Staff Paper

Project	**Insurance contracts**
Topic	**Appendices C and D to Agenda paper 3D: *Definition of an insurance contract***

1. This document contains Appendix C and D to agenda paper 3D.

2. Appendix C provides examples of insurance/reinsurance structures and examples to support the alternative staff view in agenda paper 3D/60D. Please note that pages7 to 11 print on A3 paper.

3. Appendix D contains the alternative staff view and recommendation.

Appendix C: Insurance/reinsurance structures and examples to support assertions in agenda paper 3D/60D

Various structures

1. The purpose of this section is not to explain every detail for each structure and is not all inclusive of the types of structures in the marketplace. Rather the purpose is to inform the boards about various structures to indicate the extent that companies have gone to in order to minimize the amount of risk exposure they accept and avoid accounting for arrangements as financing.

2. Insurance and reinsurance contracts may be structured in various ways to minimize the ultimate premium paid by the insured and the amount of risk the insurer or reinsurer is exposed to. Over time these structures have become more complex.

3. Determining whether a contract provides indemnification or compensation against loss or liability relating to insurance risk requires a complete understanding of that contract and other contracts or agreements between the enterprises. A complete understanding includes an evaluation of all contractual features that (a) limit the amount of insurance risk to which the insurer or reinsurer is subject (such as through experience refunds, cancellation provisions, adjustable features, or additions of profitable lines of business to the reinsurance contract) or (b) delay the timely reimbursement of claims by the insurer or reinsurer (such as through payment schedules or accumulating retentions from multiple years).

4. Quota share reinsurance is a form of pro rata reinsurance (proportional) in which the reinsurer assumes an agreed percentage of each risk being insured and shares all premiums and losses accordingly with the reinsured. For example, under a 50-percent-quota share treaty the reinsurer receives 50 percent of the insurer's premiums, less ceding commissions, and is obligated to pay 50 percent of each claim as well as the claim-adjustment expense incurred by the insurer.

    (a) Contracts written as “pure” quota share contracts would transfer all the risk associated with an individual policy to the assuming company and the assuming company would be viewed as stepping in the shoes of the ceding company. However, other contracts contain provisions (e.g., sliding scale and other adjustable commissions, caps, loss corridors) that limit the assuming company's risk. This is often the case in the market after significant loss events.

(i) Sliding scale commission formulas allow increasing commissions as losses decrease and vice versa, subject to maximum and minimum limits. This may result in an implicit corridor of losses that are not covered by the arrangement.

(ii) Caps are used to limit the assuming company's aggregate exposure.

(iii) Experience refund arrangements allow the ceding company to share in the favourable experience of the underlying contracts. An experience account will impact the relationship of the results to both the a) commercial and insurance company or b) the ceding and assuming companies. This will cause the results to the insurer or reinsurer to vary less under profitable scenarios. However, under loss scenarios the reinsurer will have variability.

(iv) Loss corridors eliminate or reduce the assuming company's risk exposure for a range of specific loss ratios. In some cases the loss corridor is explicit, for example the contract will state that the reinsurer will not pay losses for claims between a 75% and 85% loss ratio. In other cases, the loss corridor may be implicit based on other adjustments, for example an increase in premium ceded at certain loss ratios.

(b) Under a reinsurance arrangement, typically, the ceded premium is the quota share percentage of the underlying premium. If the reinsurance contract is accounted for as quota share reinsurance, the reinsurance premium will be reflected as ceded premium and thus will reduce net written and net earned premium of the ceding company (and impacting the premium to surplus ratios). For contracts with any of the risk limiting features noted above, the actual risk retained by the ceding company can be very significant in relation to the retained premium, similar to an excess of loss contract and may not actually require the assuming company to have a possibility of a loss thus having the ceding company retaining more losses than the financial statements would indicate.

5. *Multiple-year retrospectively rated contracts* - An enterprise (for example, a manufacturing company, a retailer, a service entity, or a financial institution) may enter into a multiple-year retrospectively rated contract with an insurance company. These contracts may cover various types of exposures such as product and environmental liability risks. Similarly an insurer (ceding enterprise) may enter into a multiple-year retrospectively rated reinsurance contract with a reinsurer (assuming enterprise). Examples of these contracts may include transactions referred to as "funded catastrophe covers."

   (a) Those contracts include a "retrospective rating" provision that provides for at least one of the following based on contract experience: (1) changes in the amount or timing of future contractual cash flows, including premium adjustments, settlement adjustments, or refunds to the noninsurance enterprise or ceding enterprise, or (2) changes in the contract's future coverage. A critical distinguishing feature of these contracts is that part or all of the retrospective rating provision is obligatory such that the retrospective rating provision creates for each party to the contract future rights and obligations as a result of past events.

