

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
4.1	4.1.1	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Prefunded - Own Capital Before; Reported as at quarter end	30/09/2019	HKD216,991,365.00	4.1 - SEOCH retains a single Reserve Fund for its different products. 4.1.1 - The amount of own capital is equivalent to DFCCP (as defined in BCBS 282) as the CCP's prefunded own resources which are contributed to the default waterfall, where these are junior or pari passu to prefunded member contributions. The reported amount includeds SEOCH own capital (of HKD109,759,365) and accumulated interest income earned on Reserve Fund Contributions. While interest income does not represent SEOCH's prefunded own resources, interest income are junior to member contributions in the default waterfall, hence this amount is reported in this component. The value of DFCCP is consistent with that used in the calculation of KCCP reported in 4.2.1.	30/06/2019	HKD191,860,016.00	4.1 - SEOCH retains a single Reserve Fund for its different products. 4.1.1 - The amount of own capital is equivalent to DFCCP (as defined in BCBS 282) as the CCP's prefunded own resources which are contributed to the default waterfall, where these are junior or pari passu to prefunded member contributions. The reported amount includeds SEOCH own capital (of HKD84,628,016) and accumulated interest income earned on Reserve Fund Contributions. While interest income does not represent SEOCH's prefunded own resources, interest income are junior to member contributions in the default waterfall, hence this amount is reported in this component. The value of DFCCP is consistent with that used in the calculation of KCCP reported in 4.2.1.
4.1	4.1.2	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Prefunded - Own Capital Alongside; Reported as at quarter end	30/09/2019	HKD0.00		30/06/2019	HKD0.00	
4.1	4.1.3	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Prefunded - Own Capital After; Reported as at quarter end	30/09/2019	HKD0.00		30/06/2019	HKD0.00	
4.1	4.1.4	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Prefunded - Aggregate Participant Contributions - Required; Reported as at quarter end	30/09/2019	HKD880,602,288.00		30/06/2019	HKD655,389,142.00	
4.1	4.1.5	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Prefunded - Aggregate Participant Contributions - Post-Haircut Posted; Reported as at quarter end	30/09/2019	HKD880,602,288.00		30/06/2019	HKD655,389,142.00	
4.1	4.1.6	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Prefunded - Other; Reported as at quarter end	30/09/2019	See Note	4.1.6 - Hong Kong Exchanges and Clearing Limited (HKEX) has committed HKD4 billion from its shareholders' funds as HKEX Risk Management Capital to use only for the strengthening the risk management framework of the three clearing houses as central counterparties. Effective from 1 Jun 2018, the HKSCC Margin Credit, HKSCC Dynamic Contribution Credit, HKCC Participant Additional Deposit Credit and the three clearing houses' appropriations are supported by the HKD4 billion.	30/06/2019	See Note	4.1.6 - Hong Kong Exchanges and Clearing Limited (HKEX) has committed HKD4 billion from its shareholders' funds as HKEX Risk Management Capital to use only for the strengthening the risk management framework of the three clearing houses as central counterparties. Effective from 1 Jun 2018, the HKSCC Margin Credit, HKSCC Dynamic Contribution Credit, HKCC Participant Additional Deposit Credit and the three clearing houses' appropriations are supported by the HKD4 billion.
4.1	4.1.7	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Committed - Own/parent funds that are committed to address a participant default (or round of participant defaults); Reported as at quarter end	30/09/2019	N/A		30/06/2019	N/A	
4.1	4.1.8	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Committed - Aggregate participant commitments to address an initial participant default (or initial round of participant defaults); Reported as at quarter end	30/09/2019	N/A	4.1.8 - SEOCH Procedures stipulate "Notwithstanding the above or any other provisions of these Procedures, SEOCH may assess the adequacy of the Reserve Fund and recalculate the requirements for Variable Contributions based on the abovementioned formula or on such other basis as SEOCH may consider appropriate at its absolute discretion from time to time and following an event of default, SEOCH may further at its absolute discretion determine the appropriate aggregate value of the Reserve Fund for the purpose of calculating any Variable Contributions required taking into account the estimated loss arising from any actions taken by SEOCH in respect of such event of default under Chapter 7 of the Clearing Rules, and in each of the aforementioned circumstances, SEOCH Participants shall pay to SEOCH such Variable Contributions as may from time to time be demanded by SEOCH." Reference: Operational Clearing Procedures for Options Trading Exchange Participants of SEOCH, Chapter 11, Section 11.2.3	30/06/2019	N/A	4.1.8 - SEOCH Procedures stipulate "Notwithstanding the above or any other provisions of these Procedures, SEOCH may assess the adequacy of the Reserve Fund and recalculate the requirements for Variable Contributions based on the abovementioned formula or on such other basis as SEOCH may consider appropriate at its absolute discretion from time to time and following an event of default, SEOCH may further at its absolute discretion determine the appropriate aggregate value of the Reserve Fund for the purpose of calculating any Variable Contributions required taking into account the estimated loss arising from any actions taken by SEOCH in respect of such event of default under Chapter 7 of the Clearing Rules, and in each of the aforementioned circumstances, SEOCH Participants shall pay to SEOCH such Variable Contributions as may from time to time be demanded by SEOCH." Reference: Operational Clearing Procedures for Options Trading Exchange Participants of SEOCH, Chapter 11, Section 11.2.3

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
4.1	4.1.9	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Committed - Aggregate participant commitments to replenish the default fund to deal with a subsequent participant default (or round of participant defaults) after the initial participant default (or round of participant defaults) has been addressed; Reported as at quarter end	30/09/2019	N/A	4.1.9 - SEOCH Rules stipulate that SEOCH Clearing Participants (CPs) are required to replenish the deficiency of their Reserve Fund contributions should the Reserve Fund be applied to cover default losses. There is no cap on a SEOCH CP's liability in the absence of it serving a Resignation Notice. However, a SEOCH CP can limit its liability to certain further replenishment requirement by submitting a Resignation Notice to terminate its participation in SEOCH. The aggregate liability of a resigning SEOCH CP to replenish a deficiency of Reserve Fund contributions is limited to (a) the aggregate amount of the SEOCH CP's RF contribution requirements on the day SEOCH receives a Resignation Notice; and (b) two times the amount in (a) above. Reference: Operational Clearing Procedures for Options Trading Exchange Participants of SEOCH, Chapter 11, Section 11.6; Options Clearing Rules, Chapter 4, Rule 411, 413C-413E	30/06/2019	N/A	4.1.9 - SEOCH Rules stipulate that SEOCH Clearing Participants (CPs) are required to replenish the deficiency of their Reserve Fund contributions should the Reserve Fund be applied to cover default losses. There is no cap on a SEOCH CP's liability in the absence of it serving a Resignation Notice. However, a SEOCH CP can limit its liability to certain further replenishment requirement by submitting a Resignation Notice to terminate its participation in SEOCH. The aggregate liability of a resigning SEOCH CP to replenish a deficiency of Reserve Fund contributions is limited to (a) the aggregate amount of the SEOCH CP's RF contribution requirements on the day SEOCH receives a Resignation Notice; and (b) two times the amount in (a) above. Reference: Operational Clearing Procedures for Options Trading Exchange Participants of SEOCH, Chapter 11, Section 11.6; Options Clearing Rules, Chapter 4, Rule 411, 413C-413E
4.1	4.1.10	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service	Committed - Other; Reported as at quarter end	30/09/2019	N/A		30/06/2019	N/A	
4.2	4.2.1	Kccp	Kccp - Kccp need only be reported by those CCPs which are, or seek to be a "qualifying CCP" under relevant law	30/09/2019	HKD2,030,039.53	4.2 - Kccp is reported based on the definition of BCBS 282 which comes in effect in Jan 2017.	30/06/2019	HKD2,717,035.91	4.2 - Kccp is reported based on the definition of BCBS 282 which comes in effect in Jan 2017.
