2026/269

18.2.2026

COMMISSION DELEGATED REGULATION (EU) 2026/269

of 29 October 2025

amending Delegated Regulation (EU) 2015/35 as regards technical provisions, long-term guarantee measures, own funds, equity risk, spread risk on securitisation positions, other standard formula capital requirements, reporting and disclosure, proportionality and group solvency

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (^{1}), and in particular Article 29(5), Article 31(4), Article 35(9), Article 37(6), Article 50(1), Article 56, Article 75(2), Article 75(3), Article 86(1), Article 92(1a), Article 97(1), Article 99, point (b), Article 105a(5), Article 111(1), Article 127, Article 130, Article 213a(6), Article 233b, point (a), Article 234, Article 256(4), and Article 256b(6), thereof,

Whereas:

(1) With around EUR 10 trillion of assets under management, insurance and reinsurance undertakings are a mainstay of the financial system. In view of the long-term nature of their business, they are particularly well-placed to provide stable funding to the real economy, including small and medium-sized enterprises (SMEs). Due to their pivotal socio-economic role, insurance and reinsurance undertakings are subject to comprehensive prudential rules, set out in Directive 2009/138/EC and Commission Delegated Regulation (EU) 2015/35 (^{2}).

(2) To enhance the ability of the sector to support the real economy, the green and digital transitions, and other Union priorities, while preserving prudential soundness and financial stability, Directive 2009/138/EC was amended by Directive (EU) 2025/2 of the European Parliament and of the Council (^{3}) which entered into force on 28 January 2025. Directive (EU) 2025/2 improves the design of long-term guarantee measures and introduces a preferential treatment for long-term investments in equity. Those amendments will increase undertakings' available capital in excess of the Solvency Capital Requirement, and thereby strengthen their capacity to support the objectives of the Savings and Investments Union and the European Green Deal. Directive (EU) 2025/2 also enhances proportionality of prudential rules, by introducing a new category of 'small and non-complex undertakings' which can automatically benefit from identified proportionality measures on reporting, disclosure, governance, revision of written policies, calculation of technical provisions, own-risk and solvency assessment, and liquidity risk management plans. At the same time, recognising the need to maintain a robust supervisory framework, Directive (EU) 2025/2 strengthens cooperation requirements between supervisory authorities, enhances the coordination role and the supervisory powers of the European Insurance and Occupational Pensions Authority (EIOPA), and expands the macroprudential toolkit available to national supervisory authorities.

(^{1}) OJ L 335, 17.12.2009, p. 1, ELI: http://data.europa.eu/eli/dir/2009/138/oj.

(^{2}) Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (OJ L 12, 17.1.2015, p. 1, ELI: http://data.europa.eu/eli/reg_del/2015/35/oj).

(^{3}) Directive (EU) 2025/2 of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/138/EC as regards proportionality, quality of supervision, reporting, long-term guarantee measures, macro-prudential tools, sustainability risks and group and cross-border supervision, and amending Directives 2002/87/EC and 2013/34/EU (OJ L, 2025/2, 8.1.2025, ELI: http://data.europa.eu/eli/dir/2025/2/oj).

(3) To become fully operational, the new regime requires further specifications of key quantitative parameters in delegated acts. Therefore, Delegated Regulation (EU) 2015/35 should be amended. The amendments to Delegated Regulation (EU) 2015/35 should contribute to the implementation of the Unions' policy agenda on the Savings and Investments Union, and should help insurers enhance the competitiveness of the economy of the Union, as outlined in the Commission's Competitiveness Compass (⁴). In particular, the potential of insurers to mobilise additional private capital in support of key Union objectives, including when investing together with public funds in the real economy, in particular through significant public guarantees or subsidies, should be recognised.

(4) Current prudential calibrations ensure a high level of policyholder protection and contribute significantly to financial stability. However, those calibrations can also be overly conservative, limiting insurers' capacity to engage in long-term investments. To address that issue, the prudential framework should be revised to remove unjustified layers of prudence. While such revisions may result in higher own funds in excess of the solvency capital requirements, insurance and reinsurance undertakings are expected to support the Union's broader policy objectives, by directing additional capital towards productive investments in the real economy.

(5) The Union faces massive financing needs to deliver on its already-agreed objectives on innovation, sustainable growth and defence (⁵). Directive (EU) 2025/2 has amended Directive 2009/138/EC, inter alia to ensure that the level of available capital in excess of the Solvency Capital Requirement is increased. It is important that national supervisory authorities and EIOPA monitor the use of that newly available capital considering the impact on the capital position of insurers over time. Expectations are that insurers direct excess capital to productive investments, including securitisation positions, that contribute to the funding of companies and the economy of the Union. The Commission will monitor whether such expectations are fulfilled and will assess the effectiveness of the reforms in particular as regards their impact on increasing the insurance sector participation in productive investments contributing to the funding of companies and the economy of the Union. In this context, EIOPA should regularly report to the European Commission, the European Parliament and the Council on (i) the allocation of assets, broken down by sector and geographical area; (ii) increases in distributions to shareholders, including share buy-backs, as well as variable remuneration to the administrative, management or supervisory body, key function holders or senior management, taking into account the newly available capital in excess of the Solvency Capital Requirement stemming from Directive (EU) 2025/2 and from this Regulation. The first report should be submitted by 31 December 2028.

(6) The Commission, together with EIOPA, will assess how sustainability risks related to fossil fuel assets and activities, including transition risks currently associated with high emissions but on a trajectory towards alignment with the Paris Agreement objectives, are managed by insurance and reinsurance undertakings. Where appropriate, the Commission will consider possible amendments to ensure that these emerging risks are adequately reflected in the prudential framework, taking into account developments in the framework for credit institutions, and the report delivered by EIOPA pursuant to Article 304c(1) of Directive 2009/138/EC. The Commission will also consider, as part of the forthcoming European Climate Adaptation Plan, whether prudential rules can be more conducive to issuances of or investments in catastrophe bonds and other green bonds.

(7) The requirement to obtain two credit assessments from nominated external credit assessment institutions (ECAIs) is in general justified by the complexity of assessing in a reliable manner the credit risk of securitisation positions. However, securitisations meeting the criteria of simplicity, transparency and standardisation (STS) are subject to a specific regulatory framework designed to ensure comparability and to reduce information asymmetries. For that reason, and to support the Union's efforts to address unjustified administrative and compliance costs, it is appropriate to lift the double-rating requirement for STS securitisations, while maintaining it for other securitisations.

(⁴) See European Commission, 'A Competitiveness Compass for the EU' (COM(2025) 30).
(⁵) See European Commission, 'A Competitiveness Compass for the EU' (COM(2025) 30).

(8)   Climate change related risks are long-term in nature, non-linear and systemic, making them challenging for insurance and reinsurance undertakings to estimate solely based on past data. Directive (EU) 2025/2 introduced new requirements on the management of climate change related risks and sustainability risks more generally. In particular, Article 45a of Directive 2009/138/EC as amended by Directive (EU) 2025/2 requires undertakings to identify any material exposure to climate change risks and, where relevant, to assess the impact of long-term climate change scenarios on their business. However, when it comes to the valuation or computation of capital requirements with an internal model, insurance and reinsurance undertaking often use data from past events to inform predictions on risks materialising in the future. Data from past events may not sufficiently capture climate change related trends. Forward looking assessments, including plausible climate scenarios, may therefore be necessary to assess how the risks evolve and to mitigate possible impacts. Where an insurance or reinsurance undertaking relies too heavily on past data, its best estimate for obligations to policy holders or its internal model, where applied, may underestimate obligations or relevant risks. It is therefore necessary to require undertakings to have in place internal procedures to avoid overreliance on data from past events in relation to climate-change related trends.

(9)   The risk margin is currently calibrated conservatively. Directive (EU) 2025/2 reduces the cost-of-capital rate underlying the risk margin calculation, leading to an overall reduction in its level by approximately 21 %. Despite that amendment, the calculation formula set out in Delegated Regulation (EU) 2015/35 does not adequately reflect the natural decline of certain risks over time and may result in the double counting of such risks, including lapse and mortality. It is therefore necessary to introduce an exponential and time-dependent factor, which ensures an annual reduction of risks of at least 3,5 %. That adjustment is intended to correct the conservative bias in the current calibration, thereby reducing technical provisions of insurance and reinsurance undertakings, and, as a result, increasing the capital available to cover the Solvency Capital Requirement. However, to ensure that the risk margin continues to reflect an appropriate level of prudence and does not compromise policyholder protection, the reduction in the quantification of future risks resulting from that factor should be capped at 50 %.

(10)   Directive (EU) 2025/2 amended the method for the extrapolation of risk-free interest rates. In particular, that Directive changed the approach for identifying the starting maturity of extrapolation ('first smoothing point'). Article 77a(1) of Directive 2009/138/EC provides that the first smoothing point should correspond to a maturity for which the volume of outstanding bonds of that or a longer maturity is sufficiently high. Article 77a(3) of that Directive further specifies that the first smoothing point for the euro should be at a maturity of 20 years on 28 January 2025. Currently, the percentage threshold for determining a sufficient volume of bonds is set at 6 % for the euro. However, due to the increase in outstanding long-maturity bonds in recent years, that threshold may no longer point to a 20-year first smoothing point going forward. In addition, EIOPA will need to decide which data source it will use for that assessment, including the publication of information pursuant to Article 77e(1a) of Directive 2009/138/EC. To avoid market disruption, it is important that the percentage threshold is in such a way that it also results in a first smoothing point of 20 years at the application date of Directive (EU) 2025/2, regardless of the data source used by EIOPA. Therefore, the currency-related threshold used for the euro to assess whether the percentage of outstanding bonds with maturities equal to or greater than the first smoothing point referred to in Article 77a of Directive 2009/138/EC is sufficiently high, should be calculated as follows. A 'safety margin' of 1,5 % should be applied to the minimum percentage that results in a 20-year first smoothing point on 28 January 2025, based on the data source that EIOPA will use at the application date of new rules. The obtained percentage should be rounded up to the closest half-integer or integer percentage.

(11)   The extrapolated forward rate should be equal to a weighted average between a liquid forward rate and the ultimate forward rate (UFR). Article 77a(1) of Directive 2009/138/EC provides that for maturities of at least 40 years past the first smoothing point, the weight of the UFR should be at least 77,5 %. That implies that the parameter determining the speed of the convergence of the forward rates towards the UFR of the extrapolation should not be lower than 11 %. Therefore, such value should be used. However, due to the specificities of the Swedish bond market, and as explained by EIOPA in its Opinion on the Solvency II review ([6]), the use of such a value for the Swedish krona, would result in a significant and unintended distortion of the risk-free interest rate term structure. To preserve the integrity of the risk-free interest term structure, a convergence parameter of 40 % should apply for that currency.

([6])   Ref. EIOPA-BoS-20-749.

(12) Directive (EU) 2025/2 amended the rules governing the volatility adjustment by requiring that the volatility adjustment is subject to supervisory approval and by requiring that its calculation takes into account undertaking-specific characteristics related to the spread sensitivity of assets and the interest rate sensitivity of the best estimate of technical provisions. In addition, the volatility adjustment is not to reflect the portion of the spreads that is attributable to a realistic assessment of expected losses or unexpected credit or other risk. Article 77d(3) of Directive 2009/138/EC as amended by Directive (EU) 2025/2 provides that such portion is to be calculated as percentage of the spreads, and is to decrease as spreads increase. Empirical economic studies confirm that for corporate bonds, the major part of spreads reflect genuine credit risk, in particular where spreads are at low-to-medium levels. Therefore, where spreads on corporate bonds and loans do not exceed their long-term average, the percentage applied to determine the risk correction should not be lower than 50 %.

(13) To ensure the volatility adjustment operates in a countercyclical manner, the risk correction should not exceed an appropriate share of long-term average spreads. Where that percentage is too low, the volatility adjustment could unduly neutralise an increase in spreads stemming from genuine deterioration of the credit worthiness of bond issuers, thereby overstating the solvency position of insurance or reinsurance undertakings during periods of short-term market stress. Therefore, to ensure that the volatility adjustment effectively stabilises the solvency position of insurance or reinsurance undertakings without distorting risk sensitivity, the maximum level of the risk correction should not be set too low.

(14) Article 70(1) Delegated Regulation (EU) 2015/35 provides that when calculating their available own funds, insurance and reinsurance undertakings are to deduct foreseeable dividends, distribution and charges from the excess of assets over liabilities. However, Delegated Regulation (EU) 2015/35 does not specify how the deduction should be made. In particular, while certain undertakings progressively accrue foreseeable dividends during the financial year, others immediately deduct the full amount of yearly foreseeable dividends. To ensure a level-playing field, insurers should use an accrual approach when determining the amount of foreseeable dividends to be deducted when calculating their available own funds.

(15) Article 69, point (a)(i), of Delegated Regulation (EU) 2015/35 provides that paid-in ordinary shares capital and the related share premium account are eligible as tier 1 basic own-fund items where their repayment or redemption is subject to prior supervisory approval. Such a requirement may create undue administrative and regulatory burden where an insurance or reinsurance undertaking executes a share buy-back programme with the objective of immediately using the bought shares for the exercise stock options. It should therefore be specified that where the repayment or redemption of basic own fund items aims at exercising stock option rights within no more than one month from the date of the share buyback, such repayment or redemption should not be subject to prior supervisory approval.

(16) Pursuant to Article 77b(1), point (b), of Directive 2009/138/EC, insurance and reinsurance undertakings that use the matching adjustment have to identify, organise and manage the assigned portfolio of assets and obligations separately from other parts of the business and are therefore not permitted to meet risks arising elsewhere in the business using the assigned portfolio of assets. However, the separated management of the portfolio does not result in an increase in correlation between the risks within that portfolio and those within the rest of the undertaking. Therefore, insurance and reinsurance undertakings which use the matching adjustment should not be required to calculate a distinct notional solvency capital requirement for the portfolio of assets and obligations to which the matching adjustment is applied, unless the portfolios of assets covering a corresponding best estimate of insurance or reinsurance obligations form a ring-fenced fund.

(17) Article 84(4) of Delegated Regulation (EU) 2015/35 provides that the 'look-through' approach should apply to related undertakings that mainly act as investment vehicles on behalf of the participating insurance or reinsurance undertaking. However, that wording may unduly exclude related undertakings that manage assets on behalf of several undertakings within the same insurance or reinsurance group. That creates a regulatory gap and risks inconsistent application of the 'look-through' principle. Article 84(4) of Delegated Regulation (EU) 2015/35 should therefore be amended to specify that the 'look-through' approach also applies where the related investment vehicle manages assets on behalf of multiple undertakings within the group, and not only on behalf of the participating undertaking itself.

(18) Rules governing the calculation of the counterparty default risk module, including the risk-mitigating effect of derivatives, reinsurance arrangements or insurance securitisation can prove to be very complex. Such complex calculations may not always be commensurate to the nature, scale, and complexity of the risks of an insurance or reinsurance undertaking. Therefore, to reduce compliance costs for smaller undertakings, an additional simplified calculation of the risk-mitigating effect of derivatives, reinsurance arrangements or securitisation should be introduced.

(19) Insurance and reinsurance undertakings may opt to transfer risks using non-proportional reinsurance arrangements. However, where the standard formula is used, such type of reinsurance arrangement is not appropriately reflected as a risk-mitigation technique to reduce the Solvency Capital Requirements. It is therefore necessary to lay down that certain forms of reinsurance, in particular adverse development covers allowing to transfer reserve risk, can be recognised in a simple manner under the standard formula.

(20) Article 164(3) of Delegated Regulation (EU) 2015/35 provides that the correlation between standard formula spread risk and interest rate risk in the interest rate downward scenario is 50 %. However, economic analysis conducted by the European Insurance and Occupational Pensions Authority ('EIOPA') demonstrates that such calibration is overly conservative [7]. In particular, empirical data shows that the largest interest rate decreases did not occur at the same time as the largest spread widening in bond markets. Therefore, the correlation between spread risk and interest rate risk in the interest rate downward scenario should be decreased to 25 %.

(21) Capital requirements for interest rate risk under the standard formula are calculated separately for each currency. However, for insurance and reinsurance undertakings the head office of which is in a Member State whose local currency is pegged to the euro, that approach results in disproportionately high capital requirements that do not reflect the actual economic risks. It is therefore necessary to lay down that capital requirement for interest rate risk under the standard formula may be calculated jointly for the euro and the pegged currency of the Member state in which insurance or reinsurance undertakings have their head office.

(22) The extrapolation method used to value long-term liabilities contributes to smoothening the effect of changes in interest rates on the best estimate of insurance liabilities. The current standard formula capital requirements to interest rate risk do, however, not reflect the extrapolation of long-term interest rates. It is therefore necessary to require that stressed interest rates at maturities beyond the first smoothing point are extrapolated.

(23) Under current rules, the standard formula interest rate risk assumes that positive interest rates cannot become negative and that negative interest rates cannot decrease further. However, historical developments in financial markets showed that such assumption may significantly underestimate exposures to interest rate risk by insurance or reinsurance undertakings. Therefore, the standard formula should be amended to appropriately reflect the risk of low or negative interest rates. That should be achieved via a recalibration of the interest rate risk sub-module to reflect the existence of a negative yield environment.

(24) Amendments to standard formula for interest rate risk should not result in unjustified increase in capital requirements when rates are low. In particular, the calibration of downward shock should not assume interest rate levels to fall significantly below historically observed values across major currencies. Therefore, to ensure proportionality and consistency with past market behaviours, a maturity-dependent floor should be introduced to limit the extent of assumed negative interest rates, increasing with maturity to reflect the lower plausibility of extreme long-term rates.

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[7] See EIOPA-BoS-20-749.

(25) As underlined in the Commission's Communication on a Savings and Investment Union ([8]), institutional investors, such as insurance and reinsurance undertakings, are uniquely placed to invest with a long-term perspective and support the equitisation of Union firms in priority areas, including defence, research and innovation or the green and digital transitions. Encouraging equity financing is central to strengthening the Union's economic resilience and competitiveness, notably by enabling innovative firms to access stable and patient capital. Article 105a of Directive 2009/138/EC lays down a preferential capital requirement applicable to long-term equity investments. Specifically, paragraph 1, point (d), of that Article provides that, to benefit from the preferential treatment, insurance and reinsurance undertakings should demonstrate, to the satisfaction of the supervisory authorities, that they are able to avoid forced sales of equity investments for a period of five years, on an ongoing basis and under stressed conditions. To ensure that this requirement is applied in a consistent manner, the approaches to demonstrate an undertaking's ability to avoid forced sales of equity investments should be specified. In addition, to avoid unjustified administrative burden and to accommodate differences in the complexity of undertakings' risk profiles, insurance and reinsurance undertakings should be allowed to select the most appropriate approach from several methods, depending on their business model and sophistication. That can increase the usability and effectiveness of the preferential treatment across diverse categories of undertakings. However, to prevent arbitrary or opportunistic switching between approaches over time, it is necessary to set out clear safeguards and supervisory monitoring requirements, ensuring consistency, transparency, and supervisory convergence, while maintaining prudent risk management and policyholder protection.

(26) By default, where long-term equity investments are made through collective investment undertakings, the criteria set out in Article 105a(1) of Directive 2009/138/EC should be assessed at the level of each underlying asset. However, Article 105a(2) of that Directive provides that, for certain types of collective investment undertakings presenting a lower risk profile, those criteria set out in Article 105a(1) of that Directive may be assessed at the level of the fund rather than at the level of the underlying assets held within that fund. Article 168(6) of Delegated Regulation (EU) 2015/35 already identifies certain collective investment undertakings as type 1 equities, which are subject to lower risk factors for equity risk than type 2 equities. These include European Social Entrepreneurship Funds, European Venture Capital Funds, European Long-Term Investment Funds, and closed-ended alternative investment funds with no leverage. As for closed-ended alternative investment funds with no leverage, the use of derivative instruments for hedging purposes, as well as temporary borrowing arrangements that are fully covered by contractual capital commitments from investors in the alternative investment fund, are excluded from the leverage calculation. All such type 1 funds should also be considered as presenting a lower risk profile for the purposes of identifying long-term equity investments, including when they are invested in qualifying infrastructure equities or qualifying infrastructure corporate equities. Where the conditions set out in Article 105a(1) of Directive 2009/138/EC are met at the level of such funds with lower risk profile, the preferential 22 % risk factor referred to in paragraph 4 of Article 105a of that Directive should by default only apply to the equity exposures held within such funds, and not to other financial assets.

(27) The current limits on the symmetric adjustment reduce its effectiveness in mitigating the potential pro-cyclical effects of the financial system. In particular, they may lead insurance and reinsurance undertakings to raise additional capital or sell assets in response to short-lived adverse market movements, including those triggered by geopolitical instability. In line with Directive (EU) 2025/2, Article 172 of Delegated Regulation (EU) 2015/35 should be amended to allow the symmetric adjustment to generate greater variations in the standard equity capital charge, thereby enhancing its capacity to dampen the impact of sharp market fluctuations.

