ISDA Safe, Efficient Markets	Copyright ©2024 by International Swaps and Derivatives Association, Inc. Sponsored Member Service		FICC Clearing Models Agent Clearing Service		CME Models	Proposed ICC Model	LCH Repo Clear:		Other Repo Clearing Models Eurex Repo	CDCC Repo CCP	
	Sponsored DVP Service	Sponsored GC Service (Non-CIL)**	Collateral in Lieu (CIL) Service** Agent Clearing Service*	ACS Triparty** Full Service Netting Members Centrally Cleared Institutional Triparty	ty (CCIT) Service Member Supported User Independent User	Treasury Participant Non-Participant Party	RepoClear Member RepoClear Dealer	Sponsored Member General Clearing Membership	Direct Clearing Membership ISA Direct Clearing Membership / Clearing Agents Undisclosed Clients Disclosed Clients	Clearing Member Limited Clearing Member	Sponsored Member N/A (It appears that CDCC is
			FICC permits certain Netting Members (Sponsoring Members) to sponsor customers into a limited-purpose membership (Sponsored Members), where the Sponsoring Member acts as processing agent. Under the proposed CIL Service, FICC would permit Sponsored Members (in such a capacity, a "CIL Funds Lender") to	pers (Agent Clearing Members) to submit to FICC for	CMESC permits a Member to submit to			Eurex permits a General Clearing Membe	Eurex permits a Direct Clearing Member to clear (1) its "Own Transactions" i.e. Eurex permits certain buyside entities to Eurex permits a Clearing Member to clear		considering expanding its clearing services to include a sponsored model, but that is not
	FICC permits certain Netting Members (Sponsoring Members) to sponsor customers into a limited-purpose membership (Sponsored Members), where the Sponsoring Member acts as processing agent and guarantor in respect of the Sponsored Member's transactions.	FICC permits certain Netting Members (Sponsoring Members) to sponsor customers into a limited purpose membership (Sponsored Members), where the Sponsoring Member acts as processing agent and guarantor.	enter into "Sponsored GC CIL Trades" with any Netting Member or any Netting Member's Indirect Participant, which trades would generally be subject to the rules of Sponsored GC Service with certain adjustments: •FICC permits certain Netting Members (Agent Clearing Members) to submit to FICC for clearing trades entered into between the Agent Clearing Member's customer (Executing Firm Customer) and a Netting Member, a Sponsored GC Service with certain adjustments:	the Agent Clearing Member's customer (Executing ber, which may be the Agent Clearing Member or a red Member or another Executing Firm Customer on	CMESC for clearing trades between it and any other Participant, and to authorize Users to submit trades for clearing. CMESC permits a Supported Users of an authorizing Member to submit to CMESC permits an Independent User of a authorizing Member to submit to CMESC	on C	LCH permits RepoClear Members to clear proprietary trades and trades of clients that are RepoClear Dealers. LCH permits RepoClear Dealers to clear transactions through a RepoClear Member. LCH Procedures, Section 2B,	to clear (1) its "Own Transactions," i.e., proprietary trades of the General Clearin Member, and (2) client transactions,	proprietary trades of the General Clearing Members to clear proprietary trades through one or including (a) transactions of its "Direct Clearing Members (in such including (a) transactions of its "Direct Clearing Members (in such including (a) transactions of its "Direct Clearing Members (in such including (a) transactions of its "Direct Clearing Members (in such including Indirect Clients). Eurex Clearing Conditions. Eurex permits a Clearing Member to clear transactions of Disclosed Clients (which including Indirect Clients). Eurex Clearing Conditions.	clear proprietary and client repo (which are mostly pension plans) to act as	currently provided under its rules).
Description	Transactions settle through FICC (i.e., the Sponsoring Member delivers and receives the cash and securities to and from FICC, respectively, on behalf of the Sponsored Member; Sponsored Members' payment and delivery obligations are netted across all positions in the same	"Sponsored GC Trades" settle using the same triparty accounts at BNYM as the GC Funds Borrower and GC Funds Lender typically use to settle uncleared triparty repos (i.e., delivery and	•FICC would require the CIL Funds Lender to pledge to FICC the purchased securities received in the start leg of the repo. Sponsored GC CIL Trades would need to have a haircut of no less than 2%. •FICC would allow a Sponsoring Member to submit for clearing under the CIL Service transactions executed with	ther Agent Clearing Member is acting. FICC requires Netting Members to submit all Treasury repos between Netting purpose members (CCIT Members) to su purpose	submit to FICC for veen a CCIT Member, The Member's cleared proprietary. The Member's cleared proprietary. The Member's cleared proprietary.	ICC allows a Treasury Participant to submit for clearing trades for itself with any Treasury Participant or Non-Participant Party and designate the trades as house positions. ICC Rule 301. Party with any Treasury Participant to submit for clearing trades Party with any Treasury Participant or Non-Participant Party trades as client-related positions. ICC Rule 3	d designate the	paying agent for the Sponsored Member's margin and is responsible for default fund and certain other financial obligations related to a Sponsored Member's Eurex Clearing Conditions, General	Clients" and (b) transactions of "Indirect Clients" of its Direct Clients (but only if the Direct Clients are affiliated with the Direct Clearing Agent is responsible for processing. Clearing Agent is responsible for processing. Clearing Agent is responsible for processing.	transactions. CDCC Rules, Rule D-6. The cleared transaction is between the	
	customer account through FICC's netting system). FICC offers Sponsoring Members the option to treat a Sponsored Member's account as a segregated account.	payment obligations are satisfied on a gross basis between the two pre-novation counterparties). FICC offers Sponsoring Members the option to treat a Sponsored Member's account as a segregated account.	multiple CIL Funds Lenders through a joint trading account even if the investment manager has not yet allocated the trades. •FICC would not require the CIL Funds Lender (or its Sponsoring Member) to exchange Funds-Only Settlement Figure 1. Settlement and payment of two presents account as a segregated account as a segregated account.	oligations are satisfied on a gross basis between the novation counterparties).	transaction is between the Member and CMESC as principals. The Supported User's cleared transactions are between the Supported User and CMESC as principals. User and CMESC as principals.	Please see Column M for information on client (i.e., Non-Participant Party) trades.	RepoClear Member and LCH as principals. RepoClear Member and LCH as principals with the RepoClear Member and Please See Column P for information on RepoClear Dealer entering into a back-to	positions, but does not guarantee the Sponsored Member's obligations. SC Provisions Chapter I, Part 1, Section 2.1.1(4).	Conditions, General Provisions, Chapter I, Member Conditions, General Provisions, Chapter I, Member Member I He deared transaction is between the Clearing Member and Eurex as principals, with the Clearing Member entering into the Clearing Member and Eurex as principals, with the Clearing Member entering into the Clearing Member and Eurex as principals, with the Clearing Member entering into the Clearing Member and Eurex as principals, with the Clearing Member and Eurex as principals, with the Clearing Member and Eurex as principals.	Fixed Income Clearing Member and CDCC as principals. For client trades, the Fixed Income Clearing Member may enter into a back-to-back transaction with its clients. The cleared transaction is between the Fixed Income Clearing Member and CDCC as principals.	
	Seg. egated account.	Jegregated decount.	Amounts with FICC in relation to the CIL Funds Lender's positions (though the pre-novation counterparty collateral	rs the option to treat an Executing Firm Customer's as a segregated account.	Please see Columns J and K for information on client (i.e., User) trades.		client transactions. back transaction.	Regulation 6. Please See Columns T and U for information on client transactions.	Please See Columns T and U for information on client transactions. The cleared transaction is between Eurex and the ISA Direct Clearing Member. Client Client	Sack to sack transaction with its dients.	