4.3	4.3.1	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Cash deposited at a central bank of issue of the currency concerned; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	4.3 - The holding company, HKEX, has set aside HKD4 billion of shareholders' funds of the HKEX Group for the purpose of strengthening the risk management regime of HKFE Clearing Corporation Ltd (HKCC), The SEHK Options Clearing House Ltd (SEOCH) and Hong Kong Securities Clearing Co Ltd (HKSCC), and supporting their roles as central counterparties. Differences in the default fund resources set out in 4.1.1 to 4.1.6 and 4.3 represent differences in the accounting treatment of the default fund and the basis of the recalculation of the default fund, such as amounts payable to resigning SEOCH Clearing Participants and realized investment gains.	30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	4.3 - The holding company, HKEX, has set aside HKD4 billion of shareholders' funds of the HKEX Group for the purpose of strengthening the risk management regime of HKFE Clearing Corporation Ltd (HKCC), The SEHK Options Clearing House Ltd (SEOCH) and Hong Kong Securities Clearing Co Ltd (HKSCC), and supporting their roles as central counterparties. Differences in the default fund resources set out in 4.1.1 to 4.1.6 and 4.3 represent differences in the accounting treatment of the default fund and the basis of the recalculation of the default fund, such as amounts payable to resigning SEOCH Clearing Participants and realized investment gains.
4.3	4.3.2	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Cash deposited at other central banks; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.3	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Secured cash deposited at commercial banks (including reverse repo); Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.4	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Unsecured cash deposited at commercial banks; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD990,000,000.00 PostHaircut : HKD990,000,000.00		30/06/2019	PreHaircut : HKD763,000,000.00 PostHaircut : HKD763,000,000.00	
4.3	4.3.5	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash Sovereign Government Bonds - Domestic; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.6	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash Sovereign Government Bonds - Other; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.7	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash Agency Bonds; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
4.3	4.3.8	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash State/municipal bonds; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.9	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash Corporate bonds; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.10	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash Equities; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.11	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash Commodities - Gold; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.12	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash Commodities - Other; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.13	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash Commodities - Mutual Funds / UCITS; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.14	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by	Non-Cash Commodities - Other; Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00		30/06/2019	PreHaircut : HKD0.00 PostHaircut : HKD0.00	
4.3	4.3.15	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total	In total. Reported as at quarter end; Pre-Haircut and Post-Haircut	30/09/2019	PreHaircut : HKD990,000,000.00 PostHaircut : HKD990,000,000.00		30/06/2019	PreHaircut : HKD763,000,000.00 PostHaircut : HKD763,000,000.00	
4.4	4.4.1	Credit Risk Disclosures	State whether the CCP is subject to a minimum “Cover 1” or “Cover 2” requirement in relation to total pre-funded default resources.	30/09/2019	The largest and 5th largest CPs	4.4 - The estimated largest aggregate stress loss and actual largest aggregate credit exposure are reported in excess of collateral (which includes surplus collateral), instead of initial margin requirement.	30/06/2019	The largest and 5th largest CPs	4.4 - The estimated largest aggregate stress loss and actual largest aggregate credit exposure are reported in excess of collateral (which includes surplus collateral), instead of initial margin requirement.
4.4	4.4.2	Credit Risk Disclosures	For each clearing service, state the number of business days within which the CCP assumes it will close out the default when calculating credit exposures that would potentially need to be covered by the default fund.	30/09/2019	1		30/06/2019	1	
4.4	4.4.3	Credit Risk Disclosures	For each clearing service, the estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions; Peak day amount in the previous 12 months and mean average over the previous 12 months	30/09/2019	PeakDayAmountInPast12Months : HKD836,437,169.00 MeanAverageOverPrevious12Months : HKD343,317,233.74	4.4.3 - In consensus with the local regulator, SEOCH is subject to a "Cover" requirement of the largest and 5th largest Clearing Participant, i.e. Cover 1+5. Estimated largest aggregate stress loss (in excess of initial margin) under Cover 1+5: - Peak day amount in the previous 12 months = HKD987,834,285.00 - Mean average over the previous 12 months = HKD435,655,644.56	30/06/2019	PeakDayAmountInPast12Months : HKD1,149,053,334.00 MeanAverageOverPrevious12Months : HKD375,598,456.20	4.4.3 - In consensus with the local regulator, SEOCH is subject to a "Cover" requirement of the largest and 5th largest Clearing Participant, i.e. Cover 1+5. Estimated largest aggregate stress loss (in excess of initial margin) under Cover 1+5: - Peak day amount in the previous 12 months = HKD1,341,632,289.00 - Mean average over the previous 12 months = HKD517,099,170.00
4.4	4.4.4	Credit Risk Disclosures	Report the number of business days, if any, on which the above amount (4.4.3) exceeded actual pre-funded default resources (in excess of initial margin).	30/09/2019	0	4.4.4 - Actual pre-funded default resources include the HKEX Risk Management Capital which is shared amongst the 3 on-exchange clearing houses, namely HKSCC, HKCC and SEOCH. Hence, the number of days on which the amount exceeded actual pre-funded default resources (in excess of collateral) is calculated on an aggregated basis for these 3 on-exchange clearing houses. Number of days on which the amount under Cover 1+5 in 4.4.3 exceeded actual pre-funded default resources represented in 4.1.1 to 4.1.6 (in excess of collateral) = 0	30/06/2019	0	4.4.4 - Actual pre-funded default resources include the HKEX Risk Management Capital which is shared amongst the 3 on-exchange clearing houses, namely HKSCC, HKCC and SEOCH. Hence, the number of days on which the amount exceeded actual pre-funded default resources (in excess of collateral) is calculated on an aggregated basis for these 3 on-exchange clearing houses. Number of days on which the amount under Cover 1+5 in 4.4.3 exceeded actual pre-funded default resources represented in 4.1.1 to 4.1.6 (in excess of collateral) = 0
4.4	4.4.5	Credit Risk Disclosures	The amount in 4.4.3 which exceeded actual pre-funded default resources (in excess of initial margin)	30/09/2019	AmountExceeded1 : HKD0.00	4.4.5 - The amounts under Cover 1+5 in 4.4.3 which exceeded actual pre-funded default resources represented in 4.1.1 to 4.1.6 (in excess of collateral) = 0	30/06/2019	AmountExceeded1 : HKD0.00	4.4.5 - The amounts under Cover 1+5 in 4.4.3 which exceeded actual pre-funded default resources represented in 4.1.1 to 4.1.6 (in excess of collateral) = 0
4.4	4.4.6	Credit Risk Disclosures	For each clearing service, the actual largest aggregate credit exposure (in excess of initial margin) to any single participant and its affiliates (including transactions cleared for indirect participants); Peak day amount in the previous 12 months and mean average over the previous 12 months	30/09/2019	PeakDayAmountInPast12Months : HKD565,567,779.83 MeanAverageOverPrevious12Months : HKD4,042,312.93	4.4.6 - Actual largest aggregate credit exposure (in excess of collateral) under Cover 1+5 (including transactions cleared for indirect participants): - Peak day amount in the previous 12 months = HKD565,567,779.83 - Mean average over the previous 12 months = HKD4,042,312.93	30/06/2019	PeakDayAmountInPast12Months : HKD565,567,779.83 MeanAverageOverPrevious12Months : HKD4,088,064.38	4.4.6 - Actual largest aggregate credit exposure (in excess of collateral) under Cover 1+5 (including transactions cleared for indirect participants): - Peak day amount in the previous 12 months = HKD565,567,779.83 - Mean average over the previous 12 months = HKD4,088,064.38

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
4.4	4.4.7	Credit Risk Disclosures	For each clearing service, the estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any two participants and their affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions; Peak day amount in the previous 12 months and mean average over the previous 12 months	30/09/2019	PeakDayAmountInPast12Months : HKD1,386,627,499.00 MeanAverageOverPrevious12Months : HKD562,735,955.43		30/06/2019	PeakDayAmountInPast12Months : HKD1,791,895,133.00 MeanAverageOverPrevious12Months : HKD593,798,086.49	
4.4	4.4.8	Credit Risk Disclosures	Number of business days, if any, on which the above amount (4.4.7) exceeded actual pre-funded default resources (in excess of initial margin) and by how much.	30/09/2019	0	4.4.8 - Actual pre-funded default resources include the HKEX Risk Management Capital which is shared amongst the 3 on-exchange clearing houses, namely HKSCC, HKCC and SEOCH. Hence, the number of days on which the amount exceeded actual pre-funded default resources (in excess of collateral) is calculated on an aggregated basis for these 3 on-exchange clearing houses.	30/06/2019	0	4.4.8 - Actual pre-funded default resources include the HKEX Risk Management Capital which is shared amongst the 3 on-exchange clearing houses, namely HKSCC, HKCC and SEOCH. Hence, the number of days on which the amount exceeded actual pre-funded default resources (in excess of collateral) is calculated on an aggregated basis for these 3 on-exchange clearing houses.