(28) In the banking sector, Article 133(5) Regulation (EU) No 575/2013 of the European Parliament and of the Council ([9]) allows credit institutions, under certain conditions and subject to prior supervisory approval, to apply a preferential risk weight to equity exposures acquired under specific legislative programmes. Those programmes should provide significant subsidies or guarantees, involve government oversight and impose some restrictions on the types of

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([8]) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 19 March 2025, 'Savings and Investments Union. A Strategy to Foster Citizens' Wealth and Economic Competitiveness in the EU'.

([9]) Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1, ELI: http://data.europa.eu/eli/reg/2013/575/oj).

equity investments. To foster a cross-sectoral level playing field and to strengthen the contribution of insurance and reinsurance undertakings to equity financing of the real economy, it is appropriate to replicate the approach in the standard formula for calculating the Solvency Capital Requirements under Delegated Regulation (EU) 2015/35. Equity investments made under comparable legislative programmes, including those which support one or more economic sectors listed in the Communication on the Competitiveness Compass for the Union or in the ReArm Europe plan/Readiness 2030 ([10]), should be recognised as having the potential to reduce risk and may therefore justify a lower capital requirement, subject to the approval of the supervisory authority.

(29) To ensure consistency between banking and insurance regulations, and to promote convergence in supervisory practices, legislative programmes deemed to meet the eligibility conditions under Article 133(5) of Regulation (EU) No 575/2013 should also be recognised as legislative programmes under Delegated Regulation (EU) 2015/35, based on the same criteria. The Commission may maintain a public register of such programmes for the purposes of Article 133(5) of Regulation (EU) No 575/2013, thereby enhancing transparency and predictability. Where such a register exists, the inclusion of a programme therein should constitute a presumption that such programme qualifies under the insurance framework as well.

(30) Investments made under legislative programmes may also qualify as long-term equity investments. Therefore, it is necessary that the calculation of solvency Capital Requirements allow reflecting the combined risk-reducing features of both types of investments.

(31) A well-functioning securitisation market provides additional funding sources to capital markets, thus improving the funding capacity of the real economy and contributing to delivering on the Savings and Investments Union. It also provides alternative investment opportunities to insurance and reinsurance undertakings, which need to diversify their portfolios to boost returns and reduce idiosyncratic risk. As institutional investors, insurance and reinsurance undertakings should therefore be fully integrated into the Union's securitisation market.

(32) Commission Delegated Regulation (EU) 2018/1221 ([11]) introduced into Delegated Regulation (EU) 2015/35 specific risk factors for spread risk of STS securitisations. However, the risk factors for senior tranches of STS securitisations remained above those applicable to corporate bonds or covered bonds with the same credit quality step. However, contrary to corporate or covered bonds, STS securitisations with a comparable credit quality are subject to specific due diligence and transparency requirements under Regulation (EU) 2017/2402 of the European Parliament and of the Council ([12]). Those requirements ensure that insurance or reinsurance undertakings have a better understanding and management of the risks related to STS securitisations. Therefore, to improve consistency across asset classes with comparable risk profiles, risk factors for senior tranches of STS securitisations should be further aligned with those applicable to corporate or covered bonds.

(33) Delegated Regulation (EU) 2015/35 does not distinguish between senior tranches and non-senior tranches of non-STS securitisations. That lack of risk-sensitivity results in overestimating the spread risks underlying investments in the highest-quality tranches of non-STS securitisation. In addition, the difference in capital requirements for insurance or reinsurance undertakings between STS and non-STS securitisations is much more significant than that applicable to credit institutions. Therefore, to preserve that difference, lower risk factors should be introduced for senior tranches of non-STS securitisations.

([10]) See the White Paper for European Defence – Readiness 2030.
([11]) Commission Delegated Regulation (EU) 2018/1221 of 1 June 2018 amending Delegated Regulation (EU) 2015/35 as regards the calculation of regulatory capital requirements for securitisations and simple, transparent and standardised securitisations held by insurance and reinsurance undertakings (OJ L 227, 10.9.2018, p. 1, ELI: http://data.europa.eu/eli/reg_del/2018/1221/oj).
([12]) Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012 (OJ L 347, 28.12.2017, p. 35, ELI: http://data.europa.eu/eli/reg/2017/2402/oj).

(34) The amounts expressed in euro in Delegated Regulation (EU) 2015/35 have not been revised since its entry into force in 2014. The cumulative inflation since then is approaching 35 %. Therefore, the amounts expressed in euro in that Regulation should be revised, by increasing the base amount in euro by the percentage change in the Harmonised Indices of Consumer Prices of all Member States as published by the Commission (Eurostat).

(35) Article 192(4) of Delegated Regulation (EU) 2015/35 provides that where the loan-to-value on a mortgage loan does not exceed 60 %, the standard formula capital requirement for counterparty default risk is null. That treatment unduly underestimates the actual risks of such exposures, and results in an uneven playing field with the banking sector where such exposures are risk weighted. Therefore, a floor to the loss-given default on mortgage loans should be introduced.

(36) Article 176(4) of Delegated Regulation (EU) 2015/35 sets out the risk factors applicable to loans for which a credit assessment by a nominated External Credit Assessment Institutions (ECAI) is not available and for which debtors have not posted collateral that meet the criteria set out in Article 214 of that Regulation. However, those applicable risk factors substantially underestimate the level of potential losses on default of forborne loans. It is therefore necessary to adapt those risk factors to better reflect the level of potential losses on default of forborne loans.

(37) Central clearing counterparties (CCPs) have developed new access models which enable insurance or reinsurance undertakings to become direct clearing members while a sponsor undertaking is responsible for default fund contributions. To date, no insurance or reinsurance undertaking has decided to use those new access models. That is partly due to the prudential treatment of direct exposures to qualifying CCPs, which can be higher than the prudential treatment applicable to an insurance or reinsurance undertaking which acts as an indirect clearing member. Delegated Regulation (EU) 2015/35 does not fully reflect the risk-reducing effect of central clearing for insurance or reinsurance undertakings. To address that issue and to remove obstacles to the participation of insurance or reinsurance undertakings as direct clearing members, capital requirements for direct exposures to qualifying CCP should be lowered and aligned with those of indirect exposures.

(38) Insurance and reinsurance undertakings may decide to use repurchase transactions, or securities lending or borrowing transactions, to manage liquidity or to increase asset returns. However, the capital requirements associated with such transactions are currently treated too conservatively, as they are classified as type 2 exposures for the calculation of capital requirements under the counterparty default risk module. Therefore, Delegated Regulation (EU) 2015/35 should be amended to reclassify those transactions as type 1 exposures. In addition, the Commission will assess, in coordination with EIOPA, whether and how to reflect in capital requirements for counterparty default risk the risk-mitigating effect of central clearing through qualifying CCPs.

(39) In some cases, insurance and reinsurance undertakings can significantly reduce their Solvency Capital Requirement by using risk mitigation techniques, including reinsurance, but those risk mitigation techniques do not always result in a significant transfer of risk. In particular, some reinsurance agreements are designed to cover only the extreme scenarios modelled in the standard formula, while offering little or no protection against more moderate but more likely events. Therefore, to ensure that the risk profile of insurance and reinsurance undertakings is more accurately assessed, it should be specified that the reduction in the Solvency Capital Requirement resulting from the use of risk mitigation techniques is to be commensurate with the amount of risks effectively transferred.

(40) To ensure that risk-mitigation techniques that are recognised in the standard formula calculation of the Solvency Capital Requirement do not include material basis risk, insurance and reinsurance undertakings should assess the effective performance of the risk mitigation under a comprehensive set of risk scenarios that are relevant for the risk-mitigation technique considered. For proportional reinsurance, effective performance should be shown by a close mirroring in all scenarios. For non-proportional reinsurance, the assessment should focus on scenarios featuring losses between attachment and detachment points and should observe a close mirroring of those losses.

(41) Article 275(2), point (c), of Delegated Regulation provides that the payment of a substantial portion of the variable remuneration component to staff whose professional activities have a material impact on the undertaking's risk profile should be subject to deferral. However, the cost of applying such a requirement may exceed its prudential benefits in cases where a member of that category of staff has a low level of variable remuneration, as such remuneration levels are unlikely to create incentives for excessive risk-taking. Therefore, in such cases, the requirement on deferral set out in Article 275(2), point (c), of Delegated Regulation should not apply.

(42) Directive 2009/138/EC requires the regular disclosure of essential information through the solvency and financial condition report. That report is targeted at policy holders and beneficiaries on the one hand, and analysts and other market professionals on the other hand. To address the needs and the expectations of those two different groups, Directive (EU) 2025/2 amending Directive 2009/138/EC requires that the content of the report should be divided into two parts, clearly identified but disclosed jointly. The first part, addressed mainly to policy holders and beneficiaries, should contain the key information on business, performance, capital management and risk profile. The second part, addressed to market professionals, should contain detailed information on the business and on the system of governance, specific information on technical provisions and other liabilities, the solvency position as well as other data relevant for specialised analysts. Therefore, Delegated Regulation (EU) 2015/35 should be amended to reflect that new structure and content.

(43) Certain information to be included in the part of the solvency and financial condition report targeted at market professionals may already be publicly available in other reports published by insurance or reinsurance undertakings. Where that is the case, insurance and reinsurance undertakings should not be required to duplicate that information in their solvency and financial condition report, but should instead be allowed to provide direct references, including through internet links, to the relevant section or page of the other report. To ensure accessibility over time, insurance or reinsurance undertakings should ensure that such links remain functional for a minimum of five years, even where website structures or document locations change.

(44) The part of the solvency and financial condition report targeted at policy holders and beneficiaries should be concise, accessible and easily understandable by a layperson. To achieve that objective, it should only contain simple information focused on the needs of targeted policy holders and beneficiaries, and it should not exceed five pages in length.

(45) To ensure that policy holders and beneficiaries can understand the part of the solvency and financial condition report targeted at them, that part should be made available in the languages used by the insurance or reinsurance undertaking in its operations under the freedom of establishment or the freedom to provide services. However, to avoid excessive administrative and legal costs, undertakings should not be required to obtain certified translations of that part.

(46) Pursuant to Directive 2009/138/EC, supervisory authorities are entitled to receive from each supervised insurance and reinsurance undertaking and their groups, at least every three years, a regular narrative report with information on the business and performance, system of governance, risk profile, capital management and other relevant information for solvency purposes. The requirements regarding narrative information to be included in the regular supervisory report may however overlap with information already provided in quantitative reporting templates or in the Own Risk and Solvency Assessment (ORSA) report. That duplication increases reporting costs without clear added value for supervision. The requirements for narrative information to be included in the regular supervisory report should therefore be limited to what is necessary for prudential supervision.

(47) As part of its efforts to make the economy of the Union more competitive, the Commission aims to deliver an unprecedented simplification effort. Against that background, the review of Delegated Regulation (EU) 2015/35 should aim to achieve the objectives of Directive (EU) 2025/2 in the simplest, most targeted, most effective and least burdensome way. In particular, amendments to that Regulation should contribute to the targets for burden reduction, including reporting burden.

(48) Article 330(4) of Delegated Regulation (EU) 2015/35 provides that any minority interest in a subsidiary exceeding the contribution of that subsidiary to the group Solvency Capital Requirement, where the subsidiary is an insurance or reinsurance undertaking, a third country insurance or reinsurance undertaking, an insurance holding company or a mixed financial holding company, should be considered unavailable. Actually, minority interests represent one of the main sources of deductions from group own funds. However, that Delegated Regulation does not set out how such minority interests should be calculated. That results in inconsistent approaches by groups across the Union and raises level playing field issues. It is therefore necessary to lay down rules governing the calculation of minority interests for solvency purposes.

(49) Insurance prudential rules can prove to be very complex, and may generate significant compliance costs, in particular for smaller undertakings. While Directive 2009/138/EC embeds an overarching principle of proportionality, its practical implementation is insufficient to effectively reduce the regulatory burden for smaller undertakings, for whom certain requirements may be disproportionately costly and complex given the nature, scale and complexity of their risks. In addition to the new proportionality framework applicable for undertakings classified as small and non-complex, Directive (EU) 2025/2 introduced Article 29d into Directive 2009/138/EC, allowing insurance and reinsurance undertakings to benefit from the application of proportionality measures, subject to prior supervisory approval and a case-by-case analysis. To ensure a level-playing field and predictability for the sector, the conditions based on which a supervisory authority may refuse to grant that approval should be exhaustively specified.

(50) Directive (EU) 2025/2 introduced several changes and clarifications to the rules governing the calculation of the solvency position of insurance groups, including with regard to own funds and solvency capital requirements. In particular, it clarifies that insurance holding companies and mixed financial holding companies are to be treated as insurance or reinsurance undertakings for the sole purposes of group solvency calculations. That entails the calculation of notional capital requirements for such entities under both method 1, including in the context of the assessment of the availability of own funds, and method 2. Delegated Regulation (EU) 2015/35 should therefore be amended to reflect those changes to Directive 2009/138/EC.

(51) For own fund items issued by a related undertaking to qualify as group own funds, they are to satisfy the requirements set out in Articles 71, 73, and 77 of Delegated Regulation (EU) 2015/35, with the reference to the 'Solvency Capital Requirement' in those Articles interpreted as applying to both the Solvency Capital Requirement of the issuing related undertaking and the group Solvency Capital Requirement. In the context of mergers and acquisitions, that requirement may prevent recognition of own fund instruments issued by an undertaking before it became part of the acquiring group, even where those instruments continue to meet all relevant prudential standards at the level of the undertaking itself. Such a limitation can create disproportionate capital costs associated with external growth, ultimately impairing the international competitiveness of Union insurance and reinsurance groups. To address that issue, it should be allowed, on a transitional and time-limited basis, to recognise such own fund items as non-available group own funds following the acquisition of the issuing undertaking.

(52) While prudential consolidation serves different objectives than accounting consolidation, excessive divergence between the two frameworks may impose an undue regulatory burden on insurance and reinsurance groups. In particular, the current treatment of joint operations and joint ventures under Delegated Regulation (EU) 2015/35 deviates from international accounting standards by requiring proportional consolidation of undertakings that would otherwise be treated under the equity method, and conversely requiring the application of an equity method for undertakings that would otherwise be subject to proportional consolidation. That inconsistency increases reporting costs, creates operational inefficiencies, and may discourage legitimate business structures. Greater consistency with international accounting consolidation rules in the treatment of joint arrangements should therefore be achieved, provided that such alignment does not compromise policy holder protection or financial stability.

(53) For an equity portfolio to be treated as long-term equity, insurance or reinsurance undertakings are to demonstrate that they fulfil the conditions set out in Article 105a(1) of Directive 2009/138/EC. Where such an undertaking belongs to a group, it would be too burdensome for that group to reassess the conditions for long-term equity at group level. Therefore, unless there are significant group-wide liquidity risks not captured at the level of individual undertakings or significant intragroup transactions, equity investments which are treated as long-term equities by an insurance or reinsurance undertaking should also be treated as such when calculating the solvency capital requirement of the group to which that undertaking belongs.

(54) Directive 2009/138/EC provides for the possibility for insurance and reinsurance groups to calculate their Solvency Capital Requirement with a full or partial internal model subject to prior supervisory approval. Any integration technique of a partial internal model into the standard formula to calculate the group Solvency Capital Requirement is part of that internal model and is to, together with the other components of the partial internal model, to comply with the relevant requirements of Directive 2009/138/EC. The integration techniques set out in Annex XVIII to Delegated Regulation (EU) 2015/35 are primarily designed for the integration of risks and not for the integration of entire undertakings within an internal model at group level. Therefore, it should be specified that in cases where undertakings are integrated as a whole, Article 239(4) of that Regulation applies.

(55) Delegated Regulation (EU) 2015/35 does not specify under which conditions the use of 'method 2', as referred to in Article 233 of Directive 2009/138/EC, is to take precedence over integration techniques. To address that gap, insurance and reinsurance groups should demonstrate the appropriateness of the integration techniques they apply and should justify to the satisfaction of their supervisory authority why those integration techniques are more suitable than the application of method 2.

(56) Natural disasters and extreme weather events are increasing across the world due to climate change, and so are the losses related to them. To ensure the continued protection of policy holders and the overall stability of the Union insurance sector amid more erratic and damaging weather patterns, it is important that insurers' capital requirements for natural catastrophe underwriting risk adequately reflect the impact of natural catastrophe events. In view of the new available data and models, risk factors for several regions across natural hazards such as floods, windstorms, hail, earthquakes and subsidence should be amended.

(57) Directive (EU) 2025/2 introduces new prerogatives and powers for supervisory authorities to grant proportionality measures or to waive group supervision as a result of excluding an undertaking from group supervision in accordance with Article 214 of Directive 2009/138/EC. It is important for the sector and the wider audience to know whether and how those new powers and prerogatives have been used in practice. Therefore, the aggregated statistical data which national supervisory authorities should be disclosed on key aspects of the application of the prudential framework should be extended to cover those new areas.

(58) Delegated Regulation (EU) 2015/35 should therefore be amended accordingly,

HAS ADOPTED THIS REGULATION:

Article 1

Amendments to Delegated Regulation (EU) 2015/35

Delegated Regulation (EU) 2015/35 is amended as follows:

(1)   Article 1 is amended as follows:

(a)   the following point 45a is inserted:

'45a.   "future management action" means any action that the administrative, management or supervisory body of an insurance or reinsurance undertaking may expect to carry out under specific future circumstances;';

(b)   the following point 46a is inserted:

'46a.   "expected profit included in future fees for servicing and management of funds" means the expected present value of future cash flows which result from the inclusion in technical provisions of fees for servicing and management of funds relating to existing insurance and reinsurance index-linked and unit-linked contracts that are expected to be charged, but that may not be charged for any reason, other than because the insured event has occurred, regardless of the legal or contractual rights of the policyholder to discontinue the policy;';

(c)   points 55c and 55d are deleted;

(d)   the following points 64 to 67 are added:

'64.   "defaulted loan" means a loan where a default of the obligor has occurred as referred to in Article 178(1) of Regulation (EU) No 575/2013;

65.   "forborne loan" means a loan in respect of which forbearance measures as referred to in Article 47b(1) to (3) of Regulation (EU) No 575/2013 have been applied;

66.   "distributions" means the pay-out of accounting profits other than dividends to shareholders, members or similar, including share buybacks;

67.   "foreseeable charges" means the amount of taxes and the amount of any obligations or circumstances arising during the related reporting period which are likely to reduce the profits of the undertaking.';

(2)   Article 6 is replaced by the following:

'*Article 6*

Double credit rating for securitisation positions other than STS securitisations

By way of derogation from Article 4(4), point (d), where only one credit assessment is available from a nominated ECAI for a securitisation position other than an STS securitisation, that credit assessment shall not be used. The capital requirements for that item shall be derived as if no credit assessment by a nominated ECAI is available.';

(3)   in Article 16(1), the following subparagraph is added:

'By way of derogation from the first subparagraph, insurance and reinsurance undertakings that are classified as small and non-complex undertakings may value short-term deposits with maturities of less than 1 year at cost or amortised cost provided that the use of such valuation methods meets one of the following conditions:

(a)   it does not introduce material errors in the valuation of such deposits;

(b)   it leads to a value of short-term deposits that is lower than the value that would otherwise be calculated without using cost or amortised cost.';

(4)   in Article 18(3), the third subparagraph is replaced by the following:

'However, in the case of life insurance obligations where an individual risk assessment of the obligations relating to the insured person of the contract is carried out at the inception of the contract and the undertaking does not have the right to repeat the assessment before amending the premiums or benefits, insurance and reinsurance undertakings shall only take into account the right to assess at the level of the contract whether the premiums fully reflect the risk for the purposes of point (c).';

(5)   in Article 20, the following subparagraph is added:

'Insurance and reinsurance undertakings shall put in place internal procedures to avoid overreliance on data from past events with respect to climate change-related trends, including, where appropriate, by using climate scenarios.';

(6)   in Article 31, paragraph 4 is replaced by the following:

'4.   Expenses shall be projected taking into account the decisions of the administrative, management or supervisory body of the undertaking with regard to writing new business.';

(7)   the following Article 34a is inserted:

'*Article 34a*

Use of the prudent deterministic valuation of the best estimate for life obligations with options and guarantees that are deemed immaterial

1.   Insurance and reinsurance undertakings shall only use the prudent deterministic valuation of the best estimate for life obligations with options and guarantees that are not deemed material, as referred to in Article 77(8) of Directive 2009/138/EC, where all of the following conditions are met:

(a)   the insurance or reinsurance undertaking clearly identifies the life obligations with options and guarantees which it deems immaterial and to which it intends to apply the prudent deterministic valuation of the best estimate;

(b)   the time value of options and guarantees of the life obligations referred to in point (a) represents less than 5 % of the Solvency Capital Requirement;

(c)   the insurance or reinsurance undertaking confirms in writing that it intends to apply the calculation methodology referred to in paragraph 2 to the life obligations referred to in point (a) of this paragraph;

(d)   the undertaking is classified as small and non-complex undertaking.

