Annex 1

The 15% of Tier 1 Limit on Innovative Instruments

1. This annex is meant to clarify the calculation of the 15% limit on innovative instruments agreed by the Committee in its press release of October 1998.

2. Innovative instruments will be limited to 15% of Tier 1 capital, net of goodwill. To determine the allowable amount of innovative instruments, banks and supervisors should multiply the amount of non-innovative Tier 1 by 17.65%. This number is derived from the proportion of 15% to 85% (i.e. 15%/85% = 17.65%).

3. As an example, take a bank with €75 of common equity, €15 of non-cumulative perpetual preferred stock, €5 of minority interest in the common equity account of a consolidated subsidiary, and €10 of goodwill. The net amount of non-innovative Tier 1 is €75+€15+€5-€10 = €85.

4. The allowable amount of innovative instruments this bank may include in Tier 1 capital is €85x17.65% = €15. If the bank issues innovative Tier 1 instruments up to its limit, total Tier 1 will amount to €85 + €15 = €100. The percentage of innovative instruments to total Tier 1 would equal 15%.

Annex 2

Standardised Approach - Implementing the Mapping Process

1. Because supervisors will be responsible for assigning eligible ECAI's credit risk assessments to the risk weights available under the standardised approach, they will need to consider a variety of qualitative and quantitative factors to differentiate between the relative degrees of risk expressed by each assessment. Such qualitative factors could include the pool of issuers that each agency covers, the range of ratings that an agency assigns, each rating's meaning, and each agency's definition of default, among others.

2. Quantifiable parameters may help to promote a more consistent mapping of credit risk assessments into the available risk weights under the standardised approach. This annex summarises the Committee's proposals to help supervisors with mapping exercises. The parameters presented below are intended to provide guidance to supervisors and are not intended to establish new or complement existing eligibility requirements for ECAIs.

Evaluating CDRs: two proposed measures

3. To help ensure that a particular risk weight is appropriate for a particular credit risk assessment, the Committee recommends that supervisors evaluate the cumulative default rate (CDR) associated with all issues assigned the same credit risk rating. Supervisors would evaluate two separate measures of CDRs associated with each risk rating contained in the standardised approach, using in both cases the CDR measured over a three-year period.

- To ensure that supervisors have a sense of the long-run default experience over time, supervisors should evaluate the ten-year average of the three-year CDR when this depth of data is available.[150] For new rating agencies or for those that have compiled less than ten years of default data, supervisors may wish to ask rating agencies what they believe the 10-year average of the three-year CDR would be for each risk rating and hold them accountable for such an evaluation thereafter for the purpose of risk weighting the claims they rate.
- The other measure that supervisors should consider is the most recent three-year CDR associated with each credit risk assessment of an ECAI

4. Both measurements would be compared to aggregate, historical default rates of credit risk assessments compiled by the Committee that are believed to represent an equivalent level of credit risk.

5. As three-year CDR data is expected to be available from ECAIs, supervisors should be able to compare the default experience of a particular ECAI's assessments with those issued by other rating agencies, in particular major agencies rating a similar population.

[150] In 2002, for example, a supervisor would calculate the average of the three-year CDRs for issuers assigned to each rating grade (the "cohort") for each of the ten years 1990-1999.

Mapping risk ratings to risk weights using CDRs

6. To help supervisors determine the appropriate risk weights to which an ECAI's risk ratings should be mapped, each of the CDR measures mentioned above could be compared to the following reference and benchmark values of CDRs:

- For each step in an ECAI's rating scale, a ten-year average of the three-year CDR would be compared to a long run "reference" three-year CDR that would represent a sense of the long-run international default experience of risk assessments.
- Likewise, for each step in the ECAI's rating scale, the two most recent three-year CDR would be compared to "benchmarks" for CDRs. This comparison would be intended to determine whether the ECAI's most recent record of assessing credit risk remains within the CDR supervisory benchmarks.

7. Table 1 below illustrates the overall framework for such comparisons.

Table 1

Comparisons of CDR Measures[151]

International Experience (derived from the combined experience of major rating agencies)	Compare to	External Credit Assessment Institution
Set by the Committee as guidance		*Calculated by national supervisors based on the ECAI's own default data*
Long-run "reference" CDR	⟺	Ten-year average of the three-year CDR
CDR Benchmarks	⟺	Two most recent three-year CDR

1. Comparing an ECAI's long-run average three-year CDR to a long-run "reference" CDR

8. For each credit risk category used in the standardised approach of the New Accord, the corresponding long-run reference CDR would provide information to supervisors on what its default experience has been internationally. The ten-year average of an eligible ECAI's particular assessment would not be expected to match exactly the long-run reference CDR. The long run CDRs are meant as guidance for supervisors, and not as "targets" that ECAIs would have to meet. The recommended long-run "reference" three-year CDRs for each of the Committee's credit risk categories are presented in Table 2 below, based on the Committee's observations of the default experience reported by major rating agencies internationally.

[151] It should be noted that each major rating agency would be subject to these comparisons as well, in which its individual experience would be compared to the aggregate international experience.

Table 2

Proposed long run "reference" three-year CDRs

S&P Assessment ***(Moody's)***	**AAA-AA** ***(Aaa-Aa)***	**A** ***(A)***	**BBB** ***(Baa)***	**BB** ***(Ba)***	**B** ***(B)***
20-year average of three-year CDR	0.10%	0.25%	1.00%	7.50%	20.00%

2. Comparing an ECAI's most recent three-year CDR to CDR Benchmarks

9. Since an ECAI's own CDRs are not intended to match the reference CDRs exactly, it is important to provide a better sense of what upper bounds of CDRs are acceptable for each assessment, and hence each risk weight, contained in the standardised approach.

10. It is the Committee's general sense that the upper bounds for CDRs should serve as guidance for supervisors and not necessarily as mandatory requirements. Exceeding the upper bound for a CDR would therefore not necessarily require the supervisor to increase the risk weight associated with a particular assessment in all cases if the supervisor is convinced that the higher CDR results from some temporary cause other than weaker credit risk assessment standards.

11. To assist supervisors in interpreting whether a CDR falls within an acceptable range for a risk rating to qualify for a particular risk weight, two benchmarks would be set for each assessment, namely a "monitoring" level benchmark and a "trigger" level benchmark.

(a) "Monitoring" level benchmark

12. Exceeding the "monitoring" level CDR benchmark implies that a rating agency's current default experience for a particular credit risk-assessment grade is markedly higher than international default experience. Although such assessments would generally still be considered eligible for the associated risk weights, supervisors would be expected to consult with the relevant rating agency to understand why the default experience appears to be significantly worse. If supervisors determine that the higher default experience is attributable to weaker standards in assessing credit risk, they would be expected to assign a higher risk category to the agency's credit risk assessment.

(b) "Trigger" level

13. Exceeding the "trigger" level benchmark implies that a rating agency's default experience is considerably above the international historical default experience for a particular assessment grade. Thus there is a presumption that the ECAI's standards for assessing credit risk are either too weak or are not applied appropriately. If the observed three-year CDR exceeds the trigger level in two consecutive years, supervisors would be expected to move the risk assessment into a less favourable risk category. However, if supervisors determine that the higher observed CDR is not attributable to weaker

assessment standards, then they may exercise judgement and retain the original risk weight.[152]

14. In all cases where the supervisor decides to leave the risk category unchanged, it may wish to rely on Pillar 2 of the New Accord and encourage banks to hold more capital temporarily or to establish higher reserves.

15. When the supervisor has increased the associated risk category, there would be the opportunity for the assessment to again map to the original risk category if the ECAI is able to demonstrate that its three-year CDR falls and remains below the monitoring level for two consecutive years.

(c) Calibrating the benchmark CDRs

16. After reviewing a variety of methodologies, the Committee decided to use Monte Carlo simulations to calibrate both the monitoring and trigger levels for each credit risk assessment category. In particular, the proposed monitoring levels were derived from the 99.0th percentile confidence interval and the trigger level benchmark from the 99.9th percentile confidence interval. The simulations relied on publicly available historical default data from major international rating agencies. The levels derived for each risk assessment category are presented in Table 3 below, rounded to the first decimal:

Table 3

Proposed three-year CDR benchmarks

S&P Assessment ***(Moody's)***	**AAA-AA** ***(Aaa-Aa)***	**A** ***(A)***	**BBB** ***(Baa)***	**BB** ***(Ba)***	**B** ***(B)***
Monitoring Level	0.8%	1.0%	2.4%	11.0%	28.6%
Trigger Level	1.2%	1.3%	3.0%	12.4%	35.0%

[152] For example, if supervisors determine that the higher default experience is a temporary phenomenon, perhaps because it reflects a temporary or exogenous shock such as a natural disaster, then the risk weighting proposed in the standardised approach could still apply. Likewise, a breach of the trigger level by several ECAIs simultaneously may indicate a temporary market change or exogenous shock as opposed to a loosening of credit standards. In either scenario, supervisors would be expected to monitor the ECAI's assessments to ensure that the higher default experience is not the result of a loosening of credit risk assessment standards.

Annex 3

Illustrative IRB risk weights

1. The following table provides illustrative risk weights calculated for four asset classes types under the internal ratings-based (IRB) approach to credit risk. Each set of risk weights was produced using one of the risk weight functions set out in Section III. The inputs used to calculate the illustrative risk weights include measures of the probability of default (PD); loss given default (LGD); and an assumed effective maturity (M) of 2.5 years.

2. A firm size adjustment applies to exposures made to small- and medium-sized entity (SME) borrowers (defined as corporate exposures where the reported sales for the consolidated group of which the firm is a part is less than €50 million). Accordingly, the firm size adjustment was made in determining the second set of risk weights provided in column two given that the turnover of the firm receiving the exposure is assumed to be €5 million.