4.4	4.4.9	Credit Risk Disclosures	The amount in 4.4.7 which exceeded actual pre-funded default resources (in excess of initial margin)	30/09/2019	AmountExceeded1 : HKD0.00		30/06/2019	AmountExceeded1 : HKD0.00	
4.4	4.4.10	Credit Risk Disclosures	For each clearing service, what was the actual largest aggregate credit exposure (in excess of initial margin) to any two participants and their affiliates (including transactions cleared for indirect participants)? Description: PeakDayAmountInPrevious12Months; MeanAverageOverPrevious12Months	30/09/2019	PeakDayAmountInPast12Months : HKD565,567,779.83 MeanAverageOverPrevious12Months : HKD4,056.343.01		30/06/2019	PeakDayAmountInPast12Months : HKD565,567,779.83 MeanAverageOverPrevious12Months : HKD4,102,267.66	
5.1	5.1.1	Assets eligible as initial margin, and the respective haircuts applied	Assets eligible as initial margin and the respective haircuts applied	30/09/2019	http://www.hkex.com.hk/services/clearing/listed-derivatives/overview/collateral-management?sc_lang=en		30/06/2019	http://www.hkex.com.hk/services/clearing/listed-derivatives/overview/collateral-management?sc_lang=en	
5.2	5.2.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied (if different from 5.1)	Assets Eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied (if different from 5.1)	30/09/2019	http://www.hkex.com.hk/services/clearing/listed-derivatives/overview/collateral-management?sc_lang=en		30/06/2019	http://www.hkex.com.hk/services/clearing/listed-derivatives/overview/collateral-management?sc_lang=en	
5.3	5.3.1	Results of testing of haircuts	Confidence interval targeted through the calculation of haircuts	30/09/2019	99.00%		30/06/2019	99.00%	
5.3	5.3.2	Results of testing of haircuts	Assumed holding/liquidation period for the assets accepted	30/09/2019	1 day		30/06/2019	1 day	
5.3	5.3.3	Results of testing of haircuts	Look-back period used for testing the haircuts	30/09/2019	5 years		30/06/2019	5 years	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
5.3	5.3.4	Results of testing of haircuts	Number of days during the look-back period on which the fall in value during the assumed holding/liquidation period exceeded the haircut on an asset.	30/09/2019	2		30/06/2019	2	
6.1	6.1.1	For each clearing service, total initial margin required, split by house and client (or combined total if not segregated)	Total initial margin required split by house, client gross, client net and total(if not segregated);	30/09/2019	House_Net : HKD1,208,150,546.00 Client_Gross : HKD2,124,664,055.00 Client_Net : HKD2,014,476,510.40 Total : HKD5,347,291,111.40	6.1 - SEOCH Clearing Participants may be registered under one of two Participantship categories: (i) General Clearing Participants, which are allowed to register and clear trades both on their own account and on behalf of Non-Clearing Participants; and (ii) Clearing Participants, which are only allowed to register and clear trades on their own behalf. The initial margin for the positions of SEOCH Non-Clearing Participants, i.e. indirect participants, is calculated on a net basis. 6.1.1 - The calculation of concentration risk margin requirement for the client account of a SEOCH Clearing Participant is calculated based on the aggregated exposure, net of collateral, of all client nature accounts. Due to the calculation method which determines concentration risk margin and Block Trade margin requirement for all client nature accounts on an aggregated basis for settlement, these figures are consolidated under "IM_Client (Net)" for reporting purpose.	30/06/2019	House_Net : HKD2,094,172,599.25 Client_Gross : HKD2,268,528,021.00 Client_Net : HKD2,450,036,045.75 Total : HKD6,812,736,666.00	6.1 - SEOCH Clearing Participants may be registered under one of two Participantship categories: (i) General Clearing Participants, which are allowed to register and clear trades both on their own account and on behalf of Non-Clearing Participants; and (ii) Clearing Participants, which are only allowed to register and clear trades on their own behalf. The initial margin for the positions of SEOCH Non-Clearing Participants, i.e. indirect participants, is calculated on a net basis. 6.1.1 - The calculation of concentration risk margin requirement for the client account of a SEOCH Clearing Participant is calculated based on the aggregated exposure, net of collateral, of all client nature accounts. Due to the calculation method which determines concentration risk margin and Block Trade margin requirement for all client nature accounts on an aggregated basis for settlement, these figures are consolidated under "IM_Client (Net)" for reporting purpose.
6.2	6.2.1	For each clearing service, total initial margin held, split by house and client	Cash deposited at a central bank of issue of the currency concerned; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	6.2.1 to 6.2.15 - SEOCH maintains cash collateral of its Clearing Participants in house and client accounts in Common Collateral Management System (CCMS). For purpose of holding cash collateral with the various custodians, SEOCH holds initial margin of house and client accounts in aggregate and hence, breakdown by house and client is not available. Since SEOCH does not reinvest non-cash collateral pledged by its Clearing Participants, breakdown by house and client accounts is reported as held in its collateral accounts.	30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	6.2.1 to 6.2.15 - SEOCH maintains cash collateral of its Clearing Participants in house and client accounts in Common Collateral Management System (CCMS). For purpose of holding cash collateral with the various custodians, SEOCH holds initial margin of house and client accounts in aggregate and hence, breakdown by house and client is not available. Since SEOCH does not reinvest non-cash collateral pledged by its Clearing Participants, breakdown by house and client accounts is reported as held in its collateral accounts.
6.2	6.2.2	For each clearing service, total initial margin held, split by house and client	Cash deposited at other central banks; Total split by House and Client; Pre-Haircut and Post-Haircut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.3	For each clearing service, total initial margin held, split by house and client	Secured cash deposited at commercial banks (including reverse repo); Total split by House and Client; Pre-Haircut and Post-Haircut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.4	For each clearing service, total initial margin held, split by house and client	Unsecured cash deposited at commercial banks; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD8,055,000,000.00 TotalIM_PostHaircut : HKD8,055,000,000.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD9,385,000,000.00 TotalIM_PostHaircut : HKD9,385,000,000.00	
6.2	6.2.5	For each clearing service, total initial margin held, split by house and client	Non-Cash Sovereign Government Bonds - Domestic; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : HKD0.00 HouseIM_PostHaircut : HKD0.00 ClientIM_PreHaircut : HKD0.00 ClientIM_PostHaircut : HKD0.00 TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : HKD0.00 HouseIM_PostHaircut : HKD0.00 ClientIM_PreHaircut : HKD0.00 ClientIM_PostHaircut : HKD0.00 TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.6	For each clearing service, total initial margin held, split by house and client	Non-Cash Sovereign Government Bonds - Other; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.7	For each clearing service, total initial margin held, split by house and client	Non-Cash Agency Bonds; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
6.2	6.2.8	For each clearing service, total initial margin held, split by house and client	Non-Cash State/municipal bonds; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.9	For each clearing service, total initial margin held, split by house and client	Non-Cash Corporate bonds; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.10	For each clearing service, total initial margin held, split by house and client	Non-Cash Equities; Description: HouseIM_PreHaircut, HouseIM_PostHaircut, ClientIM_PreHaircut, ClientIM_PostHaircut, TotalIM_PreHaircut, TotalIM_PostHaircut	30/09/2019	HouseIM_PreHaircut : HKD11,059,860.00 HouseIM_PostHaircut : HKD7,728,000.00 ClientIM_PreHaircut : HKD1,990,926,970.67 ClientIM_PostHaircut : HKD0.00 TotalIM_PreHaircut : HKD2,001,986,830.67 TotalIM_PostHaircut : HKD7,728,000.00		30/06/2019	HouseIM_PreHaircut : HKD13,238,400.00 HouseIM_PostHaircut : HKD9,266,880.00 ClientIM_PreHaircut : HKD1,959,364,444.15 ClientIM_PostHaircut : HKD0.00 TotalIM_PreHaircut : HKD1,972,602,844.15 TotalIM_PostHaircut : HKD9,266,880.00	
6.2	6.2.11	For each clearing service, total initial margin held, split by house and client	Non-Cash Commodities - Gold; Description: HouseIM_PreHaircut, HouseIM_PostHaircut, ClientIM_PreHaircut, ClientIM_PostHaircut, TotalIM_PreHaircut, TotalIM_PostHaircut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.12	For each clearing service, total initial margin held, split by house and client	Non-Cash Commodities - Other; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.13	For each clearing service, total initial margin held, split by house and client	Non-Cash - Mutual Funds / UCITS; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : HKD49,003,565.48 ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD49,003,565.48 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : HKD0.00 HouseIM_PostHaircut : HKD0.00 ClientIM_PreHaircut : HKD47,123,080.85 ClientIM_PostHaircut : HKD0.00 TotalIM_PreHaircut : HKD47,123,080.85 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.14	For each clearing service, total initial margin held, split by house and client	Non-Cash - Other; Total split by House and Client; Pre-Haircut and Post Hair-cut	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A TotalIM_PreHaircut : HKD0.00 TotalIM_PostHaircut : HKD0.00	
6.2	6.2.15	For each clearing service, total initial margin held, split by house and client	For each clearing service, total initial margin held, split by house and client (if segregated).	30/09/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A		30/06/2019	HouseIM_PreHaircut : N/A HouseIM_PostHaircut : N/A ClientIM_PreHaircut : N/A ClientIM_PostHaircut : N/A	
6.3	6.3.1	Initial Margin rates on individual contracts, where the CCP sets such rates	Initial Margin rates on individual contracts where the CCP sets such rates	30/09/2019	http://www.hkex.com.hk/Services/Clearing/Listed-Derivatives/Risk-Management/Margin/Margin-Tables/SEOCH?sc_lang=en		30/06/2019	http://www.hkex.com.hk/Services/Clearing/Listed-Derivatives/Risk-Management/Margin/Margin-Tables/SEOCH?sc_lang=en	
6.4	6.4.1	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Type of IM Model	30/09/2019	VaR based on historical volatility		30/06/2019	VaR based on historical volatility	
6.4	6.4.2	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Type of IM Model Change Effective Date	30/09/2019	2000-01-25		30/06/2019	2000-01-25	
6.4	6.4.3	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	IM Model Name	30/09/2019	SPAN		30/06/2019	SPAN	
6.4	6.4.4	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	IM Model Name Change Effective Date	30/09/2019	2000-01-25		30/06/2019	2000-01-25	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
6.4	6.4.5	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Single Tailed Confidence Level	30/09/2019	99.87%	6.4.5 - SEOCH determines the Benchmark Rates for each product with reference to the projected volatility at a two-tailed confidence interval of 99.73%.	30/06/2019	99.87%	6.4.5 - SEOCH determines the Benchmark Rates for each product with reference to the projected volatility at a two-tailed confidence interval of 99.73%.