Direct/Indirect (i.e., whether pre-novation	Direct	Divort	segregated account.	Pirott	Direct Direct	Direct (for Non-Participant Parties)	Direct	Direct	Direct Indicet Indicet	Indirect (for clients)	1
counterparties are in privity with the CCP)	Direct	Direct	Direct Indirect (for Executing Firm Customers) Indirect (for Executing Firm Customers)	Executing Firm Customers) Direct Direct	Direct Direct Direct Entities eligible to become either Members or Users: broker-dealers, banks (including or Users: broker-dealers)	Direct Indirect (for Non-Participant Parties) ers g	Direct Indirect	Direct Direct	Direct Direct Indirect Indirect	Indirect (for clients) Direct	
		Netting Member, or a Non-IDB Repo Broker with respect to activity in its Segregated Repo	IDB Repo Broker with respect to activity in its Segregated Repo Account, shall be eligible to apply to become a Sponsoring Member, See FICC Bulebook, Section 2(b)(ii) of Bule 2 and Section 2(a) of Bule 34	n an Inter-Dealer Broker Netting Member, may Clearing Member. See FICC Rulebook, Section 2(b)(i) of and Section 2(a) of Rule 8. Netting Membership is limited to banks. FICC may approve an application of any Pe	foreign banks), FCMs, unregistered investment pools (which must be represented by an investment adviser	To clear trades for customers, a Treasury Participant must be a government securities broker or dealer, or exempted from some must obtain the agreement of each Non-Participant Party for	registration and				
Membership eligibility	Section 2(b)(ii) of Rule 2 and Section 2(a) of Rule 3A. All Netting Members are classified as Tier One Netting Members, except for CCIT Members	2(b)(ii) of Rule 2 and Section 2(a) of Rule 3A. All Netting Members are classified as Tier One Netting Members, except for CCIT Members and	All Netting Members are classified as Tier One Netting Members, except for CCIT Members and Registered Investment Company Netting Members, which are designated as Tier Two Members, or as otherwise determined by All Netting Member, may be approved by FICC to be an Agent Clearing Member. See FICC Rulebook, Section 2(b)(i) of Rule 2 and Section 2(a) of Rule 8.	m Customer. See FICC Rulebook, Section 3(b) of Rule 2 Section 2(a) of Rule 8. RIC, to become a CCIT Member upon a de the applicant meets a series of requirements and the applicant meets as series of requirements.	nents regarding its (including foreign banks), FCMs, acity, ability to pay unregistered investment pools (which	registered investment companies, banks, insurance companies, and other types of persons the SEC may designate as appropriate if they meet the membership Any person that is not ICC or a Treasury Participant may be	les. <u>ICC Rule 406.</u> Non-Participant				
		Registered Investment Company Netting Members, which are designated as Tier Two Members, or as otherwise determined by FICC. See FICC Rulebook, Sections 2(a) and 2(c) of Rule 2 and Section 3(a)(viii) of Rule 2A.	Any Person may be a Sponsored Member. See FICC Rulebook, Section 3(a) of Rule 2 and Section 3(a) of Rule 2 and Section 3(a) of Rule 3A. Any Person may be an Executing Firm Customer. See FICC Rulebook, Section 3(b) of Rule 2 and Section 3(a) of Rule 8. Any Person may be an Executing Firm Customer. See FICC Rulebook, Section 3(a) of Rule 8.	enumerated items as well as any Person permitted by FICC. See FICC Rulebook.	and regulatory investment adviser registered under the Advisers adviser registered under the Advisers Act), and proprietary trading firms. CMESC Bulg 202(2) must be represented by an investment advisers companies, clearing agencies, registered investment companies, and insurance companies. companies.	Party, including an affiliate of a Treasury Participant or a client is itself acting for one or more Non-Participant Parties. ICC Rule 201(a). Party, including an affiliate of a Treasury Participant or a client is itself acting for one or more Non-Participant Parties. ICC Rule 201(a). "Non-Participant Party").	, •				
	Any Person may be a Sponsored Member. <u>See FICC Rulebook, Section 3(a) of Rule 2 and Section 3(a) of Rule 3A</u> .	Any Person may be a Sponsored Member. <u>See FICC Rulebook, Section 3(a) of Rule 2 and Section 3(a) of Rule 3A.</u>	Any Sponsored Member would be eligible to be a CIL Funds Lender by being a GC Funds Lender in respect of a obligation to deliver the purchased	ecurities in exchange for cash at the end leg of an ACS Triparty Trade).	*CMESC Rule 302(a). CMESC Rules 302(a) and (b). *CMESC Rules 302(a) and (b).	Non-Participant Party membership is independent of memb platform.	nip in ICC's CDS				
					exhaustive. exhaustive.						
					CMESC permits Users to submit transactions directly to CMESC or through an Eligible Platform. CMESC permits Users to submit transactions directly to CMESC or through an Eligible Platform.	gh					
					CMESC permits Members to submit transactions directly to CMESC or through an Eligible Platform. A Clear to Deliver Transaction (i.e., a deliver-out repo) or a cash transaction would be submitted as: (1) a matched trade would be submitted as: (1) a matched trade	de					
	Sponsoring Member submits data to FICC for novation.		The Agent Clearing Member submits data to FICC on behalf of the Executing Firm Customer for novation. See FICC Rulebook, Rule 8	CCIT Member (or a Joint Account Submits data to multiple CCIT Members in a Joint Account)	A Clear to Deliver Transaction (i.e., a deliver-out repo) or a cash transaction t) submits the trade A Clear to Deliver Transaction (i.e., a deliver-out repo) or a cash transaction would be submitted as: (1) a matched to be matched by CMESC; or (3) a transaction by one Participant for another transaction by one Participant for another	Transactions may be submitted by a Treasury Participant "Authorized Trade Execution / Processing Platform." ICC will tree Transactions may be submitted by a Treasury Participant directly or via an	any submission by RepoClear Member to allow ongoing trace		Eurex becomes the counterparty to the Eurex becomes the counterparty to the Eurex becomes the counterparty to the Eurex becomes the counterparty to the Direct Clearing Member in any Direct Clearing Member in any Direct Clearing Member in any On Furey Peng GmbH, In addition, and on Furey Peng GmbH, In	ed The Fived Income Clearing Member The Fived Income Clearing Member	
	For non-forward starting done-with trades, FICC only novates the off-leg (i.e., the obligation of the repo buyer to transfer securities and the obligation of the repo seller to transfer cash on	of Sponsoring Member submits data to FICC for novation.	Sponsoring Member submits data to FICC for novation. Sponsoring Member submits data to FICC for novation. off-leg (i.e., the obligation of the repo buyer to transfer securities	Each Netting Member submits data to to FICC for novation. FICC for novation. FICC only novates the off-leg (i.e., the	trade from an Eligible Platform; (2) a single-sided trade to be matched by CMESC: or (3) a transaction by one	Transactions may be submitted by a Treasury Participant directly or via an "Authorized Trade Execution / Processing Platform." ICC will treat any submission by a platform as having been affirmed by the relevant parties (i.e., the Treasury Participant is not able and does not need to affirm to ICC directly). ICC Rules 301(b)	N. ICC Rules 301(b) RepoClear Members submit eligible repos to LCH for "registration" via an "Approved Trade Matching System" or "Automated	Clearing Member may submit transaction	Clearing Member in any transactions resulting from a quote or order submitted on Eurex Repo GmbH. In addition, a clearing Agent may, on behalf ons Clearing Member may submit transactions on Eurex Repo GmbH. In addition, a Clearing Agent may, on behalf facility for novation. (It is unclear from the facility for novation. (It is unclear from the	acceptable marketplace or the CDS trade matching facility, which upon validation matching facility, which upon validation	
Mechanics of submitting transactions	the repurchase date) of a repo transaction. For all other trades, FICC also novates the on-leg (i.e., the obligation of the repo buyer to	FICC only novates the off-leg (i.e., the obligation of the repo buyer to transfer securities and the obligation of the repo seller to transfer cash on the repurchase date) of a repo transaction.	repo seller to transfer cash on the repurchase date) of a Sponsored GC CIL Trade.	the trade settlement allocate obligation of the repo buyer to transfer securities and the obligation of the reportance of the reportance of the reportance obligation obligation of the reportance obligation obligation of the reportance obligation obligat	Participant for another Participant to solving or decline on CMESC's interface would be submitted to the tri-party would be submitted to the tri-party	ICC reserves for itself the ability to decide whether or not to novate the on-leg of a Rule 301(b).	ipant Parties). ICC Section 12(a); LCH Procedures, Section 2B, (ATMS) of Automated Trading System (ATMS). The written authorization is specification (ATMS).	Transactions (i.e., eligible repos that not facility for novation. Eurex Repo Terms ar	rules whether direct clients or indirect clients may be able to submit trades for novation. Submit trades for novation or only Clearing Members are novation.	novated to CDCC. CDCC Rules, Rule D-604, 605.	
	transfer cash to the repo seller against securities).		obligation of the repo buyer to transfer cash to the repo seller against securities).	date) of a repo transaction. seller to transfer cash on the repurchase transaction.	to CMESC. CMESC Procedure 15-3(a)(ii). Clear to Hold Transactions (triparty repos) would be submitted to the tri-party settlement honk, and the resulting	ICC reserves for itself the ability to decide whether or not to reserves for itself the ability to decide whether or not to reserve sor itself the ability to	Regulations, Section 12(a); LCH Procedure Section 2B, RepoClear Clearing Service	Part 1 Section 1.2.2	Part 1, Section 1.2.2. Provisions Chapter I, Part 6, Section 1.2. Conditions, Part 1.3.1; Eurex Clearing Conditions, Part 1.3.1; Eurex Clearing Conditions, General Provisions Chapter I, Conditions Chapter I (Conditions Chapter I)	<u>v</u>	
					matched transaction would be transmitted to CMESC. CMESC Procedure 15-3(a)(ii). Clearing, its Member must confirm the transaction to CMESC via (i) pre-supplied credit limits hosted at CMESC, (ii) a pre-credit limits hosted at CMESC, (iii) a pre-credit limits hos				Part 1, Section 1.2.2. Part 1, Section 1.2.2.		
					approval indicator from the Eligible Platform, or (iii) express acceptance via message to CMESC's system. CMESC Procedure 15-4(d). approval indicator from the Eligible Platform, or (iii) express acceptance via message to CMESC's system. CMESC Procedure 15-4(d).						