Illustrative IRB Risk Weights

Asset Class:	Corporate		Residential Mortgage		Other Retail		Qualifying Revolving Retail	
LGD:	45%	45%	45%	25%	45%	85%	45%	85%
Maturity: 2.5 years	Turnover (millions of €):							
PD:	50	5						
0.03%	14.75%	11.61%	4.31%	2.40%	4.97%	9.38%	2.85%	5.38%
0.05%	20.03%	15.80%	6.51%	3.62%	7.42%	14.02%	4.28%	8.09%
0.10%	30.19%	23.91%	11.25%	6.25%	12.54%	23.68%	7.29%	13.76%
0.25%	50.63%	40.34%	22.70%	12.61%	23.91%	45.16%	13.98%	26.41%
0.40%	64.59%	51.60%	32.19%	17.89%	32.28%	60.98%	18.87%	35.64%
0.50%	72.00%	57.57%	37.89%	21.05%	36.86%	69.63%	21.51%	40.64%
0.75%	86.50%	69.21%	50.68%	28.16%	46.01%	86.90%	26.69%	50.41%
1.00%	97.44%	77.91%	62.03%	34.46%	52.90%	99.93%	30.47%	57.55%
1.30%	107.79%	86.05%	74.31%	41.28%	59.25%	111.91%	33.82%	63.88%
1.50%	113.59%	90.58%	81.88%	45.49%	62.64%	118.33%	35.56%	67.17%
2.00%	125.77%	99.99%	99.19%	55.10%	69.20%	130.71%	38.81%	73.31%
2.50%	136.00%	107.85%	114.70%	63.72%	73.96%	139.71%	41.11%	77.66%
3.00%	145.21%	114.97%	128.86%	71.59%	77.67%	146.71%	42.94%	81.11%
4.00%	162.19%	128.33%	154.13%	85.63%	83.50%	157.72%	46.11%	87.11%
5.00%	178.27%	141.41%	176.35%	97.97%	88.56%	167.29%	49.34%	93.20%
6.00%	193.80%	154.44%	196.27%	109.04%	93.64%	176.87%	52.90%	99.92%
10.00%	250.22%	204.50%	260.66%	144.81%	117.95%	222.79%	69.51%	131.30%
15.00%	307.24%	258.48%	320.10%	177.83%	154.81%	292.41%	90.06%	170.11%
20.00%	352.49%	303.50%	365.62%	203.12%	192.33%	363.29%	107.66%	203.36%

Annex 4

Supervisory Slotting Criteria for Specialised Lending

Table 1 - Supervisory Rating Grades for Project Finance Exposures

	Strong	Good	Satisfactory	Weak
Financial strength				
Market conditions	Few competing suppliers OR substantial and durable advantage in location, cost, or technology. Demand is strong and growing.	Few competing suppliers OR better than average location, cost, or technology but this situation may not last. Demand is strong and stable.	Project has no advantage in location, cost, or technology. Demand is adequate and stable.	Project has worse than average location, cost, or technology. Demand is weak and declining.
Financial ratios (e.g. *debt service coverage ratio (DSCR), loan life coverage ratio (LLCR), project life coverage ratio (PLCR), and debt-to-equity ratio.*)	Strong financial ratios considering the level of project risk; very robust economic assumptions.	Strong to acceptable financial ratios considering the level of project risk; robust project economic assumptions.	Standard financial ratios considering the level of project risk.	Aggressive financial ratios considering the level of project risk.
Stress analysis	The project can meet its financial obligations under sustained, severely stressed economic or sectoral conditions.	The project can meet its financial obligations under normal stressed economic or sectoral conditions. The project is only likely to default under severe economic conditions.	The project is vulnerable to stresses that are not uncommon through an economic cycle, and may default in a normal downturn.	The project is likely to default unless conditions improve soon.

	Strong	Good	Satisfactory	Weak
Financial structure				
Duration of the credit compared to the duration of the project	Useful life of the project significantly exceeds tenor of the loan	Useful life of the project exceeds tenor of the loan	Useful life of the project exceeds tenor of the loan	Useful life of the project may not exceed tenor of the loan.
Amortisation schedule	Amortising debt	Amortising debt	Amortising debt repayments with limited bullet payment.	Bullet repayment or amortising debt repayments with high bullet repayment.
Political and legal environment				
Political risk, including transfer risk, considering project type and mitigants	Very low exposure; strong mitigation instruments, if needed.	Low exposure; satisfactory mitigation instruments, if needed.	Moderate exposure; fair mitigation instruments.	High exposure; no or weak mitigation instruments
Force majeure risk (war, civil unrest, etc),	Low exposure.	Acceptable exposure	Standard protection	Significant risks, not fully mitigated
Government support and project's importance for the country over the long term	Project of strategic importance for the country (preferably export-oriented). Strong support from Government	Project considered important for the country. Good level of support from Government	Project may not be strategic but brings unquestionable benefits for the country. Support from Government may not be explicit.	Project not key to the country. No or weak support from Government
Stability of legal and regulatory environment (risk of change in law)	Favourable and stable regulatory environment over the long term	Favourable and stable regulatory environment over the medium term	Regulatory changes can be predicted with a fair level of certainty	Current or future regulatory issues may affect the project
Acquisition of all necessary supports and approvals for such relief from local content laws	Strong	Satisfactory	Fair	Weak

	Strong	Good	Satisfactory	Weak
Enforceability of contracts, collateral and security	Contracts, collateral and security are enforceable.	Contracts, collateral and security are enforceable.	Contracts, collateral and security are considered enforceable even if certain non-key issues may exist.	There are unresolved key issues in respect if actual enforcement of contracts, collateral and security.
Transaction characteristics				
Design and technology risk	Fully proven technology and design	Fully proven technology and design	Proven technology and design – start-up issues are mitigated by a strong completion package	Unproven technology and design / Technology issues exist and/or complex design
Construction risk				
Permitting and siting	All permits have been obtained.	Some permits are still outstanding but their receipt is considered very likely.	Some permits are still outstanding but the permitting process is well defined and they are considered routine.	Key permits still need to be obtained and are not considered routine. Significant conditions may be attached.
Type of construction contract	Fixed-price date-certain turnkey construction EPC (engineering and procurement contract)	Fixed-price date-certain turnkey construction EPC	Fixed-price date-certain turnkey construction contract with one or several contractors	No or partial fixed-price turnkey contract and/or interfacing issues with multiple contractors
Completion guarantees	Substantial liquidated damages supported by financial substance **AND/OR** strong completion guarantee from sponsors with excellent financial standing	Significant liquidated damages supported by financial substance **AND/OR** completion guarantee from sponsors with good financial standing	Adequate liquidated damages supported by financial substance **AND/OR** completion guarantee from sponsors with good financial standing	Inadequate liquidated damages or not supported by financial substance or weak completion guarantees.

	Strong	Good	Satisfactory	Weak
Track record and financial strength of contractor in constructing similar projects.	Strong	Good	Satisfactory	Weak
Operating risk				
Scope and nature of O & M contracts	Strong long-term O&M contract, preferably with contractual performance incentives, and/or O&M reserve accounts.	Long-term O&M contract, and/or O&M reserve accounts.	Limited O&M contract or O&M reserve account.	No O&M contract: risk of high operational cost overruns beyond mitigants.
Operator's expertise, track record, and financial strength	Very strong, OR committed technical assistance of the sponsors	Strong	Acceptable	Limited/weak, OR local operator dependent on local authorities
Off-take risk				
(a) If there is a take-or-pay or fixed-price off-take contract:	Excellent creditworthiness of off-taker; strong termination clauses; tenor of contract comfortably exceeds the maturity of the debt	Good creditworthiness of off-taker; strong termination clauses; tenor of contract exceeds the maturity of the debt	Acceptable financial standing of off-taker; normal termination clauses; tenor of contract generally matches the maturity of the debt	Weak off-taker; weak termination clauses; tenor of contract does not exceed the maturity of the debt

	Strong	Good	Satisfactory	Weak
(b) If there is no take-or-pay or fixed-price off-take contract:	Project produces essential services or a commodity sold widely on a world market; output can readily be absorbed at projected prices even at lower than historic market growth rates.	Project produces essential services or a commodity sold widely on a regional market that will absorb it at projected prices at historical growth rates.	Commodity is sold on a limited market that may absorb it only at lower than projected prices.	Project output is demanded by only one or a few buyers OR is not generally sold on an organised market.
Supply risk				
Price, volume and transportation risk of feed-stocks; supplier's track record and financial strength	Long-term supply contract with supplier of excellent financial standing.	Long-term supply contract with supplier of good financial standing.	Long-term supply contract with supplier of good financial standing – a degree of price risk may remain.	Short-term supply contract or long-term supply contract with financially weak supplier – a degree of price risk definitely remains.
Reserve risks (e.g. natural resource development)	Independently audited, proven and developed reserves well in excess of requirements over lifetime of the project	Independently audited, proven and developed reserves in excess of requirements over lifetime of the project	Proven reserves can supply the project adequately through the maturity of the debt.	Project relies to some extent on potential and undeveloped reserves.
Strength of Sponsor				
Sponsor's track record, financial strength, and country/sector experience	Strong sponsor with excellent track record and high financial standing	Good sponsor with satisfactory track record and good financial standing	Adequate sponsor with adequate track record and good financial standing	Weak sponsor with no or questionable track record and/or financial weaknesses

	Strong	Good	Satisfactory	Weak
Sponsor support, as evidenced by equity, ownership clause and incentive to inject additional cash if necessary	Strong. Project is highly strategic for the sponsor (core business – long-term strategy	Good. Project is strategic for the sponsor (core business – long-term strategy	Acceptable. Project is considered important for the sponsor (core business)	Limited. Project is not key to sponsor's long-term strategy or core business
Security Package				
Assignment of contracts and accounts	Fully comprehensive	Comprehensive	Acceptable	Weak
Pledge of assets, taking into account quality, value and liquidity of assets	First perfected security interest in all project assets, contracts, permits and accounts necessary to run the project	Perfected security interest in all project assets, contracts, permits and accounts necessary to run the project	Acceptable security interest in all project assets, contracts, permits and accounts necessary to run the project	Little security or collateral for lenders; weak negative pledge clause
Lender's control over cash flow (e.g. cash sweeps, independent escrow accounts)	Strong	Satisfactory	Fair	Weak
Strength of the covenant package (mandatory prepayments, payment deferrals, payment cascade, dividend restrictions…)	Covenant package is strong for this type of project Project may issue no additional debt.	Covenant package is satisfactory for this type of project Project may issue extremely limited additional debt.	Covenant package is fair for this type of project Project may issue limited additional debt.	Covenant package is Insufficient for this type of project Project may issue unlimited additional debt.