6.4	6.4.6	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Single Tailed Confidence Level Change Effective Date	30/09/2019	2000-01-25		30/06/2019	2000-01-25	
6.4	6.4.7	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Look Back Period	30/09/2019	90 days		30/06/2019	90 days	
6.4	6.4.8	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Look Back Period Change Effective Date	30/09/2019	2000-01-25		30/06/2019	2000-01-25	
6.4	6.4.9	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Adjustments	30/09/2019	lambda = 0.96		30/06/2019	lambda = 0.96	
6.4	6.4.10	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Adjustments Change Effective Date	30/09/2019	2000-01-25		30/06/2019	2000-01-25	
6.4	6.4.11	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Close Out Period (days)	30/09/2019	1		30/06/2019	1	
6.4	6.4.12	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Close out period change Effective Date	30/09/2019	2000-01-25		30/06/2019	2000-01-25	
6.4	6.4.13	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	IM Rates Link	30/09/2019	http://www.hkex.com.hk/eng/market/rm/rm_dcrm/riskdata/margin_seoch/somargin.htm		30/06/2019	http://www.hkex.com.hk/eng/market/rm/rm_dcrm/riskdata/margin_seoch/somargin.htm	
6.4	6.4.14	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Frequency of Parameter Review	30/09/2019	Daily		30/06/2019	Daily	
6.4	6.4.15	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service	Frequency of Parameter Review Change Effective Date	30/09/2019	2000-01-25		30/06/2019	2000-01-25	
6.5	6.5.1.1	Results of back-testing of initial margin. At a minimum, this should include, for each clearing service and each initial margin model applied to that clearing service	Number of times over the past twelve months that margin coverage held against any account fell below the actual marked-to-market exposure of that member account	30/09/2019	10		30/06/2019	20	
6.5	6.5.1.2	Specify if measured intraday/continuously or only once a day. If once a day, specify at what time of day.	Frequency of daily back-testing result measurements.	30/09/2019	Dayend		30/06/2019	Dayend	
6.5	6.5.1.3	Specify if measured intraday/continuously or only once a day. If once a day, specify at what time of day.	Time of daily back-testing result if measured once a day.	30/09/2019	End of Business		30/06/2019	End of Business	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
6.5	6.5.2	Results of back-testing of initial margin. At a minimum, this should include, for each clearing service and each initial margin model applied to that clearing service	Number of observations	30/09/2019	94,113		30/06/2019	93,354	
6.5	6.5.3	Results of back-testing of initial margin. At a minimum, this should include, for each clearing service and each initial margin model applied to that clearing service	Achieved coverage level	30/09/2019	99.99%		30/06/2019	99.98%	
6.5	6.5.4	Results of back-testing of initial margin. At a minimum, this should include, for each clearing service and each initial margin model applied to that clearing service	Where breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size of uncovered exposure; Peak size	30/09/2019	HKD2,687,100.00	6.5.4 - The calculation of uncovered exposure is based on breaches of margin coverage which does not include add-ons, such as concentration risk margin.	30/06/2019	HKD2,687,100.00	6.5.4 - The calculation of uncovered exposure is based on breaches of margin coverage which does not include add-ons, such as concentration risk margin.
6.5	6.5.5	Results of back-testing of initial margin. At a minimum, this should include, for each clearing service and each initial margin model applied to that clearing service	Where breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size of uncovered exposure; Average Size	30/09/2019	HKD272,693.8		30/06/2019	HKD144,741.14	
6.6	6.6.1	Average Total Variation Margin Paid to the CCP by participants each business	Average Total Variation Margin Paid to the CCP by participants each business	30/09/2019	HKD7,242,704.02		30/06/2019	HKD15,718,398.91	
6.7	6.7.1	Maximum total variation margin paid to the CCP on any given business day over the period	Maximum total variation margin paid to the CCP on any given business day over the period	30/09/2019	HKD44,176,876.00		30/06/2019	HKD153,210,115.02	
6.8	6.8.1	Maximum aggregate initial margin call on any given business day over the period	Maximum aggregate initial margin call on any given business day over the period	30/09/2019	HKD701,081,937.69		30/06/2019	HKD1,093,461,824.49	
7.1	7.1.1	Liquidity Risk	State whether the clearing service maintains sufficient liquid resources to 'Cover 1' or 'Cover 2'.	30/09/2019	Cover 1 across HKSCC, SEOCH and SEOCH	7.1.1 - HKEX maintains sufficient liquid resources for the "Cover 1" across HKSCC, HKCC and SEOCH.	30/06/2019	Cover 1 across HKSCC, SEOCH and SEOCH	7.1.1 - HKEX maintains sufficient liquid resources for the "Cover 1" across HKSCC, HKCC and SEOCH.
7.1	7.1.2	Liquidity Risk	Size and composition of qualifying liquid resources for each clearing service; (a) Cash deposited at a central bank of issue of the currency concerned	30/09/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable		30/06/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable	7.1.2 to 7.1.4 - SEOCH does not hold qualifying liquid resources in these composition types.
7.1	7.1.3	Liquidity Risk	Size and composition of qualifying liquid resources for each clearing service; (b) Cash deposited at other central banks	30/09/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable		30/06/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable	
7.1	7.1.4	Liquidity Risk	Size and composition of qualifying liquid resources for each clearing service; (c) Secured cash deposited at commercial banks (including reverse repo)	30/09/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable		30/06/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable	
7.1	7.1.5	Liquidity Risk	Size and composition of qualifying liquid resources for each clearing service; (d) Unsecured cash deposited at commercial banks	30/09/2019	SizeAndCompositionOfQualifyingLiquidResources : HKD1,000,000,000.00		30/06/2019	SizeAndCompositionOfQualifyingLiquidResources : HKD784,000,000.00	
7.1	7.1.6	Liquidity Risk	Size and composition of qualifying liquid resources for each clearing service; (e) secured committed lines of credit (ie those for which collateral/security will be provided by the CCP if drawn) including committed foreign exchange swaps and committed repos	30/09/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable	7.1.6 to 7.1.9 (except for 7.1.7) - SEOCH does not hold qualifying liquid resources in these composition types. 7.1.7 - HKEX has arranged a total of HK\$10 billion unsecured committed credit facilities with options to draw down on the same day in different currencies, namely HKD, USD and CNY from selected liquidity providers, for HKSCC, HKCC, SEOCH, OTCC and HKEX.	30/06/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable	7.1.6 to 7.1.9 (except for 7.1.7) - SEOCH does not hold qualifying liquid resources in these composition types. 7.1.7 - HKEX has arranged a total of HK\$10 billion unsecured committed credit facilities with options to draw down on the same day in different currencies, namely HKD, USD and CNY from selected liquidity providers, for HKSCC, HKCC, SEOCH, OTCC and HKEX.