For the purposes of the first subparagraph, point (b), insurance and reinsurance undertakings shall use the most recent set of scenarios that are laid down and published by EIOPA in accordance with Article 77e(1), point (ab), of Directive 2009/138/EC.

2.   Where insurance and reinsurance undertakings use the prudent deterministic valuation of the best estimate for clearly identified life obligations with options and guarantees that are deemed immaterial, in accordance with paragraph 1, they shall value the best estimate of such obligations as the sum of the following:

(a)   the deterministic best estimate of the life obligations with options and guarantees that are deemed immaterial;

(b)   the product of a stochastic add-on and the Solvency Capital Requirement of the undertaking.

For the purposes of the first subparagraph, point (b), the stochastic add-on shall be equal to 5 %, unless the undertaking demonstrates to the satisfaction of the supervisory authority that another percentage would more appropriately reflect its risk profile. For the purposes of that demonstration, the insurance and reinsurance undertaking shall use the set of scenarios referred to in paragraph 1, second subparagraph.

3.   Insurance and reinsurance undertakings that use the prudent deterministic valuation of the best estimate for clearly identified life obligations with options and guarantees that are deemed immaterial shall assume that the stochastic add-on referred to in paragraph 2, first subparagraph, point (b), is constant for calculating the Solvency Capital Requirement, including the loss-absorbing capacity of technical provisions referred to in Article 206.';

(8)   in Article 37(1), in the first subparagraph, the formula is replaced by the following:

$$\text{'}RM = CoC. \sum_{t \geq 0} \frac{\max(0{,}96^{t};\ 50\,\%).SCR(t)}{\left(1 + r(t+1)\right)^{t+1}}\text{';}$$

(9)   Article 39 is replaced by the following:

'*Article 39*

Cost-of-Capital rate

The Cost-of-Capital rate referred to in Article 77(5) of Directive 2009/138/EC shall be assumed to be equal to 4,75 %.';

(10)   Article 43 is amended as follows:

(a)   paragraph 2 is replaced by the following:

'2.   The techniques, data specifications and parameters used for determining the technical information on the relevant risk-free interest rate term structure referred to in Article 77e(1) of Directive 2009/138/EC, including the ultimate forward rate, shall be transparent, prudent, reliable, objective and consistent over time.';

(b)   the following paragraph 6 is added:

'6.   Notwithstanding paragraphs 2 to 5 of this Article, for the purposes of Article 43a(2), before changing the source of data used to determine the first smoothing point for a given currency, EIOPA shall inform the Commission, the European Parliament and the Council of the currency-related percentage which, based on the new data source, would most appropriately result in maintaining the first smoothing point at the same maturity as that applicable prior to the change in data source.';

(11)   the following Article 43a is inserted:

'*Article 43a*

Currency-related percentages for the determination of the first smoothing point

1.   At the application date of Directive (EU) 2025/2, for the determination of the first smoothing point for a currency in accordance with Article 77a(1) of Directive 2009/138/EC, the currency-related percentage above which the share of outstanding bonds with maturities longer than or equal to a given maturity among all outstanding bonds shall be considered sufficiently high within the meaning of Article 77a, paragraph 1, point (b), of that Directive shall be the following:

(a)   for the euro, the applicable percentage shall be the closest half-integer or integer percentage greater than or equal to the sum of:

(i)   1,5 percentage point;

(ii)   the lowest percentage of outstanding bonds which would result in the determination of a first smoothing point of 20 years on 28 January 2025;

(b)   for currencies other than the euro, where on 29 January 2027 the last maturity for which the relevant risk-free interest rate term structure is not extrapolated was at least 20 years, the applicable percentage shall be the same as that applicable for the euro;

(c)   for currencies other than those referred to in points (a) and (b), the applicable percentage shall be half of the one applicable for the euro.

2.   Where the data source to determine the first smoothing point for the euro is changed, the applicable currency-related percentage for that currency shall be the closest half-integer or integer percentage greater than or equal to the sum of 1,5 percentage point and the lowest percentage which, at the first reference date on which the new data source is used, results in a first smoothing point equal to that applicable during the previous calendar year.

By way of derogation, where the currency-related percentage determined in accordance with the first subparagraph does not result, at the first reference date on which the new data source is applied, in a first smoothing point equal to that applicable during the previous calendar year, the applicable percentage shall be the closest lower value which does result in such a first smoothing point.

For the purposes of this paragraph, Article 43(5) shall apply.';

(12) Article 44 is replaced by the following:

'*Article 44*

Relevant financial instruments to derive the basic risk-free interest rates

1. For each currency and maturity, the basic risk-free interest rates shall be derived on the basis of interest rate swap rates for interest rates of that currency. Interest rate swap rates that are not overnight indexed swap rates shall be adjusted to take account of credit risk.

2. For currencies where interest rate swap rates are not available from deep, liquid and transparent financial markets the rates of government bonds issued in that currency, adjusted to take account of the credit risk of the government bonds, shall be used to derive the basic risk free-interest rates, provided that, such government bond rates are available from deep, liquid and transparent financial markets.';

(13) in Article 45, the first sentence is replaced by the following:

'Where an adjustment for credit risk is applied pursuant to Article 44(1), the adjustment shall be determined in a transparent, prudent, reliable and objective manner that is consistent over time.';

(14) Article 46 is amended as follows:

(a) in paragraph 1, the second sentence is deleted;

(b) the following paragraphs 1a, 1b and 1c are inserted:

'1a. The extrapolated relevant risk-free interest rates for a currency shall be equal to the following:

$$r_{FSP+h} = \sqrt[FSP+h]{(1 + r_{FSP})^{FSP} \cdot exp(h \cdot f_h)} - 1$$

where:

(a) *FSP* denotes the first smoothing point as referred to in Article 77a(1) of Directive 2009/138/EC;

(b) *h* denotes the number of years exceeding the first smoothing point;

(c) r_{FSP} denotes the annualised discretely compounded relevant risk-free interest rate at a maturity equal to the first smoothing point;

(d) r_{FSP+h} denotes the annualised discretely compounded relevant risk-free interest rate at a maturity equal to the sum of the first smoothing point and *h*;

(e) f_h denotes the annualised continuously compounded forward rate calculated in accordance with paragraph 1b;

(f) *exp( )* denotes the exponential function.

1b. For the purposes of paragraph 1a, point (e), the forward rate f_h shall be equal to the following:

$$f_h = ln(1 + UFR) + [LLFR - ln(1 + UFR)] \cdot \frac{1 - exp(-a \cdot h)}{a \cdot h}$$

where:

(a) *UFR* denotes the ultimate forward rate referred to in Article 47;

(b) *LLFR* denotes the last liquid forward rate determined in accordance with paragraph 1c;

(c) *a* denotes the parameter determining the speed of the convergence towards the ultimate forward rate *UFR*;

(d) *ln( )* denotes the natural logarithm;

(e) *exp( )* denotes the exponential function.

The parameter *a* referred to in point (c) of the first subparagraph shall be equal to 40 % for the Swedish Krona and 11 % for other currencies.

1c. For the purposes of paragraph 1b, the last liquid forward rate for a currency as referred to in point (b) of that paragraph shall be a weighted average of the following forward rates:

(a) the annualised continuously compounded forward rate derived from the basic risk-free interest rate term structure for the period up to the first smoothing point and beginning at the closest shorter maturity where the basic risk-free interest rate term structure is derived on the basis of interest rate swap rates or government bonds;

(b) the annualised continuously compounded forward rate derived from the basic risk-free interest rate term structure and risk-adjusted interest rate swap rates or, as applicable, government bond rates for the periods from the first smoothing point to the maturities after the first smoothing point where interest rate swap rates or, as applicable, government bond rates are available from deep, liquid and transparent financial markets.

For the calculation of the weighted average referred to in the first subparagraph, the relevant annualised continuously compounded forward rates shall be weighted by the average notional amount of traded contracts of the interest rate swaps of the relevant maturity.

For currencies where no interest rate swap rates are available from deep, liquid and transparent financial markets for maturities after the first smoothing point, the last liquid forward rate shall be equal to the annualised continuously compounded forward rate determined in accordance with point (a) of the first subparagraph.

Notwithstanding the first subparagraph, where an insurance or reinsurance undertaking applies the volatility adjustment to calculate the weighted average referred to in the first paragraph, the volatility adjustment shall be added to the annualised continuously compounded forward rate referred to in point (a) of that subparagraph.';

(15) the following Article 46a is inserted:

'*Article 46a*

Phasing-in of the extrapolation

1. Where an insurance or reinsurance undertaking is allowed to apply the phasing-in mechanism referred to in Article 77a(2) of Directive 2009/138/EC, for each currency other than the Swedish Krona, the parameter α referred to in Article 46(1b), shall be decreased linearly at the beginning of each calendar year from 20 % during the year starting from 1 January 2027 to 11 % on 1 January 2032.

2. Where an insurance or reinsurance undertaking is allowed to apply the phasing-in mechanism referred to in Article 77a(2) of Directive 2009/138/EC, for the Swedish Krona, the parameter α referred to in Article 46(1b) shall be decreased linearly at the beginning of each calendar year from 70 % during the year starting from 1 January 2027 to 40 % on 1 January 2032.';

(16) in Article 47(1), the first sentence is replaced by the following:

'For each currency, the ultimate forward rate referred to in Article 46(1b), point (a) shall be stable over time and shall only change as a result of changes in long-term expectations.';

(17) in Article 49, paragraph 1 is replaced by the following:

'1. The reference portfolios referred to in Article 77d(4a) of Directive 2009/138/EC shall be determined in a transparent, prudent, reliable and objective manner that is consistent over time. The methods applied when determining the reference portfolios shall be the same for all currencies and countries.';

(18)   Articles 50 and 51 are replaced by the following:

'*Article 50*

Formula to calculate the spread underlying the volatility adjustment

For each currency and each country, the spread referred to in Article 77d(2) and (4) of Directive 2009/138/EC shall be equal to the following:

$$S = w_{gov} \cdot S_{gov} + w_{corp} \cdot S_{corp}$$

where:

(a) w_{gov} denotes the ratio of the value of government bonds included in the reference portfolio of assets for that currency or country and the value of all bonds, loans and securitisations included in that reference portfolio;

(b) S_{gov} denotes the average currency spread on government bonds included in the reference portfolio of assets for that currency or country;

(c) w_{corp} denotes the ratio of the value of bonds other than government bonds, loans and securitisations included in the reference portfolio of assets for that currency or country and the value of all bonds, loans and securitisations included in that reference portfolio;

(d) S_{corp} denotes the average currency spread on bonds other than government bonds, loans and securitisations included in the reference portfolio of assets for that currency or country.

For the purposes of this Article, "government bonds" means exposures to central governments and central banks.

Article 51

Risk-corrected spread

1.   For the purposes of Article 77d(3) and (4) of Directive 2009/138/EC, the portion of the average currency spread that is attributable to a realistic assessment of expected losses, unexpected credit risk or any other risk ("risk correction") shall be calculated in accordance with paragraphs 2 to 4 of this Article.

2.   The risk correction on government bonds issued by Member States of the EEA shall be equal to the following:

$$RC = 30\% \cdot min(S^+; LTAS^+) + 20\% \cdot max\{0; min(S^+ - LTAS^+; LTAS^+)\} + 15\% \cdot max(0; S^+ - 2 \cdot LTAS^+)$$

where:

(a) S^+ denotes the maximum of zero and the average spread of government bonds issued by Member States of the European Economic Area of the same duration, credit quality and asset class in the representative portfolio, as observed in financial markets;

(b) $LTAS^+$ denotes the maximum of 0 and the long-term average spread of government bonds issued by Member States of the European Economic Area of the same duration, credit quality and asset class in the representative portfolio, as observed in financial markets.

Without prejudice to the first subparagraph, the risk correction on government bonds issued by Member States of the European Economic Area shall never exceed the maximum of zero and 65 % of the long-term average spread of government bonds issued by Member States of the European Economic Area of the same duration, credit quality and asset class in the representative portfolio as observed in financial markets.

3. The risk correction on bonds other than government bonds issued by Member States of the European Economic Area, loans and securitisations in the representative portfolio, shall be equal to the following:

$$RC = 50\ \% \cdot min(S^+; LTAS^+) + 40\ \% \cdot max\ \{0;\ min(S^+ - LTAS^+, LTAS^+)\} + 30\ \% \cdot max(0;\ S^+ - 2 \cdot LTAS^+)$$

where:

(a) S^+ denotes the maximum of zero and the average spread of bonds other than government bonds issued by Member States of the European Economic Area, loans and securitisations of the same duration, credit quality and asset class in the representative portfolio as observed in financial markets;

(b) $LTAS^+$ denotes the maximum of 0 and the long-term average spread of bonds other than government bonds issued by Member States of the European Economic Area, loans and securitisations of the same duration, credit quality and asset class in the representative portfolio as observed in financial markets.

Without prejudice to the first subparagraph, the risk correction on bonds other than government bonds issued by Member States of the European Economic Area, loans and securitisations of the same duration, credit quality and asset class shall never exceed the maximum of zero and 125 % of the long-term average spread of bonds other than government bonds issued by Member States of the European Economic Area, loans and securitisations of the same duration, credit quality and asset class in the representative portfolio as observed in financial markets.

4. The long-term average spreads referred to in paragraph 2, point (b), and paragraph 3, point (b), shall be based on data relating to the last 30 years. Where a part of those data is not available, that part shall be replaced by constructed data. The constructed data shall be based on the available and reliable data relating to the last 30 years. Data that are not reliable shall be replaced by constructed data using that methodology. The constructed data shall be based on prudent assumptions.';

(19) the following Articles 51a and 51b are inserted:

'*Article 51a*

Credit spread sensitivity ratio

1. For each currency, the credit spread sensitivity ratio referred to in Article 77d, paragraph (3), point (b), and paragraph (4), point (b), shall be equal to the following:

$$CSSR = max\ [min\ (\frac{PVBP(MV^{FI})}{PVBP(BEL)};\ 1);\ 0]$$

where:

(a) *CSSR* denotes the credit spread sensitivity ratio of the insurance or reinsurance undertaking for a currency;

(b) *PVBP(MV^{FI})* denotes the price value of a basis point of the value of the investments in bonds, loans and securitisations of the insurance or reinsurance undertaking, calculated in accordance with paragraph 2;

(c) *PVBP(BEL)* denotes the price value of a basis point of the value of the best estimate of liabilities of the insurance or reinsurance undertaking, calculated in accordance with paragraph 3.

By way of derogation from the first subparagraph, where *PBVP(BEL)* for a given currency is equal to 0 or is negative, the credit spread sensitivity ratio for that currency shall be equal to 1.

2.   For each currency, the price value of a basis point of the investments in bonds, loans and securitisations of an insurance or reinsurance undertaking shall be equal to the following:

$$PVBP(MV^{FI}) = \frac{MV^{FI} - MV^{FI^*}}{VA^*}$$

where:

(a) MV^{FI} denotes the value of the investments in bonds, loans and securitisations of the insurance or reinsurance undertaking denominated in the given currency;

(b) VA^* denotes the notional volatility adjustment, calculated in accordance with Article 77d(3) of Directive 2009/138/EC, under the assumption that the credit spread sensitivity ratio is equal to 1;

(c) MV^{FI^*} denotes the value of investments in bonds, loans and securitisations of the insurance or reinsurance undertaking denominated in the given currency, under the assumption that for each asset the spread increases by an amount equal to the value of the notional volatility adjustment for all maturities.

For the purposes of points (a) and (c), in relation to unit-linked business, the insurance or reinsurance undertaking shall exclude fixed income investments which give rise to no or immaterial credit spread risk exposure for the undertaking.

3.   For each currency, the price value of a basis point of the best estimate of liabilities of an insurance or reinsurance undertaking shall be equal to the following:

$$PVBP(BEL) = \frac{BEL - BEL^*}{VA^*}$$

where:

(a) BEL denotes the value of the best estimate of liabilities of the insurance or reinsurance undertaking denominated in the given currency without a volatility adjustment, where the value is determined in accordance with Article 75 of Directive 2009/138/EC;

(b) VA^* denotes the notional volatility adjustment, calculated in accordance with Article 77d(3) of Directive 2009/138/EC, under the assumption that the credit spread sensitivity ratio is equal to 1;

(c) BEL^* denotes the value of the best estimate of liabilities of the insurance or reinsurance undertaking denominated in the given currency, where the value is determined in accordance with Article 75 of Directive 2009/138/EC, under the assumption that the notional volatility adjustment is applied to the relevant risk-free interest rate term structure.

For the purposes of point (c), the best estimate shall be revaluated, taking into account the effect of future discretionary benefits. However, for that revaluation, no impact of a change in credit spreads on the value of assets held by the undertaking shall be taken into account.

4.   Where the credit spread sensitivity ratio for a given currency was most recently calculated less than one year before the reference date for valuing the best estimate of liabilities, insurance and reinsurance undertakings shall not be required to recalculate the ratio, provided that they are able to demonstrate to the satisfaction of their supervisory authority that the ratio has not materially changed.

Article 51b

Credit spread sensitivity ratio for pegged currencies

1.   By way of derogation from Article 51a, where the domestic currency of a Member State is pegged to the euro, and the basic risk-free interest rate term structure for the euro, adjusted for currency risk, is used to calculate the best estimate with respect to insurance or reinsurance obligations denoted in that currency in accordance with Article 48(1), insurance and reinsurance undertakings may calculate one single credit spread sensitivity ratio for the euro and that currency. In that case, the credit spread sensitivity ratio shall be equal to the following:

$$CSSR_{euro,\ pegged\ currency} = max\ [min\ (\frac{PVBP(MV^{FI})}{PVBP(BEL)}; 1); 0]$$

where:

(a) $CSSR_{euro,\ pegged\ currency}$ denotes the credit spread sensitivity ratio of the insurance or reinsurance undertaking for both the euro and the pegged currency;

(b) $PVBP(MV^{FI})$ denotes the price value of a basis point of the value of the investments in bonds, loans and securitisations of the insurance or reinsurance undertaking denominated in both the euro and the pegged currency, calculated in accordance with paragraph 2;

(c) $PVBP(BEL)$ denotes the price value of a basis point of the value of the best estimate of liabilities of the insurance or reinsurance undertaking, denominated in both the euro and the pegged currency, calculated in accordance with paragraph 3.

By way of derogation from the first subparagraph, where $PBVP(BEL)$ for a given currency pegged to the euro is equal to 0 or is negative, the credit spread sensitivity ratio for that currency pegged to the euro shall be equal to 1.

2.   For both the euro and the pegged currency considered jointly, the price value of a basis point of the investments in bonds, loans and securitisations of an insurance or reinsurance undertaking shall be equal to the following:

$$PVBP(MV^{FI}) = \frac{MV^{FI} - MV^{FI*}}{VA^*}$$

where:

(a) MV^{FI} denotes the value of the investments in bonds, loans and securitisations of the insurance or reinsurance undertaking denominated in both the euro and the pegged currency, where the value is determined in accordance with Article 75 of Directive 2009/138/EC;

(b) VA^* denotes the maximum of the notional volatility adjustment for the euro and the notional volatility adjustment for the pegged currency, calculated in accordance with Article 77d(3) of Directive 2009/138/EC, under the assumption that the credit spread sensitivity ratio is equal to 1;

(c) MV^{FI*} denotes the value of investments in bonds, loans and securitisations of the insurance or reinsurance undertaking denominated in both the euro and the pegged currency, where the value is determined in accordance with Article 75 of Directive 2009/138/EC, under the assumption that for each asset the spread increases by an amount equal to the value of the notional volatility adjustment for all maturities.

For the purposes of points (a) and (c), in relation to unit-linked business, the insurance or reinsurance undertaking shall exclude fixed income investments which give rise to no or immaterial credit spread risk exposure for the undertaking.

3.   For both the euro and the pegged currency considered jointly, the price value of a basis point of the best estimate of liabilities of an insurance or reinsurance undertaking shall be equal to the following:

$$PVBP(BEL) = \frac{BEL - BEL^*}{VA^*}$$

where:

(a)   *BEL* denotes the sum of the value of the best estimate of liabilities of the insurance or reinsurance undertaking denominated in euro without a volatility adjustment and the value of the best estimate of liabilities denoted in the pegged currency without a volatility adjustment, and for which the basic risk-free rate term structure for the euro, adjusted for currency risk, is used in accordance with Article 48(1) of this Regulation, where both values are determined in accordance with Article 75 of Directive 2009/138/EC;

(b)   *VA** denotes the maximum of the notional volatility adjustment for the euro and the notional volatility adjustment for the pegged currency, calculated in accordance with Article 77d(3) of Directive 2009/138/EC, under the assumption that the credit spread sensitivity ratio is equal to 1;

(c)   *BEL** denotes the sum of the value of the best estimate of liabilities of the insurance or reinsurance undertaking denominated in euro, and the value of the best estimate of liabilities denominated in the pegged currency and for which the basic risk free rate term structure for the euro, adjusted for currency risk, is used in accordance with Article 48(1), where both values are determined in accordance with Article 75 of Directive 2009/138/EC, under the assumption that the notional volatility adjustment is applied to the relevant risk-free interest rate term structures.