	Strong	Good	Satisfactory	Weak
Reserve funds (debt service, O&M, renewal and replacement, unforeseen events, etc)	Longer than average coverage period, all reserve funds fully funded in cash or letters of credit from highly rated bank.	Average coverage period, all reserve funds fully funded.	Average coverage period, all reserve funds fully funded.	Shorter than average coverage period, reserve funds funded from operating cash flows.

Table 2 - Supervisory Rating Grades for Income-Producing Real Estate Exposures and High-Volatility Commercial Real Estate Exposures

	Strong	Good	Satisfactory	Weak
Financial strength				
Market conditions	The supply and demand for the project's type and location are currently in equilibrium. The number of competitive properties coming to market is equal or lower than forecasted demand.	The supply and demand for the project's type and location are currently in equilibrium. The number of competitive properties coming to market is roughly equal to forecasted demand.	Market conditions are roughly in equilibrium. Competitive properties are coming on the market and others are in the planning stages. The project's design and capabilities may not be state of the art compared to new projects.	Market conditions are weak. It is uncertain when conditions will improve and return to equilibrium. The project is losing tenants at lease expiration. New lease terms are less favourable compared to those expiring.
Financial ratios and advance rate	The property's debt service coverage ratio (DSCR) is considered strong (DSCR is not relevant for the construction phase) and its loan to value ratio (LTV) is considered low given its property type. Where a secondary market exists, the transaction is underwritten to market standards.	The DSCR (not relevant for development real estate) and LTV are satisfactory. Where a secondary market exists, the transaction is underwritten to market standards.	The property's DSCR has deteriorated and its value has fallen, increasing its LTV.	The property's DSCR has deteriorated significantly and its LTV is well above underwriting standards for new loans.

	Strong	Good	Satisfactory	Weak
Stress analysis	The property's resources, contingencies and liability structure allow it to meet its financial obligations during a period of severe financial stress (e.g. interest rates, economic growth).	The property can meet its financial obligations under a sustained period of financial stress (e.g. interest rates, economic growth). The property is only likely to default under severe economic conditions.	During an economic downturn, the property would suffer a decline in revenue that would limit its ability to fund capital expenditures and significantly increase the risk of default.	The property's financial condition is strained and is likely to default unless conditions improve in the near term.
Cash-flow predictability				
(a) For complete and stabilised property.	The property's leases are long-term with creditworthy tenants and their maturity dates are scattered. The property has a track record of tenant retention upon lease expiration. Its vacancy rate is low. Expenses (maintenance, insurance, security, and property taxes) are predictable.	Most of the property's leases are long-term, with tenants that range in creditworthiness. The property experiences a normal level of tenant turnover upon lease expiration. Its vacancy rate is low. Expenses are predictable.	Most of the property's leases are medium rather than long-term with tenants that range in creditworthiness. The property experiences a moderate level of tenant turnover upon lease expiration. Its vacancy rate is moderate. Expenses are relatively predictable but vary in relation to revenue.	The property's leases are of various terms with tenants that range in creditworthiness. The property experiences a very high level of tenant turnover upon lease expiration. Its vacancy rate is high. Significant expenses are incurred preparing space for new tenants.
(b) For complete but not stabilised property	Leasing activity meets or exceeds projections. The project should achieve stabilisation in the near future	Leasing activity meets or exceeds projections. The project should achieve stabilisation in the near future	Most Leasing activity is within projections; however, stabilisation will not occur for some time.	Market rents do not meet expectations. Despite achieving target occupancy rate, cash flow coverage is tight due to disappointing revenue.

	Strong	Good	Satisfactory	Weak
(c) For construction phase	The property is entirely pre-leased through the tenor of the loan or pre-sold to an investment grade tenant or buyer, or the bank has a binding commitment for take-out financing from an investment grade lender.	The property is entirely pre-leased or pre-sold to a creditworthy tenant or buyer, or the bank has a binding commitment for permanent financing from a creditworthy lender	Leasing activity is within projections but the building may not be pre-leased and there may not exist a take-out financing. The bank may be the permanent lender	The property is deteriorating due to cost overruns, market deterioration, tenant cancellations or other factors. There may be a dispute with the party providing the permanent financing.
Asset characteristics				
Location	Property is located in highly desirable location that is convenient to services that tenants desire.	Property is located in desirable location that is convenient to services that tenants desire.	The property location lacks a competitive advantage.	The property's location, configuration, design and maintenance have contributed to the property's difficulties.
Design and condition	Property is favoured due to its design, configuration, and maintenance, and is highly competitive with new properties.	Property is appropriate in terms of its design, configuration and maintenance. The property's design and capabilities are competitive with new properties.	Property is adequate in terms of its configuration, design and maintenance.	Weaknesses exist in the property's configuration, design or maintenance.
Property is under construction	Construction budget is conservative and technical hazards are limited. Contractors are highly qualified.	Construction budget is conservative and technical hazards are limited. Contractors are highly qualified.	Construction budget is adequate and contractors are ordinarily qualified.	Project is over budget or unrealistic given its technical hazards. Contractors may be under qualified.

	Strong	Good	Satisfactory	Weak
Strength of Sponsor/Developer				
Financial capacity and willingness to support the property.	The sponsor/developer made a substantial cash contribution to the construction or purchase of the property. The sponsor/developer has substantial resources and limited direct and contingent liabilities. The sponsor/developer's properties are diversified geographically and by property type.	The sponsor/developer made a material cash contribution to the construction or purchase of the property. The sponsor/developer's financial condition allows it to support the property in the event of a cash flow shortfall. The sponsor/developer's properties are located in several geographic regions.	The sponsor/developer's contribution may be immaterial or non-cash. The sponsor/developer is average to below average in financial resources.	The sponsor/developer lacks capacity or willingness to support the property.
Reputation and track record with similar properties.	Experienced management and high sponsors' quality. Strong reputation and lengthy and successful record with similar properties.	Appropriate management and sponsors' quality. The sponsor or management has a successful record with similar properties.	Moderate management and sponsors' quality. Management or sponsor track record does not raise serious concerns.	Ineffective management and substandard sponsors' quality. Management and sponsor difficulties have contributed to difficulties in managing properties in the past.
Relationships with relevant real estate actors	Strong relationships with leading actors such as leasing agents.	Proven relationships with leading actors such as leasing agents.	Adequate relationships with leasing agents and other parties providing important real estate services.	Poor relationships with leasing agents and/or other parties providing important real estate services.

	Strong	Good	Satisfactory	Weak
Security Package				
Nature of Lien	Perfected first lien.[153]	Perfected first lien.[153]	Perfected first lien.[153]	Ability of lender to foreclose is constrained.
Assignment of rents (for projects leased to long-term tenants)	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to remit rents directly to the lender, such as a current rent roll and copies of the project's leases.	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to the tenants to remit rents directly to the lender, such as current rent roll and copies of the project's leases.	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to the tenants to remit rents directly to the lender, such as current rent roll and copies of the project's leases.	The lender has not obtained an assignment of the leases or has not maintained the information necessary to readily provide notice to the building's tenants.
Quality of the insurance coverage	Appropriate	Appropriate	Appropriate	Substandard

[153] Lenders in some markets extensively use loan structures that include junior liens. Junior liens may be indicative of this level of risk if the total LTV inclusive of all senior positions does not exceed a typical first loan LTV.

Table 3 - Supervisory Rating Grades for Object Finance Exposures

	Strong	Good	Satisfactory	Weak
Financial strength				
Market conditions	Demand is strong and growing, strong entry barriers, low sensitivity to changes in technology and economic outlook.	Demand is strong and stable. Some entry barriers, some sensitivity to changes in technology and economic outlook.	Demand is adequate and stable, limited entry barriers, significant sensitivity to changes in technology and economic outlook.	Demand is weak and declining, vulnerable to changes in technology and economic outlook, highly uncertain environment.
Financial ratios (debt service coverage ratio and loan-to-value ratio)	Strong financial ratios considering the type of asset. Very robust economic assumptions	Strong / acceptable financial ratios considering the type of asset. Robust project economic assumptions.	Standard financial ratios for the asset type.	Aggressive financial ratios considering the type of asset.
Stress analysis	Stable long-term revenues, capable of withstanding severely stressed conditions through an economic cycle.	Satisfactory short-term revenues. Loan can withstand some financial adversity. Default is only likely under severe economic conditions.	Uncertain short-term revenues. Cash flows are vulnerable to stresses that are not uncommon through an economic cycle. The loan may default in a normal downturn.	Revenues subject to strong uncertainties; even in normal economic conditions the asset may default, unless conditions improve.
Market liquidity	Market is structured on a worldwide basis; assets are highly liquid.	Market is worldwide or regional; assets are relatively liquid.	Market is regional with limited prospects in the short term, implying lower liquidity.	Local market and/or poor visibility. Low or no liquidity, particularly on niche markets.