7.1	7.1.7	Liquidity Risk	Size and composition of qualifying liquid resources for each clearing service; (f) unsecured committed lines of credit (ie which the CCP may draw without providing collateral/security)	30/09/2019	SizeAndCompositionOfQualifyingLiquidResources : Please refer to "Notes"		30/06/2019	SizeAndCompositionOfQualifyingLiquidResources : Please refer to "Notes"	
7.1	7.1.8	Liquidity Risk	Size and composition of qualifying liquid resources for each clearing service; (g) highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements even in extreme but plausible market conditions	30/09/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable		30/06/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable	
7.1	7.1.9	Liquidity Risk	Size and composition of qualifying liquid resources for each clearing service; (h) other	30/09/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable		30/06/2019	SizeAndCompositionOfQualifyingLiquidResources : Not applicable	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
7.1	7.1.10	Liquidity Risk	State whether the CCP has routine access to central bank liquidity or facilities.	30/09/2019	No		30/06/2019	No	
7.1	7.1.11	Liquidity Risk	Details regarding the schedule of payments or priority for allocating payments, if such exists, and any applicable rule, policy, procedure, and governance arrangement around such decision making.	30/09/2019	In using qualifying liquid resources, HKEX would apply the liquid resources to meet the most urgent payment obligations of its subsidiaries (i.e. its 3 on-exchange clearing houses). In the event that the timing of the payment obligations occur concurrently, HKEX would apply the liquid resources on a pro-rata basis to meet the payment obligations.		30/06/2019	In using qualifying liquid resources, HKEX would apply the liquid resources to meet the most urgent payment obligations of its subsidiaries (i.e. its 3 on-exchange clearing houses). In the event that the timing of the payment obligations occur concurrently, HKEX would apply the liquid resources on a pro-rata basis to meet the payment obligations.	
7.2	7.2.1	Size and composition of any supplementary liquidity risk resources for each clearing service above those qualifying liquid resources above.	Size and composition of any supplementary liquidity risk resources for each clearing service above those qualifying liquid resources in 7.1	30/09/2019	HKD0.00		30/06/2019	HKD0.00	
7.3	7.3.1	Liquidity Risk	Estimated largest same-day and, where relevant, intraday and multiday payment obligation in total that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions; Forward looking measure reported quarterly	30/09/2019	SameDayPayment_Total : HKD 12,459,184,848.62 MultiDayPayment_Total : HKD 16,714,470,795.23	7.3 - Figures are calculated on an aggregated basis of 3 on-exchange clearing houses, HKSCC, HKCC and SEOCH. 7.3.1 - Only same-day and multiday scenarios are applicable to HKSCC, HKCC and SEOCH.	30/06/2019	SameDayPayment_Total : HKD 8,439,893,862.91 MultiDayPayment_Total : HKD 9,857,270,601.41	7.3 - Figures are calculated on an aggregated basis of 3 on-exchange clearing houses, HKSCC, HKCC and SEOCH. 7.3.1 - Only same-day and multiday scenarios are applicable to HKSCC, HKCC and SEOCH.
7.3	7.3.2	Liquidity Risk	Report the number of business days, if any, on which the above amount exceeded its qualifying liquid resources (identified as in 7.1, and available at the point the breach occurred), and by how much.; No. of days in quarter	30/09/2019	0		30/06/2019	0	
7.3	7.3.3	Liquidity Risk	Number of business days, if any, on which the above amount exceeded its qualifying liquid resources (identified as in 7.1, and available at the point the breach occurred), and by how much; Amount of excess on each day	30/09/2019	AmountExceeded1 : Nil	7.3.3 - No business day with amount exceeded its qualifying liquid resources.	30/06/2019	AmountExceeded1 : Nil	7.3.3 - No business day with amount exceeded its qualifying liquid resources.
7.3	7.3.4	Liquidity Risk	Actual largest intraday and multiday payment obligation of a single participant and its affiliates (including transactions cleared for indirect participants) over the past twelve months; Peak day amount in previous twelve months	30/09/2019	SameDayPayment_Total : HKD 12,459,184,848.62 MultiDayPayment_Total : HKD 16,583,036,554.21		30/06/2019	SameDayPayment_Total : HKD 8,439,893,862.91 MultiDayPayment_Total : HKD 10,764,860,636.38	
7.3	7.3.5	Liquidity Risk	Estimated largest same-day and, where relevant, intraday and multiday payment obligation in each relevant currency that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions; Forward looking measure reported quarterly	30/09/2019	SameDayPayment_Total : N/A MultiDayPayment_Total : N/A	7.3.5 - Only same-day and multiday scenarios are applicable to HKSCC, HKCC and SEOCH. 7.3.5 to 7.3.7 - Products cleared by HKSCC, HKCC and SEOCH are denominated in 3 different currencies (HKD, CNY and USD). Since the major financial resource, committed bank facilities in an amount of 10 billion in HKD equivalent, can be drawn in HKD, CNY and USD on the same day to cover liquidity requirement of respective currency, calculation of days with exceedances by currency is not available.	30/06/2019	SameDayPayment_Total : N/A MultiDayPayment_Total : N/A	7.3.5 - Only same-day and multiday scenarios are applicable to HKSCC, HKCC and SEOCH. 7.3.5 to 7.3.7 - Products cleared by HKSCC, HKCC and SEOCH are denominated in 3 different currencies (HKD, CNY and USD). Since the major financial resource, committed bank facilities in an amount of 10 billion in HKD equivalent, can be drawn in HKD, CNY and USD on the same day to cover liquidity requirement of respective currency, calculation of days with exceedances by currency is not available.
7.3	7.3.6	Liquidity Risk	Number of business days, if any, on which the above amounts exceeded its qualifying liquid resources in each relevant currency (as identified in 7.1 and available at the point the breach occurred), and by how much	30/09/2019	NumberOfDays_HKD : N/A		30/06/2019	NumberOfDays_HKD : N/A	
7.3	7.3.7	Liquidity Risk	Report the number of business days, if any, on which the above amounts exceeded its qualifying liquid resources in each relevant currency (as identified in 7.1 and available at the point the breach occurred), and by how much; Amount of excess on each day	30/09/2019	AmountExceeded1 : N/A		30/06/2019	AmountExceeded1 : N/A	
12.1	12.1.1	Percentage of settlements by value effected using a DvP, DvD or Pvp settlement mechanism	Percentage of settlements by value effected using a DvP settlement mechanism	30/09/2019	N/A	12.1.1 to 12.2.3 - Settlement using DvP, DvD or Pvp settlement mechanism is not applicable to SEOCH.	30/06/2019	N/A	12.1.1 to 12.2.3 - Settlement using DvP, DvD or Pvp settlement mechanism is not applicable to SEOCH.
12.1	12.1.2	Percentage of settlements by value effected using a DvP, DvD or Pvp settlement mechanism	Percentage of settlements by value effected using a DvD settlement mechanism	30/09/2019	N/A		30/06/2019	N/A	
12.1	12.1.3	Percentage of settlements by value effected using a DvP, DvD or Pvp settlement mechanism	Percentage of settlements by value effected using a Pvp settlement mechanism	30/09/2019	N/A		30/06/2019	N/A	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
12.2	12.2.1	Percentage of settlements by volume effected using a DvP, DvD or Pvp settlement mechanism	Percentage of settlements by volume effected using a DvP settlement mechanism	30/09/2019	N/A		30/06/2019	N/A	
12.2	12.2.2	Percentage of settlements by volume effected using a DvP, DvD or Pvp settlement mechanism	Percentage of settlements by volume effected using a DvD settlement mechanism	30/09/2019	N/A		30/06/2019	N/A	
12.2	12.2.3	Percentage of settlements by volume effected using a DvP, DvD or Pvp settlement mechanism	Percentage of settlements by volume effected using a Pvp settlement mechanism	30/09/2019	N/A		30/06/2019	N/A	
13.1	13.1.1	quantitative information related to defaults	Quantitative information related to defaults; Amount of loss versus amount of initial margin	30/09/2019	N/A	13.1 - No Clearing Participant default occurred in Q4 of 2018. References to default cases occurring before 2018 can be found in the HKEX Annual Report.	30/06/2019	N/A	13.1 - No Clearing Participant default occurred in Q4 of 2018. References to default cases occurring before 2018 can be found in the HKEX Annual Report.