						ICC calculates initial margin and variation payment separate	on either a gross				
			Funds Borrower and ACS Triparty	nt amounts would be settled between ACS Triparty unds Lender through BNYM's triparty platform. FICC rrower and ACS Triparty Funds Lender to make such		(i.e., customer-by-customer) basis or a net basis (i.e., across mu Parties' positions in the same account) depending on the man described below), and the Treasury Participant exchanges i	e Non-Participant option used (as al margin and				
			FICC collects and posts variation margin (Funds Only Settlement), initial margin (Clearing Fund), and settlement amounts from and to, respectively, the Agent Clearing Member, on a net basis across all trades carried in the same account. An Agent Clearing	r, following which the obligations between each pre- uld be deemed to be satisfied. Funds-Only Settlement o certain interest-related amounts for ACS Triparty FICC collects, returns, and posts variation FICC collects and posts variation	rgin (Funds Only	variation payment with ICC on behalf of the Non-Participant following a Treasury Participant default, ICC may permit variation settled directly by a gross-margined Non-Participant Party.	ties, except that n payment to be		Eurex collects, returns, and posts margin from and to the Clearing Member in respect of its Undisclosed Clients' cleared Eurex collects, returns, and posts margin		
	FICC collects and posts variation margin (Funds Only Settlement) and settlement amounts only from and to, respectively, the Sponsoring Member, which amounts are calculated on a net basis across all Sponsored Members of the same Sponsoring Member. See FICC Rulebook.	The mark-to-market and settlement amounts are settled between the GC Funds Borrower and GC Funds Lender through BNYM's triparty platform. FICC directs the GC Funds Borrower and GC Funds Lender to make such payments and delivery to each other, following which the obligations between each pre-novation counterparty and FICC are deemed to be satisfied. Funds-Only	In general, because FICC would require CIL Funds Lenders to pledge to FICC the purchased securities received in the start leg of the repo, FICC would not require Sponsoring Member to post initial margin for CIL Funds Lender's obligations, subject to a limited exception described below. Trades) would be settled throug proprietary trades in the same account. As a result, margin and settlement amounts can be calculated on a net basis across	the Agent Clearing Member at the level of Agent (or, where elected, Segregated Indirect Participants Account). FICC collects, returns, and posts variation margin (Funds Only Settlement), initial margin (Clearing Fund*), and settlement amounts direct CCIT Members on a net basis as if they was amounts, as applicable, from and to the	ectly from and to the	605A. There are four margining options for a Non-Particip	across the same "C" Client Account of the	Eurex collects, returns, and posts margin from and to the Clearing Member in respect of its Own Transactions. Such	from and to the Clearing Member in respect of its Own Transactions. Such amounts are calculated on a net basis amounts are calculated on a net basis. Eurex collects, returns, and posts margin from and to the ISA Direct Clearing Member (directly or through its Clearing Agent) in respect of its Undisclosed Clients' cleared transactions. Such amounts are calculated on a net basis across all transactions held in the same net omnibus segregated cleared transactions. Such amounts are calculated on a net basis across all transactions held in the same net omnibus segregated cleared transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions. Such amounts are calculated on a net basis across all transactions held in the same net omnibus segregated cleared transactions.		
Macharita	basis across all Sponsored Members of the same Sponsoring Member. See FICC Rulebook, Sections 8(a) and 9(a) of Rule 3A. These amounts flow through an account of the Sponsoring Member at BNYM.	between each pre-novation counterparty and FICC are deemed to be satisfied. Funds-Only Settlement Amounts (which are limited to certain interest-related amounts for Sponsored GC Trades) are settled through the Sponsoring Member at the level of Sponsoring Member Omnibus Account.	FICC also would not require the CIL Funds Lender (or its Sponsoring Member) to exchange Funds-Only Settlement Amounts with FICC in relation to the CIL Funds Lender's positions (though the pre-novation counterparty collateral Executing Firm Customer trades, but netting is not permitted between proprietary and Executing Firm Customer trades. See FICC Rulebook, Rule 2B. FICC would collect and post initial Agent Clearing Member, on a net between proprietary and Executing Firm Customer trades.	Netting Member. Such amounts are calculated on a net basis across all positions carried in the same account (ACS and in an Agent Clearing Member Omnibus Account of the Netting Member, which may include a pledge the purchased securities they received.	Users is responsible for exchanging initial margin (Clearing Members exchange initial margin, abers are required to variation margin (Outstanding Exposure ceive on the on-leg Settlement or "OES") and settlement or "OES")	In respect of a Treasury Participant's house positions, ICC calculates initial margin and variation payment on a net basis and the Treasury Participant exchanges initial margin and variation payment with ICC. ICC Rule 401(a). (1) "Net Margin": customer positions are margined on a net customers, initial margin and variation payment are netted. Participant funds the margin requirement. ICC Rule	sis with other RepoClear Member, which may be did the Treasury Margin for a RepoClear Member's individually segregated accounts of	calculated on a net basis for each account of the Sponsored Member. LCH collects margin from a Sponsored Member, who amounts are calculated on a net basis across all of the Clearing Member's Own Transactions. Eurex Clearing Conditions General Provisions. Part 1, 3,1,2.	amounts are calculated on a net basis across all of the Clearing Member's Own Transactions. Eurex Clearing Conditions General Provisions, Part 1, 3.1.2. amounts are calculated on a net basis across all of the ISA Direct Clearing Member's transactions. Eurex Clearing General Provisions, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2. Amounts are calculated on a net basis across all of the ISA Direct Clearing General Provisions, Chapter I, Part 1, 3.1.2.	CDCC collects and posts variation margin and settlement amounts from and to the Fixed Income Clearing Members on a net hasis across all rope transactions (both the last).	
Mechanics of posting/receiving daily margin/payments	FICC collects and posts initial margin (Clearing Fund or Segregated Customer Margin*) only from and to, respectively, the Sponsoring Member, which amount is calculated on a net basis across the same Sponsored Member's positions, but mostly not netted across different Sponsored Members. See FICC Rulebook, Section 10 of Rule 3A.	FICC collects and posts initial margin (Clearing Fund or Segregated Customer Margin*) only from and to, respectively, the Sponsoring Member, which amount is calculated on a net basis across the same Sponsored Member's positions, but results are also across.	If Executing Firm Customer elects to post margin on a segregated	of the Netting Member, which may include both proprietary and, if the Netting Member, which may include both proprietary and, if the Netting Member is acting as a Submitting Member, its Executing Firm customers Member, its Executing Firm customers' FICC to secure their obligations	is to FICC. 1504(a). Supported Users exchange settlement 1504(b).	Transfers of variation payment are treated as settlement, and such settlement resets the fair value of the outstanding exposures for the relevant positions to zero. ICC Rules 401(k) and (l). (2) "Gross Margin Fully Funded by Treasury Participant": cus margined on a gross basis and the Treasury Participant fully requirement. ICC Rules 401(k) and (l).	basis for such RepoClear Member. General omnibus segregated accounts (i.e., an Regulations, Regulation 10(b); LCH account to which multiple RepoClear Dealer's transactions, but not the Service, Sections 1.7 and 1.8. RepoClear Member's proprietary trades	may "outsource" to its Agent Member to post such margin. However, the principal obligation to provide margin remains with Sponsored Member. SC Population 15(b)	Eurex settles payment and delivery amounts may be netted upon agreement amounts with the Clearing Member. Such amounts may be netted upon agreement amounts with the ISA Direct Member. Such amounts may be netted upon agreement amounts with the ISA Direct Member. Such amounts may be netted upon agreement amounts with the ISA Direct Member. Such amounts may be netted upon agreement amounts with the ISA Direct Member. Such amounts may be netted upon agreement amounts with the ISA Direct Member. Such amounts may be netted upon agreement amounts with the ISA Direct Member. Such amounts may be netted upon agreement amounts with the ISA Direct Member. Such amounts may be netted upon agreement amounts with the ISA Direct Member. Such amounts with the ISA Direct Member.	basis across all repo transactions (both proprietary and customer transactions), provided that settlement of same day repos are not netted. CDCC Rules, Rule D-606, 607.	