For the purposes of point (c), a revaluation of the best estimate shall be performed, taking into account the effect of future discretionary benefits. However, for that revaluation, no impact of a change in credit spreads on the value of assets held by the undertaking shall be taken into account.

4.   Where the credit spread sensitivity ratio for a given currency was most recently calculated less than one year before the reference date for valuing the best estimate of liabilities, insurance and reinsurance undertakings shall not be required to recalculate the ratio, provided that they are able to demonstrate to the satisfaction of their supervisory authority that the ratio is not materially changed.';

(20)   the following Article 54a is inserted:

'*Article 54a*

Restructured assets

1.   For the purposes of paragraph 2, "restructured assets" shall mean assets the cash flows of which are dependent on the performance of other underlying financial assets.

2.   Without prejudice to Article 77b of Directive 2009/138/EC, insurance and reinsurance undertakings shall only be allowed to include restructured assets in the assigned portfolio of assets referred to in that Article, where they can demonstrate to the satisfaction of the supervisory authority all of the following:

(a)   the underlying financial assets of the restructured assets provide a sufficiently fixed level of income such that the cash-flows of the restructured asset are themselves sufficiently fixed;

(b)   the cash flows of the restructured asset are supported by features for loss absorbency ensuring that those cash flows remain sufficiently fixed where operating conditions change;

(c)   where the underlying financial assets include financial guarantees, those guarantees do not increase the matching adjustment in the calculation pursuant to Article 77c of Directive 2009/138/EC and Article 53 of this Regulation;

(d)   the undertaking is able to properly identify, measure, monitor, manage, control and report the risks of the underlying financial assets.';

(21)   in Article 68, paragraph 3 is replaced by the following:

'3.   Paragraphs 1 and 2 shall not apply to strategic participations as referred to in Article 171 of this Regulation, where the participating insurance or reinsurance undertaking has obtained the permission referred to in Article 92(1a), second subparagraph of Directive 2009/138/EC.';

(22)   in Article 70(1), point (e), point (i) is replaced by the following:

'(i)   exceed the notional Solvency Capital Requirement in the case of ring-fenced funds determined in accordance with Article 81(1);';

(23)   the following Articles 70a and 70b are inserted:

'*Article 70a*

Foreseeable dividends and distributions

1.   For the purposes of Article 70(1), point (b), the amount of foreseeable dividends and distributions shall be determined in accordance with the accrual approach set out in paragraphs 2 to 6 of this Article.

2.   The amount of dividends and distributions shall be deemed foreseeable where the administrative, management or supervisory body or the other persons who effectively run the undertaking have formally taken a decision or proposed a decision to the relevant body regarding the amount of dividend or distributions to be paid out.

3.   Before the administrative, management or supervisory body, or the other persons who effectively run the undertaking, have formally taken a decision or proposed a decision to the relevant body regarding the amount of dividend or distributions to be paid out, the amount of foreseeable dividend or distributions for the financial year under consideration shall be equal to the sum of the following:

(a)   the full amount of the likely dividend or distributions to be paid during the course of the ongoing financial year, corresponding to profits of the previous financial years;

(b)   either of the following:

(i)   the product of the dividend or distributions pay-out ratio and the cumulative interim profits realised or estimated, as the case may be, between the beginning of the ongoing financial year and the reference date for the calculation of the reconciliation reserve;

(ii)   the product of the estimated amount of dividend or distributions corresponding to profits for the entire ongoing financial year and the fraction of that financial year that has elapsed up to the reference date for the calculation of the reconciliation reserve.

For the purposes of the first subparagraph, "profits" shall have the same meaning as under the applicable accounting framework.

4.   For the purposes of paragraph 3, point (b), the dividend or distributions pay-out ratio or pay-out amount shall be determined on the basis of the dividend or distributions policy approved by the administrative, management or supervisory body. Where the dividend or distributions policy contains a pay-out range instead of a fixed value, the upper end of the range shall be used.

5.   In the absence of an approved dividend or distribution policy referred to in paragraph 4, or when, in the opinion of the supervisory authority, it is likely that the undertaking will not apply its dividend or distribution policy, or where that policy is not a prudent basis upon which to determine the amount of deduction, the dividend or distribution pay-out ratio or pay-out amount shall be based on the most prudent approach among the following:

(a)   the average dividend or distribution pay-out ratio or amount over the three financial years prior to the ongoing financial year;

(b)   the dividend or distribution pay-out ratio or amount of the financial year preceding the ongoing financial year;

(c)   relevant public announcements on the pay-out dividends or distributions.

6.   The undertaking may exclude from the calculation of the dividends or distributions pay-out ratio or pay-out amount as referred to in paragraph 4, points (a) and (b), exceptional payment or non-payment of dividends or distributions, provided it can demonstrate to the satisfaction of the supervisory authority, that such payment or non-payment is not representative of its dividend or distributions policy or past distribution practices.

Article 70b

Repayment and redemption requirements for the classification as own funds

1.   For the purposes of this Section, any transaction or arrangement which has the same economic effect as a repayment or redemption regarding the loss-absorbing capacity or the amount of eligible own funds shall be treated as a repayment or redemption.

2.   For the purposes of paragraph 1, share buy-backs shall be considered to have the same economic effect as repayment or redemption, unless the shares which are bought back are used to exercise stock options, either immediately or within no more than one month from the date of the execution of the share buy-back programme.';

(24)   Article 81 is amended as follows:

(a)   the title is replaced by the following:

'**Adjustment for ring-fenced funds**';

(b)   paragraph 1 is amended as follows:

(i)   in the first subparagraph, points (a) and (b) are replaced by the following:

'(a)   the restricted own-fund items within the ring-fenced fund;

(b)   the notional Solvency Capital Requirement for the ring-fenced fund.';

(ii)   the third subparagraph is replaced by the following:

'Where the undertaking calculates the Solvency Capital Requirement using an internal model, the notional Solvency Capital Requirement shall be calculated using that internal model, as if the undertaking pursued only the business included in the ring-fenced fund.';

(25)   in Article 84, paragraph 4, the first subparagraph is amended as follows:

(a)   point (a) is replaced by the following:

'(a)   the main purpose of the related undertaking is to hold and manage assets on behalf of the participating undertaking or of any other undertaking of the group to which the participating undertaking belongs;';

(b)   point (c) is replaced by the following:

'(c)   the related undertaking does not carry on any significant business other than investing for the benefit of the participating undertaking or for any other undertaking of the group to which the participating undertaking belongs.';

(26)   the following Article 89a is inserted:

'*Article 89a*

Simplified calculation for immaterial risk module or sub-module

1.   To assess whether one or several risk modules or sub-modules meet the conditions set out in Article 109(2) and (3) of Directive 2009/138/EC, insurance and reinsurance undertakings shall calculate each of such modules or sub-modules separately.

For the purposes of the first subparagraph, insurance and reinsurance undertakings may use a simplified calculation, provided that they comply with Article 88 and 89 of this Regulation, but not for the market risk module or any risk sub-module within that risk module.

2.   Where one or several risk modules or sub-modules, other than the market risk module or any risk sub-module within the market risk module, meet the conditions set out in Article 109(2) and (3) of Directive 2009/138/EC, the value of each of such risk modules or sub-modules may be calculated, for each reference date no later than three years from the reference date of the calculation referred to in paragraph 1 of this Article, as follows:

$$SCR_t^k = max(SCR_0^k; f^k . Volume_t^k)$$

where:

(a) SCR_t^k denotes the solvency capital requirement for a given risk-module or sub-module k which meets the conditions set out in Article 109(2) of Directive 2009/138/EC, at the reference date t;

(b) SCR_0^k denotes the outcome of the calculation of the risk-module or sub-module k, referred to in paragraph 1;

(c) $Volume_t^k$ denotes the undertaking-specific volume measure for the risk module or sub-module k, at the reference date t;

(d) f^k denotes the risk factor for the risk module or sub-module k, calculated in accordance with paragraph 3.

For the purposes of the first subparagraph, point (c), the insurance or reinsurance undertaking shall justify, to the satisfaction of the supervisory authority, the appropriateness of the undertaking-specific volume measure used.

3.   The risk factor referred to in paragraph 2, first subparagraph, point (d), shall be calculated as follows:

$$f^k = \frac{SCR_0^k}{Volume_0^k}$$

where $Volume_0^k$ denotes the undertaking-specific volume measure for the risk module or sub-module k, at the reference date of the calculation of paragraph 1.';

(27)   in Article 90b, the following paragraph 6 is added:

'6.   For the purposes of paragraphs 1 to 5, Article 120(1a) shall apply.';

(28)   the following Article 107a is inserted:

'*Article 107a*

Simplified calculation of the risk mitigating effect for reinsurance arrangements, derivatives, or securitisations

1.   Where Article 88 is complied with, insurance and reinsurance undertakings may calculate the risk-mitigating effect on underwriting and market risk of a reinsurance arrangement, securitisation or derivative referred to in Article 196 with an external counterparty i as follows:

$$RM_i = \frac{|EAD_i|}{\sum_{CE} |EAD_{CE}|} . RM_{total}$$

where:

(a) $\sum_{CE} |EAD_{CE}|$ denotes the sum of the absolute values of the exposures at default of the reinsurance arrangement, special purpose vehicle, securitisation and derivative towards each external counterparty CE;

(b) $|EAD_i|$ denotes the absolute value of the exposure at default of the reinsurance arrangement, special purpose vehicle, securitisation and derivative towards the external counterparty i;

(c) RM_{total} denotes the total risk-mitigating effect calculated in accordance with paragraph 3;

(d)   the sum covers all counterparty exposures.

2.   For the purposes of paragraph 1, points (a) and (b), the value of the exposure at default of a reinsurance arrangement and securitisation towards a counterparty shall be the value of the best estimate of the amounts recoverable from the reinsurance arrangement and securitisation towards that counterparty.

3.   For the purposes of paragraph 1, point (c), the total risk mitigating effect shall be equal to the difference between the following capital requirements:

(a)   the hypothetical basic solvency capital requirement under the assumptions that the counterparty default risk module is equal to 0 and that the reinsurance arrangement, special purpose vehicle, securitisation or derivative included in the scope of the simplified calculation referred to in paragraph 1 did not exist;

(b)   the hypothetical basic solvency capital requirement under the assumptions that the counterparty default risk module is equal to 0.';

(29)   Article 117 is amended as follows:

(a)   in paragraph 2, point (b) is replaced by the following:

'(b) $\sigma_{(res,s)}$ denotes the standard deviation for non-life reserve risk of segment s as set out in paragraphs 4 and 5;';

(b)   paragraph 3 is replaced by the following:

'3.   For all segments set out in Annex II, the standard deviation for non-life premium risk of a particular segment shall be equal to the product of the standard deviation for non-life gross premium risk of the segment set out in Annex II and the adjustment factor for non-proportional reinsurance, where such non-proportional reinsurance is in place for that particular segment, or a factor of 100 % in other cases. For segments 1, 4 and 5 set out in Annex II the adjustment factor for non-proportional reinsurance shall be equal to 80 %. For all other segments set out in Annex II the adjustment factor for non-proportional reinsurance shall be equal to 100 %.';

(c)   the following paragraphs 4 and 5 are added:

'4.   For all segments set out in Annex II, the standard deviation for non-life reserve risk of a particular segment shall be equal to the product of the standard deviation for non-life gross reserve risk of the segment set out in Annex II and the adjustment factor for non-proportional reinsurance, where such non-proportional reinsurance is in place for that particular segment, or a factor of 100 % in other cases.

Where the non-proportional reinsurance is an adverse development cover that meets the conditions set out in the third subparagraph, the adjustment factor for non-proportional reinsurance referred to in the first subparagraph shall be equal to the following:

$$Adjust_{(NP,s)} = max(0 \; ; \frac{V_{(net,res,s)} \cdot 3 \cdot \sigma_{(res,s,\ annex)} - ADC_{(rec,s)} \cdot C \cdot Pr + Par}{V_{(net,res,s)} \cdot 3 \cdot \sigma_{(res,s,\ annex)}})$$

where:

(a) $V_{(net,res,s)}$ denotes the nominal best estimate of the insurance and reinsurance obligations in the segment after deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles of the adverse development cover;

(b) $\sigma_{(res,s,\ annex)}$ denotes the standard deviation for non-life reserve risk of segment s as set out in Annex II;

(c) $ADC_{(rec,s)}$ denotes the adverse development cover recovery under the reserve risk scenario;

(d) Par denotes the maximum of the additional reinsurance premium, or the equivalent thereof, and zero;

(e) C denotes the cession to the reinsurer, expressed as percentage of the claim amounts between attachment and detachment points that the reinsurance covers;

(f) Pr denotes the prudency factor, which shall be equal to 100 %.

The adverse development covers referred to in the second subparagraph shall meet the following conditions:

(a)   each adverse development cover is only applied to one specific group of policies with the same risk characteristics within the same segment, and has a separate and distinct attachment and detachment point;

(b)   the attachment point referred to in point (a) does not exceed the product of $V_{(net,res,s)}$ referred to in point (a) of the second subparagraph and the sum of 1 and $\sigma_{(res,s, annex)}$ referred to in point (b) of that subparagraph.

For non-proportional reinsurance other than those referred to in the second subparagraph, the adjustment factor shall be 100 %.

5.   The adverse development cover recovery referred to in paragraph 4, second subparagraph, point (c) shall be equal to the following:

$$ADC_{(rec,s)} = min\ [V_{(net,res,s)} \cdot (1 + 3 \cdot \sigma_{(res,s,annex)}) - R_{(ap)}; R_{(cs)}]$$

where:

(a) $V_{(net,res,s)}$ denotes the nominal best estimate of the insurance and reinsurance obligations in the segment after deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles of the adverse development cover;

(b) $\sigma_{(res,s,annex)}$ denotes the standard deviation for non-life reserve risk of segment s as set out in Annex II;

(c) $R_{(ap)}$ denotes the reinsurance structure attachment point;

(d) $R_{(cs)}$ denotes the size of the adverse development cover that is available to the insurance or reinsurance undertaking.';

(30)   in Article 120, the following paragraph 1a is inserted:

'1a.   For the purposes of paragraph 1, the following definitions shall apply:

(a)   "windstorm" means a meteorological peril involving storm events characterised by high-velocity winds generated by atmospheric disturbances, including extratropical cyclones and tropical cyclones; windstorm includes storm surge, where materially present, and does not include convective storms;

(b)   "earthquake" means a geophysical peril characterised by a sudden movement of a block of the Earth's crust along a geological fault and associated ground shaking; earthquake does not include tsunami or fire following the seismic event;

(c)   "flood" means a hydrological peril involving the temporary inundation of normally dry land by water resulting from the overflow of inland or surface waters, including riverine or fluvial flooding, surface water or pluvial flooding caused by rainfall, or flash floods, whether resulting from fluvial, pluvial, or combined causes; flood does not include storm surge;

(d)   "hail" means a meteorological peril involving the fall of solid ice stones or pellets and includes severe convective storms, tornadoes and lightning;

(e)   "subsidence" means a geophysical peril involving the sinking of the ground due to natural or human-induced changes in subsurface conditions, including the shrinkage or swelling of clay soils.';

(31)   in Article 123(7), the formula is replaced by the following:

$$'SI_{(flood,r,i)} = SI_{(property,r,i)} + SI_{(onshore\text{-}property,\ r,i)} + 1,5 \cdot SI_{(motor,r,i)}';$$

(32)   in Article 124(7), the formula is replaced by the following:

$$'SI_{(hail,r,i)} = SI_{(property,r,i)} + SI_{(onshore\text{-}property,\ r,i)} + 10 \cdot SI_{(motor,r,i)}';$$

(33) Article 125 is replaced by the following:

'*Article 125*

Subsidence risk sub-module

1. The capital requirement for subsidence risk shall be equal to the following:

$$SCR_{subsidence} = \sqrt{\left(\sum_{(r,s)} CorrS_{(r,s)} * SCR_{(subsidence,r)} * SCR_{(subsidence,s)} \right) + SCR^2_{(subsidence,\ other)}}$$

where:

(a) the sum includes all possible combinations *(r,s)* of the regions set out in Annex VIIIa;

(b) $CorrS_{(r,s)}$ denotes the correlation coefficient for subsidence risk for region *r* and region *s* as set out in Annex VIIIa;

(c) $SCR_{(subsidence,r)}$ and $SCR_{(subsidence,s)}$ denote the capital requirements for subsidence risk in region *r* and *s* respectively;

(d) $SCR_{(subsidence,\ other)}$ denotes the capital requirement for subsidence risk in regions other than those set out in Annex XIII.

2. For all regions set out in Annex VIIIa, the capital requirement for subsidence risk in a particular region r shall be equal to the loss in basic own funds of insurance and reinsurance undertakings that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles, is equal to the following:

$$L_{(subsidence,r)} = \sqrt{\sum_{(i,j)} Corr_{(subsidence,r,i,j)} * WSI_{(subsidence,\ r,\ i)} * WSI_{(subsidence,\ r,j)}}$$

where:

(a) the sum includes all possible combinations of risk zones *(i,j)* of region *r* set out in Annex IX;

(b) $Corr_{(subsidence,r,i,j)}$ denotes the correlation coefficient for subsidence risk in risk zones *i* and *j* of region *r* set out in Annex XXVI;

(c) $WSI_{(subsidence,r,i)}$ and $WSI_{(subsidence,r,j)}$ denote the weighted sums insured for subsidence risk in risk zones *i* and *j* of region *r* set out in Annex IX.

3. For all regions set out in Annex VIIIa and all risk zones of those regions set out in Annex IX, the weighted sum insured for subsidence risk in a particular risk zone *i* of a particular region *r* shall be equal to the following:

$$WSI_{(subsidence,i)} = Q_{(subsidence,r)} \cdot W_{(subsidence,r,i)} \cdot SI_{(subsidence,r,i)}$$

where:

(a) $W_{(subsidence,r,i)}$ denotes the risk weight for subsidence risk in risk zone *i* of region *r* set out in Annex X;

(b) $SI_{(subsidence,r,i)}$ denotes the sum insured of the insurance or reinsurance undertaking for lines of business 7 and 19 as set out in Annex I in relation to contracts that cover subsidence risk of residential buildings in subsidence zone *i* of region *r*;

(c) $Q_{(subsidence,r)}$ denotes the subsidence risk factor for region *r* as set out in Annex VIIIa.

Where the amount determined for a particular risk zone in accordance with the first subparagraph exceeds an amount (referred to in this subparagraph as "the lower amount") equal to the sum of the potential losses, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles, that the insurance or reinsurance undertaking could suffer for subsidence risk in that risk zone, taking into account the terms and conditions of its specific policies, including any contractual payment limits, the insurance or reinsurance undertaking may, as an alternative calculation, determine the weighted sum insured for subsidence risk in that risk zone as the lower amount.';

(34)   Article 129(1) is amended as follows:

(a)   the formula is replaced by the following:

$$\text{'}L_{motor} = max\ (8\ 100\ 000;\ 67\ 500 \cdot \sqrt{N_a + 0,05 \cdot N_b + 0,95 \cdot min(N_b;\ 20\ 000)}\text{'};$$

(b)   points (a) and (b) are replaced by the following:

      '(a) N_a is the number of vehicles insured by the insurance or reinsurance undertaking in lines of business 4 and 16 as set out in Annex I with a deemed policy limit above EUR 32 400 000;

      (b) N_b is the number of vehicles insured by the insurance or reinsurance undertaking in lines of business 4 and 16 as set out in Annex I with a deemed policy limit below or equal to EUR 32 400 000.';

(35)   Article 130 is amended as follows:

(a)   in paragraph 2, point (a), 'EUR 250 000' is replaced by 'EUR 337 500';

(b)   the following paragraph 4 is added:

      '4.   For the calculation of the hypothetical capital requirement referred to in Article 196(a), the identification of the set of sea, lake, river and canal vessels corresponding to the maximum sum insured in accordance with paragraph 2 of this Article, and of the set of oil and gas offshore platforms corresponding to the maximum sum insured in accordance with paragraph 3 of this Article, shall both take into account the existence of reinsurance arrangements, special purpose vehicles and securitisations.';

(36)   in Article 131, the following subparagraph is added:

'For the calculation of the hypothetical capital requirement referred to in Article 196(a), the identification of the set of aircrafts corresponding to the largest sum insured in accordance with this Article shall take into account the existence of reinsurance arrangements, special purpose vehicles and securitisations.';

(37)   in Article 132, the following paragraph 4 is added:

      '4.   For the purposes of the calculation of the hypothetical capital requirement referred to in Article 196(a), the identification of the set of buildings corresponding to the largest fire risk concentration in accordance with this Article shall take into account the existence of reinsurance arrangements, special purpose vehicles and securitisations.';

(38)   in Article 142(6), the second subparagraph is replaced by the following:

'The events referred to in the first subparagraph shall apply uniformly to all insurance and reinsurance contracts concerned. In relation to reinsurance contracts, the event referred to in points (a) and (b) of the first subparagraph shall apply to the underlying insurance contracts.';

(39) Article 148 is amended as follows:

(a) in paragraph 2, point (b) is replaced by the following:

'(b) $\sigma_{(res,s)}$ denotes the standard deviation for NSLT health reserve risk of segment s as set out in paragraphs 4 and 5;';

(b) in paragraph 3, the first sentence is replaced by the following:

'For all segments set out in Annex XIV, the standard deviation for NSLT health premium risk of a particular segment shall be equal to the product of the standard deviation for NSLT health gross premium risk of the segment set out in Annex XIV and the adjustment factor for non-proportional reinsurance, where such non-proportional reinsurance is in place for that particular segment, or a factor of 100 % in other cases.';

(c) the following paragraphs 4 and 5 are added:

'4. For all segments set out in Annex XIV, the standard deviation for NSLT reserve risk of a particular segment shall be equal to the product of the standard deviation for NSLT gross reserve risk of the segment set out in Annex XIV and the adjustment factor for non-proportional reinsurance, where such non-proportional reinsurance is in place for that particular segment, or a factor of 100 % in other cases.