	Strong	Good	Satisfactory	Weak
Political and legal environment				
Political risk, including transfer risk	Very low; strong mitigation instruments, if needed.	Low; satisfactory mitigation instruments, if needed.	Moderate; fair mitigation instruments.	High; no or weak mitigation instruments
Legal and regulatory risks	Jurisdiction is favourable to repossession and enforcement of contracts.	Jurisdiction is favourable to repossession and enforcement of contracts.	Jurisdiction is generally favourable to repossession and enforcement of contracts, even if repossession might be long and/or difficult.	Poor or unstable legal and regulatory environment. Jurisdiction may make repossession and enforcement of contracts lengthy or impossible.
Transaction characteristics				
Financing term compared to the economic life of the asset	Full payout profile/minimum balloon. No grace period	Balloon more significant, but still at satisfactory levels.	Important balloon with potentially grace periods	Repayment in fine or high balloon
Operating risk				
Permits / licensing	All permits have been obtained; asset meets current and foreseeable safety regulations	All permits obtained or in the process of being obtained; asset meets current and foreseeable safety regulations	Most permits obtained or in process of being obtained, outstanding ones considered routine, asset meets current safety regulations	Problems in obtaining all required permits, part of the planned configuration and / or planned operations might need to be revised.
Scope and nature of O & M contracts	Strong long-term O&M contract, preferably with contractual performance incentives, and/or O&M reserve accounts (if needed)	Long-term O&M contract, and/or O&M reserve accounts (if needed)	Limited O&M contract or O&M reserve account (if needed)	No O&M contract: risk of high operational cost overruns beyond mitigants.

	Strong	Good	Satisfactory	Weak
Operator's financial strength, Track record in managing the asset type and capability to re-market asset when it comes off-lease	Excellent track record and strong re-marketing capability.	Satisfactory track record and re-marketing capability.	Weak or short track record and uncertain re-marketing capability.	No or unknown track record and inability to re-market the asset.
Asset characteristics				
Configuration, size, design and maintenance (i.e. age, size for a plane) compared to other assets on the same market	Strong advantage in design and maintenance. Configuration is standard such that the object meets a liquid market.	Above average design and maintenance. Standard configuration, maybe with very limited exceptions - such that the object meets a liquid market.	Average design and maintenance. Configuration is somewhat specific, and thus might cause a narrower market for the object	Below average design and maintenance. Asset is near the end of its economic life. Configuration is very specific; the market for the object is very narrow.
Resale value	Current resale value is well above debt value.	Resale value is moderately above debt value.	Resale value is slightly above debt value.	Resale value is below debt value.
Sensitivity of the asset value and liquidity to economic cycles	Asset value and liquidity are relatively insensitive to economic cycles.	Asset value and liquidity are sensitive to economic cycles.	Asset value and liquidity are quite sensitive to economic cycles.	Asset value and liquidity are highly sensitive to economic cycles.
Strength of Sponsor				
Operator's financial strength, Track record in managing the asset type and capability to re-market asset when it comes off-lease	Excellent track record and strong re-marketing capability.	Satisfactory track record and re-marketing capability.	Weak or short track record and uncertain re-marketing capability.	No or unknown track record and inability to re-market the asset.

	Strong	Good	Satisfactory	Weak
Sponsors' track record and financial strength	Sponsors with excellent track record and high financial standing	Sponsors with good track record and good financial standing	Sponsors with adequate track record and good financial standing	Sponsors with no or questionable track record and/or financial weaknesses
Security Package				
Asset control	Legal documentation provides the lender effective control (e.g. a first perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it.	Legal documentation provides the lender effective control (e.g. a perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it.	Legal documentation provides the lender effective control (e.g. a perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it.	The contract provides little security to the lender and leaves room to some risk of losing control on the asset.
Rights and means at the lender's disposal to monitor the location and condition of the asset	The lender is able to monitor the location and condition of the asset, at any time and place (regular reports, possibility to lead inspections)	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender is able to monitor the location and condition of the asset are limited.
Insurance against damages	Strong insurance coverage including collateral damages with top quality insurance companies.	Satisfactory insurance coverage (not including collateral damages) with good quality insurance companies.	Fair insurance coverage (not including collateral damages) with acceptable quality insurance companies.	Weak insurance coverage (not including collateral damages) or with weak quality insurance companies.

Table 4 - Supervisory Rating Grades for Commodities Finance Exposures

	Strong	Good	Satisfactory	Weak
Financial strength				
Degree of over-collateralisation of trade	Strong	Good	Satisfactory	Weak
Political and legal environment				
Country risk	No country risk	Limited exposure to country risk (in particular, offshore location of reserves in an emerging country)	Exposure to country risk (in particular, offshore location of reserves in an emerging country)	Strong exposure to country risk (in particular, inland reserves in an emerging country)
Mitigation of country risks	Very strong mitigation: Strong offshore mechanisms Strategic commodity 1st class buyer	Strong mitigation: Offshore mechanisms Strategic commodity Strong buyer	Acceptable mitigation: Offshore mechanisms Less strategic commodity Acceptable buyer	Only partial mitigation: No offshore mechanisms Non-strategic commodity Weak buyer
Asset characteristics				
Liquidity and susceptibility to damage	Commodity is quoted and can be hedged through futures or OTC instruments. Commodity is not susceptible to damage.	Commodity is quoted and can be hedged through OTC instruments. Commodity is not susceptible to damage.	Commodity is not quoted but is liquid. There is uncertainty about the possibility of hedging. Commodity is not susceptible to damage	Commodity is not quoted. Liquidity is limited given the size and depth of the market. No appropriate hedging instruments. Commodity is susceptible to damage.

	Strong	Good	Satisfactory	Weak
Strength of Sponsor				
Financial strength of trader	Very strong, relative to trading philosophy and risks.	Strong	Adequate	Weak
Track record, including ability to manage the logistic process.	Extensive experience with the type of transaction in question. Strong record of operating success and cost efficiency.	Sufficient experience with the type of transaction in question. Above average record of operating success and cost efficiency.	Limited experience with the type of transaction in question. Average record of operating success and cost efficiency.	Limited or uncertain track record in general. Volatile costs and profits.
Trading controls and hedging policies	Strong standards for counterparty selection, hedging, and monitoring.	Adequate standards for counterparty selection, hedging, and monitoring.	Past deals have experienced no or minor problems.	Trader has experienced significant losses on past deals.
Quality of financial disclosure	Excellent	Good	Satisfactory	Financial disclosure contains some uncertainties or is insufficient.
Security Package				
Asset control	First perfected security interest provides the lender legal control of the assets at any time if needed.	First perfected security interest provides the lender legal control of the assets at any time if needed.	At some point in the process, there is a rupture in the control of the assets by the lender. The rupture is mitigated by knowledge of the trade process or a third party undertaking as the case may be.	Contract leaves room for some risk of losing control over the assets. Recovery could be jeopardized.

	Strong	Good	Satisfactory	Weak
Insurance against damages	Strong insurance coverage including collateral damages with top quality insurance companies.	Satisfactory insurance coverage (not including collateral damages) with good quality insurance companies.	Fair insurance coverage (not including collateral damages) with acceptable quality insurance companies.	Weak insurance coverage (not including collateral damages) or with weak quality insurance companies.

Annex 5

Illustrative Examples: Calculating the Effect of Credit Risk Mitigation under Supervisory Formula

Some examples are provided below for determining how collateral and guarantees are to be recognised under the SF.

Illustrative Example Involving Collateral - proportional cover

Assume an originating bank purchases a €100 securitisation exposure with a credit enhancement level in excess of K_{IRB} for which an external or inferred rating is not available. Additionally, assume that the SF capital charge on the securitisation exposure is €1.6 (when multiplied by 12.5 results in risk weighted assets of €20). Further assume that the originating bank has received €80 of collateral in the form of cash that is denominated in the same currency as the securitisation exposure. The capital requirement for the position is determined by multiplying the SF capital requirement by the ratio of adjusted exposure amount and the original exposure amount, as illustrated below.

Step 1: Adjusted Exposure Amount (E*) = max {0, [E x (1 + He) - C x (1 - Hc - Hfx)]}

E* = max {0, [100 x (1 + 0) - 80 x (1 - 0 - 0)]} = € 20

Where (based on the information provide above):

E* = the exposure value after risk mitigation (€20)

E = current value of the exposure (€100)

He = haircut appropriate to the exposure (This haircut is not relevant because the originating bank is not lending the securitisation exposure in exchange for collateral).

C = the current value of the collateral received (€80)

Hc = haircut appropriate to the collateral (0)

Hfx= haircut appropriate for mismatch between the collateral and exposure (0)

Step 2: Capital requirement = E* / E x SF capital requirement

Where (based on the information provide above):

Capital requirement = €20 / €100 x €1.6 = €0.32.

Illustrative Example Involving a Guarantee - proportional cover

All of the assumptions provided in the illustrative example involving collateral apply except for the form of credit risk mitigant. Assume that the bank has received an eligible, unsecured guarantee in the amount of €80 from a bank. Therefore, a haircut for currency mismatch will not apply. The capital requirement is determined as follows.

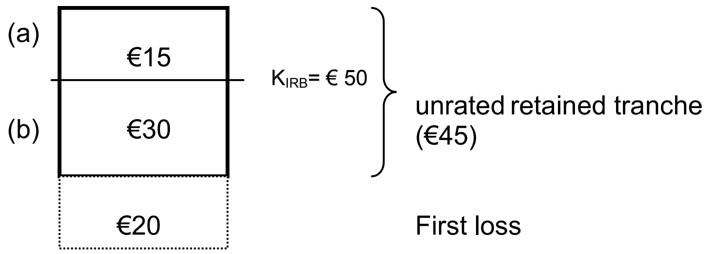
- The protected portion of the securitisation exposure (€80) is to receive the risk weight of the protection provider. The risk weight for the protection provider is equivalent to that for an unsecured loan to the guarantor bank, as determined under the IRB approach. Assume that this risk weight is 10%. Then, the capital charge on the protected portion would be; €80 x10% x 0.08= €0.64.
- The capital charge for the unprotected portion (€20) is derived by multiplying the capital charge on the securitisation exposure by the share of the unprotected portion to the exposure amount. The share of the unprotected portion is: €20 / €100 = 20%. Thus, the capital requirement will be; €1.6 x 20% = €0.32.