13.1	13.1.2	quantitative information related to defaults	Quantitative information related to defaults; Amount of other financial resources used to cover losses	30/09/2019	N/A		30/06/2019	N/A	
13.1	13.1.3.1	quantitative information related to defaults	Quantitative information related to defaults; Proportion of client positions closed-out	30/09/2019	N/A		30/06/2019	N/A	
13.1	13.1.3.2	quantitative information related to defaults	Quantitative information related to defaults; Proportion of client positions ported	30/09/2019	N/A		30/06/2019	N/A	
13.1	13.1.4	quantitative information related to defaults	Quantitative information related to defaults; Appropriate references to other published material related to the defaults	30/09/2019	N/A		30/06/2019	N/A	
14.1	14.1.1	Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions	Total Client Positions held in individually segregated accounts	30/09/2019	51.98%	14.1.1 & 14.1.2 - The shares are calculated based on the total market notional values (which also includes the notional values of non-client accounts).	30/06/2019	53.30%	14.1.1 & 14.1.2 - The shares are calculated based on the total market notional values (which also includes the notional values of non-client accounts).
14.1	14.1.2	Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions	Total Client Positions held in omnibus client-only accounts, other than LSOC accounts	30/09/2019	15.50%		30/06/2019	14.72%	
14.1	14.1.3	Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions	Total Client Positions held in legally segregated but operationally comingled (LSOC) accounts	30/09/2019	N/A	14.1.3 & 14.1.4 - The account structure of SEOCH does not offer legally segregated but operationally comingled (LSOC) accounts nor comingled house and client accounts.	30/06/2019	N/A	14.1.3 & 14.1.4 - The account structure of SEOCH does not offer legally segregated but operationally comingled (LSOC) accounts nor comingled house and client accounts.
14.1	14.1.4	Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions	Total Client Positions held in comingled house and client accounts	30/09/2019	N/A		30/06/2019	N/A	
15.1	15.1.1	General business risk	Value of liquid net assets funded by equity	31/12/2018	HKD232,000,000.00		31/12/2018	HKD232,000,000.00	
15.1	15.1.2	General business risk	Six months of current operating expenses	31/12/2018	HKD18,000,000.00		31/12/2018	HKD18,000,000.00	
15.2	15.2.1	General business risk; Financial Disclosures	Total Revenue	31/12/2018	HKD108,000,000.00		31/12/2018	HKD108,000,000.00	
15.2	15.2.2	General business risk; Financial Disclosures	Total Expenditure	31/12/2018	HKD35,000,000.00		31/12/2018	HKD35,000,000.00	
15.2	15.2.3	General business risk; Financial Disclosures	Profits	31/12/2018	HKD260,000,000.00		31/12/2018	HKD260,000,000.00	
15.2	15.2.4	General business risk; Financial Disclosures	Total Assets	31/12/2018	HKD10,314,000,000.00		31/12/2018	HKD10,314,000,000.00	
15.2	15.2.5	General business risk; Financial Disclosures	Total Liabilities	31/12/2018	HKD9,878,000,000.00		31/12/2018	HKD9,878,000,000.00	
15.2	15.2.6	General business risk; Financial Disclosures	Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet	31/12/2018	Cash collateral is held on the balance sheet. Non-cash collateral is held off the balance sheet.		31/12/2018	Cash collateral is held on the balance sheet. Non-cash collateral is held off the balance sheet.	
15.2	15.2.7	General business risk; Financial Disclosures	Additional items as necessary	31/12/2018	Not applicable		31/12/2018	Not applicable	
15.3	15.3.1	General business risk; Income breakdown	Percentage of total income that comes from fees related to provision of clearing services	31/12/2018	34.99%		31/12/2018	34.99%	
15.3	15.3.2	General business risk; Income breakdown	Percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants	31/12/2018	63.73%		31/12/2018	63.73%	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
16.1	16.1.1	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, split by whether it was received as initial margin or default fund contribution	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, received as initial margin	30/09/2019	HKD8,055,000,000.00		30/06/2019	HKD9,385,000,000.00	
16.1	16.1.2	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, split by whether it was received as initial margin or default fund contribution	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, received as default fund contribution	30/09/2019	HKD891,000,000.00		30/06/2019	HKD664,000,000.00	
16.2	16.2.1	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as cash deposits (including through reverse repo)	30/09/2019	100.00%		30/06/2019	100.00%	
16.2	16.2.2	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at central banks of issue of the currency deposited	30/09/2019	Not applicable	16.2.2 & 16.2.3 - The role of the central bank in Hong Kong, Hong Kong Monetary Authority (HKMA), does not include taking cash deposits from retail customers.	30/06/2019	Not applicable	16.2.2 & 16.2.3 - The role of the central bank in Hong Kong, Hong Kong Monetary Authority (HKMA), does not include taking cash deposits from retail customers.
16.2	16.2.3	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at other central banks	30/09/2019	Not applicable		30/06/2019	Not applicable	
16.2	16.2.4	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at commercial banks (Secured, including through reverse repo)	30/09/2019	0.00%		30/06/2019	0.00%	
16.2	16.2.5	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at commercial banks (Unsecured)	30/09/2019	100.00%		30/06/2019	100.00%	
16.2	16.2.6	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as cash deposits (including through reverse repo); in money market funds	30/09/2019	0.00%		30/06/2019	0.00%	
16.2	16.2.7	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as cash deposits (including through reverse repo); in other forms	30/09/2019	0.00%		30/06/2019	0.00%	
16.2	16.2.8	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as cash deposits (including through reverse repo); percentage split by currency of these cash deposits (including reverse repo) and money market funds by CCY; Specify local currency in comments	30/09/2019	Percentage_HKD : 89.75% Percentage_USD : 0.00% Percentage_JPY : 3.64% Percentage_EUR : 6.61%		30/06/2019	Percentage_HKD : 86.82% Percentage_USD : 0.00% Percentage_JPY : 3.24% Percentage_EUR : 9.94%	
16.2	16.2.9	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as cash deposits (including through reverse repo); weighted average maturity of these cash deposits (including reverse repo) and money market funds	30/09/2019	0.19 year		30/06/2019	0.24 year	
16.2	16.2.10	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash invested in securities; Domestic sovereign government bonds	30/09/2019	0.00%		30/06/2019	0.00%	
16.2	16.2.11	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash invested in securities; Other sovereign government bonds	30/09/2019	0.00%		30/06/2019	0.00%	
16.2	16.2.12	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash invested in securities; Agency Bonds	30/09/2019	0.00%		30/06/2019	0.00%	
16.2	16.2.13	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash invested in securities; State/municipal bonds	30/09/2019	0.00%		30/06/2019	0.00%	
16.2	16.2.14	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash invested in securities; Other instruments	30/09/2019	0.00%		30/06/2019	0.00%	
16.2	16.2.15	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash invested in securities; percentage split by currency of these securities; Specify local currency in comments;	30/09/2019	Percentage_HKD : 0.00% Percentage_USD : 0.00%		30/06/2019	Percentage_HKD : 0.00% Percentage_USD : 0.00%	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
16.2	16.2.16	How total cash received from participants (16.1) is held/deposited/invested, including;	Weighted average maturity of securities	30/09/2019	0.00 year		30/06/2019	0.00 year	
16.2	16.2.17	How total cash received from participants (16.1) is held/deposited/invested, including;	Provide an estimate of the risk on the investment portfolio (excluding central bank and commercial bank deposits) (99% one-day VaR, or equivalent)	30/09/2019	0		30/06/2019	0	
16.2	16.2.18	How total cash received from participants (16.1) is held/deposited/invested, including;	State if the CCP investment policy sets a limit on the proportion of the investment portfolio that may be allocated to a single counterparty, and the size of that limit.	30/09/2019	A cap is set on the total amount of margin funds, default funds and corporate funds of HKEx Group that can be deposited with any one of its counterparties. Under the new Credit Limit Framework for Settlement and Investment (Credit Limit Framework), investment exposure in HSBC & BOCHK, the concentration limit is 50% of last year-end audited HKEX shareholders' equity. Investment exposure in all other single name counterparty limit using credit rating based ladderred approach, ranges from 5% to 37.5% of last year-end audited HKEX shareholders' equity.		30/06/2019	A cap is set on the total amount of margin funds, default funds and corporate funds of HKEx Group that can be deposited with any one of its counterparties. Under the new Credit Limit Framework for Settlement and Investment (Credit Limit Framework), investment exposure in HSBC & BOCHK, the concentration limit is 50% of last year-end audited HKEX shareholders' equity. Investment exposure in all other single name counterparty limit using credit rating based ladderred approach, ranges from 5% to 37.5% of last year-end audited HKEX shareholders' equity.	