Where the non-proportional reinsurance is an adverse development cover that meets the conditions set out in the fourth subparagraph, the adjustment factor for non-proportional reinsurance referred to in the first subparagraph shall be equal to the following:

$$Adjust_{(NP,s)} = max\ (0;\ \frac{V_{(net,res,s)}\ \cdot\ 3\ \cdot\ \sigma_{(res,s,\ annex)} -\ ADC_{(rec,s)}\ \cdot\ C\ \cdot\ Pr + Par}{V_{(net,res,s)}\ \cdot\ 3\ \cdot\ \sigma_{(res,s,\ annex)}})$$

where:

(a) $V_{(net,res,s)}$ denotes the nominal best estimate of the insurance and reinsurance obligations in the segment net of the amounts recoverable from reinsurance contracts and special purpose vehicles of the adverse development cover;

(b) $\sigma_{(res,s,\ annex)}$ denotes the standard deviation for NSLT health reserve risk of segment s as set out in Annex XIV;

(c) $ADC_{(rec,s)}$ denotes the adverse development cover recovery under the reserve risk scenario;

(d) Par denotes the maximum of the additional reinsurance premium, or the equivalent thereof, and zero;

(e) C denotes the cession to the reinsurer, expressed as percentage of the claim amounts between attachment and detachment points that the reinsurance covers;

(f) Pr denotes the prudency factor, which shall be equal to 100 %.

The adverse development covers referred to in the second subparagraph shall meet the following conditions:

(a) each adverse development cover is only applied to one specific group of policies with the same risk characteristics within the same segment, and has a separate and distinct attachment and detachment point;

(b) the attachment point referred to in point (a) does not exceed the product of $V_{(net,res,s)}$ referred to in the second subparagraph, point (a), and the sum of 1 and $\sigma_{(res,s,annex)}$ referred to in point (b) of that subparagraph.

For non-proportional reinsurance other than those referred to in the second subparagraph, the adjustment factor shall be 100 %.

5. The adverse development cover recovery referred to in paragraph 4, second subparagraph, point (c) shall be equal to the following:

$$ADC_{(rec,s)} = min[V_{(net,res,s)} \cdot (1 + 3 \cdot \sigma_{(res,s,annex)}) - R_{(ap)}; R_{(cs)}]$$

where:

(a) $V_{(net,res,s)}$ denotes the nominal best estimate of the insurance and reinsurance obligations in the segment net of the amounts recoverable from reinsurance contracts and special purpose vehicles of the adverse development cover;

(b) $R_{(ap)}$ denotes the reinsurance structure attachment point;

(c) $R_{(cs)}$ denotes the size of the adverse development cover that is available to the insurance or reinsurance undertaking;

(d) $\sigma_{(res,s,\ annex)}$ denotes the standard deviation for NSLT health reserve risk of segment s as set out in Annex XIV.';

(40) Article 157 is replaced by the following:

'*Article 157*

Health expense risk sub-module

The capital requirement for health expense risk shall be equal to the loss in basic own funds of insurance and reinsurance undertakings that would result from the combination of the following instantaneous permanent changes:

(a) an increase of 10 % in the amount of expenses taken into account in the calculation of technical provisions;

(b) an increase of 1 percentage point to the expense inflation rate (expressed as a percentage) used for the calculation of technical provisions.

For reinsurance obligations, insurance and reinsurance undertakings shall apply those changes to their own expenses and, where relevant, to the expenses of the ceding undertakings.';

(41) in Article 164, paragraph 3 is replaced by the following:

'3. The correlation parameter $Corr_{(i,j)}$ referred to in paragraph 2 shall be equal to the item set out in row i and in column j of the following correlation matrix:

i \\ j	Interest rate	Equity	Property	Spread	Concentration	Currency
Interest rate	1	A	A	B	0	0,25
Equity	A	1	0,75	0,75	0	0,25
Property	A	0,75	1	0,5	0	0,25
Spread	B	0,75	0,5	1	0	0,25
Concentration	0	0	0	0	1	0
Currency	0,25	0,25	0,25	0,25	0	1

The parameter A shall be equal to 0 where the capital requirement for interest rate risk set out in Article 165 is the capital requirement referred to in point (a) of that Article. In all other cases, the parameter A shall be equal to 0,5.

The parameter B shall be equal to 0 where the capital requirement for interest rate risk set out in Article 165 is the capital requirement referred to in point (a) of that Article. In all other cases, the parameter B shall be equal to 0,25.';

(42)   in Article 165, paragraph 1 is replaced by the following:

'1.   The capital requirement for interest rate risk referred to in Article 105(5), second subparagraph, point (a), of Directive 2009/138/EC shall be equal to the larger of the following:

(a)   the sum of the capital requirements for each currency for the risk of an increase in the term structure of interest rates as set out in Article 166 of this Regulation;

(b)   the sum of the capital requirements for each currency for the risk of a decrease in the term structure of interest rates as set out in Article 167 of this Regulation.

By way of derogation from the first subparagraph, where the domestic currency of a Member State is pegged to the euro, and the basic risk-free interest rate term structure for the euro, adjusted for currency risk, is used to calculate the best estimate with respect to insurance or reinsurance obligations denoted in that currency in accordance with Article 48(1), insurance and reinsurance undertakings may calculate one single capital requirement for the risk of a joint increase or, as applicable, decrease in the term structure of interest rates denominated in euro and that currency.';

(43)   Article 166 is amended as follows:

(a)   paragraphs 1 and 2 are replaced by the following:

'1.   The capital requirement for the risk of an increase in the term structure of interest rates for a given currency shall be equal to the loss in the basic own funds that would result from an instantaneous increase in basic risk-free interest rates for that currency at different maturities. The increased basic risk-free interest rate for a given maturity shall be calculated in accordance with paragraphs 2 and 2a.

2.   For a given currency and for maturities up to and including the first smoothing point, the increased basic risk-free interest rate shall be equal to the following:

$$r_m^{up} = r_m \cdot (1 + s_m^{up}) + b_m^{up}$$

where:

(a) m denotes the maturity in years;

(b) r_m^{up} denotes the increased risk-free interest rate at maturity m;

(c) r_m denotes the current risk-free interest rate at maturity m;

(d) s_m^{up} and b_m^{up} shall be calculated as follows:

(i)   for maturities m lower than one year, s_m^{up} shall be equal to 61 % and b_m^{up} shall be equal to 2,14 %;

(ii)   for maturities m expressed in years which are an integer number between 1 and 50 years, s_m^{up} and b_m^{up} shall take values in accordance with the following table:

Maturity m (in years)	s_m^{up}	b_m^{up}
1	61 %	2,14 %
2	53 %	1,86 %
3	49 %	1,72 %
4	46 %	1,61 %
5	45 %	1,58 %
6	41 %	1,44 %
7	37 %	1,30 %

Maturity m (in years)	s_m^{up}	b_m^{up}
8	34 %	1,19 %
9	32 %	1,12 %
10	30%	1,05 %
11	30 %	1,05 %
12	30 %	1,05 %
13	30 %	1,05 %
14	29 %	1,02 %
15	28 %	0,98 %
16	28 %	0,98 %
17	27 %	0,95 %
18	26 %	0,91 %
19	26 %	0,91 %
20	25 %	0,88 %
21	25 %	0,87 %
22	24 %	0,85 %
23	24 %	0,82 %
24	23 %	0,80 %
25	22 %	0,78 %
26	22 %	0,76 %
27	21 %	0,74 %
28	21 %	0,72 %
29	20 %	0,70 %
30	20 %	0,69 %
31	20 %	0,70 %
32	20 %	0,71 %
33	20 %	0,71 %
34	20 %	0,71 %
35	20 %	0,71 %
36	20 %	0,72 %
37	21 %	0,72 %
38	21 %	0,72 %
39	21 %	0,73 %
40	21 %	0,73 %
41	21 %	0,74 %
42	21 %	0,74 %

Maturity m (in years)	s_m^{up}	b_m^{up}
43	21 %	0,75 %
44	21 %	0,75 %
45	21 %	0,75 %
46	21 %	0,75 %
47	21 %	0,75 %
48	21 %	0,74 %
49	21 %	0,74 %
50	21 %	0,73 %

(iii) for maturities m of at least 60 years, b_m^{up} shall be equal to 0 %; for maturities of at least 90 years, s_m^{up} shall be equal to 20 %;

(iv) for other maturities m not specified in points (i) to (iii), the values of s_m^{up} and b_m^{up} shall be linearly interpolated.';

(b) the following paragraph 2a is inserted:

'2a. For a given currency and for maturities larger than the first smoothing point, the increased basic risk-free interest rates shall be derived by applying the extrapolation method referred to in Article 77a of Directive 2009/138/EC to a stressed relevant risk-free interest rate term structure, where that stressed relevant risk-free interest rate term structure is determined by applying the following assumptions:

(a) the stressed ultimate forward rate shall be equal to the sum of 15 basis points and the current ultimate forward rate;

(b) the stress to the last liquid forward rates shall be determined by applying the weights used for the determination of the current last liquid forward rate referred to in Article 46(1c) to the stresses applied to the interest rates corresponding to maturities referred to in points (a) and (b) of that Article, under the assumption that paragraph 2 of this Article applies to those maturities.';

(44) Article 167 is amended as follows:

(a) paragraphs 1 and 2 are replaced by the following:

'1. The capital requirement for the risk of a decrease in the term structure of interest rates for a given currency shall be equal to the loss in the basic own funds that would result from an instantaneous decrease in basic risk-free interest rates for that currency at different maturities where the decreased basic risk-free interest rate for a given maturity shall be calculated in accordance with paragraphs 2 and 2a.

In any case, no decreased basic risk-free interest rate shall be lower than a term-dependent floor. The floor shall be determined as follows:

(a) for maturities between 1 and 7 years, the floor shall be equal to – 1,25 %;

(b) for maturities of at least 20 years, the floor shall be equal to – 0,893 %;

(c) for maturities between 7 years and 20 years, the floor shall be linearly interpolated.

2. For a given currency and for maturities up to and including the first smoothing point, the decreased basic risk-free interest rate shall be equal to the following:

$$r_m^{down} = r_m \cdot (1 - s_m^{down}) - b_m^{down}$$

where:

(a) m denotes the maturity in years;

(b) r_m^{down} denotes the decreased risk-free interest rateat maturity m;

(c) r_m denotes the current risk-free interest rate at maturity m;

(d) s_m^{down} and b_m^{down} shall be calculated as follows:

   (i)   for maturities m lower than one year, s_m^{down} shall be equal to 58 % and b_m^{down} shall be equal to 1,16 %;

   (ii)   for maturities m expressed in years which are an integer number between 1 and 50 years, s_m^{down} and b_m^{down} shall take values in accordance with the following table:

Maturity m (in years)	s_m^{down}	b_m^{down}
1	58 %	1,16 %
2	51 %	0,99 %
3	44 %	0,83 %
4	40 %	0,74 %
5	40 %	0,71 %
6	38 %	0,67 %
7	37 %	0,63 %
8	38 %	0,62 %
9	39 %	0,61 %
10	40 %	0,61 %
11	41 %	0,60 %
12	42 %	0,60 %
13	43 %	0,59 %
14	44 %	0,58 %
15	45 %	0,57 %
16	47 %	0,56 %
17	48 %	0,55 %
18	49 %	0,54 %
19	49 %	0,52 %
20	50 %	0,50 %
21	49 %	0,49 %

Maturity m (in years)	s_m^{down}	b_m^{down}
22	50 %	0,49 %
23	51 %	0,48 %
24	51 %	0,48 %
25	52 %	0,47 %
26	52 %	0,46 %
27	53 %	0,45 %
28	53 %	0,44 %
29	53 %	0,42 %
30	53 %	0,41 %
31	53 %	0,40 %
32	53 %	0,39 %
33	54 %	0,37 %
34	54 %	0,36 %
35	54 %	0,35 %
36	54 %	0,34 %
37	55 %	0,33 %
38	55 %	0,32 %
39	56 %	0,31 %
40	57 %	0,30 %
41	57 %	0,29 %
42	58 %	0,28 %
43	59 %	0,27 %
44	61 %	0,26 %
45	62 %	0,25 %
46	62 %	0,23 %
47	63 %	0,22 %
48	64 %	0,21 %
49	64 %	0,19 %
50	65 %	0,18 %

(iii)   for maturities m of at least 60 years, b_m^{down} shall be equal to 0 %; for maturities of at least 90 years, s_m^{down} shall be equal to 20 %;

(iv)   for other maturities m not specified in points (i) to (iii), the values of s_m^{down} and b_m^{down} shall be linearly interpolated.';

(b) the following paragraph 2a is inserted:

'2a. For a given currency and for maturities larger than the first smoothing point, the decreased basic risk-free interest rates shall be derived by applying the extrapolation method referred to in Article 77a of Directive 2009/138/EC to a stressed relevant risk-free interest rate term structure, where the stressed relevant risk-free interest rate term structure is determined by applying the following assumptions:

(a) the stressed ultimate forward rate shall be equal to the difference between the current ultimate forward rate and 15 basis points;

(b) the stress to the last liquid forward rates shall be determined by applying the weights used for the determination of the current last liquid forward rate referred to in Article 46(1c) to the stresses applied to the interest rates corresponding to maturities referred to in points (a) and (b) of that Article under the assumption that paragraph 2 of this Article applies to those maturities.';

(45) in Article 168a(1), point (f) is replaced by the following:

'(f) each company fulfils at least one of the following conditions for each of the last three financial years ending prior to the date on which the Solvency Capital Requirement is being calculated:

(i) the annual turnover of the company exceeds EUR 12 800 000;

(ii) the balance sheet total of the company exceeds EUR 12 800 000;

(iii) the number of staff employed by the company exceeds 50;';

(46) Article 169 is amended as follows:

(a) in paragraph 1, point (b) is replaced by the following:

'(b) an instantaneous decrease equal to 22 % in the value of type 1 equity investments that are treated as long-term equity investments in accordance with Article 105a of Directive 2009/138/EC;';

(b) in paragraph 2, point (b) is replaced by the following:

'(b) an instantaneous decrease equal to 22 % in the value of type 2 equity investments that are treated as long-term equity investments in accordance with Article 105a of Directive 2009/138/EC;';

(c) in paragraph 3, point (b) is replaced by the following:

'(b) an instantaneous decrease equal to 22 % in the value of qualifying infrastructure equity investments that are treated as long-term equity investments in accordance with Article 105a of Directive 2009/138/EC;';

(d) in paragraph 4, point (b) is replaced by the following:

'(b) an instantaneous decrease equal to 22 % in the value of qualifying infrastructure corporate equity investments that are treated as long-term equity investments in accordance with Article 105a of Directive 2009/138/EC;';

(e) the following paragraph 5 is added:

'5. For the purposes of paragraphs 1 to 4, where the value of an equity investment is negative, and where the losses that may be incurred on the investment can exceed the amount invested by the insurance and reinsurance undertaking, the following shall apply:

(a) the term "value of type 1 equity investments" shall mean "absolute value of type 1 equity investments";

(b) the term "value of type 2 equity investments" shall mean "absolute value of type 2 equity investments";

(c)   the term "value of qualifying infrastructure equity investments" shall mean "absolute value of qualifying infrastructure equity investments"; and

(d)   the term "value of qualifying infrastructure corporate equity investments" shall mean "absolute value of qualifying infrastructure corporate equity investments".

The first subparagraph shall not apply to any short equity position.

For the purposes of paragraphs 1 to 4, insurance and reinsurance undertakings shall assume that equity investments with negative values other than those referred to in the first subparagraph have a value of 0.';

(47)   Article 170 is amended as follows:

(a)   in paragraph 1, the introductory wording is replaced by the following:

'Where an insurance or reinsurance undertaking has received supervisory approval to apply the provisions set out in Article 304(1) of Directive 2009/138/EC before 29 January 2027 the capital requirement for type 1 equities shall be equal to the loss in the basic own funds that would result from the following instantaneous decreases:';

(b)   in paragraph 2, the introductory wording is replaced by the following:

'Where an insurance or reinsurance undertaking has received supervisory approval to apply the provisions set out in Article 304(1) of Directive 2009/138/EC before 29 January 2027 the capital requirement for type 2 equities shall be equal to the loss in the basic own funds that would result from the following instantaneous decreases:';

(c)   in paragraph 3, the introductory wording is replaced by the following:

'Where an insurance or reinsurance undertaking has received supervisory approval to apply the provisions set out in Article 304(1) of Directive 2009/138/EC before 29 January 2027 the capital requirement for qualifying infrastructure equities shall be equal to the loss in the basic own funds that would result from the following instantaneous decreases:';

(d)   in paragraph 4, the introductory wording is replaced by the following:

'Where an insurance or reinsurance undertaking has received supervisory approval to apply the provisions set out in Article 304(1) of Directive 2009/138/EC before 29 January 2027 the capital requirement for qualifying infrastructure corporate equities shall be equal to the loss in the basic own funds that would result from the following instantaneous decreases:';

(48)   in Article 171, the introductory wording is replaced by the following:

'For the purposes of Article 169(1), point (a), 169(2), point (a), 169(3), point (a), and 169(4), point (a), and of Article 170(1), point (b), 170(2), point (b), 170(3), point (b) and 170(4), point (b), equity investments of a strategic nature shall mean equity investments to which the look-through approach does not apply and for which the participating insurance or reinsurance undertaking demonstrates the following:';

(49)   Article 171a is replaced by the following:

'*Article 171a*

Long-term equity investments: Demonstration of ability to avoid forced sales

1.   For the purposes of demonstrating their ability to avoid forced selling of equity investments on an ongoing basis and under stressed conditions, as referred to in Article 105a(1), second subparagraph, point (d) of Directive 2009/138/EC, insurance or reinsurance undertakings shall use either of the following approaches:

(a)   the methodologies referred to in Article 171b of this Regulation to assess whether they can avoid forced sales; or

(b)   the forced selling test set out in Article 171c of this Regulation.

2.   Insurance or reinsurance undertakings shall consistently apply the selected approach for the purposes of demonstrating compliance with Article 105a(1), second subparagraph, point (d) of Directive 2009/138/EC.

Notwithstanding the first subparagraph, insurance or reinsurance undertakings may change the selected approach where they demonstrate ex ante to the satisfaction of the supervisory authority that such change is justified, taking into account the risk profile of the undertaking, the amount of equity investments intended to be classified as long-term investments, and the nature, scale and complexity of the risks of the undertaking.';

(50)   the following Articles 171b, 171c, and 171d are inserted:

'*Article 171b*

Long-term equity investments: methodologies to avoid forced sales

1.   For the purposes of Article 171a(1), point (a), the insurance or reinsurance undertaking shall be able to demonstrate to the satisfaction of the supervisory authority that it complies with either of the following conditions:

(a)   a sufficient amount of particular homogeneous risk groups of the life insurance and reinsurance liabilities, whose Macaulay duration exceeds 9,5 years, are illiquid within the meaning of paragraph 2; or

(b)   a sufficient liquidity buffer is in place for non-life insurance and reinsurance obligations, calculated in accordance with paragraphs 3 to 5.