   (b) These types of contracts may result in losses being spread over many periods. Retrospectively rated contracts that have an indefinite term are viewed by some as financing transactions as the loss incurred in one year requires the contract to be continued and thus additional premiums to be paid which could be adjusted to cover the previous loss. In these situations an insured event could cause an insurer to pay benefits that would exceed those that would be payable if no insured event occurred and thus meet the definition of an insurance contract under IFRS 4.

      (i) Without an insurance policy, a commercial enterprise would record a loss when an event occurs. This could result in volatile results. With an insurance policy, a commercial enterprise would show a more steady stream of expense for its insurance premiums. Because it is unknown whether an event will occur the commercial enterprise negotiates for a low premium while the insurance company negotiates such that they are not exposed to risk. This often times results in arrangements that have adjustable features:

(ii) If the contract is accounted for as an insurance contract and an adverse event is not incurred, there is an experience refund to the commercial enterprise for the majority of the premium leaving the insurance company retaining a premium that is typically equivalent to a financing fee.

(iii) If the contract is accounted for as an insurance contract and an adverse event is incurred, the commercial enterprise does not have to record the loss under current guidance as it is covered by insurance. However, the contract may automatically become a multiple year contract upon a loss, thus requiring additional premium to be paid to the insurer which may be adjusted to absorb the loss. The commercial enterprise would show the additional premiums as insurance expense which would impact their results but not to the same extent as if it the contract was not deemed to be insurance..

(c) The commercial enterprise may be willing to absorb the loss but to have more steady results is willing to give up a fee that would be equivalent to the investment return they would have earned had they not paid the premium. While the insurance contract project is not addressing policyholder accounting, if the contract meets the definition of an insurance contract, the commercial enterprise will most likely account for the contract as an insurance arrangement.

6. *Excess of loss contracts* - Excess of loss contracts are written as per risk (the ceding entity is indemnified, subject to a specified limit, against the amount of loss in excess of a specified retention with respect to each risk covered by a treaty) or as aggregate (the ceding entity is indemnified against the amount by which the ceding entity’s net retained losses incurred during a specific period exceed either a predetermined dollar amount or a percentage of the entity’s subject premiums for the specific period subject to a specified limit) arrangements. Similar to quota share contracts, pure excess of loss contracts would transfer all the risk associated with a per risk or aggregate risk agreement to the assuming

company and the assuming company would be viewed as stepping in the shoes of the ceding company. However, other contracts contain provisions that limit risk being transferred (sliding scale and other adjustable commissions, varying pricing for different layers, etc.).

7. Below are examples of arrangements with adjustable features. It is important to note that these contracts did not meet the requirements to be accounted for as insurance under current US GAAP, however, they may be considered insurance under IFRS 4.

Example 1 – Step corridor with a cap on the losses ceded

Gross Premiums = 100
Expenses = 30
Ceded premium = 80% of gross premiums
Risk share % varies
Cap = 105% loss ratio

Loss Ratio	Gross Prem.	Expected Exp.	Gross Loss	Gross CLR	Net - prior to cession	Risk Share % Per Contract	Ass. Co. Prem	Ceding Comm	Ass. Co. losses	Ass. Co. Cumm. Losses	Ass. Co. Cumm Results	Profit Return	Ass. Co. Results	Ass. Co. LR	Ass. Co. Exp. Ratio	Ass. Co. CLR	Ceding Co. CLR
60	100	(30)	(60)	90%	10	80%	80	(24)	(48)	(48)	8.00	(4.80)	3.20	60%	24%	84%	66%
66	100	(30)	(66)	96%	4	0%	80	(24)	0	(48)	8.00	(4.80)	3.20	60%	24%	84%	96%
74	100	(30)	(74)	104%	(4)	50%	80	(24)	(4)	(52)	4.25	(1.05)	3.20	65%	29%	93%	134%
80	100	(30)	(80)	110%	(10)	0%	80	(24)	0	(52)	4.25	(1.05)	3.20	65%	29%	93%	166%
90	100	(30)	(90)	120%	(20)	80%	80	(24)	(8)	(60)	(3.95)	0.00	(3.95)	75%	30%	105%	182%
100	100	(30)	(100)	130%	(30)	0%	80	(24)	0	(60)	(3.95)	0.00	(3.95)	75%	30%	105%	230%

Based on the example above an insured event could cause an insurer to pay benefits that would exceed those that would be payable if no insured event occurred and thus meet the definition of an insurance contract under IFRS 4. However, the ceding company has given up 80% of the premiums to have coverage for losses below 60% loss ratio, between 74% loss ratio and 79% loss ratio and again between a 90% loss ratio and 100% loss ratio. The assuming company is only incurring a loss between 90% loss ratio and 100% loss ratio. Based on these provisions the assuming company can have a maximum loss of 5%, which depending on the payout period may be recovered through investment income. If a loss is not required to be accounted for as insurance, the cap could be set below the point at which the assuming company would incur a loss.