	*Note that FICC does not have separate initial margin and default funds; instead, Clearing Fund or Segregated Customer Margin serves both purposes.	the same Sponsored Member's positions, but mostly not netted across different Sponsored Members. See FICC Rulebook, Section 10 of Rule 3A. *Note that FICC does not have separate initial margin and default funds; instead, Clearing Fund	Participant of the Sponsoring Member and (2) the Sponsoring Member or its affiliate has a Segregated Indirect Participants Account. The initial margin amount would be calculated as if the Sponsored GC CIL Trades were subject to the required Clearing Fund deposit calculation, minus the required haircuts on the Sponsored GC CIL Trades. Member, which amount is calculated on a net basis across the same Executing Firm Customer's positions, but not netted across different Executing Firm Customers. See FICC Rulebook, Section 10 of Rule 3A If Executing Firm Customer elects to	trades. See FICC Rulebook, Sections 11 and 1 *Note that FICC does not have separate	payments and deliveries with CMESC directly. CMESC Rule 1504(b).	(3) "Gross Margin Fully Funded by Customer": customer position gross basis and the Non-Participant Party fully funds the ma	are credited). General Regulations, Regulation 10(c); LCH Procedures, Section Regulation 10(c); LCH Procedures, Section 2B, RepoClear Clearing Service, Sections	Sponsored Member. SC Regulation 15(b). SC Procedures, Section 2.8. between Eurex and the Clearing Member provided that same day repos are not netted. Eurex Clearing Conditions, Chapte	amounts may be netted upon agreement between Eurex and the Clearing Member, between Eurex and the Clearing Member, provided that same day repos are not ter netted. Eurex Clearing Conditions, Chapter amounts with the ISA Direct Member. Such amounts may be netted upon agreement between Eurex and the ISA Direct Clearing Member, amounts with the Clearing Member. Such amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts may be netted upon agreement amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts may be netted upon agreement between Eurex and the Clearing Member. Such amounts with the ISA Direct Clearing Member. Such amounts may be netted upon agreement	er,	
			*Note that FICC does not have separate initial margin and default funds; instead, Clearing Fund serves both purposes. *Note that FICC does not have separate initial margin and default funds; instead, Clearing Fund serves both purposes. *Note that FICC does not have separate initial margin and default funds; instead, Clearing Fund serves both purposes. *Note that FICC does not have separate initial margin and default funds; instead, Clearing Fund serves both purposes.	*Note that FICC does not have separate initial margin and default funds; instead, Clearing Fund serves both purposes. *Note that FICC does not have separate initial margin and default funds; instead, Clearing Fund serves both purposes. *Note that FICC does not have separate in default funds; instead, Clearing Fund serves both purposes.		(subject to permitted pre-funding by the Treasury Participant 3). ICC Rule 407. (4) "Hybrid": customer positions are margined on a gross ba	er SEC Rule 15c3- <u>1.7 and 1.8.</u>	IV, Part 2, Section 2.5.1.	Wellider, provided that same day repose are not netted. Eurex Clearing Conditions, Chapter IV, Part 2, Section 2.5.1. IV, Part 2, Section 2.5.1. Section 2.5.1. Eurex Clearing Conditions, Chapter IV, Part 2, Section 2.5.1. Section 2.5.1. Eurex Clearing Conditions, Chapter IV, Part 2, Section 2.5.1. IV, Part 2, Section 2.5		
			serves both purposes. *Note that in FICC does not have	Customers. separate initial margin and default funds; instead,		Participant funds part of the margin requirement, and the No funds the remainder margin requirement (subject to permittee Treasury Participant under SEC Rule 15c3-3). ICC F	articipant Party re-funding by the		iv, rait 2, section 2.3.1.		
logal counterparty	Spansored Member (Spansoring Member acts as processing agent and guaranter)	Spansored Member (Spansoring Member acts as processing agent and guaranter)		ed Customer Margin serves both purposes. Pt Clearing Member CCIT Member CCIT Member	Member Supported User Independent User	Treasury Participant Non-Participant Party		Spansored Member General Clearing Member	Direct Clearing Member ISA Direct Clearing Member Clearing Member Clearing Member	Fixed Income Clearing Member Limited Clearing Member	4
Legal counterparty	Sponsored Member (Sponsoring Member acts as processing agent and guarantor)	Sponsored Member (Sponsoring Member acts as processing agent and guarantor)	CIL Funds Lender (Sponsoring Member acts as processing agent) Agent Clearing Member. Rule 8 Section 7(f) Agent Clearing Member. Rule 8 Section 7(f) Agent Clearing Member. Rule 8 Section 7(f)	The Clearing Member CCTT Member	A Supported User is responsible for	Treasury Participant Non-Participant Party	Repoclear Member	Sponsored Member General Clearing Member	Direct Clearing Member ISA Direct Clearing Member Clearing Member Clearing Member	Fixed income clearing Member	
					exchanging final settlement amounts arising under its positions with CMESC, while its authorizing Member is responsible while its authorizing Member is responsible for exchanging initial margin and OES with positions with CMESC directly. CMESC						
Entity to whom CCP has recourse		Both Sponsored Member as counterparty to the cleared transaction and its Sponsoring Member	CIL Funds Lender as counterparty to the cleared transaction, though FICC would be able to rely on the Sponsoring Member's Clearing Fund in addition to FICC's lien on the purchased securities. Agent Clearing Member. Rule 8 Section 7(f) Agent Clearing Member. Rule 8 Section 7(f)	nt Clearing Member CCIT Member	CMESC in respect of such Supported User's transactions. CMESC Rules 501 and 506(a). Member Member Member Member Member Member Member Member Member	Where a Treasury Participant clears a trade for a Non-Part Treasury Participant is fully and directly liable as principal to ICC in respect of its bours positions ICC Bulg 201(b) By the properties of the prope	pal and not as	Sponsored Member General Clearing Member	ISA Direct Clearing Member (and, if the Direct Clearing Member Clearing Agent is a "Indemnifying Clearing Clearing Member Clearing Member	Fixed Income Clearing Member Limited Clearing Member	
	Member (as guarantor)	(as guarantor)	FICC would also have recourse to the Sponsoring Member in the event the Sponsoring Member elects to terminate the CIL Funds Lender's transactions pursuant to Section 16 of FICC Rule 3A.		If a Supported User's settlement obligations are not fully covered by margin posted by the Member on its behalf and posted by the Member on its behalf and obligations are not fully covered by margin posted by it and other assets of the Independent User available to CMESC, su	house positions. ICC Rule 301(b). expressly provided, ICC shall have no obligation to deal dir performance from any Non-Participant Party. ICC Rule 301(b).			Agent," the Clearing Agent)		
					other assets of the Supported User available to CMESC, such shortfall must be authorizing Member. covered by the authorizing Member. CMESC Rules 406(b)(ii) and (iii).						
					A Supported User is responsible for exchanging final settlement amounts arising under its positions with CMESC,			Agent Member does not guarantee its			
					while its authorizing Member is responsible for exchanging initial margin and OES with CMESC in respect of such Supported User's transactions. CMESC Rules 501 and 506(a).	ont ons	RepoClear Member is responsible for all	Sponsored Member's obligations. However, Agent Member is responsible for posting "Agent Buffer" (i.e., collateral that LCH may apply to cover a shortfall in			
Liability/obligations of intermediary (if applicable)	Sponsoring Member guarantees Sponsored Members' performance to FICC.	Sponsoring Member guarantees Sponsored Members' performance to FICC.	in respect of trades submitted on hebalt of Executing Firm	sible for all obligations to FICC in respect of trades half of Executing Firm Customers. N/A N/A	If CMESC determines that a Supported User defaults and its settlement obligations are	Where a Treasury Participant clears a trade for a Non-Part Treasury Participant becomes fully and directly liable, as properties. N/A guarantor or surety, for all obligations to ICC in respect of s	ant Party, the pal and not as trade, ICC Rule N/A Obligations owed to LCH with respect to the transactions of its RepoClear Dealers General Regulations, Regulation 10(a);	margin required to be posted by a Sponsored Member or default fund or Agent Resource Contribution obligations of	Clearing Agent acts as processing agent only and is not responsible for satisfying any margin/settlement obligations of its N/A Clearing Member is responsible for all obligations to Eurex in respect of trades submitted on behalf of clients. Eurex ISA Direct Clearing Member, unless it is an Clearing Conditions, Chapter I, Part 1, Clearing Conditions, Chapter I,	respect of both proprietary and client respect of both proprietary and client	
					Member on its behalf and other assets of the Supported User available to CMESC, Member fails to do so in time, CMESC made declare the Member in default. CMESC Ru	316(a). 316(a).	Regulation 16(f); LCH Procedures, Section 2B, RepoClear Clearing Service, Section 1.1.7.	fund contributions for Sponsored Member	Indemnifying Clearing Agent Section 1.2.2. Section 1.2.2. Section 1.2.2.	trades.	
					such shortfall must be covered by the authorizing Member. If the Member fails to do so in time, CMESC may declare the Member in default. CMESC Rules 406(b)(ii)			positions, as well as additional collateral known as "Agent Resource Contribution". SC Regulation 17.			