2.   The condition referred to in paragraph 1, point (a) shall be deemed fulfilled where the insurance and reinsurance undertaking complies with both of the following conditions:

(a)   the value in accordance with Article 75 of Directive 2009/138/EC of illiquid liabilities referred to in paragraph 1, point (a) exceeds the total amount of long-term equity investments within the portfolio of assets related to life insurance or reinsurance obligations;

(b)   the share of equity investments to which Article 105a(4) of Directive 2009/138/EC is intended to be applied does not exceed the higher of zero and the ratio of the value in accordance with Article 75 of Directive 2009/138/EC of illiquid liabilities referred to in point (a) of this paragraph to the total best estimate of life technical provisions of the insurance or reinsurance undertaking.

For the purposes of the first subparagraph, a homogenous risk group of life insurance and reinsurance liabilities shall be considered illiquid where the capital requirement for each of the following risks is lower than 5 % of the best estimate of the liabilities belonging to that homogenous risk group:

(a)   the mortality risk referred to in Article 137;

(b)   the risk of a permanent increase in lapse rates referred to in Article 142(1), point (a);

(c)   the health mortality risk referred to in Article 152;

(d)   the risk of a permanent increase in SLT health lapse rates referred to in Article 159(1), point (a).

3.   The condition referred to in paragraph 1, point (b) shall be deemed fulfilled where the liquidity buffer calculated in accordance with paragraphs 4 to 6 is higher than 100 %.

For the purposes of the first subparagraph, the liquidity buffer shall be calculated as the ratio of the value of the portfolio of liquid assets corresponding to non-life insurance activities to the best estimate of non-life technical provisions net of reinsurance, calculated in accordance with paragraphs 4 and 5.

4.   For the purposes of paragraph 3, the portfolio of liquid assets corresponding to non-life insurance activities shall include Level 1 assets, Level 2A assets and Level 2B assets, within the meaning of this paragraph.

The sum of the values for solvency purposes of Level 2A and Level 2B assets shall not exceed 40 % of the total value for solvency purposes of the portfolio of liquid assets referred to in the first subparagraph. The value for solvency purposes of Level 2B assets shall not exceed 15 % of the total value for solvency purposes of the portfolio of liquid assets referred to in the first subparagraph.

Liquid assets held through collective investment undertakings and through other investments packaged as funds in which insurance or reinsurance undertakings hold units or shares, may be taken into account up to an absolute amount of EUR 500 million.

Level 1 assets shall only include assets falling under one or more of the following categories:

(a)   cash and cash equivalents;

(b)   assets representing claims on one of the counterparties referred to in Article 180(2);

(c)   assets that are fully, unconditionally and irrevocably guaranteed by one of the counterparties referred to in Article 180(2), where the guarantee meets the requirements set out in Article 215.

Level 2A assets shall only include assets falling under one or more of the following categories:

(a)   bonds and loans which have been assigned to credit quality step 0 or 1, excluding bonds and loans issued by insurance and reinsurance undertakings or financial sector entities within the meaning of Article 4, point (27) of Regulation (EU) No 575/2013;

(b)   covered bonds referred to in Article 180(1) which have been assigned to credit quality step 0 or 1, excluding those which are issued by a financial sector entity which is part of the same group.

Level 2B assets shall only include assets falling under one or more of the following categories:

(a)   STS securitisation which either has been assigned a credit assessment of credit quality step 0 or 1 by a nominated ECAI, or which is a senior tranche, and which is not originated by entities belonging to the same group as the insurance or reinsurance undertaking;

(b)   bonds and loans which have been assigned to credit quality step 2 or 3, excluding bonds and loans issued by insurance and reinsurance undertakings or financial sector entities within the meaning of Article 4, point (27) of Regulation (EU) No 575/2013;

(c)   investments in equities, other than long-term equity investments or strategic equities, and other than investments in insurance and reinsurance undertakings, credit or financial institutions and investment firms, which are either listed in regulated markets in the countries which are members of the EEA or the OECD, or traded on multilateral trading facilities, as defined in Article 4(1), point (22), of Directive 2014/65/EU, whose registered office or head office is in a Member State of the European Union.

5.   For the purposes of calculating the liquidity buffer referred to in paragraph 3, first subparagraph, the following shall apply:

(a)   the value of the portfolio of liquid assets referred to in paragraph 4, first subparagraph, shall be the sum of the following:

—   the value for solvency purposes of Level 1 assets, subject to a haircut of 0 %;

—   the value for solvency purposes of Level 2A assets, subject to a haircut of 15 %;

—   the value for solvency purposes of securitisations which fall under Level 2B assets, subject to a haircut of 25 %;

—   the value for solvency purposes of Level 2B assets other than securitisations, subject to a haircut of 50 %;

(b) for the purposes of calculating the best estimate of non-life technical provisions referred to in paragraph 4, cash flows stemming from reinsurance contracts or special purpose vehicles that meet the requirements set out in Articles 209, 211 and 213 shall be subject to a haircut of 15%. Cash flows stemming from reinsurance contracts or special purpose vehicles that do not meet the requirements set out in Article 209, 211 and 213 shall be subject to a haircut of 50 %.

6.   By way of derogation from paragraph 5, point (a), insurance and reinsurance undertakings shall apply the following haircuts to their investments in liquid assets held through collective investment undertakings and through other investments packaged as funds in which undertakings hold units or shares:

(a)   0 % for cash and cash equivalents;

(b)   5 % for Level 1 assets other than cash and cash equivalents;

(c)   20 % for Level 2A assets;

(d)   30 % for securitisations which fall under Level 2B assets;

(e)   55 % for Level 2B assets other than securitisations.

Article 171c

Long-term equity investments: forced selling test

1.   For the purposes of Article 171a(1), point (b), the insurance or reinsurance undertaking shall be able to demonstrate to the satisfaction of the supervisory authority all of the following:

(a)   the undertaking complies with its risk tolerance limits;

(b)   the undertaking's solvency capital requirement, assessed without the use of any of the transitional measures referred to in Article 77a(2), Article 308c, Article 308d, or where relevant, Article 111(1), second subparagraph, of Directive 2009/138/EC, is exceeded by an appropriate margin, taking into account the solvency position of the undertaking including the undertaking's medium-term capital management plan;

(c)   based on projections over a five-year time horizon, the undertaking is able to generate cash inflows that are higher than cash outflows, both on an ongoing basis and under stressed conditions during each of the next five financial calendar years (forced selling test) over the time horizon of the test.

2.   For the forced selling test referred to in paragraph 1, point (c), all of the following shall apply:

(a)   when assessing cash inflows and outflows on an ongoing basis, insurance and reinsurance undertakings shall assume that the situation in financial markets over the time horizon of the test remains the same as the one at the reference date of the test;

(b)   when assessing cash inflows and outflows under stressed conditions, insurance and reinsurance undertakings shall apply the stress assumptions set out in paragraph 5 and shall not be required to take into account additional secondary or market-wide effects;

(c)   when assessing cash inflows and outflows both on an ongoing basis and under stressed conditions, the projected decisions of investment or divestments by the insurance or reinsurance undertaking shall be consistent with the business strategy of the undertaking, its written policies on investment, liquidity and asset-liability management, and the future management actions referred to in Article 23.

3.   For the forced selling test referred to in paragraph 1, point (c), the cash inflows shall only include the value of cash and cash equivalents on the reference date and inflows from the following sources over the time horizon of the projections:

(a)   revenues stemming from the sale of the following assets, held either directly or through a collective investment undertaking or other investment packaged as funds in which the undertaking holds units or shares:

     (i)   assets representing claims on one of the counterparties referred to in Article 180(2);

     (ii)   assets that are fully, unconditionally and irrevocably guaranteed by one of the counterparties referred to in Article 180(2), where the guarantee meets the requirements set out in Article 215;

     (iii)   bonds and loans which have been assigned to credit quality step 0, 1, 2 or 3, excluding bonds and loans issued by insurance and reinsurance undertakings or financial sector entities within the meaning of Article 4, point (27), of Regulation (EU) No 575/2013;

     (iv)   covered bonds referred to in Article 180(1) which have been assigned to credit quality step 0 or 1, excluding those which are issued by a financial sector entity which is part of the same group;

     (v)   STS securitisation which either has been assigned a credit assessment of credit quality step 0 or 1 by a nominated ECAI, or which is a senior tranche, and which is not originated by entities belonging to the same group as the insurance or reinsurance undertaking;

     (vi)   equities, other than long-term equity investments or strategic equities, and other than investments in financial sector entities, which are either listed in regulated markets in the countries which are members of the EEA or the OECD, or traded on multilateral trading facilities, as referred to in Article 4(1), point (22), of Directive 2014/65/EU, whose registered office or head office is in EU Member States;

(b)   revenues at maturity date stemming from dated assets referred to in point (a), and regular revenues stemming from assets referred to in that point and from property investments and long-term equity investments, including prudently estimated future non-contractual revenues such as dividend payments, provided that the projected non-contractual revenues for a given year are not higher than their three-year historical average;

(c)   premiums and other cash inflows included in the contract boundary of the best estimate of life technical provisions, prudently estimated life premiums and other cash inflows to be earned by the undertaking over the time horizon of the test not included in the contract boundary, provided that such prudently estimated premiums and other cash inflows during a given year are never assumed to be higher than their three-year historical average, or, where there is less than three years of available data, they are not assumed to be higher than those of the most recent year, as well as cash inflows from accepted reinsurance of life obligations;

(d)   premiums and other cash inflows included in the contract boundary of the best estimate of non-life technical provisions, prudently estimated non-life premiums and other cash inflows to be earned by the undertaking over the time horizon of the test not included in the contract boundary, provided that such prudently estimated premiums and other cash inflows during a given year are not assumed to be higher than their three-year historical average or, where there is less than three years of available data, they are not assumed to be higher than those of the most recent year, as well as cash inflows from accepted reinsurance of non-life obligations;

(e)   revenues stemming from the reinvestment of the cash inflows listed in points (a) to (d) in excess of the cash outflows referred to in paragraph 4, where the return on investment is derived from the risk-free interest rate term structure, taking into account the volatility adjustment.

The assets referred to in the first subparagraph, point (a), held through an investment vehicle over which the insurance or reinsurance undertaking exercises control, or, to the extent of the rights of the undertaking, through an investment vehicle over which another entity within the same group exercises control and in which the undertaking holds units or shares, may be fully taken into account. The assets referred to in the first subparagraph, point (a), held through collective investment undertakings or through other investments packaged as funds, other than those referred to in the preceding sentence, may be taken into account up to an absolute amount of EUR 500 million.

Insurance and reinsurance undertakings may decide not to take into account cash inflows referred to in the first subparagraph, point (b) or (e).

For estimating the cash inflows referred to in the first subparagraph, points (c) and (d), which are not included in the contract boundary, the insurance or reinsurance undertaking shall be able to demonstrate to the satisfaction of the supervisory authority that plausible negative outlooks with regard to historical data are appropriately taken into account.

For the purposes of the first subparagraph, point (a), insurance and reinsurance undertakings shall not take into account assets covering the best estimate of insurance obligations to which the matching adjustment is applied.

When assuming revenues stemming from the sale of bonds, loans and securitisations covering the best estimate of insurance obligations to which the volatility adjustment is applied over the time horizon of the test, the undertaking shall be able to demonstrate to the satisfaction of the supervisory authority that its risk profile does not deviate significantly from the following assumptions underlying the volatility adjustment, even as a result of such sales, including under stressed conditions:

(a)   the undertaking holds assets that are spread-sensitive, and is exposed to changes in credit spreads;

(b)   the application of the volatility adjustment does not result in situations where the impact of an exaggeration of credit spreads on the assets held by the undertaking is overcompensated by the impact of the volatility adjustment on the best estimate of technical provisions;

(c)   the cash flows arising from insurance liabilities of the undertaking to which the volatility adjustment is applied are sufficiently stable and predictable to ensure that the undertaking is not exposed to the risk of forced sale of its assets that are spread-sensitive, and can instead hold on to such assets, including during market turmoil.

4.   For the forced selling test referred to in paragraph 1, point (c), the cash outflows shall include all of the following:

(a)   cash outflows related to claims, surrenders, other technical outflows including operating expenses, and taxes, within the contract boundary of the best estimate of life technical provisions, cash outflows corresponding to obligations related to the life premiums which are not included in the contract boundary referred to in paragraph 3, first subparagraph, point (c), as well as cash outflows from accepted reinsurance of life obligations;

(b)   cash outflows related to claims, surrenders, other technical outflows including operating expenses, taxes, within the contract boundary of the best estimate of non-life technical provisions, cash outflows corresponding to obligations related to the non-life premiums which are not included in the contract boundary referred to in paragraph 3, first subparagraph, point (d), as well as cash outflows from accepted reinsurance of non-life obligations;

(c)   cash outflows arising from repurchase agreements, reverse repurchase agreements and similar arrangements, margin requirements, and other financial outflows;

(d)   cash outflows arising from pension scheme contributions related to the employees of the insurance or reinsurance undertaking;

(e) cash outflows arising from other expenses that are not included in the calculation of the best estimate of technical provisions, and other cash outflows, including all of the following:

  (i) dividend distributions and other payments to shareholders and other subordinated creditors;

  (ii) share buy-backs and repayment or redemption of own fund items;

  (iii) other cash outflows, including intragroup ones, not captured by previous points, including contingent liabilities, bonuses and other variable remuneration and off-balance sheet commitments.

5. For the forced selling test under stressed conditions referred to in paragraph 1, point (c), the insurance or reinsurance undertaking shall assume to be subject to the following stresses:

(a) during the first financial year of the projections, there is an additional cash outflow equal to the aggregation of capital requirements stemming from the risk modules referred to in Chapter V of Title I, net of the adjustment for the loss-absorbing capacity of technical provisions and deferred taxes referred to in Article 205, where the aggregation is based on the correlation parameters set out in Annex IV to Directive 2009/138/EC;

(b) during each of the following four financial years of the projections, there is an additional cash outflow equal to the aggregation of capital requirements stemming from the risk modules referred to in Chapter V of Title I, net of the adjustment for the loss-absorbing capacity of technical provisions and deferred taxes referred to in Article 205, without taking into account the submodules referred to in the second subparagraph of this paragraph, where the aggregation is based on the correlation parameters set out in Annex IV to Directive 2009/138/EC.

The submodules referred to in the first subparagraph, point (b), shall be the following:

(a) the sum of capital requirements for non-life, life and health catastrophe risks, calculated in accordance with Articles 119, 143 and 160 respectively;

(b) the sum of capital requirements for non-life, life, NSLT health and SLT health lapse risks, calculated in accordance with Articles 118, 142, 150 and 159 respectively.

For the purposes of the first subparagraph, point (b), the following assumptions shall apply:

(a) capital requirements for market risk and counterparty default risk modules decrease each year of the test, the percentage of reduction for a given year is equal to the decrease in the total projected value of the assets held by the insurance or reinsurance undertaking at the end of the previous year.

(b) in relation to the non-life premium and reserve risk sub-module referred to in Article 115, cash outflows referred to in paragraph 4, point (b), shall be estimated by increasing the relevant cash outflows in each segment s set out in Annex II as follows:

  (i) the cash outflows occurring during the first year following the date when the insurance or reinsurance cover begins or is renewed shall be increased by a percentage that is equal to the standard deviations for non-life premium risk of the segments s as set out in Annex II multiplied by three;

  (ii) the cash outflows occurring after the first year following the date when the insurance or reinsurance cover begins or is renewed shall be increased by a percentage that is equal to the standard deviation for non-life reserve risk of the segments s as set out in Annex II multiplied by three;

(c) in relation to the NSLT health premium and reserve risk sub-module referred to in Article 146, cash outflows referred to in paragraph 4, point (b), shall be estimated by increasing the relevant cash outflows in each segment *s* set out in Annex XIV as follows:

    (i) the cash outflows occurring during the first year following the date when the insurance or reinsurance cover begins or is renewed shall be increased by a percentage that is equal to the standard deviation for NSLT health premium risk of the segment *s* as set out in Annex XIV multiplied by three;

    (ii) the cash outflows occurring after the first year following the date when the insurance or reinsurance cover begins or is renewed shall be increased by a percentage that is equal to the standard deviation for NSLT health reserve risk of the segment *s* as set out in Annex XIV multiplied by three.

6. For the forced selling test under stressed conditions referred to in paragraph 1, point (c), the insurance or reinsurance undertaking shall make the following additional assumptions regarding certain cash flows:

(a) over the time horizon of the test, the stressed values of cash flows referred to in paragraph 3, first subparagraph, point (c), and paragraph 4, point (a), shall be consistent with the scenario of the life lapse risk sub-module referred to in Article 142 and, as applicable, the SLT health lapse risk sub-module referred to in Article 159;

(b) over the time horizon of the test, the stressed values of cash flows referred to in paragraph 3, first subparagraph, point (d), and paragraph 4, point (b), shall be consistent with the scenario of the non-life lapse risk sub-module referred to in Article 118 and, as applicable, the NSLT health lapse risk sub-module referred to in Article 150;

(c) the stressed values of cash outflows referred to in paragraph 4, points (c), (d) and (e) shall be consistent with paragraph 2, point (c), and with past distribution practices by insurance and reinsurances undertakings, in particular in stressed market environments; in addition, the insurance and reinsurance undertaking shall assume that the contingent liabilities and off-balance sheet commitments referred in paragraph 4, point (e)(iii), are triggered;

(d) for determining reinvestment revenues referred to in paragraph 3, first subparagraph, point (e), the term structure of interest rate shall be assumed to change in accordance with the scenario underlying the calculation of the interest rate risk submodule included in the calculation of the cash outflow referred to in paragraph 5.

Article 171d

Long-term equity investments: collective investment undertakings with a lower risk profile

1. The funds referred to in Article 105a(2) of Directive 2009/138/EC shall belong to one of the types of collective investment undertakings or alternative investment funds referred to in paragraph 2 of this Article.

2. The types of collective investment undertakings and alternative investment funds referred to in paragraph 1 shall be the following:

(a) European long-term investment funds pursuant to Regulation (EU) 2015/760;

(b) qualifying social entrepreneurship funds as referred to in Article 3, point (b), of Regulation (EU) No 346/2013;

(c) qualifying venture capital funds as referred to in Article 3, point (b), of Regulation (EU) No 345/2013;

(d) closed-ended alternative investment funds managed by authorised EU AIFMs, which have no leverage calculated in accordance with the commitment method set out in Article 8 of Delegated Regulation (EU) No 231/2013.

3.   Where the conditions set out in Article 105a(1) of Directive 2009/138/EC are complied with at the level of a collective investment undertaking referred to in paragraph 2 of this Article, Article 105a(4) of that Directive shall apply to:

(a)   equities held within the collective investment undertaking, where the look-through approach set out in Article 84 of this Regulation can be applied to all exposures;

(b)   units or shares of the collective investment undertaking, where the look-through approach set out in Article 84 of this Regulation cannot be applied to all exposures.';

(51)   in Article 172, paragraph 4 is replaced by the following:

'4.   The symmetric adjustment shall not be lower than – 13 % or higher than 13 %.';

(52)   Article 173 is replaced by the following:

'*Article 173*

Investments in equity under legislative programmes

1.   Where an insurance or reinsurance undertaking invests in equity, either directly or through a collective investment undertaking, under a legislative programme which fulfils the conditions laid down in Article 133(5) of Regulation (EU) No 575/2013, the standard equity risk sub-module applicable to the part of such equity investments that in aggregate does not exceed 10 % of the undertaking's eligible own funds shall be calculated in accordance with paragraphs 2 and 3 of this Article, subject to the approval of the supervisory authority.

2.   The percentages laid down in Article 169 of this Regulation shall be reduced in proportion to the quantified reduction in credit risk achieved under the legislative programme.