The total capital requirement for the protected and unprotected portions is:

€0.64 (protected portion) + €0.32 (unprotected portion) = €0.96 .

Illustrative example - the case of credit risk mitigants covering the most senior parts

Assume an originating bank that securitises a pool of loans of €1000. The K_{IRB} of this underlying pool is 5% (capital charge of €50). There is a first loss position of €20. The originator retains only the second most junior tranche: an unrated tranche of €45. We can summarise the situation as follows:



1. Capital charge without collateral or guarantees

According to this example, the capital charge for the unrated retained tranche that is straddling the K_{IRB} line is sum of the capital requirements for tranches (a) and (b) in the graph above:

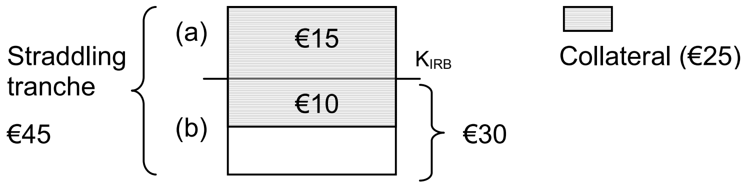
(a) Assume the SF risk weight for this subtranche is 820%. Thus, risk weighted assets are €15 x 820% = €123. Capital charge is €123 x 8%= €**9.84**

(b) The subtranche below K_{IRB} must be deducted. Risk weighted assets: €30 x1250% = €375. Capital charge of €375 x 8% = €**30**

Total capital charge for the unrated straddling tranche = €9.84 + €30 = €39.84

2. Capital charge with collateral

Assume now that the originating bank has received €25 of collateral in the form of cash that is denominated in the same currency as the securitisation exposure. Because the tranche is straddling the K_{IRB} level, we must assume that the collateral is covering the most senior subtranche above K_{IRB} ((a) subtranche) and, only if there is some collateral left, the coverage will be applied proportionally to the subtranche below K_{IRB} ((b) subtranche). Thus, we have:



The capital requirement for the position is determined by multiplying the SF capital requirement by the ratio of adjusted exposure amount and the original exposure amount, as illustrated below. We must apply this for the two subtranches.

(a) The first subtranche has an initial exposure of €15 and collateral of €15, so in this case it is completely covered. In other words:

Step 1: Adjusted Exposure Amount

E* = max {0, [E x (1 + He) - C x (1 - Hc - Hfx)]} = max {0, [15 - 15]} = € 0

Where:

E* = the exposure value after risk mitigation (€15)

E = current value of the exposure (€15)

C = the current value of the collateral received (€15)

He = haircut appropriate to the exposure (not relevant here, thus €0)

Hc and Hfx = haircut appropriate to the collateral and that for the mismatch between the collateral and exposure (to simplify, €0)

Step 2: Capital requirement = E* / E x SF capital requirement

Capital requirement = 0 x €9.84 = € **0**

(b) The second subtranche has an initial exposure of €30 and collateral of €10, which is the amount left after covering the subtranche above K_{IRB}. Thus, these €10 must be allocated in a proportional way to the €30 subtranche.

Step1: Adjusted Exposure Amount

E* = max {0, [30 x (1 + 0) - 10 x (1 - 0 - 0)]} = €20

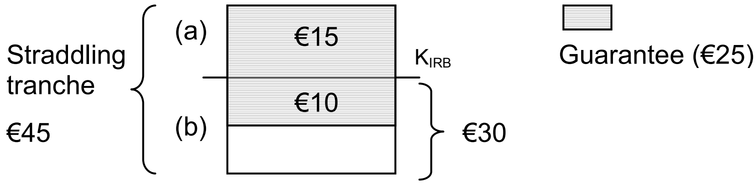
Step 2: Capital requirement = E* / E x SF capital requirement

Capital requirement = €20/€30 x €30 = €**20**

Finally, the total capital charge for the unrated straddling tranche = €0 + €20 = €20

3. Guarantee

Assume now that instead of collateral, the bank has received an eligible, unsecured guarantee in the amount of €25 from a bank. Therefore the haircut for currency mismatch will not apply. The situation can be summarised as:



The capital requirement for the two subtranches is determined as follows:

(a) The first subtranche has an initial exposure of €15 and a guarantee of €15, so in this case it is completely covered. The €15 will receive the risk weight of the protection provider. The risk weight for the protection provider is equivalent to that for an unsecured loan to the guarantor bank, as determined under the IRB approach. Assume that this risk weight is 20%.

capital charge on the protected portion is €15 x 20% x 8%= €**0.24**

(b) The second subtranche has an initial exposure of €30 and guarantee of €10. Accordingly, the protected part is €10 and the unprotected part is €20.

- Again, the protected portion of the securitisation exposure is to receive the risk weight of the guarantor bank.

  capital charge on the protected portion is €10 x 20% x 8%= € **0.16**

- The capital charge for the unprotected portion is derived by multiplying the share of the unprotected portion to the original capital charge. The share of the unprotected portion is: €20 / €30 = 66.7%.

  capital charge on the unprotected portion is 66.7% x €30 = **€20**

  (or equivalently €20 x 1250% x 8%= €20)

Total capital charge for the unrated straddling tranche = **€0.24** (protected portion, above K_{IRB}) **+ €0.16** (protected portion, below K_{IRB}) **+ €20** (unprotected portion, below K_{IRB}) **= €20.4**

Annex 6

Mapping of Business Lines

Level 1	Level 2	Activity Groups
Corporate Finance	Corporate Finance	Mergers and Acquisitions, Underwriting, Privatisations, Securitisation, Research, Debt (Government, High Yield), Equity, Syndications, IPO, Secondary Private Placements
	Municipal/Government Finance	
	Merchant Banking	
	Advisory Services	
Trading & Sales	Sales	Fixed Income, equity, foreign exchanges, commodities, credit, funding, own position securities, lending and repos, brokerage, debt, prime brokerage
	Market Making	
	Proprietary Positions	
	Treasury	
Retail Banking	Retail Banking	Retail lending and deposits, banking services, trust and estates
	Private Banking	Private lending and deposits, banking services, trust and estates, investment advice
	Card Services	Merchant/Commercial/Corporate cards, private labels and retail
Commercial Banking	Commercial Banking	Project finance, real estate, export finance, trade finance, factoring, leasing, lends, guarantees, bills of exchange
Payment and Settlement[154]	External Clients	Payments and collections, funds transfer, clearing and settlement
Agency Services	Custody	Escrow, Depository Receipts, Securities lending (Customers) Corporate actions
	Corporate Agency	Issuer and paying agents
	Corporate Trust	
Asset Management	Discretionary Fund Management	Pooled, segregated, retail, institutional, closed, open, private equity
	Non-Discretionary Fund Management	Pooled, segregated, retail, institutional, closed, open
Retail Brokerage	Retail Brokerage	Execution and full service

[154] Payment and settlement losses related to a bank's own activities would be incorporated in the loss experience of the affected business line.

Principles for business line mapping[155]

(a) All activities must be mapped into the eight level 1 business lines in a mutually exclusive and jointly exhaustive manner;

(b) Any banking or non-banking activity which cannot be readily mapped into the business line framework, but which represents an ancillary function to an activity included in the framework, must be allocated to the business line it supports. If more than one business line is supported through the ancillary activity, an objective mapping criteria must be used;

(c) When mapping gross income, if an activity cannot be mapped into a particular business line then the business line yielding the highest charge must be used. The same business line equally applies to any associated ancillary activity;

(d) Banks may use internal pricing methods to allocate gross income between business lines provided that total gross income for the bank (as would be recorded under the Basic Indicator Approach) still equals the sum of gross income for the eight business lines.

(e) The mapping of activities into business lines for operational risk capital purposes must be consistent with the definitions of business lines used for regulatory capital calculations in other risk categories, i.e. credit and market risk. Any deviations from this principle must be clearly motivated and documented;

(f) The mapping process used must be clearly documented. In particular, written business line definitions must be clear and detailed enough to allow third parties to replicate the business line mapping. Documentation must, among other things, clearly motivate any exceptions or overrides and be kept on record;

(g) Processes must be in place to define the mapping of any new activities or products;

155 **Supplementary business line mapping guidance**

There are a variety of valid approaches that banks can use to map their activities to the eight business lines, provided the approach used meets the business line mapping principles. Nevertheless, the Committee is aware that some banks would welcome further guidance. The following is therefore an example of one possible approach that could be used by a bank to map its gross income:

Gross income for retail banking consists of net interest income on loans and advances to retail customers and SMEs treated as retail, plus fees related to traditional retail activities, net income from swaps and derivatives held to hedge the retail banking book and income on purchased retail receivables. To calculate net interest income for retail banking, a bank takes the interest earned on its loans and advances to retail customers less the weighted average cost of funding of the loans (from whatever source - retail or other deposits).

Similarly, gross income for commercial banking consists of the net interest income on loans and advances to corporate (plus SMEs treated as corporate), interbank and sovereign customers and income on purchased corporate receivables, plus fees related to traditional commercial banking activities including commitments, guarantees, bills of exchange, net income (e.g. from coupons and dividends) on securities held in the banking book, and profits/losses on swaps and derivatives held to hedge the commercial banking book. Again, the calculation of net interest income is based on interest earned on loans and advances to corporate, interbank and sovereign customers less the weighted average cost of funding for these loans (from whatever source).

For trading and sales - gross income consists of profits/losses on instruments held for trading purposes (i.e. in the mark-to-market book), net of funding cost, plus fees from wholesale broking.