16.2	16.2.19	How total cash received from participants (16.1) is held/deposited/invested, including;	State the number of times over the previous quarter in which this limit has been exceeded.	30/09/2019	0		30/06/2019	0	
16.2	16.2.20	How total cash received from participants (16.1) is held/deposited/invested, including;	Percentage of total participant cash held as securities.	30/09/2019	0.00%		30/06/2019	0.00%	
16.3	16.3.1	Rehypothecation of participant assets (ie non-cash)	Total value of participant non-cash rehypothecated (Initial margin)	30/09/2019	N/A	16.3.1 to 16.3.4 - SEOCH does not permit rehypothecation of non-cash collateral per its internal risk policy.	30/06/2019	N/A	16.3.1 to 16.3.4 - SEOCH does not permit rehypothecation of non-cash collateral per its internal risk policy.
16.3	16.3.2	Rehypothecation of participant assets (ie non-cash)	Total value of participant non-cash rehypothecated (Default fund)	30/09/2019	N/A		30/06/2019	N/A	
16.3	16.3.3	Rehypothecation of participant assets (ie non-cash)	Rehypothecation of participant assets (ie non-cash) by the CCP where allowed; initial margin; over the following maturities: Overnight/one day; one day and up to one week; One week and up to one month; One month and up to one year; One year and up to two years; Over two years	30/09/2019	N/A		30/06/2019	N/A	
16.3	16.3.4	Rehypothecation of participant assets (ie non-cash)	Rehypothecation of participant assets (ie non-cash); default fund; over the following maturities: Overnight/one day; one day and up to one week; One week and up to one month; One month and up to one year; One year and up to two years; Over two years	30/09/2019	N/A		30/06/2019	N/A	
17.1	17.1.1	Operational availability target for the core system(s) involved in clearing (whether or not outsourced) over specified period for the system (e.g. 99.99% over a twelve-month period)	Operational availability target for the core system(s) involved in clearing (whether or not outsourced) over specified period for the system (e.g. 99.99% over a twelve-month period)	30/09/2019	99.95%		30/06/2019	99.95%	
17.2	17.2.1	Actual availability of the core system(s) over the previous twelve month period	Actual availability of the core system(s) over the previous twelve month period	30/09/2019	99.95%	The unavailability was on margin calculation function on 8-May only. No impact to other functions in clearing system.	30/06/2019	99.95%	The unavailability was on margin calculation function on 8-May only. No impact to other functions in clearing system.
17.3	17.3.1	Total number of failures	Total number of failures and duration affecting the core system(s) involved in clearing over the previous twelve month period	30/09/2019	DurationofFailure : 02:20:00	Refer to 17.2	30/06/2019	DurationofFailure : 02:20:00	Refer to 17.2
17.4	17.4.1	Recovery time objective(s)	Recovery time objective(s) (e.g. within two hours)	30/09/2019	within 2 hours		30/06/2019	within 2 hours	
18.1	18.1.1.1	Number of clearing members, by clearing service	Number of general clearing members	30/09/2019	9		30/06/2019	9	
18.1	18.1.1.2	Number of clearing members, by clearing service	Number of direct clearing members	30/09/2019	64		30/06/2019	62	
18.1	18.1.1.3	Number of clearing members, by clearing service	Number of others category (Describe in comments)	30/09/2019	N/A	18.1.1.3 to 18.1.2.3 - SEOCH does not offer these Clearing Participantship categories.	30/06/2019	N/A	18.1.1.3 to 18.1.2.3 - SEOCH does not offer these Clearing Participantship categories.
18.1	18.1.2.1	Number of clearing members, by clearing service	Number of central bank participants	30/09/2019	N/A		30/06/2019	N/A	
18.1	18.1.2.2	Number of clearing members, by clearing service	Number of CCP participants	30/09/2019	N/A		30/06/2019	N/A	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
18.1	18.1.2.3	Number of clearing members, by clearing service	Number of bank participants	30/09/2019	N/A		30/06/2019	N/A	
18.1	18.1.2.4	Number of clearing members, by clearing service	Number of other participants (Describe in comments)	30/09/2019	73	18.1.2.4 - All SEOCH Clearing Participants are required to be licensed as licensed corporations by SEOCH's local regulator, the Securities and Futures Commission.	30/06/2019	71	18.1.2.4 - All SEOCH Clearing Participants are required to be licensed as licensed corporations by SEOCH's local regulator, the Securities and Futures Commission.
18.1	18.1.3.1	Number of clearing members, by clearing service	Number of domestic participants	30/09/2019	73	18.1.3.1 - All SEOCH Clearing Participants are required to be domestically incorporated. The sum of the number of general clearing members and direct clearing members should reconcile with the total number of domestically incorporated Clearing Participants.	30/06/2019	71	18.1.3.1 - All SEOCH Clearing Participants are required to be domestically incorporated. The sum of the number of general clearing members and direct clearing members should reconcile with the total number of domestically incorporated Clearing Participants.
18.1	18.1.3.2	Number of clearing members, by clearing service	Number of foreign participants	30/09/2019	N/A	18.1.3.2 - SEOCH does not offer this category of SEOCH Clearing Participantship because all SEOCH Clearing Participants are required to be domestically incorporated.	30/06/2019	N/A	18.1.3.2 - SEOCH does not offer this category of SEOCH Clearing Participantship because all SEOCH Clearing Participants are required to be domestically incorporated.
18.2	18.2.1	Open Position Concentration	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the largest five clearing members, including both house and client, in aggregate; Average and Peak over the quarter	30/09/2019	AverageInQuarter : N/A PeakInQuarter : N/A	18.2.1 - Not applicable to SEOCH which has more than 25 members onboard.	30/06/2019	AverageInQuarter : N/A PeakInQuarter : N/A	18.2.1 - Not applicable to SEOCH which has more than 25 members onboard.
18.2	18.2.2	Open Position Concentration	For each clearing service with 25 or more members; Percentage of open positions held by the largest five clearing members, including both house and client, in aggregate; Average and Peak over the quarter	30/09/2019	AverageInQuarter : 62.46% PeakInQuarter : 63.20%		30/06/2019	AverageInQuarter : 60.90% PeakInQuarter : 62.82%	
18.2	18.2.3	Open Position Concentration	For each clearing service with 25 or more members; Percentage of open positions held by the largest ten clearing members, including both house and client, in aggregate; Average and Peak over the quarter	30/09/2019	AverageInQuarter : 82.07% PeakInQuarter : 82.92%		30/06/2019	AverageInQuarter : 80.97% PeakInQuarter : 82.35%	
18.3	18.3.1	Initial Margin Concentration	For each clearing service with ten or more members, but fewer than 25 members; Percentage of initial margin posted by the largest five clearing members, including both house and client, in aggregate; Average and Peak over the quarter	30/09/2019	AverageInQuarter : N/A PeakInQuarter : N/A		30/06/2019	AverageInQuarter : N/A PeakInQuarter : N/A	
18.3	18.3.2	Initial Margin Concentration	For each clearing service with 25 or more members; Percentage of initial margin posted by the largest five clearing members, including both house and client, in aggregate; Average and Peak over the quarter	30/09/2019	AverageInQuarter : 49.27% PeakInQuarter : 51.67%		30/06/2019	AverageInQuarter : 49.95% PeakInQuarter : 54.66%	
18.3	18.3.3	Initial Margin Concentration	For each clearing service with 25 or more members; Percentage of initial margin posted by the largest ten clearing members, including both house and client, in aggregate; Average and Peak over the quarter	30/09/2019	AverageInQuarter : 72.18% PeakInQuarter : 73.98%		30/06/2019	AverageInQuarter : 72.11% PeakInQuarter : 75.69%	
18.4	18.4.1	Segregated Default Fund Concentration	For each segregated default fund with ten or more members, but fewer than 25 members; Percentage of participant contributions to the default fund contributed by largest five clearing members in aggregate	30/09/2019	N/A		30/06/2019	N/A	18.4.1 - Not applicable to SEOCH which has more than 25 members onboard.