3.   Where the Commission maintains a public register of legislative programmes deemed to comply with the conditions of Article 133(5) of Regulation (EU) No 575/2013, any programme included in that register shall be deemed to achieve a reduction in overall credit risk of at least 5 %.';

(53)   in Article 176, paragraph 1 is replaced by the following:

'1.   The capital requirement for spread risk on bonds and loans SCR_{bonds} shall be equal to the loss in the basic own funds that would result from an instantaneous relative decrease of $stress_i$ in the value of each bond or loan i other than defaulted and forborne loans, and other than mortgage loans that meet the requirements in Article 191, including bank deposits other than cash at bank referred to in Article 189(2), point (b).';

(54)   in Article 176a(3), point (g), point (v) is replaced by the following:

'(v)   at least one of the following conditions is fulfilled with respect to each of the last three financial years ending prior to the date on which the Solvency Capital Requirement is being calculated:

—   the annual turnover of the company exceeds EUR 12 800 000;

—   the balance sheet total of the company exceeds EUR 12 800 000;

—   the number of staff employed by the company exceeds 50;';

(55)   in Article 176c(3), point (e) is replaced by the following:

'(e)   at least one of the following conditions is met for each of the last three financial years ending prior to the date on which the Solvency Capital Requirement is being calculated:

(i)   the annual turnover of the issuer exceeds EUR 12 800 000;

(ii)   the balance sheet total of the issuer exceeds EUR 12 800 000;

(iii)   the number of staff employed by the issuer exceeds 50.';

(56)   Article 178 is amended as follows:

(a)   in paragraph 3, the table is replaced by the following:

'Credit quality step		0		1		2		3		4		5 and 6	
Duration (dur_i)	$stress_i$	a_i	b_i	a_i	b_i	a_i	b_i	a_i	b_i	a_i	b_i	a_i	b_i
up to 5	min $[b_i \cdot dur_i; 1]$	—	0,7 %	—	0,9 %	—	1,4 %	—	2,5 %	—	4,5 %	—	7,5 %
More than 5 and up to 10	min $[a_i + b_i \cdot (dur_i − 5); 1]$	3,5 %	0,5 %	4,5 %	0,6 %	7,0 %	0,7 %	12,5 %	1,5 %	22,5 %	2,5 %	37,5 %	4,2 %
More than 10 and up to 15	min $[a_i + b_i \cdot (dur_i − 10); 1]$	6,0 %	0,5 %	7,5 %	0,5 %	10,5 %	0,5 %	20,0 %	1,0 %	35,0 %	1,8 %	58,5 %	0,5 %
More than 15 and up to 20	min $[a_i + b_i \cdot (dur_i − 15); 1]$	8,5 %	0,5 %	10,0 %	0,5 %	13,0 %	0,5 %	25,0 %	1,0 %	44,0 %	0,5 %	61,0 %	0,5 %
More than 20	min $[a_i + b_i \cdot (dur_i − 20); 1]$	11,0 %	0,5 %	12,5 %	0,5 %	15,5 %	0,5 %	30,0 %	0,5 %	46,5 %	0,5 %	63,5 %	0,5 %'

(b)   in paragraph 4, the table is replaced by the following:

'Credit quality step		0		1		2		3		4		5 and 6	
Duration (dur_i)	$stress_i$	a_i	b_i	a_i	b_i	a_i	b_i	a_i	b_i	a_i	b_i	a_i	b_i
up to 5	min $[b_i \cdot dur_i; 1]$	—	2,0 %	—	2,6 %	—	4,0 %	—	7,1 %	—	12,7 %	—	21,3 %
More than 5 and up to 10	min $[a_i + b_i \cdot (dur_i − 5); 1]$	9,8 %	1,1 %	12,8 %	1,4 %	20,2 %	2,0 %	35,3 %	4,2 %	63,5 %	7,3 %	100,0 %	0,0 %
More than 10 and up to 15	min $[a_i + b_i \cdot (dur_i − 10); 1]$	15,3 %	1,1 %	19,8 %	1,1 %	30,2 %	1,4 %	56,3 %	2,9 %	100,0 %	0,0 %	100,0 %	0,0 %
More than 15 and up to 20	min $[a_i + b_i \cdot (dur_i − 15); 1]$	20,8 %	1,1 %	25,3 %	1,1 %	37,2 %	1,4 %	70,8 %	2,9 %	100,0 %	0,0 %	100,0 %	0,0 %
More than 20	min $[a_i + b_i \cdot (dur_i − 20); 1]$	26,3 %	1,1 %	30,8 %	1,1 %	44,2 %	1,4 %	85,3 %	1,5 %	100,0 %	0,0 %	100,0 %	0,0 %'

(c) paragraph 8 is replaced by the following:

'8. Senior securitisation positions not covered by paragraphs 3 to 7, for which a credit assessment by a nominated ECAI is available shall be assigned a risk factor $stress_i$ equal to the following formula:

$$stress_i = min(b_i \cdot dur_i;1)$$

where b_i shall be assigned depending on the credit quality step of securitisation position i, as set out in the following table:

Credit quality step	0	1	2	3	4	5	6
b_i	2,7 %	3,3 %	4,4 %	7,5 %	14,3 %	23,5 %	100,0 %'

(d) the following paragraph 8a is inserted:

'8a. Non-senior securitisation positions not covered by paragraphs 3 to 8, for which a credit assessment by a nominated ECAI is available shall be assigned a risk factor $stress_i$ equal to the following formula:

$$stress_i = min(b_i \cdot dur_i;1)$$

where b_i shall be assigned depending on the credit quality step of securitisation position i, as set out in the following table:

Credit quality step	0	1	2	3	4	5	6
b_i	7,4 %	9,0 %	12,0 %	18,8 %	38,9 %	63,8 %	100,0 %'

(e) paragraph 9 is replaced by the following:

'9. Securitisation positions not covered by paragraphs 3 to 8a, shall be assigned a risk factor $stress_i$ of 100 %.';

(57) Article 180 is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. Exposures in the form of bonds within the meaning of Article 3, point (1), of Directive (EU) 2019/2162 (covered bonds) which have been assigned to credit quality step 0 or 1 shall be assigned a risk factor $stress_i$ according to the following table.';

(b) in paragraph 2, the following subparagraphs are inserted after the second subparagraph:

'Where an exposure takes the form of an individual bond or loan that is partly, unconditionally and irrevocably guaranteed by one of the counterparties mentioned in points (a) to (d), where the guarantee meets the requirements set out in Article 215 and provides a first-loss guarantee of at least 5 % of the nominal value of the exposure, the part of the value of the exposure that is covered by the guarantee shall also be assigned a risk factor $stress_i$ of 0 %.

Where an exposure takes the form of a pool of bonds and loans that is partly, unconditionally and irrevocably guaranteed by one of the counterparties mentioned in points (a) to (d) and where the guarantee meets the requirements set out in Article 215 and provides a first-loss guarantee of at least 5 % of the nominal total exposure, for the calculating spread risk, the insurance and reinsurance undertaking may assign a risk factor $stress_i$ of 0 % to an amount of bonds and loans within the pool the cumulative value of which is equal to the total value of the guarantee.

For the purposes of the third and fourth subparagraphs, the requirements set out in Article 215 point (f) shall be considered to be satisfied where the partial guarantee proportionally covers all types of regular payments the obligor is expected to make in respect of the claim.';

(c)   paragraph 10 is replaced by the following:

'10.   Securitisation positions which fulfil the criteria set out in Article 243 of Regulation (EU) No 575/2013 and which are fully, unconditionally and irrevocably guaranteed by the European Investment Fund or the European Investment Bank, where the guarantee meets the requirements set out in Article 215, shall be assigned a risk factor $stress_i$ of 0 %.';

(58)   Article 182 is amended as follows:

(a)   paragraph 5 is replaced by the following

'5.   For the purposes of paragraph 4, exposures for which a credit assessment by a nominated ECAI is available shall be assigned a credit quality step in accordance with Chapter 1 Section 2 of this Title. The credit quality step for exposures to central governments and central banks shall be reduced by one where all of the following applies:

(a)   those exposures are other than those referred to in Article 187(3), point (b);

(b)   those exposures are denominated and funded in the domestic currency of that central government and central bank;

(c)   the credit quality step for such exposures is two or larger.';

(b)   the following paragraphs 5a and 5b are inserted:

'5a.   Exposures to Member States' regional governments and local authorities not listed in Article 1 of Implementing Regulation (EU) 2015/2011 shall be assigned credit quality step 1.

5b.   Exposures that are fully, unconditionally, and irrevocably guaranteed by a Member State's regional government or local authority that is not listed in Article 1 of Implementing Regulation (EU) 2015/2011, where the guarantee meets the requirements set out in Article 215 of this Regulation, shall be assigned to credit quality step 1.';

(59)   in Article 184(2), the following point (g) is added:

'(g)   the value of an equity investment, where such value is negative.';

(60)   Article 187 is amended as follows:

(a)   paragraph 1 is replaced by the following:

'1.   Exposures in the form of bonds within the meaning of Article 3, point (1), of Directive (EU) 2019/2162 (covered bonds) shall be assigned a relative excess exposure threshold CT_i of 15 %, provided that the corresponding exposures in the form of covered bonds have been assigned to credit quality step 0 or 1. Exposures in the form of covered bonds shall be considered as single name exposures, regardless of other exposures to the same counterparty as the issuer of the covered bonds, which constitute a distinct single name exposure.';

(b)   paragraphs 4a and 4b are deleted;

(61)   Article 189 is amended as follows:

(a)   in paragraph 2, the following points (g) and (h) are added:

'(g)   repurchase transactions, reverse repurchase transactions, and securities lending or borrowing transactions;

(h)   pre-funded contributions and unfunded contributions to the default fund of a CCP, within the meaning of Article 4(1), point (90) and Article 300, point (10) of Regulation (EU) No 575/2013 respectively, where the CCP is a qualifying central counterparty.';

(b)   in paragraph 3, the following point (ca) is inserted:

'(ca)   defaulted loans and forborne loans;';

(62) Article 191 is amended as follows:

(a) in paragraph 4, 'EUR 1 million' is replaced by 'EUR 1,35 million';

(b) paragraph 7 is replaced by the following:

'7. Either of the following conditions shall be met:

(a) the risk of the borrower does not materially depend upon the performance of the underlying property, but on the underlying capacity of the borrower to repay the debt from other sources, and as a consequence, the repayment of the facility does not materially depend on any cash flow generated by the underlying property serving as collateral. For those other sources, the insurance or reinsurance undertaking shall determine maximum loan-to-income ratio as part of its lending policy and obtain suitable evidence of the relevant income when granting the loan; or

(b) the exposure complies with Article 124(2), point(a)(ii), and Article 124(3), points (a), (b) and (d) of Regulation (EU) No 575/2013.';

(63) Article 192 is amended as follows:

(a) paragraph 2, second subparagraph, is replaced by the following:

'Where the reinsurance arrangement is with an insurance or reinsurance undertaking or a third country insurance or reinsurance undertaking and 60% or more of that counterparty's assets are subject to collateral arrangements, the loss-given-default shall be equal to the following:

$$LGD = max[90\,\% \cdot (Recoverables + 50\,\% * RM_{re}) - F''' . Collateral; 0]$$

where F''' denotes a factor to take into account the economic effect of the collateral arrangement in relation to the reinsurance arrangement or securitisation in the case of a credit event related to the counterparty.';

(b) in paragraph 3, the introductory wording is replaced by the following:

'The loss-given-default on a derivative falling within Article 192a(1) or Article 192b shall be equal to the following:';

(c) the following paragraphs 3e and 3f are inserted:

'3e. The loss-given-default on repurchase transactions, reverse repurchase transactions, or securities lending or borrowing transactions, shall be equal to the following:

$$LGD = max(Exposure - Collateral; 0)$$

where:

(a) *Exposure* denotes the value of securities or cash lent to the counterparty under the transaction, determined in accordance with Article 75 of Directive 2009/138/EC;

(b) *Collateral* denotes the risk-adjusted value of securities or cash received from the counterparty.

3f. Where insurance and reinsurance undertakings have concluded contractual netting agreements covering several repurchase transactions, or reverse repurchase agreements or securities lending or borrowing transactions that represent credit exposure to the same counterparty, they may calculate the loss-given-default on those repurchase transactions or reverse repurchase transactions or securities lending or borrowing transactions, as set out in paragraph 3e, on the basis of the combined economic effect of all of those repurchase transactions or reverse repurchase transactions or securities lending or borrowing transactions that are covered by the same contractual netting agreement, provided that Articles 209 and 210 are complied with in relation to the netting.

Where the loss-given default on repurchase transactions, or reverse repurchase transactions, or securities lending or borrowing transactions is to be calculated on the bases referred to in the first subparagraph, the following rules shall apply for the purposes of paragraph 3e:

(a) the value of the securities or cash lent to the counterparty shall be the total value for solvency purposes of securities or cash lent to the counterparty for the transactions that covered by the contractual netting arrangement;

(b) the risk-adjusted value of securities or cash received from the counterparty shall be determined at the level of the combination of repurchase transactions, or reverse repurchase transactions, or securities lending or borrowing transactions, covered by the contractual netting arrangement.';

(d) paragraph 4 is replaced by the following:

'4. The loss-given-default on a mortgage loan shall be equal to the following:

$$LGD = \max[Loan - (80\ \% \times Mortgage + Guarantee);\ 5\ \% \times \max[0;\ (Loan - Guarantee)]]$$

where:

(a) *Loan* denotes the value of the mortgage loan determined in accordance with Article 75 of Directive 2009/138/EC;

(b) *Mortgage* denotes the risk-adjusted value of the mortgage;

(c) *Guarantee* denotes the amount that the guarantor would be required to pay to the insurance or reinsurance undertaking if the obligor of the mortgage loan were to default at a time when the value of the property held as mortgage were equal to 80 % of the risk-adjusted value of the mortgage.

For the purposes of point (c), a guarantee shall only be recognised where both of the following conditions are met:

(a) it is provided by a counterparty as referred to in Article 180(2), first subparagraph, points (a) to (d), or by a counterparty which is itself fully guaranteed by one of the counterparties referred to in the first subparagraph, points (a) to (d), of that Article;

(b) it complies with the requirements set out in Articles 209 and 210, and Article 215, points (a) to (e).

Where the guarantee is provided by a counterparty which is fully guaranteed by one or more of the counterparties referred to in Article 180(2), first subparagraph, points (a) to (d), the requirements set out in Article 215, point (c)(iii) and point (d) shall be considered to be satisfied where the insurance or reinsurance undertaking has the right to obtain in a timely manner a provisional payment by the first guarantor that meets both of the following conditions:

(a) it represents a robust estimate of the amount of the loss, including losses resulting from the non-payment of interest and other types of payment which the borrower is obliged to make, that the lending insurance or reinsurance undertaking is likely to incur;

(b) it is proportional to the coverage of the guarantee.';

(e) the following paragraph 4a is inserted:

'4a. The loss-given-default on a defaulted loan or a forborne loan shall be equal to the following:

$$LGD = max\ (Loan - Recoverables;\ 36\ \% \times Loan)$$

where:

(a) *Loan* denotes the value of the mortgage loan determined in accordance with Article 75 of Directive 2009/138/EC;

(b) *Recoverables* denotes the present value of the debt recoveries calculated in accordance with the guidelines adopted pursuant to Article 181(4) of Regulation (EU) No 575/2013.';

(f)   the following paragraphs 7 and 8 are added:

'7.   The loss-given-default on a pre-funded contribution to the default fund of a qualifying central counterparty shall be equal to 18 % of the contribution.

8.   The loss-given-default on an unfunded contribution to the default fund of a qualifying central counterparty shall be equal to 0 % of the contribution.';

(64)   in Article 192a, paragraph 1 is replaced by the following:

'1.   For the purposes of Article 192(3), a derivative shall fall within this paragraph where the following requirements are met:

(a)   the derivative is a CCP-related transaction in which the insurance or reinsurance undertaking is the client;

(b)   the positions and assets of the insurance or reinsurance undertaking related to that transaction are distinguished and segregated, at the level of both the clearing member and the CCP, from the positions and assets of both the clearing member and the other clients of that clearing member and as a result of that distinction and segregation those positions and assets are bankruptcy remote in the event of the default or insolvency of the clearing member or one or more of its other clients;

(c)   the laws, regulations, rules and contractual arrangements applicable to or binding the insurance or reinsurance undertaking or the CCP facilitate the transfer of the client's positions relating to that contract and transaction and of the corresponding collateral to another clearing member within the applicable margin period of risk in the event of default or insolvency of the original clearing member, in which case, the client's positions and the collateral shall be transferred at market value, unless the client requests to close out the position at market value;

(d)   the insurance and reinsurance undertaking has conducted a sufficiently thorough legal review, which it has kept up to date, that substantiates that the arrangements that ensure that the condition set out in point (c) is met are legal, valid, binding and enforceable under the relevant laws of the relevant jurisdiction or jurisdictions;

(e)   the CCP is a qualifying central counterparty.

When assessing their compliance with the condition set out in the first subparagraph, point (c), insurance or reinsurance undertakings may take into account any clear precedents of transfers of client positions and of corresponding collateral at a CCP, and any industry intent to continue with that practice.';

(65)   the following Article 192b is inserted:

'*Article 192b*

Direct exposure to a qualifying central counterparty

Notwithstanding Article 192a, for the purposes of Article 192(3), a derivative financing transaction shall fall under the scope of this Article where the insurance or reinsurance undertaking acts as a clearing member of a CCP for its own purposes on the derivative financing transaction, and the CCP is a qualifying central counterparty.';

(66)   in Article 197(7), the first sentence is replaced by the following:

'Where, in case of insolvency of the counterparty, the determination of the insurance or reinsurance undertaking's proportional share of the counterparty's insolvency estate does not take into account that the undertaking receives the collateral, the factors F, F', F'' and F''' referred to in Article 192(2) to (3c) and Articles 194 to 196 shall all be 100 %.';

(67)   in Article 199, paragraph 12 is replaced by the following:

'12.   Notwithstanding paragraphs 2 to 11, exposures as referred to in Article 192(3), (7) and (8) shall be assigned a probability of default equal to 0,002 %.';

(68)   in Article 201(2), point (a) is replaced by the following:

'(a)   the sum covers all possible combinations *(j,k)* of probabilities of default on single name exposures as referred to in Article 199, except the case where $PD_j = PD_k = 0$;';

(69)   Article 202 is replaced by the following:

'*Article 202*

Type 2 exposures

The capital requirement for counterparty default risk on type 2 exposures shall be equal to the loss in the basic own funds that would result from an instantaneous decrease in value of type 2 exposures by the following amount:

$$90\,\% \cdot LGD_{receivables>3months} + 100\,\% \cdot LGD_{defaulted/forborne} + \sum_i 15\,\% \cdot LGD_i$$

where:

(a) $LGD_{receivables>3months}$ denotes the total losses-given-default on all receivables from intermediaries which have been due for more than three months;

(b) $LGD_{defaulted/forborne}$ denotes the total loss given default on all defaulted and forborne loans;

(c)   the sum is taken on all type 2 exposures other than receivables from intermediaries which have been due for more than three months, and other than defaulted and forborne loans;

(d) LGD_i denotes the loss-given-default on the type 2 exposure *i*.';

(70)   Article 210 is amended as follows:

(a)   the following paragraph 3a is inserted:

'3a.   A risk-mitigation technique shall only be considered not to result in material basis risk where the insurance or reinsurance undertaking can demonstrate that both of the following conditions are met:

(a)   the exposure covered by the risk-mitigation technique is sufficiently similar in nature to the risk exposure of the undertaking; and

(b)   the changes in value of the exposure covered by the risk-mitigation technique closely mirror the changes in value of the risk exposure of the undertaking under a comprehensive set of relevant risk scenarios, including scenarios that are consistent with the confidence level set out in Article 101(3) of Directive 2009/138/EC.';

(b)   the following paragraph 6 is added:

'6.   The undertaking can demonstrate that the transfer of risk is effective and that any reduction in the Solvency Capital Requirement or increase in available basic own funds resulting from the risk transfer arrangements is commensurate with the actual change in risks that the undertaking is exposed to.