For the other five business lines - gross income consists primarily of the net fees/commissions earned in each of these businesses. Payment and settlement consists of fees to cover provision of payment/settlement facilities for wholesale counterparties. Asset management is management of assets on behalf of others.

Gross income should not exclude operating expenses.

(h) Senior management is responsible for the mapping policy (which is subject to the approval by the board of directors); and

(i) The mapping process to business lines must be subject to independent review.

Annex 7

Detailed loss event type classification

Event-Type Category (Level 1)	Definition	Categories (Level 2)	Activity Examples (Level 3)
Internal fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding diversity/ discrimination events, which involves at least one internal party.	Unauthorised Activity	Transactions not reported (intentional) Trans type unauthorised (w/monetary loss) Mismarking of position (intentional)
		Theft and Fraud	Fraud / credit fraud / worthless deposits Theft / extortion / embezzlement / robbery Misappropriation of assets Malicious destruction of assets Forgery Check kiting Smuggling Account take-over / impersonation / etc. Tax non-compliance / evasion (wilful) Bribes / kickbacks Insider trading (not on firm's account)
External fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent the law, by a third party	Theft and Fraud	Theft/Robbery Forgery Check kiting
		Systems Security	Hacking damage Theft of information (w/monetary loss)
Employment Practices and Workplace Safety	Losses arising from acts inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims, or from diversity / discrimination events	Employee Relations	Compensation, benefit, termination issues Organised labour activity
		Safe Environment	General liability (slip and fall, etc.) Employee health & safety rules events Workers compensation
		Diversity & Discrimination	All discrimination types
Clients, Products & Business Practices	Losses arising from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements), or from the nature or design of a product.	Suitability, Disclosure & Fiduciary	Fiduciary breaches / guideline violations Suitability / disclosure issues (KYC, etc.) Retail customer disclosure violations Breach of privacy Aggressive sales Account churning Misuse of confidential information Lender Liability

Event-Type Category (Level 1)	Definition	Categories (Level 2)	Activity Examples (Level 3)
		Improper Business or Market Practices	Antitrust Improper trade / market practices Market manipulation Insider trading (on firm's account) Unlicensed activity Money laundering
		Product Flaws	Product defects (unauthorised, etc.) Model errors
		Selection, Sponsorship & Exposure	Failure to investigate client per guidelines Exceeding client exposure limits
		Advisory Activities	Disputes over performance of advisory activities
Damage to Physical Assets	Losses arising from loss or damage to physical assets from natural disaster or other events.	Disasters and other events	Natural disaster losses Human losses from external sources (terrorism, vandalism)
Business disruption and system failures	Losses arising from disruption of business or system failures	Systems	Hardware Software Telecommunications Utility outage / disruptions
Execution, Delivery & Process Management	Losses from failed transaction processing or process management, from relations with trade counterparties and vendors	Transaction Capture, Execution & Maintenance	Miscommunication Data entry, maintenance or loading error Missed deadline or responsibility Model / system misoperation Accounting error / entity attribution error Other task misperformance Delivery failure Collateral management failure Reference Data Maintenance
		Monitoring and Reporting	Failed mandatory reporting obligation Inaccurate external report (loss incurred)
		Customer Intake and Documentation	Client permissions / disclaimers missing Legal documents missing / incomplete
		Customer / Client Account Management	Unapproved access given to accounts Incorrect client records (loss incurred) Negligent loss or damage of client assets
		Trade Counterparties	Non-client counterparty misperformance Misc. non-client counterparty disputes
		Vendors & Suppliers	Outsourcing Vendor disputes

Annex 8

Overview of Methodologies for the Capital Treatment of Transactions Secured by Financial Collateral under the Standardised and IRB Approaches

1. The rules set forth in the standardised approach – Credit Risk Mitigation (CRM), for collateralised transactions generally determine the treatment under both the standardised and the foundation internal ratings-based (IRB) approaches for claims in the banking book that are secured by financial collateral of sufficient quality. Banks using the advanced IRB approach will typically take financial collateral on banking book exposures into account by using their own internal estimates to adjust the exposure's loss given default (LGD). One exception for advanced IRB bank pertains to the recognition of repo-style transactions subject to a master netting agreement, as discussed below.

2. Collateralised exposures that take the form of repo-style transactions (i.e. repo/reverse repos and securities lending/borrowing) are subject to special considerations. Such transactions that are held in the trading book are subject to a counterparty risk capital charge as described below. Further, all banks, including those using the advanced IRB approach, must follow the methodology in the CRM section, which is outlined below, for repo-style transactions booked in either the banking book or trading book that are subject to master netting agreements if they wish to recognise the effects of netting for capital purposes.

Standardised and Foundation IRB Approaches

3. Banks under the standardised approach may use either the simple approach or the comprehensive approach for determining the appropriate risk weight for a transaction secured by eligible financial collateral. Under the simple approach, the risk weight of the collateral substitutes for that of the counterparty. Apart from a few types of very low risk transactions, the risk weight floor is 20%. Under the foundation IRB approach, banks may only use the comprehensive approach.

4. Under the comprehensive approach, eligible financial collateral reduces the amount of the exposure to the counterparty. The amount of the collateral is decreased and, where appropriate, the amount of the exposure is increased through the use of haircuts, to account for potential changes in the market prices of securities and foreign exchange rates over the holding period. This results in an adjusted exposure amount, E*. Banks may either use supervisory haircuts set by the Committee or, subject to qualifying criteria, rely on their "own" estimates of haircuts. Where the supervisory holding period for calculating the haircut amounts differs from the holding period set down in the rules for that type of collateralised transaction, the haircuts are to be scaled up or down as appropriate. Once E* is calculated, the standardised bank will assign that amount a risk weight appropriate to the counterparty. For transactions secured by financial collateral other than repos subject to a master netting agreement, foundation IRB banks are to use E* to adjust the loss given default (LGD) on the exposure.

Special Considerations for Repo-Style Transactions

5. Repo-style transactions booked in the trading book, will, like OTC derivatives held in the trading book, be subject to a counterparty credit risk charge. In calculating this charge, a bank under the standardised approach must use the comprehensive approach to collateral; the simple approach will not be available.

6. The capital treatment for repo-style transactions that are not subject to master netting agreements is the same as that for other collateralised transactions. However, for banks using the comprehensive approach, national supervisors have the discretion to determine that a haircut of zero may be used where the transaction is with a core market participant and meets certain other criteria (so-called carve-out treatment). Where repo-style transactions are subject to a master netting agreement whether they are held in the banking book or trading book, a bank may choose not to recognise the netting effects in calculating capital. In that case, each transaction will be subject to a capital charge as if there were no master netting agreement.

7. If a bank wishes to recognise the effects of master netting agreements on repo-style transactions for capital purposes, it must apply the treatment the CRM section sets forth in that regard on a counterparty-by-counterparty basis. This treatment would apply to all repo-style transactions subject to master netting agreements, regardless of whether the bank is under the standardised, foundation IRB, or advanced IRB approach and regardless of whether the transactions are held in the banking or trading book. Under this treatment, the bank would calculate E* as the sum of the net current exposure on the contract plus an add-on for potential changes in security prices and foreign exchange rates. The add-on may be determined through the supervisory haircuts or, for those banks that meet the qualifying criteria, own estimate haircuts or an internal VaR model. The carve-out treatment for haircuts on repo-style transactions may not be used where an internal VAR model is applied.

8. The calculated E* is in effect an unsecured loan equivalent amount that would be used for the exposure amount under the standardised approach and the exposure at default (EAD) value under both the foundation and advanced IRB approaches. E* is used for EAD under the IRB approaches, thus would be treated in the same manner as the credit equivalent amount (calculated as the sum of replacement cost plus an add-on for potential future exposure) for OTC derivatives subject to master netting agreements.

Annex 9

The Simplified Standardised Approach[156]

I. Credit risk - general rules for risk weights

1. Exposures should be risk weighted net of specific provisions.

(i) Claims on sovereigns and central banks

2. Claims on sovereigns and their central banks will be risk weighted on the basis of the consensus country risk scores of export credit agencies (ECA) participating in the "Arrangement on Guidelines for Officially Supported Export Credits". These scores are available on the OECD's website.[157] The methodology establishes seven risk score categories associated with minimum export insurance premiums. As detailed below, each ECA risk score will correspond to a specific risk weight category.

ECA risk scores	1	2	3	4 to 6	7
Risk weights	0%	20%	50%	100%	150%

3. At national discretion, a lower risk weight may be applied to banks' exposures to their sovereign (or central bank) of incorporation denominated in domestic currency and funded[158] in that currency.[159] Where this discretion is exercised, other national supervisory authorities may also permit their banks to apply the same risk weight to domestic currency exposures to this sovereign (or central bank) funded in that currency.

(ii) Claims on other official entities

4. Claims on the Bank for International Settlements, the International Monetary Fund, the European Central Bank and the European Community will receive a 0% risk weight.

5. The following Multilateral Development Banks (MDBs) will be eligible for a 0% risk weight:

- the World Bank Group, comprised of the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC),
- the Asian Development Bank (ADB),
- the African Development Bank (AfDB),

[156] This approach should not be seen as another approach for determining regulatory capital. Rather, it collects in one place the simplest options for calculating risk weighted assets.

[157] The consensus country risk classification is available on the OECD's website (http://www.oecd.org) in the Export Credit Arrangement web-page of the Trade Directorate.

[158] This is to say that the bank should also have liabilities denominated in the domestic currency.

[159] This lower risk weight may be extended to the risk weighting of collateral and guarantees.

- the European Bank for Reconstruction and Development (EBRD),
- the Inter-American Development Bank (IADB),
- the European Investment Bank (EIB),
- the Nordic Investment Bank (NIB),
- the Caribbean Development Bank (CDB),
- the Islamic Development Bank, and
- the Council of Europe Development Bank (CEDB).