Available for done away transactions (i.e., whether a					and (iii).						4
customer can clear trades executed with a person other than its clearing member)?	Yes	Yes	Yes Yes	Yes N/A N/A	N/A Yes Yes	N/A Yes	N/A Yes	Yes N/A	N/A Yes Yes Yes	Yes Yes	1
			If Executing Firm Customer elects to post margin on non- segregated basis, Agent Clearing Member bears Clearing Fund		Members would be required to contribute	Treasury Participants are subject to guaranty fund requirement ("Required Contribution"), which is the greater of (x) the Treasury Participant's proportionate share of the aggregate "Treasury Participant Loss Exposure" (calculated using a	Described March as been Default Sund and Described Advantage Default Sund				
	bears Clearing Fund obligation in respect of Sponsored Member Trades, which is mostly	If Sponsored Member elects to post margin on a non-segregated basis, Sponsoring Member bears Clearing Fund obligation in respect of Sponsored Member Trades, which is mostly calculated on a	obligation in respect of trades submitted on behalf of Executing Firm Customers, which is calculated on a net basis across In general, because FICC would require CIL Funds Lenders to pledge to FICC the purchased securities received in the start leg of the repo, FICC would not require Sponsoring Member to post initial margin (Clearing Fund) for CIL Funds Obligation in respect of trades submitted on behalf of Executing Firm Customers, which is calculated on a net basis across Executing Firm Customer positions. However, Executing Firm Customers, which we customer positions are not netted against the Agent Clearing Customer positions. However, Executing Firm Customer positions. However, Executing Firm Customers, which we can be also be all fexecuting Firm Customer elects to the properties of trades submitted on behalf of Executing Firm Customer elects to the properties of the control of the properties of trades submitted on behalf of Executing Firm Customer elects to the properties of trades submitted on behalf of Executing Firm Customer elects to the properties of trades submitted on behalf of Executing Firm Customer elects to the properties of trades submitted on behalf of Executing Firm Customer elects to the properties of trades submitted on behalf of Executing Firm Customer elects to the properties of trades submitted on a net basis across. Executing Firm Customer positions. However, Executing Firm Customer positions are not netted against the Agent Clearing Firm Customer positions. However, Executing Firm Customer positions. However, Executing Firm Customer positions. However, Executing Firm Customer positions.	obligation in respect of trades submitted on behalf of uld be calculated on a net basis across Executing Firm	Guaranty Fund (which is separate from initial margin requirements) and may be subject to Default Assessment up to 200% of their Guaranty Fund obligations.	"Cover-Two" standard) and (y) \$20 million. If a Treasury Participant's Required Contribution exceeds 25% of its excess net capital (as calculated pursuant to SEC Rule 15c3-1), the Treasury Participant may be required to make an additional "Prepaid	RepoClear Member bears Default Fund obligation. <u>Default Rules, Schedule 7,</u> Section R1; Procedures, Section 2B, RepoClear Clearing Service, Section RepoClear Member bears Default Fund obligation. <u>Default Rules, Schedule 7,</u> Section R1; Procedures, Section 2B, RepoClear Clearing Service, Section	Agent Member bears belauft rung 1	The Clearing Member bears Default Fund obligations for the transactions of its ISA obligation for its Own Transactions. Eurex The Clearing Agent bears the Default Fund obligations for the transactions of its ISA Fund obligations for the transactions of the transact	t its	
Obligations to default fund/clearing fund – who bear		gross (i.e., Sponsored Member by Sponsored Member) basis, not segregated from FICC's proprietary assets, and available for loss mutualization. See FICC Rulebook, Section 12 of Rule 3A; Rule 4.	Lender's obligations, subject to a limited exception described below. Member's proprietary positions for purposes of such calculation. Clearing Fund is not segregated from FICC's proprietary assets, and is available for loss mutualization. See FICC Rulebook, Rule 4. Against the Agent Clearing Member or a Segregated Indirect and is available for loss mutualization. See FICC Rulebook, Rule 4.	proprietary positions for purposes of such calculation. obligation, which is calculated on a net basis (i.e., across the Netting Member's proprietary positions and, if the Netting the purchased securities they receive on the purchased securities the purchased securitie	e required to pledge I the on-leg (i.e., the The total Guaranty Fund would be at Users would not be required to contribute Users would not be required to contribute.	Contribution." ICC Rules 209 and 801(a). ICC is permitted to make assessments up to three times of a Treasury Participant's Required Contribution amount in a given 30-day cooling off period after either (i) ICC Non-Participant Parties are not required to make contribution	1.14.13(k). Default fund contribution requirements are calculated on the basis of the stress-tested losses in excess of the	fund contribution requirements are calculated on the basis of the stress-tested losses in excess of the amount of initial	Clearing Conditions Chapter I, Part 1, Section 6. Default Fund contribution requirements are calculated using a requirements are calculated requirements.	the Clearing Fund obligations for both proprietary and client transactions on a The Limited Clearing Member does not	
these, how are they calculated, how are they segregated and what is at risk?	If Sponsored Member elects to post margin on a segregated basis, Sponsoring Member is generally required to collect Segregated Customer Margin from the Sponsored Member and on-post that Margin to FICC. The Segregated Customer Margin requirement is calculated on a		The little and all little and the first state of the stat	related Executing Firm positions), not buyer against cash on the purchase date) segregated to collect Segregated Customer Margin from the segregated from FICC's proprietary assets,	to Guaranty Fund. CMESC Rule 401(a).	makes an assessment call or (ii) the replenishment contributions of a non-defaulting Treasury Participant to the guaranty fund, following defaults of at least two Treasury Participants, exceed the Required Contribution prior to the first such	RepoClear Member's "RepoClear Business" (defined to include all fixed income transactions carried by that PenoClear	margin in respect of the Sponsored Member's positions. <u>Default Rules,</u> Schedule 7, Section R2. Schedule 7, Section R2.	"Stress Loss-over-Margin" methodology that compares a "portfolio's" margin requirements to its performance in a stress scenario. Default Fund amounts are stress scenario.	in purposes. <u>CDCC Rules, Rule A-6; CDCC Risk</u>	
	gross (i.e., Sponsored Member by Sponsored Member) basis, and held segregated from FICC's proprietary assets and not available to satisfy the obligations of any person other than the Sponsored Member for whom the margin is held. See FICC Rulebook, Rule 4.			culated on a gross (i.e., Executing Firm Customer by egregated from FICC's proprietary assets and not	CMESC Procedure 4-1(a). The Guaranty Fund is not segregated and	default (either such circumstance, a "Cooling-off Period Trigger Event"). If a subsequent Cooling-off Period Trigger Event occurs 30 or fewer days after the previous one, the cooling-off period will be extended until 30 days after such	Member). <u>Default Rules, Schedule 7,</u> Section R2. RepoClear Default Fund is segregated from RepoClear Default Fun	PenoClear Default Fund is segregated from	not segregated and may be used for loss mutualization purposes. performance in a stress scenario. Default rund amounts are not segregated and may be used for loss mutualization purposes. performance in a stress scenario. Default rund amounts are not segregated and may be used for loss mutualization purposes. loss mutualization purposes. astress scenario. Default rund amounts are not segregated and may be used for loss mutualization purposes. loss mutualization purposes.		
			FICC's proprietary assets and not available to satisfy the for whom obligations of any person other than the Executing Firm Customer for whom the margin is held. See FICC Rulebook, Rule 4.	the margin would be held.	may be used for loss mutualization purposes.	subsequent Cooling-off Period Trigger Event. ICC Rules 803(b) and 806. The guaranty fund is not segregated and may be used for loss mutualization purposes.	LCH's other default funds. <u>PFMI p. 27</u> . LCH's other default funds. <u>PFMI p. 27</u> .				