Example 2 – Step corridor with a cap on the losses ceded and an adjustable ceding commission

Gross Premiums = 100
Expenses = 20
Ceded premium = 50% of gross premiums
Risk share % varies
Cap = 105% loss ratio

Loss Ratio	Gross Prem.	Expected Exp.	Gross Loss	Gross CLR	Net - prior to cession	Risk Share % Per Contract	Ass. Co. Prem	Ceding Comm	Ass. Co. losses	Ass. Co. Cumm. Losses	Ass. Co. Cumm Results	Profit Return	Ass. Co. Results	Ass. Co. LR	Ass. Co. Exp. Ratio	Ass. Co. CLR	Ceding Co. CLR
60	100	(20)	(60)	80%	20	50%	50	12.50	(30.00)	(30.00)	20.00	(5.00)	15.00	60%	35%	95%	65%
75	100	(20)	(75)	95%	5	50%	50	10.00	(7.50)	(37.50)	12.50	0.00	12.50	75%	20%	95%	95%
85	100	(20)	(85)	105%	(5)	0%	50	10.00	0.00	(37.50)	12.50	0.00	12.50	75%	20%	95%	115%
95	100	(20)	(95)	115%	(15)	50%	50	10.00	(5.00)	(42.50)	7.50	0.00	7.50	85%	20%	105%	125%
105	100	(20)	(105)	125%	(25)	50%	50	10.00	(5.00)	(47.50)	2.50	0.00	2.50	95%	20%	115%	135%
120	100	(20)	(120)	140%	(40)	0%	50	10.00	0.00	(47.50)	2.50	0.00	2.50	95%	20%	115%	165%

Based on the example above an insured event could cause an insurer to pay benefits that would exceed those that would be payable if no insured event occurred and thus meet the definition of an insurance contract under IFRS 4. However, the ceding company has given up 50% of the premiums to have coverage for losses below 75% loss ratio and between 95% loss ratio and 105% loss ratio. The assuming company is only incurring a loss between 95% loss ratio and 105% loss ratio. Based on these provisions the assuming company can have a maximum loss of 15%, which depending on the payout period may be recovered through investment income. If a loss is not required to be accounted for as insurance, the cap could be set below the point at which the assuming company would incur a loss.

Measurement

8. In addition to the concern that the classification of arrangements with adjustable features that are in substance financing as insurance in the financial statements, based on analysis performed by the staff, different results may emerge depending on whether a contract is included in insurance or in financial instruments. While ultimate results will be equivalent, the discount unwind less the amortization of the residual margin is not equivalent to the investment expense that would be calculated under the financial instruments standards throughout the contract period.