6. The standard risk weight for claims on other MDBs will be 100%.

7. Claims on domestic public sector entitles (PSEs) will be risk-weighted according to the risk weight framework for claims on banks of that country.[160] Subject to national discretion, claims on a domestic PSE may also be treated as claims on the sovereign in whose jurisdiction the PSEs are established. Where this discretion is exercised, other national supervisors may allow their banks to risk weight claims on such PSEs in the same manner.

(iii) Claims on banks and securities firms

8. Banks will be assigned a risk weight based on the weighting of claims on the country in which they are incorporated (see paragraph 2). The treatment is summarised in the table below:

ECA risk scores for sovereigns	1	2	3	4 to 6	7
Risk weights	20%	50%	100%	100%	150%

9. When the national supervisor has chosen to apply the preferential treatment for claims on the sovereign as described in paragraph 3, it can also assign a risk weight that is

[160] The following examples outline how PSEs might be categorised when focusing upon the existence of revenue raising powers. However, there may be other ways of determining the different treatments applicable to different types of PSEs, for instance by focusing on the extent of guarantees provided by the central government:

- **Regional governments and local authorities** could qualify for the same treatment as claims on their sovereign or central government if these governments and local authorities have specific revenue-raising powers and have specific institutional arrangements the effect of which is to reduce their risks of default.
- **Administrative bodies responsible to central governments, regional governments or to local authorities and other non-commercial undertakings** owned by the governments or local authorities may not warrant the same treatment as claims on their sovereign if the entities do not have revenue raising powers or other arrangements as described above. If strict lending rules apply to these entities and a declaration of bankruptcy is not possible because of their special public status, it may be appropriate to treat these claims in the same manner as claims on banks.
- **Commercial undertakings** owned by central governments, regional governments or by local authorities might be treated as normal commercial enterprises. However, if these entities function as a corporate in competitive markets even though the state, a regional authority or a local authority is the major shareholder of these entities, supervisors should decide to consider them as corporates and therefore attach to them the applicable risk weights.

one category less favourable than that assigned to claims on the sovereign, subject to a floor of 20%, to claims on banks of an original maturity of 3 months or less denominated and funded in the domestic currency.

10. Claims on securities firms may be treated as claims on banks provided such firms are subject to supervisory and regulatory arrangements comparable to those under the New Accord (including, in particular, risk-based capital requirements).[161] Otherwise such claims would follow the rules for claims on corporates.

(iv) Claims on corporates

11. The standard risk weight for claims on corporates, including claims on insurance companies, will be 100%.

(v) Claims included in the regulatory retail portfolios

12. Claims that qualify under the criteria listed in paragraph 13 may be considered as retail claims for regulatory capital purposes and included in a regulatory retail portfolio. Exposures included in such a portfolio may be risk-weighted at 75%, except as provided in paragraph 17 for past due retail claims.

13. To be included in the regulatory retail portfolio, claims must meet the following four criteria:

- Orientation criterion - The exposure is to an individual person or persons or to a small business;
- Product criterion - The exposure takes the form of any of the following: revolving credits and lines of credit (including credit cards and overdrafts), personal term loans and leases (e.g. instalment loans, auto loans and leases, student and educational loans, personal finance) and small business facilities and commitments. Securities (such as bonds and equities), whether listed or not, are specifically excluded from this category. Mortgage loans are excluded to the extent that they qualify for treatment as claims secured by residential property (see paragraph 14).
- Granularity criterion - The supervisor must be satisfied that the regulatory retail portfolio is sufficiently diversified to a degree that reduces the risks in the portfolio, warranting the 75% risk weight. One way of achieving this may be to set a numerical limit that no aggregate exposure to one counterpart[162] can exceed 0.2% of the overall regulatory retail portfolio.
- Low value of individual exposures. The maximum aggregated retail exposure to one counterpart cannot exceed an absolute threshold of €1 million.

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[161] That is capital requirements that are comparable to those applied to banks in the New Accord. Implicit in the meaning of the word "comparable" is that the securities firm (but not necessarily its parent) is subject to consolidated regulation and supervision with respect to any downstream affiliates.

[162] Aggregated exposure means gross amount (i.e. not taking any credit risk mitigation into account) of all forms of debt exposures (e.g. loans or commitments) that individually satisfy the three other criteria. In addition, “on one counterpart” means one or several entities that may be considered as a single beneficiary (e.g. in the case of a small business that is affiliated to another small business, the limit would apply to the bank's aggregated exposure on both businesses).

(vi) Claims secured by residential property

14. Lending fully secured by mortgages on residential property that is or will be occupied by the borrower, or that is rented, will be risk weighted at 35%. In applying the 35% weight, the supervisory authorities should satisfy themselves, according to their national arrangements for the provision of housing finance, that this concessionary weight is applied restrictively for residential purposes and in accordance with strict prudential criteria, such as the existence of substantial margin of additional security over the amount of the loan based on strict valuation rules. Supervisors should increase the standard risk weight where they judge the criteria are not met.

15. National supervisory authorities should evaluate whether the preferential risk weights in paragraphs 13 and 14 are appropriate for their circumstances. Supervisors may require banks to increase these preferential risk weights as appropriate.

(vii) Claims secured by commercial real estate

16. Mortgages on commercial real estate will be risk weighted at 100%.

(viii) Treatment of past due loans

17. The unsecured portion of any loan (other than a qualifying residential mortgage loan) that is past due for more than 90 days, net of specific provisions, will be risk-weighted as follows:[163]

- 150% risk weight if provisions are less than 20% of the outstanding amount of the loan;
- 100% risk weight when specific provisions are no less than 20% of the outstanding amount of the loan; and
- 100% risk weight when specific provisions are no less than 50% of the outstanding amount of the loan, but with supervisory discretion to reduce the risk weight to 50%.

18. For the purpose of defining the secured portion of the past due loan, eligible collateral and guarantees will be the same as for credit risk mitigation purposes (see section II).[164] Past due retail loans are to be excluded from the overall regulatory retail portfolio when assessing the granularity criterion specified in paragraph 13, for risk-weighting purposes.

19. In addition to the circumstances described in paragraph 17, where a past due loan is fully secured by those forms of collateral that are not recognised in paragraph 46, a 100% risk weight may apply when specific provisions reach 15% of the outstanding amount of the loan. These types of collateral are not recognised elsewhere in the Simplified Standardised Approach. Supervisors should set strict operational criteria to ensure the quality of collateral.

20. In the case of qualifying residential mortgage loans, when such loans are past due for more than 90 days they will be risk weighted at 100%, net of specific provisions. If such

[163] Subject to national discretion, supervisors may permit banks to treat non-past due loans extended to counterparties subject to a 150% risk weight in the same way as past due loans described in paragraphs 17 to 19.

[164] There will be a transitional period of three years during which a wider range of collateral may be recognised, subject to national discretion.

loans are past due but specific provisions are no less than 50% of their outstanding amount, the risk weight applicable to the remainder of the loan can be reduced to 50% at national discretion.

(ix) Higher-risk categories

21. National supervisors may decide to apply a 150% or higher risk weight reflecting the higher risks associated with some other assets, such as venture capital and private equity investments.

(x) Other assets

22. The treatment of securitisation exposures is presented separately in section III. The standard risk weight for all other assets will be 100%.[165] Investments in equity or regulatory capital instruments issued by banks or securities firms will be risk weighted at 100%, unless deducted from the capital base according to Part I of the present framework.

(xi) Off-balance sheet items

23. Off-balance-sheet items under the standardised approach will be converted into credit exposure equivalents through the use of credit conversion factors, as specified in the current Accord, except as specified below. Counterparty risk weightings for OTC derivative transactions will not be subject to any specific ceiling.

24. Commitments with an original maturity up to one year and commitments with an original maturity over one year will receive, respectively, a credit conversion factor of 20% and 50%. However, any commitments that are unconditionally cancellable at any time by the bank without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness, will receive a 0% credit conversion factor.[166]

25. A credit conversion factor of 100% will be applied to the lending of banks' securities or the posting of securities as collateral by banks, including instances where these arise out of repo-style transactions (i.e. repurchase/reverse repurchase and securities lending/securities borrowing transactions). See credit risk mitigation (section II) for the calculation of risk weighted assets where the credit converted exposure is secured by eligible collateral.

26. For short-term self-liquidating trade letters of credit arising from the movement of goods (e.g. documentary credits collateralised by the underlying shipment), a 20% credit conversion factor will be applied to both issuing and confirming banks.

27. Where there is an undertaking to provide a commitment, banks are to apply the lower of the two applicable credit conversion factors.

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[165] However, at national discretion, gold bullion held in own vaults or on an allocated basis to the extent backed by bullion liabilities can be treated as cash and therefore risk-weighted at 0%.

[166] In certain countries, retail commitments are considered unconditionally cancellable if the terms permit the bank to cancel them to the full extent allowable under consumer protection and related legislation.

II. Credit risk mitigation

1. Overarching issues

(i) Introduction

28. Banks use a number of techniques to mitigate the credit risks to which they are exposed. Exposure may be collateralised in whole or in part with cash or securities, or a loan exposure may be guaranteed by a third party.

29. Where these various techniques meet the operational requirements below credit risk mitigation (CRM) may be recognised.

(ii) General remarks

30. The framework set out in this section is applicable to the banking book exposures under the Simplified Standardised Approach.

31. No transaction in which CRM techniques are used should receive a higher capital requirement than an otherwise identical transaction where such techniques are not used.

32. The effects of CRM will not be double counted. Therefore, no additional supervisory recognition of CRM for regulatory capital purposes will be granted on claims for which an issue-specific rating is used that already reflects that CRM. Principal-only ratings will also not be allowed within the framework of CRM.

33. Although banks use CRM techniques to reduce their credit risk, these techniques give rise to risks (residual risks) which may render the overall risk reduction less effective. Where these risks are not adequately controlled, supervisors may impose additional capital charges or take other supervisory actions as detailed in Pillar 2.

