, is for trader T1 to have a gross limit of 10,000 and a net limit of 7,000 for all instruments. However, the receiver accepts the net limit of 7,000 if trading in IBM is excluded from that and is only willing to allow a gross limit of 9,000.

Note that in this example, the receiver issues RiskLimitID values and echoes back the complete <PartyDetailGrp> to allow the submitter to associate ID 1 with T1 from firm ABC.

The PartyRiskLimitDefinitionRequest looks as follows.

```
1666 RiskLimitRequestID = 4711
1657 NoRequestingPartyIDs = 2
      1658 RequestingPartyID = "ABC"
>
      1660 RequestingPartyRole = 1 (Executing Firm)
>
      1658 RequestingPartyID = "R1"
>
      1660 RequestingPartyRole = 12 (Executing Trader)
>
1677 NoPartyRiskLimits = 1
      1324 ListUpdateAction = "A" (Add)
>
>
      1671 NoPartyDetails = 2
            448 PartyID = "ABC"
>
      >
>
            452
                  PartyRole = 1 (Executing Firm)
      >
                  PartyID = "T1"
>
            448
      >
>
            452
                  PartyRole = 12 (Executing Trader)
>
      1678 NoRiskLimits = 1
>
            1529 NoRiskLimitTypes = 2
      >
                  1530 RiskLimitType = 1 (Gross Limit)
>
      >
            >
>
            >
                  1531 RiskLimitAmount = 10000
      >
>
            >
                  1530 RiskLimitType = 2 (Net Limit)
      >
>
      >
            >
                  1531 RiskLimitAmount = 7000
The PartyRiskLimitDefinitionRequestAck looks as follows.
```

```
1666 RiskLimitRequestID = 4711
```

- 1762 RiskLimitRequestStatus = 1 (Accepted with changes)
- 1761 RiskLimitRequestResult = 0 (Successful)
- 1657 NoRequestingPartyIDs = 2
- 1658 RequestingPartyID = "ABC" >
- 1660 RequestingPartyRole = 1 (Executing Firm) >
- 1658 RequestingPartyID = "R1" >
- 1660 RequestingPartyRole = 12 (Executing Trader) \sim
- 1677 NoPartyRiskLimits = 1

B new definition for trader T1

>	1324	ListUpdateAction = "A" (Add)						
>	1763	RiskLimitStatus = 1 (Accepted with changes)						
>	1764	RiskLimitResult = 5 (Invalid risk limit amount(s))						
>	1328	RejectText = "Gross limit exceeds maximum amount permitted"						
>	1671	NoPartyDetails = 2						
>	>	448 PartyID = " <mark>ABC</mark> "						
>	>	452 PartyRole = 1 (Executing Firm)						
>	>	448 PartyID = " $T1$ "						
>	>	452 PartyRole = 12 (Executing Trader)						
>	1678	NoRiskLimits = 2 B split from 1 to 2 needed to limit instrument scope						
>	>	1529 NoRiskLimitTypes = 1						
>	>	> 1530 RiskLimitType = 1 (Gross Limit)						
>	>	> 1531 RiskLimitAmount = $\frac{9000}{1000}$ B gross limit changed by receiver						
>	>	1529 NoRiskLimitTypes = 1						
>	>	> 1530 RiskLimitType = 2 (Net Limit)						
>	>	> 1531 RiskLimitAmount = $\frac{7000}{100}$ B no change to net limit but scope added						
>	>	1534 NoRiskInstrumentScopes = 1						
>	>	> 1535 InstrumentScopeOperator = 2 (Exclude)						
>	>	> 1536 InstrumentScopeSymbol = "IBM" B exclude IBM from net limit						
>	1670	RiskLimitID = 1 B receiver issues RiskLimitID for T1						

9.2.4 Risk Limits Definition Pending Approval

The following example shows how a definition request may be approved in two steps by the counterparty. The request from the risk manager R1, firm ABC, is for trader T1 to have a gross limit of 10,000 and a net limit of 7,000 for all instruments. The counterparty initially signals that the approval is pending before accepting it without any changes, using the shortest possible messages, i.e. without echoing any information from the request. The submitter of the request has to be aware of the fact that the workflow is not complete after the first response.

The PartyRiskLimitDefinitionRequest looks as follows.

```
1666 RiskLimitRequestID = 4711
1657 NoRequestingPartyIDs = 2
      1658 RequestingPartyID = "ABC"
>
      1660 RequestingPartyRole = 1 (Executing Firm)
>
      1658 RequestingPartyID = "R1"
>
      1660 RequestingPartyRole = 12 (Executing Trader)
>
1677 NoPartyRiskLimits = 1
      1324 ListUpdateAction = "A" (Add)
                                                         B new definition for trader T1
>
>
      1671 NoPartyDetails = 2
                  PartyID = "ABC"
>
            448
      >
>
            452
                  PartyRole = 1 (Executing Firm)
      >
                  PartyID = "T1"
>
            448
      >
>
            452
                  PartyRole = 12 (Executing Trader)
      >
>
      1678 NoRiskLimits = 1
>
            1529 NoRiskLimitTypes = 2
      >
>
                  1530 RiskLimitType = 1 (Gross Limit)
      >
            >
>
                  1531 RiskLimitAmount = 10000
      >
            >
                  1530 RiskLimitType = 2 (Net Limit)
>
            >
      >
                  1531 RiskLimitAmount = 7000
>
      >
            >
```

The first PartyRiskLimitDefinitionRequestAck looks as follows.

1666 RiskLimitRequestID = 47111762 RiskLimitRequestStatus = 4 (Acceptance pending)

The second (and final) PartyRiskLimitDefinitionRequestAck looks as follows.

1666 RiskLimitRequestID = 47111762 RiskLimitRequestStatus = 0 (Accepted)

10Appendix D - FIXML Tags

This section lists new FIXML tags that are required for the proposed extensions described above.

FIXML tags for new component blocks:

•	PartyRiskLimitsUpdateGrp	<ptyrisklmtupd></ptyrisklmtupd>
•	PartyRiskLimitsAckGrp	<ptyrisklmtack></ptyrisklmtack>

FIXML tags for new messages:

•	PartyRiskLimitsUpdateReport	<ptyrisklmtupdrpt></ptyrisklmtupdrpt>
•	PartyRiskLimitDefinitionRequest	<ptyrisklmtdefreq></ptyrisklmtdefreq>
•	PartyRiskLimitDefinitionRequestAck	<pre><ptyrisklmtdefreqack></ptyrisklmtdefreqack></pre>

New FIXML abbreviations for new field names : see also Appendix A - Data Dictionary

• Utilization = Utilztn