9. For the following examples assume:

   (a) Gross written premium = CU 10,000,000

   (b) Commission is 15% of gross written premium = CU 1,500,000

   (c) Coverage period is one year

   (d) Payout period is 15 years

   (e) Discount rate = 5%

Data Analysis for Examples 1 and 2

Insurance																	
Year		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Payout pattern		15%	40%	55%	70%	75%	80%	83%	85%	90%	91%	92%	93%	95%	97%	100%	
Expected payout	10,000,000	1,500,000	4,000,000	5,500,000	7,000,000	7,500,000	8,000,000	8,300,000	8,500,000	9,000,000	9,100,000	9,200,000	9,300,000	9,500,000	9,700,000	10,000,000	10,000,000
	Net premium																
Amount paid out in year	-8,500,000	1,500,000	2,500,000	1,500,000	1,500,000	500,000	500,000	300,000	200,000	500,000	100,000	100,000	100,000	200,000	200,000	300,000	
Discount rate per time period (5%)		0.9524	0.9070	0.8638	0.8227	0.7835	0.7462	0.7107	0.6768	0.6446	0.6258	0.6076	0.5899	0.5727	0.5560	0.5398	
PV expected cash outflows		1,428,571	2,267,574	1,295,756	1,234,054	391,763	373,108	213,204	135,368	322,304	62,583	60,761	58,991	114,545	111,209	161,955	8,231,747
Unwind of discount Yr 1		71,429	113,379	64,788	61,703	19,588	18,655	10,660	6,768	16,115	1,878	1,823	1,770	3,436	3,336	4,859	400,186
Remaining PV ECF			2,380,952	1,360,544	1,295,756	411,351	391,763	223,865	142,136	338,420	64,461	62,583	60,761	117,982	114,545	166,814	
Unwind of discount Yr 2			119,048	68,027	64,788	20,568	19,588	11,193	7,107	16,921	3,223	1,878	1,823	3,539	3,436	5,004	346,143
Remaining PV ECF				1,428,571	1,360,544	431,919	411,351	235,058	149,243	355,341	67,684	64,461	62,583	121,521	117,982	171,818	
Unwind of discount Yr 3				71,429	68,027	21,596	20,568	11,753	7,462	17,767	3,384	3,223	1,878	3,646	3,539	5,155	239,426
Remaining PV ECF					1,428,571	453,515	431,919	246,811	156,705	373,108	71,068	67,684	64,461	125,167	121,521	176,973	
Unwind of discount Yr 4					71,429	22,676	21,596	12,341	7,835	18,655	3,553	3,384	3,223	3,755	3,646	5,309	177,402
Remaining PV ECF						476,190	453,515	259,151	164,540	391,763	74,622	71,068	67,684	128,922	125,167	182,282	
Unwind of discount Yr 5						23,810	22,676	12,958	8,227	19,588	3,731	3,553	3,384	6,446	3,755	5,468	113,596
Remaining PV ECF							476,190	272,109	172,768	411,351	78,353	74,622	71,068	135,368	128,922	187,750	
Unwind of discount Yr 6							22,676	13,605	8,638	20,568	3,918	3,731	3,553	6,768	6,446	5,633	95,536
Remaining PV ECF								285,714	181,406	431,919	82,270	78,353	74,622	142,136	135,368	193,383	
Unwind of discount Yr 7								13,605	9,070	21,596	4,114	3,918	3,731	7,107	6,768	9,669	79,578
Remaining PV ECF									190,476	453,515	86,384	82,270	78,353	149,243	142,136	203,052	
Unwind of discount Yr 8									9,070	22,676	4,319	4,114	3,918	7,462	7,107	10,153	68,818
Remaining PV ECF										476,190	90,703	86,384	82,270	156,705	149,243	213,204	
Unwind of discount Yr 9										22,676	4,535	4,319	4,114	7,835	7,462	10,660	61,601
Remaining PV ECF											95,238	90,703	86,384	164,540	156,705	223,865	
Unwind of disct Yr 10											4,535	4,535	4,319	8,227	7,835	11,193	40,645
Remaining PV ECF												95,238	90,703	172,768	164,540	235,058	
Unwind of disct Yr 11												4,535	4,535	8,638	8,227	11,753	37,689
Remaining PV ECF													95,238	181,406	172,768	246,811	
Unwind of disct Yr 12													4,535	9,070	8,638	12,341	34,584
Remaining PV ECF														190,476	181,406	259,151	
Unwind of disct Yr 13														9,070	9,070	12,958	31,098
Remaining PV ECF															190,476	272,109	
Unwind of disct Yr 14															9,070	13,605	22,676
Remaining PV ECF																285,714	
Unwind of disct Yr 15																13,605	13,605
																	9,994,331
		1,500,000	2,500,000	1,500,000	1,500,000	500,000	498,866	299,320	199,546	498,866	99,773	99,773	99,773	199,546	199,546	299,320	9,994,331

Data Analysis for Examples 1 and 2

Financing																	
Beginning ECF		8,500,000	7,339,494	5,132,637	3,837,637	2,490,914	2,090,402	1,673,894	1,440,750	1,298,294	850,149	784,104	715,422	643,996	469,717	288,478	0
Expected payout		(1,500,000)	(2,500,000)	(1,500,000)	(1,500,000)	(500,000)	(500,000)	(300,000)	(200,000)	(500,000)	(100,000)	(100,000)	(100,000)	(200,000)	(200,000)	(300,000)	-
Interest expense (calculated using IRR)	0.0399	339,494	293,143	205,000	153,277	99,488	83,492	66,856	57,544	51,854	33,955	31,317	28,574	25,721	18,761	11,522	1,500,000
Remaining ECF		7,339,494	5,132,637	3,837,637	2,490,914	2,090,402	1,673,894	1,440,750	1,298,294	850,149	784,104	715,422	643,996	469,717	288,478	0	

Example 1: Analysis of results on nominal or present value basis

	Nominal	Present Value
Gross premiums	10,000,000	10,000,000
Less ceding commission	(1,500,000)	(1,500,000)
Net cash inflows	8,500,000	8,500,000
Less expected cash out flow	(10,000,000)	(8,231,747)
Reinsurer's estimated profit (loss)	(1,500,000)	268,253