34. While the use of CRM techniques reduces or transfers credit risk, it simultaneously may increase other risks to the bank, such as legal, operational, liquidity and market risks. Therefore, it is imperative that banks employ robust procedures and processes to control these risks, including strategy; consideration of the underlying credit; valuation; policies and procedures; systems; control of roll-off risks; and management of concentration risk arising from the bank's use of CRM techniques and its interaction with the bank's overall credit risk profile.

35. The Pillar 3 requirements must also be observed for banks to obtain capital relief in respect of any CRM techniques.

(iii) Legal certainty

36. In order for banks to obtain capital relief, all documentation used in collateralised transactions and for documenting guarantees must be binding on all parties and legally well founded in all relevant jurisdictions. Banks must have appropriate legal opinions to verify this, and update them as necessary to ensure continuing enforceability.

(iv) Proportional cover

37. Where the amount collateralised or guaranteed (or against which credit protection is held) is less than the amount of the exposure, and the secured and unsecured portions are of equal seniority, i.e. the bank and the guarantor share losses on a pro-rata basis, capital relief will be afforded on a proportional basis, i.e. the protected portion of the exposure will

receive the treatment applicable to the collateral or counterparty, with the remainder treated as unsecured.

2. Collateralised transactions

38. A collateralised transaction is one in which:

- banks have a credit exposure or potential credit exposure to a counterparty;[167] and
- that credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by the counterparty or by a third party on behalf of the counterparty.

39. Under the Simplified Standardised Approach, only the simple approach from the Standardised Approach will apply, which, similar to the current Accord, substitutes the risk weighting of the collateral for the risk weighting of the counterparty for the collateralised portion of the exposure (generally subject to a 20% floor). Partial collateralisation is recognised. Mismatches in the maturity or currency of the underlying exposure and the collateral will not be allowed.

(i) Minimum conditions

40. In addition to the general requirements for legal certainty set out in paragraph 36, the following operational requirements must be met.

41. The collateral must be pledged for at least the life of the exposure and it must be marked to market and revalued with a minimum frequency of six months.

42. In order for collateral to provide protection, the credit quality of the counterparty and the value of the collateral must not have a material positive correlation. For example, securities issued by the counterparty - or by any related group entity - would provide little protection and so would be ineligible.

43. The bank must have clear and robust procedures for the timely liquidation of collateral.

44. Where the collateral is held by a custodian, banks must take reasonable steps to ensure that the custodian segregates the collateral from its own assets.

45. Where a bank, acting as agent, arranges a repo-style transaction (i.e. repurchase/reverse repurchase and securities lending/borrowing transactions) between a customer and a third party and provides a guarantee to the customer that the third party will perform on its obligations, then the risk to the bank is the same as if the bank had entered into the transaction as principal. In such circumstances, banks will be required to calculate capital requirements as if they were themselves the principal.

[167] In this section "counterparty" is used to denote a party to whom a bank has an on- or off-balance sheet credit exposure or a potential credit exposure. That exposure may, for example, take the form of a loan of cash or securities (where the counterparty would traditionally be called the borrower), of securities posted as collateral, of a commitment or of exposure under an OTC derivative contract.

(ii) Eligible collateral

46. The following collateral instruments are eligible for recognition:

- Cash on deposit with the bank which is incurring the counterparty exposure including certificates of deposit or comparable instruments issued by the lending bank,[168, 169]
- Gold, and
- Debt securities rated issued by sovereigns rated category 4 or above[170] or issued by PSE that are treated as sovereigns by the national supervisor.

(iii) Risk weights

47. Those portions of claims collateralised by the market value of recognised collateral receive the risk weight applicable to the collateral instrument. The risk weight on the collateralised portion will be subject to a floor of 20%. The remainder of the claim should be assigned to the risk weight appropriate to the counterparty. A capital requirement will be applied to banks on either side of the collateralised transaction: for example, both repos and reverse repos will be subject to capital requirements.

48. The 20% floor for the risk weight on a collateralised transaction will not be applied and a 0% risk weight can be provided where the exposure and the collateral are denominated in the same currency, and either:

- the collateral is cash on deposit; or
- the collateral is in the form of sovereign/PSE securities eligible for a 0% risk weight, and its market value has been discounted by 20%.

3. Guaranteed transactions

49. Where guarantees meet and supervisors are satisfied that banks fulfil the minimum operational conditions set out below, they may allow banks to take account of such credit protection in calculating capital requirements.

(i) Minimum conditions

50. A guarantee must represent a direct claim on the protection provider and must be explicitly referenced to specific exposures, so that the extent of the cover is clearly defined and incontrovertible. Other than non-payment by a protection purchaser of money due in respect of the credit protection contract it must be irrevocable; there must be no clause in the contract that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure. It must also be unconditional; there should be no clause in

[168] Where a bank issues credit-linked notes against exposures in the banking book, the exposures will be treated as being collateralised by cash.

[169] When cash on deposit, certificates of deposit or comparable instruments issued by the lending bank are held as collateral at a third-party bank, if they are openly pledged/assigned to the lending bank and if the pledge/assignment is unconditional and irrevocable, the exposure amount covered by the collateral (after any necessary haircuts for currency risk) will receive the risk weight of the third-party bank.

[170] The rating category refers to the ECA country risk score as described in paragraph 2.

the protection contract outside the control of the bank that could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original counterparty fails to make the payment(s) due.

51. In addition to the legal certainty requirements in paragraph 36 above, the following conditions must be satisfied:

(a) On the qualifying default/non-payment of the counterparty, the bank may in a timely manner pursue the guarantor for monies outstanding under the documentation governing the transaction, rather than having to continue to pursue the counterparty. By making a payment under the guarantee the guarantor must acquire the right to pursue the obligor for monies outstanding under the documentation governing the transaction.

(b) The guarantee is an explicitly documented obligation assumed by the guarantor.

(c) The guarantor covers all types of payments the underlying obligor is expected to make under the documentation governing the transaction, for example notional amount, margin payments, etc.

(ii) Eligible guarantors

52. Credit protection given by the following entities will be recognised: sovereign entities[171], PSEs and other entities with a risk weight of 20% or better and a lower risk weight than the counterparty.

(iii) Risk weights

53. The protected portion is assigned the risk weight of the protection provider. The uncovered portion of the exposure is assigned the risk weight of the underlying counterparty.

54. As specified in paragraph 3, a lower risk weight may be applied at national discretion to a bank's exposure to the sovereign (or central bank) where the bank is incorporated and where the exposure is denominated in domestic currency and funded in that currency. National authorities may extend this treatment to portions of claims guaranteed by the sovereign (or central bank), where the guarantee is denominated in the domestic currency and the exposure is funded in that currency.

55. Materiality thresholds on payments below which no payment will be made in the event of loss are equivalent to retained first loss positions and must be deducted in full from the capital of the bank purchasing the credit protection.

4. Other items related to the treatment of CRM techniques

Treatment of pools of CRM techniques

56. In the case where a bank has multiple CRM covering a single exposure (e.g. a bank has both collateral and guarantee partially covering an exposure), the bank will be required

[171] This includes the Bank for International Settlements, the International Monetary Fund, the European Central Bank and the European Community.

to subdivide the exposure into portions covered by each type of CRM tool (e.g. portion covered by collateral, portion covered by guarantee) and the risk weighted assets of each portion must be calculated separately. When credit protection provided by a single protection provider has differing maturities, they must be subdivided into separate protection as well.

III. Credit risk – Securitisation framework

(i) Scope of transactions covered under the securitisation framework

57. A traditional securitisation is a structure where the cash flow from an underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Payments to the investors depend upon the performance of the specified underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures. The stratified/tranched structures that characterise securitisations differ from ordinary senior/subordinated debt instruments in that junior securitisation tranches can absorb losses without interrupting contractual payments to more senior tranches, whereas subordination in a senior/subordinated debt structure is a matter of priority of rights to the proceeds of a liquidation.

58. Banks' exposures to securitisation are referred to as "securitisation exposures".

(ii) Permissible role of banks

59. A bank operating under the Simplified Standardised Approach can only assume the role of an investing bank in a traditional securitisation. An investing bank is an institution, other than the originator or the servicer that assumes the economic risk of a securitisation exposure.

60. A bank is considered to be an originator if it originates directly or indirectly credit exposures included in the securitisation. A servicer bank is one that manages the underlying credit exposures of a securitisation on a day-to-day basis in terms of collection of principal and interest, which is then forwarded to investors in securitisation exposures. A bank under the Simplified Standardised Approach should not offer credit enhancement, liquidity facilities or other financial support to a securitisation.

(iii) Treatment of Securitisation Exposures

61. Banks using the Simplified Standardised Approach to credit risk for the type of underlying exposure(s) securitised are permitted to use a simplified version of the standardised approach under the securitisation framework.

62. The standard risk weight for securitisation exposures for an investing bank will be 100%. For first loss positions acquired, deduction from capital will be required. The deduction will be taken 50% from Tier 1 and 50% from Tier 2 capital.

IV. Operational risk

63. The Simplified Standardised Approach for operational risk is the Basic Indicator Approach under which banks must hold capital equal to a fixed percentage (15%) of average annual gross income over the previous three years.

64. Gross income is defined as net interest income plus net non-interest income.[172] It is intended that this measure should be (i) gross of any provisions (e.g. for unpaid interest); (ii) exclude realised profits/losses from the sale of securities in the banking book;[173] and (iii) exclude extraordinary or irregular items as well as income derived from insurance.

65. Banks using this approach are encouraged to comply with the Committee's guidance on *Sound Practices for the Management and Supervision of Operational Risk* (February 2003).

[172] As defined by national supervisors and/or national accounting standards.

[173] Realised profit/losses from securities classified as "held to maturity" and "available for sale", which typically constitute items of the banking book (e.g. under US or IASB accounting standards), are also excluded from the definition of gross income.