								Eurex states that it holds non-cash	Eurex states that it holds non-cash	CDCC states that collateral is maintained	
		FICC has stated that it holds Clearing Fund at a Federal Reserve Bank or a FDIC-insured bank. FICC is required to hold all Segregated Customer Margin at the Federal Reserve Bank of New	The purchased securities over which FICC has a lien would be held at BNYM. Segregated Customer Margin at the Federal Reserve Bank of	FICC has stated that it holds Clearing Fund at a Federal Reserve Work on a FDIC insured hour.	CMESC would establish three separate omnibus accounts at each of its bank(s) for omnibus accounts at each of its bank(s) for	or		instruments at central securities depositories. For cash, Eurex either inves the cash in highly liquid financial	instruments at central securities depositories. For cash, Eurex either invests the cash in highly liquid financial instruments or holds the cash at central securities depositories. For cash, Eurex either invests the cash in highly liquid financial instruments or holds the cash at central securities depositories. For cash, Eurex either invests the cash in highly liquid financial instruments or holds the cash at central securities depositories. For cash, Eurex either invests the cash in highly liquid financial invests the cash in highly liquid fi	at either the central bank (for cash collateral), pledged to CDCC via the CDS settlement system, or held at approved at either the central bank (for cash collateral), pledged to CDCC via the CDS settlement system, or held at approved	
Where is collateral held by the CCP?	York or a FDIC-insured bank. FICC has limited rehypothecation rights with respect to Clearing Fund and no rehypothecation	York or a FDIC-insured bank. n FICC has limited rehypothecation rights with respect to Clearing Fund and no rehypothecation	FICC has stated that it holds Clearing Fund at a Federal Reserve Bank or a FDIC-insured bank. New York or a FDIC-insured bank. FICC has limited rehypothecation rights with respect to Clearing	on rights with respect to Clearing Fund and no insured bank. insured bank. The purchased securities pledged by the Clearing Fund and no held in a tri-party account at E		ICC holds margin or collateral transferred by Treasury Participants in bank and securities accounts specified by ICC. ICC Rule 101 (definition of "Transfer"). Note H(b)(2)(iv). ICC Rule 407(g).	es in an account LCH states that it holds collateral at central securities depositories, and where those are not available, custodian banks. LCH states that it holds collateral at central securities depositories, and where those are not available, custodian banks.	central securities depositories, and where banks (if authorized) or at authorized	banks (if authorized) or at authorized credit		
		rights with respect to Segregated Customer Margin. <u>See FICC Rulebook, Section 5 of Rule 4</u> .	First and and an appropriate with respect to Cleaning Fund. See Fice Rulebook, Section 5 of Rule 4.	to Segregated Customer Margin. See FICC Rulebook, Section 5 of Rule 4. See FICC Rulebook, Section 5 of Rule 4.	CMESC Rule 507(a). CMESC Rule 507(a). CMESC Rule 507(a). CMESC Rule 507(a).				Eurex has broad rehypothecation rights with respect to cash collateral, but not with respect to securities collateral. Eurex has broad rehypothecation rights with respect to cash collateral, but not with respect to securities collateral. Eurex has broad rehypothecation rights with respect to cash collateral, but not with respect to securities collateral. Eurex has broad rehypothecation rights with respect to cash collateral, but not with respect to securities collateral. Eurex has broad rehypothecation rights with respect to cash collateral, but not with respect to securities collateral.	CDCC has broad rehypothecation rights with respect to clearing fund, but not with respect to other collateral. CDCC Rules, Rule A-701(4). CDCC has no rehypothecation rights with respect to collateral posted by a Limited Clearing Member. CDCC Rules, Rule A-701(4).	
			There is no segregation requirement for Clearing Fund from any						If the Disclosed Direct Client elects to use the "Gross Omnibus Segregated Account	se e t''	
	There is no segregation requirement for Clearing Fund from any other assets (note that FICC does not have separate initial margin and default funds; instead, Clearing Fund serves both purposes).	There is no segregation requirement for Clearing Fund from any other assets (note that FICC does not have separate initial margin and default funds; instead, Clearing Fund serves both purposes).	and default funds; instead, Clearing Fund serves both purposes). FICC does not have separate initial in	art for Clearing Fund from any other assets (note that argin and default funds; instead, Clearing Fund serves both purposes).			A RepoClear Dealer's positions and initia		model, its positions and margin are legal segregated from the Clearing Member proprietary positions and margin, but a	ly s re	
	FICC holds Segregated Customer Margin in a separate account from any margin with respect to the Sponsoring Member's proprietary positions (note that FICC does not have separate	FICC holds Segregated Customer Margin in a separate account from any margin with respect to the Sponsoring Member's proprietary positions (note that FICC does not have separate initial margin and default funds; instead. Segregated Customer Margin serves both purposes). The	from any margin with respect to the Agent Clearing Member's proprietary positions (note that FICC does not have separate initial margin and default funds instead. Segregated Customer respect to the Agent Clearing Me	Margin in a separate account from any margin with ober's proprietary positions (note that FICC does not efault funds; instead. Segregated Customer Margin that in non-segregated models FICC does	CMESC would maintain separate accounts CMESC would maintain separate accounts on its books for each Member, Independent User, and Supported User to CMESC would maintain separate accounts on its books for each Member, Independent User, and Supported User to which it would User, and Supported User to which it would User, and Supported User to which it would User, and Supported User to which it	ICC segregates margin posted in relation to each of the follo Treasury Participants' house positions, (2) net margined client gross margined client-related positions fully funded by Treas ICC maintains separate accounts on its books for each Treasury Participant's house gross margined client-related positions fully funded by Non-Pa	g categories: (1) ated positions, (3) A RepoClear Member's proprietary RepoClear Member's proprietary position	A Sponsored Member's positions and margin are legally segregated from its Agent Member's proprietary positions and Proprietary positions and assets of a	An ISA Direct Clearing Member's positions and and margin are legally segregated from those of the Clearing Agent and other Proprietary positions and assets of a trisk for a collateral shortfall (i.e., if the value of the collateral is not sufficient to margins are legally segregated from the those of the Clearing Agent and other those of the Clearing Agent and other those of the Clearing Member's proprietary positions are carried in the account).		
How is initial margin (or similar) segregated?	initial margin and default funds; instead, Segregated Customer Margin serves both purposes). The segregation is equivalent to LSOC. Segregated Customer Margin can be used exclusively to settle and margin the obligations of	segregation is equivalent to LSOC. Segregated Customer Margin can be used exclusively to settle and margin the obligations of the	initial margin and default funds; instead, Clearing Fund serves both purposes). Margin serves both purposes). The segregation is equivalent to serves both purposes. LSOC. Segregated Customer Margin can be used exclusively to settle.	efault funds; instead, Segregated Customer Margin The segregation is equivalent to LSOC. that in non-segregated models FICC does not have separate initial margin and default funds; instead, Clearing Fund serves both purposes).	which it would record margin it holds. The Member's initial margin is segregated from its Users. CMESC Rules 406 and 513. Supported User's initial margin is equivalent to LSOC and not subject to any kind of loss mutualization. CMESC Rules 406 kind of loss mutualization. CMESC Rules 406 kind of loss mutualization. CMESC Rules 406 kind of loss mutualization.	positions and client-related positions, to which it credits the relevant margin. ICC margin funded by customer in connection with hybrid funded client-related positions that funded by Norreasury Part on a sub-account level, and (6) margin funded by Treasury Part with hybrid funded client-related positions on a sub-account level.	I Segregated Account it may be exposed t	Members. SC Regulation 10(a); SC	Clearing Member are legally segregated parties and not exposed to loss arising from its client-related positions and assets. from its client-related positions are client-related positions and assets. from its client-related positions are client-related positions and assets. from its client-related positions are client-related positions and assets. from its client-related positions are client-related positions and assets. from its client-related positions are client-related positions are client-related positions are client-related positions.	or clearing fund in respect of repos to be segregated. There is no requirement for initial margin in respect of repos to be segregated.	