Example 2: Summary of results

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Check
INSURANCE																
Discount unwind	400,186	346,143	239,426	177,402	113,596	95,536	79,578	68,818	61,601	40,645	37,689	34,584	31,098	22,676	13,605	1,762,584
Amortization of residual margin (IASB)	268,253															268,253
Net result	131,933	346,143	239,426	177,402	113,596	95,536	79,578	68,818	61,601	40,645	37,689	34,584	31,098	22,676	13,605	1,494,331
FINANCING																
Investment Expense	339,494	293,143	205,000	153,277	99,488	83,492	66,856	57,544	51,854	33,955	31,317	28,574	25,721	18,761	11,522	1,500,000
DIFFERENCE	(207,561)	53,000	34,426	24,125	14,108	12,045	12,722	11,274	9,747	6,690	6,371	6,010	5,377	3,915	2,083	(5,669)

Appendix D: Alternative staff view and recommendation

1. Some staff disagree with the staff recommendation in agenda paper 3D/60D.

Possibility of loss over whole life of contract

2. Some staff believe that a contract should expose the issuer of a contract to a loss (there is a scenario that has commercial substance in which the present value of the net cash flows paid by the insurer can exceed the present value of the premiums) to meet the definition of insurance contract to be included in the insurance contract accounting standard for the following reasons:

   (a) The objective of the Boards is to develop an accounting standard for insurance contracts. Permitting the definition of an insurance contract to include financing arrangements with some variable cash flows appear to be in conflict with the stated objective of the Boards.

   (b) Combining contracts that have “true” risk transfer with those that are principally financing could weaken the quality of financial information. We believe that the benefit of reporting financing consistent with all other financing is worth the cost.

   (c) The results included in the financial statements would more accurately show the economics of the substance of the contract. For certain arrangements, especially where there are long tail payouts, the financial results may differ, thus resulting in a difference between the amount of discount unwind and the investment expense in each period, not portraying to the users of the financial statements the economic results of the contract. See appendix C.

(d) The classification of an agreement as an insurance contract liability versus a financial liability in the financial statements could be misleading to shareholders, creditors, analysts, etc. who place reliance on certain key ratios including the amount of insurance/reinsurance protection, debt to equity ratio, and premium written to surplus ratio.

(e) If the boards were to apply the tentative decision from the joint board meeting on 1 March with regard to when a fixed fee service contract would be scoped out of the standard when in substance it was viewed to be a service contract, we would expect that if a contact was in substance financing that it would follow a similar scope out.

(f) The conclusion to reverse the tentative view included in the ED and DP, is not sufficiently supported by the comment letters. Many of those who commented on definition supported the tentative view included in the ED and DP, including those applying IFRS 4 who thought the clarification of what they are doing in practice would be useful.

(g) While unbundling the financing element of an arrangement could achieve the same result as requiring that a scenario that has commercial substance in which the present value of the net cash flows paid by the insurer can exceed the present value of the premiums, this approach could be complex. For example, the issuer would need to determine the financing component, value that financing component based on observable market variables (similar to IAS 32) and allocate the difference to insurance contract. The financing component in these situations will most likely be the core element of the contract. The guidance would still need to be amended to include only contracts with adjustable features in this test versus contracts that have a fixed premium for fixed coverage. Even with this amendment, contracts may be grouped into this requirement that clearly should be accounted for as insurance.

Time Value of Money

3. Some staff believe that an insurer must take into account the time value of money in determining whether it will pay significant additional benefits in a particular scenario.

   (a) Based on analysis performed by the staff there could be a difference in what is classified as insurance when determined on a nominal or present value basis.

      (i) As seen in the Appendix C, a contract with gross premium of CU 10 million, a commission of 15% of gross premium or CU 1,500,000, and an expected loss of CU 10 million would result in the issuer having a CU 1,500,000 loss when evaluated on a gross basis and thus would be considered insurance. However, when the staff applied a 5% discount rate to the contract using a reasonable payout pattern over 15 years, the issuer had a gain of approximately CU 260,000.

(ii) Using the same contract and adding a provision that the insurer would pay out CU 95% of the premium if there is not a loss event or if there is a loss event the insurer would pay up to 110% of the premium but not for five years. In this scenario, the benefits paid out when there is a loss event would be significantly greater than if there was not a loss but when considering time value of money there would not be a significant difference.

(b) Some staff believe that the conclusion to reverse the tentative view included in the ED and DP, is not sufficiently supported by the comment letters. Many of those who commented on definition supported the tentative view included in the ED and DP.