18.4	18.4.2	Segregated Default Fund Concentration	For each segregated default fund with 25 or more members; Percentage of participant contributions to the default fund contributed by largest five clearing members in aggregate	30/09/2019	36.23%		30/06/2019	34.93%	
18.4	18.4.3	Segregated Default Fund Concentration	For each segregated default fund with 25 or more members; Percentage of participant contributions to the default fund contributed by largest ten clearing members in aggregate	30/09/2019	52.86%		30/06/2019	48.98%	
19.1	19.1.1	Tiered participation arrangements, measures of concentration of client clearing	Number of clients (if known)	30/09/2019	N/A	19.1.1 - SEOCH deals with its Clearing Participants as principal and not agent, it has no contractual relationship with the clients of its Clearing Participant. Hence SEOCH does not have information on the number of retail clients of its Clearing Participants.	30/06/2019	N/A	19.1.1 - SEOCH deals with its Clearing Participants as principal and not agent, it has no contractual relationship with the clients of its Clearing Participant. Hence SEOCH does not have information on the number of retail clients of its Clearing Participants.
19.1	19.1.2	Tiered participation arrangements, measures of concentration of client clearing	Number of direct members that clear for clients	30/09/2019	73		30/06/2019	71	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
19.1	19.1.3.1	Tiered participation arrangements, measures of concentration of client clearing	Percent of client transactions attributable to the top five clearing members (if CCP has 10+ clearing members) - Peak	30/09/2019	70.91%		30/06/2019	63.70%	
19.1	19.1.3.2	Tiered participation arrangements, measures of concentration of client clearing	Percent of client transactions attributable to the top five clearing members (if CCP has 10+ clearing members) - Average	30/09/2019	17.45%		30/06/2019	17.23%	
19.1	19.1.4.1	Tiered participation arrangements, measures of concentration of client clearing	Percent of client transactions attributable to the top ten clearing members (if CCP has 25+ clearing members) - Peak	30/09/2019	58.58%		30/06/2019	55.59%	
19.1	19.1.4.2	Tiered participation arrangements, measures of concentration of client clearing	Percent of client transactions attributable to the top ten clearing members (if CCP has 25+ clearing members) - Average	30/09/2019	8.70%		30/06/2019	8.66%	
20.1	20.1.1	FMI Links, Value of Trades	Value of trades cleared through each link – as a share of total trade values/total notional values cleared	30/09/2019	N/A	20.1.1 to 20.7.2 - FMI Links are not applicable to SEOCH.	30/06/2019	N/A	20.1.1 to 20.7.2 - FMI Links are not applicable to SEOCH.
20.2	20.2.1	FMI Links, Initial Margin or equivalent financial resources provided	Initial margin or equivalent financial resources provided to each linked CCP by the CCP to cover the potential future exposure of the linked CCP on contracts cleared across link	30/09/2019	N/A		30/06/2019	N/A	
20.3	20.3.1	FMI Links, Initial Margin or equivalent financial resources collected	Initial margin or equivalent financial resources collected from each linked CCP to cover potential future exposure to the linked CCP on contracts cleared across link (at market value and post haircut)	30/09/2019	N/A		30/06/2019	N/A	
20.4	20.4.1.1	FMI Links, Results of Back-testing coverage	Number of times over the past twelve months that coverage provided by margin and equivalent financial resources held against each linked CCP fell below the actual marked-to-market exposure to that linked CCP – based on daily back testing results; Intraday or Continuous or Once-a-day	30/09/2019	N/A		30/06/2019	N/A	
20.4	20.4.1.2	FMI Links, Results of Back-testing coverage	Back-testing results frequency - state if measured intraday/continuously/once a day	30/09/2019	N/A		30/06/2019	N/A	
20.4	20.4.1.3	FMI Links, Results of Back-testing coverage	If 20.4.1.2 is 'once a day' then the time of day measure is taken, otherwise blank	30/09/2019	N/A		30/06/2019	N/A	
20.4	20.4.2	FMI Links, Results of Back-testing coverage	Number of observations (i.e. number of accounts multiplied by number of days covered in the back test); Intraday or Continuous or Once-a-day	30/09/2019	N/A		30/06/2019	N/A	
20.4	20.4.3	FMI Links, Results of Back-testing coverage	Achieved coverage level	30/09/2019	N/A		30/06/2019	N/A	
20.5	20.5.1.1	FMI Links, Additional pre-funded financial resources provided to	Additional pre-funded financial resources (if any) beyond initial margin and equivalent financial resources provided to each linked CCP, that are available to the linked CCP to cover exposures to the CCP	30/09/2019	N/A		30/06/2019	N/A	
20.5	20.5.1.2	FMI Links, Additional pre-funded financial resources provided to	Whether part of, additional to, or separate from the standard default fund	30/09/2019	N/A		30/06/2019	N/A	
20.6	20.6.1.1	FMI Links, Additional pre-funded financial resources collected from	Additional pre-funded financial resources (if any) beyond initial margin and equivalent financial resources collected from each linked CCP, that are available to the linked CCP to cover exposures to the CCP	30/09/2019	N/A		30/06/2019	N/A	
20.6	20.6.1.2	FMI Links, Additional pre-funded financial resources collected from	Whether part of, additional to, or separate from the standard default fund	30/09/2019	N/A		30/06/2019	N/A	
20.7	20.7.1	FMI Links, Cross Margining	Value of trades subject to cross margining, by clearing service, as a percentage of total trade values/total notional values cleared	30/09/2019	N/A		30/06/2019	N/A	

SEOCH Quantitative Disclosure

PFMI Principle Reference	Disclosure Reference	Disclosure Title	Disclosure Description	Current Quarter - Report Date	Current Quarter - Data	Current Quarter - Notes	Previous Quarter - Report Date	Previous Quarter - Data	Previous Quarter - Notes
20.7	20.7.2	FMI Links, Cross Margining	Reduction in total initial margin held by the CCP as a result of cross margining, as a percentage of total initial margin that would otherwise have been held.	30/09/2019	N/A		30/06/2019	N/A	
23.1	23.1.1	Disclosure of rules, key procedures, and market data; Average Daily Volumes	Average Daily Volumes by Asset Class, Instrument, CCY and Over-the-Counter(OTC) or Exchange Traded (ETD)	30/09/2019	Please refer to supplementary table below		30/06/2019	Please refer to supplementary table below	
23.1	23.1.2	Disclosure of rules, key procedures, and market data; Average Daily Volumes	Average Notional Value of trades cleared by Asset Class, CCY and Over-the-Counter(OTC) or Exchange Traded (ETD)	30/09/2019	Please refer to supplementary table below		30/06/2019	Please refer to supplementary table below	
23.2	23.2.1	Disclosure of rules, key procedures, and market data; Non-Yet-Settled	Gross notional outstanding/total settlement value of novated but not-yet settled securities transactions by Asset Class, Instrument, CCY and Over-the-Counter(OTC) or Exchange Traded (ETD)	30/09/2019	N/A	23.2.1 - SEOCH does not clear cash market securities.	30/06/2019	N/A	23.2.1 - SEOCH does not clear cash market securities.
23.2	23.2.2	Disclosure of rules, key procedures, and market data; Average Daily Volumes	Defines the Asset Class for volumes reported in Disclosure References 23.1.1, 23.1.2 and 23.2.1	30/09/2019	Please refer to supplementary table below		30/06/2019	Please refer to supplementary table below	
23.2	23.2.3	Disclosure of rules, key procedures, and market data; Average Daily Volumes	Defines the Product Type for volumes reported in Disclosure References 23.1.1, 23.1.2 and 23.2.1	30/09/2019	Please refer to supplementary table below		30/06/2019	Please refer to supplementary table below	
23.2	23.2.4	Disclosure of rules, key procedures, and market data; Average Daily Volumes	Defines the Product Code for volumes reported in Disclosure References 23.1.1, 23.1.2 and 23.2.1	30/09/2019	Please refer to supplementary table below		30/06/2019	Please refer to supplementary table below	
23.3	23.3.1	Disclosure of rules, key procedures, and market data; Execution Facility	Average daily volumes submitted by Execution facility or matching/confirmation venue	30/09/2019	787,889		30/06/2019	976,557.32	
23.3	23.3.2	Disclosure of rules, key procedures, and market data; Execution Facility	Notional contract values submitted by Execution facility or matching/confirmation venue	30/09/2019	HKD20,504,869,791.92	23.3.2 - Notional values are denoted in HKD equivalent.	30/06/2019	HK\$26,681,308,529.09	23.3.2 - Notional values are denoted in HKD equivalent.