	Segregated Customer Margin can be used exclusively to settle and margin the obligations of the Sponsored Member for whom the assets are held. See FICC Rulebook, Section 1a of Rule 4	Sponsored Member for whom the assets are held. See FICC Rulebook, Section 1a of Rule 4.	I Segregated (lictomer Margin can be liced exclusively to cettle I	whom the assets are held. See FICC Rulebook, Section 1a of Rule 4.	and 513. and 513.	407, and 409(c).	clients of the RepoClear Member. <u>LCH</u> <u>Procedures, Section 2B, RepoClear Service</u> <u>Section 1.7.1.</u>		model, then its positions and margin ar legally segregated from those of the Clearing Members and other clients, ar not exposed to loss arising from the	e d	
									not exposed to loss arising from the default of the Clearing Members or othe clients.	er	
									Clearing Agent is responsible for Default Fund attributable to its ISA Direct Clearing		
						Treasury Participants are subject to guaranty fund requirement equal to the Required Contribution (including any applicable Prepaid Contribution) and may be subject to assessments up to three times of a Treasury Participant's Required		Classics Manual Control	Members. Upon a Clearing Agent's default as a Clearing Member, its contribution to the Default Fund in respect of any ISA		
				FICC has a capped contingency liquidity	Members would be required to contribute Guaranty Fund and may be subject to Default Assessment up to 200% of their	subject to assessments up to three times of a Treasury Participant's Required Contribution amount in a given 30-day cooling off period after a Cooling-off Period Trigger Event. If a subsequent Cooling-off Period Trigger Event occurs 30 or fewer days after the previous Cooling-off Period Trigger Event, the cooling-off period will	RepoClear Member has loss mutualization obligations. In addition, LCH may demand obligations. In addition, LCH may demand	obligations. In addition, Eurex may Agent Member has loss mutualization demand up to 2 assessments on Clearing	Direct Clearing Member has loss mutualization obligations. In addition, Eurex may demand up to 2 assessments on Clearing Member would not be treated as its own Default Fund but subject to loss mutualization on a pari passu basis	Only Clearing Members have less	
Default management obligations (i.e., loss	liquidity repos with FICC in certain instances. FICC does not have variation margin gains	FICC has a capped contingency liquidity facility (CCLF) that requires members to enter into liquidity repos with FICC in certain instances. FICC does not have variation margin gains haircutting or tear-ups.	FICC has a capped contingency liquidity facility (CCLF) that requires members to enter into liquidity repos with FICC in certain instances. FICC does not have variation margin gains liquidity repos with FICC in certain	ty facility (CCLF) that requires members to enter into nstances. FICC does not have variation margin gains cutting or tear-ups. facility (CCLF) that requires members to enter into liquidity repos with FICC in certain instances. FICC does not have	s haircutting or tear Guaranty Fund obligations. CMESC Rules 401(a) and 402(c). Users would not be required to contribute Users would not be required to contribute	be extended until 30 days after such subsequent Cooling-off Period Trigger Event. ICC Rules 209, 801(a), 803(b), and 806. Non-Participant Parties are not required to make contribution.	additional contributions to replenish the default fund, and require tear-ups. <u>Default</u> default fund, and require tear-ups. <u>Default</u> to the guaranty Rules, Schedule 7, RepoClear Default Fund Rules, Schedule 7, RepoClear Default Fund	additional contributions to replenish the default fund, and require tear-ups. Default Rules, Schedule 7, RepoClear Default Fund contributions are insufficient.	with contributions of all non-defaulting Clearing Members. If, following a default of an ISA Direct Clearing Member, the Default Fund attributable to the ISA Direct Obligations. A Clearing Member's obligations. A Clearing Member's obligations. A Clearing Member's	Only Clearing Members have loss mutualization and liquidity ("Supplemental Liquidity Fund") obligations. CDCC may demand additional contributions to	
allocation/liquidity obligations) – who has these, wha are they?	t	Only Sponsoring Members have loss mutualization and CCLF obligations. See FICC Rulebook, Section 12 of Rule 3A; Rule 22A.	Only Sponsoring Members have loss mutualization and CCLF obligations. Only Agent Clearing Members have loss mutualization and CCLF obligations are only with respect to Clearing obligations are only with respect.	e loss mutualization and CCLF obligations, and such	to the trades they one of and 14 of Rule have a Capped Liquidity Facility ("CLF") in place with CMESC. CMESC requires each Member to enter into a CLF MRA to	ICC may designate a "Settlement Liquidity Event" upon settlement failures, allowing ICC to borrow against Treasury Participants' cash contributions (but not cash initial margin in respect of Non-Participant Party's positions), require Treasury Participants to substitute cash for non-cash initial margin in respect of house positions and	RepoClear Members must provide RepoClear Members must provide "expertise" in the default management "expertise" in the default management		required to participate in default management committees, and may be subject to tear-up of positions and Clearing Member is not sufficient to cover the "Default Fund Secured Claims" against it, Eurex may at its discretion require up. Clearing Member is not sufficient to cover the "Default Fund Secured Claims" against it, Eurex may at its discretion require up. Unable of the "Default Fund Secured Claims" against it, Eurex may at its discretion require up.	replenish Clearing Fund. CDCC has a process for voluntary tear-up of positions. CDCC Rules, Rule A-6, 6A, 1008; CDCC Manual.	
			Fund (not Segregated Customer Margin)	mutualization and CCLF obligations.	provide liquidity support in case of a participant default. CMESC Rule 410(a), CMESC Procedure 4-9(c)(ii).	guaranty fund and borrow against such cash or require Treasury Participants to provide liquidity (either secured or unsecured) up to five times the Required Contribution. ICC Rule 812.	participate in auctions. <u>Default Rules,</u> <u>Schedule 4, Section 1.2</u> participate in auctions. <u>Default Rules,</u> <u>Schedule 4, Section 1.2</u> <u>Schedule 4, Section 1.2</u>	participate in auctions. <u>Default Rules,</u> required to participate in position auctions. <u>Eurex Clearing Conditions,</u>	required to participate in position auctions. Eurex Clearing Conditions, General Provisions Chapter I. Part 1 additional Default Fund from the Clearing Agent to cover the Default Fund Secured Claims. Eurex Clearing Conditions, General	Default Manual.	
						ICC may also impose tear-ups as well as variation margin gains haircuts to mitigate risk. ICC Rules 20-605(f) and 808.		Section 7.5.	Section 7.5. ISA Direct Clearing Member may be subject to tear-up of positions. <u>Eurex</u>		
									Clearing Conditions, General Provisions Chapter I, Part 1, Section 7.5.		
			EICC does not have a local relationship with Everytims Size						Eurex will cease accepting new client transactions. Eurex will transfer a		
			FICC does not have a legal relationship with Executing Firm Customers. Upon the Agent Clearing Member's default, FICC will close out all FICC does not have a legal	relationship with Executing Firm Customers.			LCH will seek to port client positions and associated assets to another clearing member (the "Backup Clearing Member"		Upon a Clearing Agent default, its ISA Eurex will cease accepting new client transactions. Eurex will transfer Undisclosed Clients' transactions (including related Indirect Client's transactions) to another Clearing	CDCC does not have a legal relationship	
	FICC has discretion to close out Sponsored Member Transactions or continue to settle them upon a Sponsoring Member's default. See FICC Rulebook, Section 14 of Rule 3A.	a Sponsoring Member's default. See FICC Rulebook, Section 14 of Rule 3A.	In the event of Sponsoring Member default, if the pre-novation counterparty of the CIL Funds Lender is not the defaulting Sponsoring Member or an Indirect Participant of that Sponsoring Member or its affiliate, FICC would be able to settle the trade with the pre-poyation counterparty by exercising its lien over the purchased securities and	default, FICC will close out all trades carried for the mers by the Agent Clearing Member.	If a Member defaults, CMESC may transfer If a Member defaults, CMESC may transf	er	The Backup Clearing Member must accept the contracts to be ported. If porting is not achieved, LCH will close out the position:	up" Agent Member to take over in the	related Indirect Client's transactions) to certain period (depending on when Eurex gives notice to the ISA Direct Clearing Member) elect to (i) find a replacement related Indirect Client's transactions) to another Clearing Member, unless (i) transfer conditions under the Eurex rules timely elect transfer, (ii) if transfer	with clients of Fixed Income Clearing Members. Upon a Fixed Income Clearing Member's	
	FICC has proposed rules to allow porting of customer Sponsored Member Transactions upon a Sponsoring Member's default. The treatment of a Sponsored Member's positions and related margin in the event of a failure	FICC has proposed rules to allow porting of customer Sponsored Member Transactions upon a Sponsoring Member's default.	instructing BNYM (or allowing the CIL Funds Lender) to remove the securities from the account of such CIL Funds Lender against the repurchase price. FICC has proposed rules to allow settlement or porting of customer trades upon the Agent Clearing Member's default. FICC has proposed rules to allow settlement or porting of customer trades upon the Agent Clearing Member's default. The treatment of an Executing Firm Customer's positions and	lement or porting of customer trades upon the Agent ing Member's default.	the positions and associated margin of any non-defaulting User(s) of such Member to a non-defaulting authorizing Member of the non-defaulting authorizing Member of the	Following a Treasury Participant default, ICC will close out the close out or, to the extent permitted by law, port the client-reasure Rules 20-605(c) and 20A-02.	and liquidate the relevant collateral. use positions and Procedures, Section 2B, RepoClear Service		Clearing Agent, (ii) become a Direct Clearing Member, if eligible, or (iii) close out its transactions. Eurex Clearing Clearing Member, if eligible, or (iii) close out its transactions. Eurex Clearing Clearing Member, in which case out its transactions. Eurex Clearing Clearing Member, in which case out its transactions. Eurex Clearing Conditions under the Eurex rules are not satisfied, or (iii) if such transfer is not permitted in the jurisdiction of the defaulting Clearing Member, in which case such client transactions would be closed.	default, CDCC will close out all trades carried for clients by the Fixed Income Clearing Member.	
Treatment of clients upon intermediary default (if applicable)	of the Sponsoring Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Sponsoring Member, its entity type and the clearing documentation. If the Sponsoring Member is organized in the United States, the Sponsored	the Sponsoring Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Sponsoring Member, its entity type and the clearing documentation. If the	Participant of that Sponsoring Member or its affiliate, FICC may seek to settle or port to another Sponsoring Member such Sponsored GC CIL Trades. To the extent it were unable to do so, FICC would terminate the transaction, in which	Member would depend on, among other things, the	User, or liquidate such positions in its discretion. Prior to any transfer or liquidation described above, CMESC may Stleet OFS payments directly from any non-	N/A For client-related position, ICC may permit variation paym settlement amount) to be settled directly by a Non-Participal settlement amount.	N/A advance and notify LCH of this choice. (but not final Procedures, Section 2B, RepoClear Service	, and the second	N/A Conditions, General Provisions Chapter I, Part 6, Section 11.2. Part 6, Section 11.2. Part 2, Subpart A, Section 8: Part 4, Section 8 and 10. Part 2, Subpart A, Section 8 and 10. Part 2, Subpart A, Section 8.1 and Subpart C. Section 8: Part 4, Section 8 and 10. Part 2, Subpart A, Section 6.1 and Subpart C. Section 8: Part 4, Section 8 and 10.	The treatment of a client's positions and related margin in the event of a failure of	
	Member's claims for the return of its margin and any amounts paid on its positions may, depending on (among other things) the documentation of the relationship between the Sponsoring Member and the Sponsored Member, be treated as customer claims under the	return of its margin and any amounts paid on its positions may, depending on (among other things) the documentation of the relationship between the Sponsoring Member and the	would then have a claim against (or be liable to) FICC for any positive (or negative) difference between the repurchase price and the value of the purchased securities as calculated by FICC. The Sponsoring Member would not be liable to FICC if the CIL Funds Lender would be able to withdraw and inquidate the purchased securities. The CIL Funds Lender would be dearing documentation. If the Agent Clearing documentation and the clearing documentation. If the Agent Clearing documentation are the clearing documentation and the clearing documentation and the clearing documentation. If the Agent Clearing documentation are the clearing documentation and the clearing documentation and the clearing documentation are the clearing documentation and the clearing documentation and the clearing documentation are the clearing documentation and the clearing documentation are the clearing documentation and the clearing documentati	ne Agent Clearing Member is organized in the United 's claims for the return of its margin and any amounts g on (among other things) the documentation of the	collect OES payments directly from any non-Notably, IM and OES payments are alreadefaulting Supported User of such Member. CMESC Rule 412. Independent Users and CMESC.	funds its margin requirement calculated on a gross basis. <u>I</u>	The treatment of a RepoClear Dealer's positions and related margin in the even	depend on, among other things, the bankruptcy and insolvency laws applicable to the Agent Member, its entity type and	Member's positions and related margin in the event of a failure of the Clearing Agent would depend on, among other things, the	depend on, among other things, the bankruptcy and insolvency laws applicable to the Fixed Income Clearing Member, its	
	Securities Investor Protection Act (SIPA) or the claims of an entitlement holder under Article 8 of the Uniform Commercial Code.	(SIPA) or the claims of an entitlement holder under Article 8 of the Uniform Commercial Code.	to cover such amount. to cover such amount. paid on its positions may, depending on (among other things) the documentation of the relationship between the Agent Clearing treated as customer claims under the cover such amount.				of a failure of the RepoClear Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the RepoClear Member, its entity type	the dearing documentation.	bankruptcy and insolvency laws applicable to the Clearing Agent, its entity type and the clearing documentation. of a failure of the Clearing Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Clearing Member, its entity type things, the bankruptcy and insolvency laws applicable to the Clearing Member, its entity type things, the bankruptcy and insolvency laws applicable to the Clearing Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Clearing Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Clearing Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Clearing Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Clearing Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Clearing Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Clearing Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Clearing Member would depend on, among other things, the bankruptcy and insolvency laws applicable to the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a failure of the Clearing Member would depend on a f	entity type and the clearing documentation.	
			(SIPA) or the claims of an entitlement holder under Article 8 of the Uniform Commercial Code.				and the clearing documentation.		and the clearing documentation. laws applicable to the Clearing Member its entity type and the clearing documentation. its entity type and the clearing documentation.		
					If CMESC determines that a User defaults, CMESC would allow the User's authorizing CMESC would allow the User's authorizing.	S, and the second secon		An Agent Member does not guarantee its	If the client has been excluded or If the client has been excluded or		
			Agent Clearing Member is responsible for all obligations to FICC	ponsible for all obligations to SICC in several Const	CMESC would allow the User's authorizing Member(s) to close out the User's positions by satisfying any obligations owing to CMESC. If the Member does not do so,	ns	is in any elect	Sponsored Members' performance. However, Agent Member is responsible for posting "Agent Buffer" (i.e., collateral	restricted from trading, the Clearing Member may terminate the trades. Eurex Clearing Agent has no obligations except Clearing Conditions, Chapter I, Part 1, Clearing Conditions, Chapter I, Clearing Conditi	The Fixed Income Clearing Member is	
Obligations of intermediary if client defaults (if applicable)	Sponsoring Member is guarantor of Sponsored Member's performance to FICC. If so permitted under agreement between Sponsoring Member and the defaulted Sponsored Member, the Sponsoring Member can close out all of the Sponsored Member's trades and the			ponsible for all obligations to FICC in respect of trades uting Firm Customers. See Rule 8 Section 7(f) N/A N/A N/A	CMESC would perform the close-out itself. The Member is responsible for amounts N/A CMESC would perform the close-out itself. The Member is responsible for amounts owing to CMESC by the User after such	Upon a Non-Participant Party default, the relevant Treasury F to either (1) have ICC manage the close-out of the defaulting N positions or (2) liquidate the defaulting Non-Participant Pa submitting new house positions to offset those customer positi	an early termination date has occurred with respect to a client transaction, it may only converting N/A instruct LCH to transfer the relevant contract to its proprietary account.	that LCH may apply to cover a shortfall in margin required to be posted by a Sponsored Member or default fund or Agent Resource Contribution obligations of	for potential additional Default Fund requirement, unless it is an Indemnifying Clearing Agent (see Row 16 above). An Indemnifying Clearing Agent is responsible Section 10.5. If the Clearing Member closes out the transaction between it and its client for another reason (e.g., pursuant to a bilateral agreement), the	respect of trades submitted on behalf of dients. N/A	
	Member, the Sponsoring Member can close-out all of the Sponsored Member's trades and the Sponsoring Member's corresponding house trades. See FICC Rulebook, Section 18 of Rule 3A.	Member, the Sponsoring Member can close-out all of the Sponsored Member's trades and the Sponsoring Member's corresponding house trades. See FICC Rulebook, Section 18 of Rule 3A.	the securities from the account of such CIL Funds Lender against the repurchase price. terminate novated trades that were submitted on behalf of Triparty Trades that were submit	ted on behalf of Executing Firm Customers upon an Firm Customers' default.	close-out. CMESC Rule 1507, CMESC Procedure 4-4(b). The CMESC Rules do not provide a Close-out. CMESC Rule 1507, CMESC Procedure 4-4(b). The CMESC Rules do not provide a The CMESC Rules do not provide a	those customer positions into house positions. <u>ICC Rules 316</u>		Agent Member). <u>SC Regulation 16.</u> Agent Member is also required to post default fund contributions for Sponsored Member	for any amount necessary to cover Eurex's losses due to its ISA Direct Clearing Member and Eurex will not be closed out but instead credited to the Clearing but instead credited to the Clearing but instead credited to the Clearing	Income Clearing Member to terminate novated trades that were submitted on hehalf of a client upon the client's default	
					mechanism for a Member to close out its User if CMESC has not determined that the User has defaulted. The CMESC Rules do not provide a mechanism for a Member to close out its User if CMESC has not determined that the User has defaulted. User has defaulted.	s he		positions, as well as additional collateral known as "Agent Resource Contribution". SC Regulation 17.	Member's proprietary account . <u>Eurex</u> <u>Clearing Conditions, Chapter 1, Part 1,</u> <u>Section 10.7.</u> Member's proprietary account . <u>Eurex</u> <u>Clearing Conditions, Chapter 1, Part 1,</u> <u>Section 10.7.</u> <u>Section 10.7.</u>		
Whether there is industry or ad hoc opinion available to address netting against U.S. Customers for U.S.	Yes for Sponsoring Members (this opinion coverage is in addition to the opinion covering their proprietary activities as Netting Members; see Column G)	Yes (for done-with trades only)	No (but Sponsored GC CIL Trades generally would not be expected to generate exposure for which netting would be necessary/beneficial) Yes	No Yes Yes	N/A N/A N/A	N/A N/A	Yes Yes	l Yes I '	CRR Opinions are available for the UK and certain EU jurisdictions. CRR Opinions are available for the UK and certain EU jurisdictions. CRR Opinions are available for the UK and certain EU jurisdictions. CRR Opinions are available for the UK and certain EU jurisdictions.	nd N/A N/A	
Regulatory Capital purposes	No for Sponsored Members		necessary/beneficial)					certain EU jurisdictions.	certain EU jurisdictions. certain EU jurisdictions. certain EU jurisdictions. certain EU jurisdictions.		