The Solvency Capital Requirement and available basic own funds shall reflect the economic substance of the contractual arrangements governing the risk-mitigation techniques. When calculating the Basic Solvency Capital Requirement, insurance or reinsurance undertakings shall only take into account risk-mitigation techniques as referred to in Article 101(5) of Directive 2009/138/EC where the insurance or reinsurance undertaking can demonstrate that all of the following conditions are met:

(a)   the contractual arrangements governing the risk-mitigation technique result in an effective transfer of risk;

(b)   the reduction in the Solvency Capital Requirement is commensurate with the extent of transfer of risks stemming from the contractual arrangements; and

(c)   the Solvency Capital Requirement appropriately reflects any risk arising from the risk-transfer process.';

(71)   Article 211 is amended as follows:

(a)   paragraph 1 is replaced by the following:

'1.   Where insurance or reinsurance undertakings transfer underwriting risks using reinsurance contracts or special purpose vehicles, in order for them to take into account the risk-mitigation technique in the Basic Solvency Capital Requirement, the qualitative criteria set out in Articles 209 and 210 and those set out in paragraphs 2 to 7 shall be met.';

(b)   the following paragraph 2a is inserted:

'2a.   Where insurance or reinsurance undertakings transfer underwriting risks to a scheme based on reinsurance conducted or fully guaranteed by the government of a Member State acting, for reasons of substantial public interest, in the capacity of reinsurer of last resort, the scheme shall be considered as a reinsurance counterparty within the meaning of paragraph 2 of this Article.';

(c)   the following paragraph 7 is added:

'7.   For the purposes of Article 86 and Article 210(3), undertakings shall consider basis risk arising from a currency mismatch to be material where the exposure covered by the reinsurance contracts or special purpose vehicles is denominated in a different currency than the risk exposure of the undertaking, unless the currencies involved are pegged within a sufficiently narrow corridor or the fixed exchange rate is provided in the reinsurance contract.';

(72)   in Article 212, paragraph 1 is replaced by the following:

'1.   Where insurance or reinsurance undertakings transfer risk, in order for the risk-mitigation technique to be taken into account in the Basic Solvency Capital Requirement, in other cases than in the cases referred to in Article 211(1), including transfers through the purchase or issuance of financial instruments, the qualitative criteria provided in paragraphs 2 to 5 shall be met, in addition to the qualitative criteria set out in Articles 209 and 210.';

(73)   the following Article 212a is inserted:

'*Article 212a*

Contingent capital instruments and convertible bond instruments

The following contractual arrangements shall never be considered as meeting the requirements of effective transfer of risk set out in Article 210:

(a)   contractual arrangements concluded between an insurance or reinsurance undertaking and another counterparty, according to which upon the occurrence of pre-defined specific events, that counterparty is required to purchase new equity shares or subordinated debts issued by the insurance or reinsurance undertaking in accordance with a pre-defined price setting mechanism;

(b)   contractual arrangements concluded between an insurance or reinsurance undertaking and another counterparty according to which upon the occurrence of pre-defined specific events that counterparty is required to acquire debt instruments issued by the insurance or reinsurance undertaking which can be later converted into new equity shares of this undertaking, in accordance with a pre-defined price setting mechanism.';

(74)   Article 215 is amended as follows:

(a)   the introductory wording is replaced by the following:

'Subject to Article 215a(1), in the calculation of the Basic Solvency Capital Requirement, guarantees shall only be recognised where explicitly referred to in this Chapter, and where in addition to the qualitative criteria laid down in Articles 209 and 210, all of the following criteria are met:';

(b)   point (b) is replaced by the following:

'(b)   the extent of the credit protection is clearly set out and incontrovertible;';

(c)   in point (c), point (i) is replaced by the following:

'(i)   would allow the protection provider to cancel or change the protection unilaterally;';

(d)   the following subparagraphs are added:

'In the case of a guarantee covering residential mortgage loans, the requirements in the first subparagraph, points (c)(iii) and (d), shall only be required to be satisfied within 24 months.

For the purposes of the first subparagraph, point (c), a clause in the guarantee contract providing that flawed due diligence or fraud by the lending institution cancels or diminishes the extent of the credit protection offered by the guarantor, shall not disqualify that guarantee from meeting the requirements of the first subparagraph, point (c).

For the purposes of the first subparagraph, point (c), the guarantor may make one lump sum payment of all monies due under the claim, or may assume the future payment obligations of the obligor covered by the credit protection contract.

For the purposes of the first subparagraph, an insurance or reinsurance undertaking shall be able to demonstrate to the satisfaction of the supervisory authority that it has in place systems to manage potential concentration of risk arising from its use of guarantees. An insurance or reinsurance undertaking shall be able to demonstrate to the satisfaction of the supervisory authority how its strategy in respect of its use of guarantees interacts with its management of its overall risk profile.';

(75)   the following Article 215a is inserted:

'*Article 215a*

Sovereign and other public sector counter-guarantees

1.   Insurance and reinsurance undertakings may treat the exposures referred to in paragraph 2 as protected by a guarantee provided by the entities listed in that paragraph, provided all the following conditions are satisfied:

(a)   the counter-guarantee covers all credit risk elements of the claim;

(b)   both the original guarantee and the counter-guarantee meet the requirements for guarantees set out in Article 215, except that the counter-guarantee need not be direct;

(c)   the cover is robust and nothing in the historical evidence suggests that the coverage of the counter-guarantee is less than effectively equivalent to that of a direct guarantee by the entity in question.

2.   The treatment set out in paragraph 1 shall apply to exposures protected by a guarantee which is counter-guaranteed by any of the counterparties referred to in Article 180(2), first subparagraph.';

(76)   Articles 216 and 217 are replaced by the following:

'*Article 216*

Calculation of the Solvency Capital Requirement in the case of ring-fenced funds

1.   In the case of ring-fenced funds determined in accordance with Article 81(1), insurance and reinsurance undertakings shall adjust the calculation of the Solvency Capital Requirement following the method set out in Article 217.

2.   However, an insurance or reinsurance undertaking that has received supervisory approval to apply Article 304 of Directive 2009/138/EC before 29 January 2027 to a ring-fenced fund shall not adjust the calculation in accordance with Article 217 of this Regulation, but base the calculation on the assumption of full diversification between the assets and liabilities of the ring-fenced funds and the rest of the undertaking.

Article 217

Solvency Capital Requirement calculation method for ring-fenced funds

1.   Insurance and reinsurance undertakings shall calculate a notional Solvency Capital Requirement for each ring-fenced fund and for the remaining part of the undertaking in the same manner as if those ring-fenced funds and the remaining part of the undertaking were separate undertakings.

2.   Insurance and reinsurance undertakings shall calculate their Solvency Capital Requirement as the sum of the notional Solvency Capital Requirements for each of the ring-fenced funds and for the remaining part of the undertaking.

3.   Where the calculation of the capital requirement for a risk module or sub-module of the Basic Solvency Capital Requirement is based on the impact of a scenario on the basic own funds of the insurance or reinsurance undertaking, the impact of the scenario on the basic own funds at the level of the ring-fenced fund and the remaining part of the undertaking shall be calculated.

4.   The basic own funds at the level of the ring-fenced fund shall be those restricted own-fund items that meet the definition of basic own funds set out in Article 88 of Directive 2009/138/EC.

5.   Where profit participation arrangements exist in the ring-fenced fund, insurance and reinsurance undertakings shall apply the following approach when adjusting the Solvency Capital Requirement:

(a)   where the calculation referred to in paragraph 3 would result in an increase in the basic own funds at the level of the ring-fenced fund, the estimated change in those basic own funds shall be adjusted to reflect the existence of profit participation arrangements in the ring-fenced fund in which case the adjustment to the change in the basic own funds of the ring-fenced fund shall be the amount by which technical provisions would increase due to the expected future distribution to policy holders or beneficiaries of that ring-fenced fund;

(b)   where the calculation referred to in paragraph 3 would result in a decrease in the basic own funds at the level of the ring-fenced fund, the estimated change in those basic own funds for the calculation of the net Basic Solvency Capital Requirement, as referred to in Article 206(2), shall be adjusted to reflect the reduction in future discretionary benefits payable to policy holders or beneficiaries of that ring-fenced fund, but such adjustment shall not exceed the amount of future discretionary benefits within the ring-fenced fund.

6.   Notwithstanding paragraph 1, the notional Solvency Capital Requirement for each ring-fenced fund shall be calculated using the scenario-based calculations under which basic own funds for the undertaking as a whole are most negatively affected.

7.   When determining the scenario under which basic own funds are most negatively affected for the undertaking as a whole, the undertaking shall first calculate the sum of the results of the impacts of the scenarios on the basic own funds at the level of each ring-fenced fund, in accordance with paragraphs 3 and 5. The sums at the level of each ring-fenced fund shall be added to one another and to the results of the impact of the scenarios on the basic own funds in the remaining part of the insurance or reinsurance undertaking.

8.   The notional Solvency Capital Requirement for each ring-fenced fund shall be determined by aggregating the capital requirements for each sub-module and risk module of the Basic Solvency Capital Requirement.

9.   Insurance and reinsurance undertakings shall assume that there is no diversification of risks between each of the ring-fenced funds and the remaining part of the insurance or reinsurance undertaking.';

(77)   in Article 231, the following paragraph 4 is added:

'4.   Insurance and reinsurance undertakings shall put in place internal procedures to avoid overreliance on data from past events with respect to climate change-related trends, including, where appropriate, by using climate scenarios.';

(78)   in Article 234, point (b), point (ii) is replaced by the following:

'(ii)   any restrictions of diversification which arise from the existence of a ring-fenced fund;';

(79)   Article 235 is amended as follows:

(a)   the title is replaced by the following:

'**Risk-mitigation techniques and other techniques to reduce the Solvency Capital Requirement**';

(b)   the following paragraph 4 is added:

'4.   The use of the arrangements referred to in Article 212a shall never be recognised as risk-mitigation techniques. It shall never result in a reduction of the Solvency Capital Requirements.';

(80)   in Article 258(6), the following subparagraph is added:

'The evaluation referred to in the first subparagraph shall include an assessment of the adequacy of the composition, including in terms of gender-balance and diversity, the effectiveness and the internal governance of the administrative, management or supervisory body. The evaluation shall also be commensurate to the nature, scale and complexity of the risks inherent in the business of the undertakings.';

(81)   Article 260 is amended as follows:

(a)   the following paragraph 2a is inserted:

'2a.   The expected profit in future fees for servicing and management of funds for index-linked and unit-linked insurance shall be calculated as the difference between technical provisions without a risk margin calculated in accordance with Article 77 of Directive 2009/138/EC and technical provisions without a risk margin under the assumption that the future fees for servicing and management of funds that are expected to be received in the future are not received for any reason other than the insured event having occurred, regardless of the contractual rights of the policyholder to discontinue the policy.';

(b)   paragraph 4 is replaced by the following:

'4.   Loss-making policies shall be offset against profit-making policies within a homogeneous risk group. Loss-making homogeneous risk groups shall also be offset against profit-making homogeneous risk groups.';

(82)   in Article 271, paragraph 2 is deleted;

(83)   Article 275 is amended as follows:

(a)   paragraph 2 is amended as follows:

(i)   the following point (ea) is inserted:

'(ea)   the variable remuneration, including the deferred portion, is paid or vests only if it is sustainable according to the financial situation of the undertaking as a whole, and justified on the basis of the performance of the undertaking, the business unit and the individual concerned;';

(ii)   the following subparagraphs are added:

'For the purposes of point (c), remuneration payable under deferral arrangements shall vest no faster than on a pro rata basis.

For the purposes of the first subparagraph, point (ea), without prejudice to the general principles of national contract and labour law, the total variable remuneration shall generally be considerably contracted where subdued or negative financial performance of the undertaking occurs, taking into account both current remuneration and reductions in payouts of amounts previously earned, including through malus or clawback arrangements.

Up to 100 % of the total variable remuneration shall be subject to malus or clawback arrangements. Undertakings shall set specific criteria for the application of malus and clawback. Such criteria shall cover situations where the staff member:

(i)   participated in or was responsible for conduct which resulted in significant losses to the undertaking;

(ii)   is no longer considered as meeting appropriate standards of fitness and propriety.';

(b)   the following paragraphs 2a and 2b are inserted:

'2a.   The deferral of a substantial portion of the variable remuneration component set out in paragraph 2, point (c), shall not apply where the annual variable remuneration of a member of the administrative, management or supervisory body, a person who effectively runs the undertaking or has other key functions, or person belonging to other categories of staff whose professional activities have a material impact on the undertaking's risk profile, does not exceed EUR 50 000 and does not represent more than 1/3 of that staff member's total annual remuneration.

2b.   By way of derogation from paragraph 2a, a supervisory authority may decide that staff members entitled to annual variable remuneration below the threshold referred to in that paragraph shall not be subject to the exemption set out therein because of national market specificities in terms of remuneration practices, because of the nature of the responsibilities and job profile of those staff members or because of the specific risk profile of the undertaking.';

(84)   the following Article 275b is inserted:

'*Article 275b*

Transparency on investment and capital management

Taking into account the information from the regular supervisory reporting referred to in Article 304, EIOPA shall regularly report to the European Commission, the European Parliament and the Council, quantitative and qualitative information on:

(a)   the aggregated allocation of investments, broken down by sector and geographical area;

(b)   distributions to shareholders, including share buy-backs, and variable remuneration to members of the administrative, management or supervisory body, key function holders or senior management.';

(85)   in Article 278, paragraph 2 is replaced by the following:

'2.   With respect to the matching adjustment and transitional measures and with respect to the volatility adjustment, where supervisory authorities have allowed an insurance or reinsurance undertaking to use one of these adjustments or transitional measures, they may impose a capital add-on pursuant to Article 37(1), point (d), of Directive 2009/138/EC only in circumstances where the deviation from the assumptions underlying the adjustments or transitional measures is of a temporary nature and does not justify revoking the supervisory approval for the use of the adjustment or the transitional measure.';

(86)   Articles 290 to 294 are replaced by the following:

'*Article 290*

Structure

1.   The solvency and financial condition report shall follow the structure set out in Annex XX, Section A, and disclose the information referred to in Articles 292 to 298 of this Regulation.

2.   The solvency and financial condition report shall contain narrative information in quantitative and qualitative form supplemented, for the part targeted at market professionals, where appropriate, with quantitative templates.

3.   Where information of at least equal scope and level of detail is provided for the reporting period in other public reports, the undertaking may provide the required information in the part targeted at market professionals by including the internet link to the relevant part of the public reports. When using internet links, insurance and reinsurance undertakings shall in particular specify the relevant sections and pages. They shall ensure that such links remain valid during at least five years after publication date.

Article 291

Materiality

For the purposes of this Chapter, the information or the changes to any information to be disclosed in the solvency and financial condition report shall be considered material where its omission or misstatement could influence the decision-making or the judgement of the users of that document, including the supervisory authorities.

Article 292

Information targeted at policy holders and beneficiaries

1.   The part of the solvency and financial condition report targeted at policy holders and beneficiaries shall start with an indication that policy holders and beneficiaries have the right to request a version of that part in the official language of the Member State where they reside, provided that the insurance or reinsurance undertaking operates in that Member State through the right of establishment or the freedom to provide services. Where versions in other languages are available online, the insurance or reinsurance undertaking shall also provide the internet links to each version at the beginning of that part of the solvency and financial condition report.

2.   The part of the solvency and financial condition report consisting of information targeted at policy holders and beneficiaries shall contain a section about the business and performance of the undertaking, which shall cover all of the following information:

(a)   the name and legal form of the undertaking;

(b)   the name and contact details of the supervisory authority responsible for financial supervision of the undertaking;

(c)   a list of the shareholders of qualifying holdings in the undertaking;

(d)   where the insurance undertaking belongs to a group, the name of the group, its legal form, the jurisdiction of the group and where applicable, the supervisory authority responsible for financial supervision of the group;

(e)   any significant business development or other significant event that has occurred over the reporting period that has a material impact on the undertaking's risk profile;

(f)   clear and simple information on the insurance undertaking's underwriting and investment performance at an aggregate level over the reporting period.

3.   The part of the solvency and financial condition report consisting of information targeted at policy holders and beneficiaries shall contain a section about the capital management and risk profile of the undertaking, which shall cover all of the following information:

(a)   a brief definition of the Solvency Capital Requirement and Minimum Capital Requirement;

(b)   the Solvency Capital Requirement and Minimum Capital Requirement, the eligible own funds, and the ratio of coverage both at the end of the reporting period and the previous reporting period;

(c)   regarding any non-compliance with the Minimum Capital Requirement or the Solvency Capital Requirement during the reporting period or at the time of disclosure, the period of each non-compliance, an explanation of its origin and consequences, any remedial measures taken, and an explanation of the effects of such remedial measures;

(d)   a description of the material risks the undertaking is exposed to, including in relation to sustainability risks, any material changes to those material risks over the reporting period, and a description of the applied risk mitigation techniques.

The description referred to in the first subparagraph, point (a), shall contain the following text:

"Two capital requirements aim at measuring the financial soundness of the undertaking: the Solvency Capital Requirement (SCR) and the Minimum Capital Requirement (MCR). The SCR should deliver a level of capital that enables an undertaking to absorb significant unforeseen losses over a one-year time horizon and should give reasonable assurance to policy holders that payments will be made as they fall due. The MCR is intended to provide a minimum level of security to be held at all times by the undertaking and below which the amount of financial resources (own funds) should not fall.

The capital requirements will need to be covered by capital (own funds) of sufficient quality to ensure that losses can be covered on a going-concern basis as well as in the event of winding-up".

4.   The part of the solvency and financial condition report targeted at policy holders and beneficiaries shall contain a section covering any other material information for policy holders. That section shall in particular indicate whether the undertaking discloses the plans referred to in Article 19a or Article 29a of Directive 2013/34/EU, and where applicable, contain the internet link to these plans.

5.   The part of the solvency and financial condition targeted at policy holders and beneficiaries shall not exceed five pages.

Compliance with the first subparagraph shall not result in an omission or the abridgement of the relevant information referred to in paragraphs 1 to 4.

Article 293

Information targeted at market professionals: Business and performance

1.   The part of the solvency and condition report targeted at market professionals shall contain all of the following information regarding the business of the insurance or reinsurance undertaking:

(a)   the name and legal form of the undertaking, and, where available, the specific legal entity identifier referred to in Article 7(3), point (b), of Regulation (EU) 2023/2859 of the European Parliament and of the Council (*);

(b)   the name and contact details of the supervisory authority responsible for the financial supervision of the undertaking and, where applicable, the name and contact details of the group supervisor of the group to which the undertaking belongs;

(c)   the name and contact details of the external auditor of the undertaking and the scope of the audit referred to in Article 51a of Directive 2009/138/EC;

(d)   a description of the holders of qualifying holdings in the undertaking, including their names;

(e)   where the undertaking belongs to a group, details of the undertaking's position within the legal structure of the group, including a full organisational chart and, where appropriate, a simplified group organisational chart;

(f)   the undertaking's material lines of business and material geographical areas where it carries out business;

(g)   any significant business or other events that have occurred over the reporting period that have had a material impact on the undertaking.

2.   The solvency and financial condition report shall contain information on the insurance or reinsurance undertaking's underwriting performance, at an aggregate level over the reporting period, together with a comparison of the information with that reported on the previous reporting period, as shown in the undertaking's financial statements.

3.   The solvency and financial condition report shall contain all of the following information regarding the performance of the investments of the insurance or reinsurance undertaking over the reporting period together with a comparison of the information that was reported on the previous reporting period, as shown in that undertaking's financial statements:

(a)   information on income and expenses arising from investments and, where necessary for a proper understanding of the income and expenses, the components of such income and expenses;

(b)   information about the nature and amount of any gains and losses recognised directly in equity;

(c)   information about the nature and amount of any investments in securitisation.

4.   The solvency and financial condition report shall describe the nature and amount of the other material income and expenses of the insurance or reinsurance undertaking incurred over the reporting period together with a comparison of the information that was reported on the previous reporting period, as shown in that undertaking's financial statements.

5.   The solvency and financial condition report shall contain in a separate section any other material information regarding the business and performance of the insurance or reinsurance undertaking.

Article 294

Information targeted at market professionals: System of governance

1.   The solvency and financial condition report shall contain all of the following information regarding the system of governance of the insurance or reinsurance undertaking:

(a)   a description of the structure of the undertaking's administrative, management or supervisory body, of its main roles and responsibilities and of the segregation of responsibilities within those bodies, and in particular whether relevant committees exist within them, and a description of the main roles and responsibilities of key functions or, where a solvency and financial condition report has already been submitted, any material changes in the system of governance that have taken place compared to the previous reporting period;

(b)   information on the remuneration policy and practices regarding administrative, management or supervisory body and, unless otherwise stated, employees, including:

(i)   principles of the remuneration policy, with an explanation of at least the relative importance of the fixed and variable components of remuneration and deferral of variable component and how the remuneration policy is consistent with the integration of sustainability risks;

(ii)   information on the individual and collective performance criteria on which any entitlement to share options, shares or variable components of remuneration is based;

(iii)   a description of the main characteristics of supplementary pension or early retirement schemes for the members of the administrative, management or supervisory body and other key function holders;

(c)   information about material transactions during the reporting period with shareholders, with persons who exercise a significant influence on the undertaking, and with members of the administrative, management or supervisory body.

2. The solvency and financial condition report shall identify any critical or important operational functions or activities outsourced, and shall contain the names of the service providers to whom any critical or important operational functions or activities have been outsourced and the jurisdiction in which the service providers of such functions or activities are located.

3. The solvency and financial condition report shall contain in a separate section any other material information regarding the system of governance of the insurance or reinsurance undertaking.

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(*)   Regulation (EU) 2023/2859 of the European Parliament and of the Council of 13 December 2023 establishing a European single access point providing centralised access to publicly available information of relevance to financial services, capital markets and sustainability (OJ L, 2023/2859, 20.12.2023, ELI: http://data.europa.eu/eli/reg/2023/2859/oj).';

(87)   Article 295 is deleted;

(88)   Articles 296 and 297 are replaced by the following:

'*Article 296*

Information targeted at market professionals: Valuation for solvency purposes

1. The solvency and financial condition report shall contain all of the following information regarding the valuation of the assets of the insurance or reinsurance undertaking for solvency purposes:

(a)   separately for each material class of assets, following the classification as set out in the solvency balance sheet, the value of the assets, and a description of the bases, methods and main assumptions used for valuation for solvency purposes, including, where relevant, the consideration of sustainability risks and factors in the valuation methods;

(b)   for material classes of assets, an explanation of any material differences between the bases, methods and main assumptions used by that undertaking for the valuation for solvency purposes and those used for its valuation in financial statements.

2. The solvency and financial condition report shall include all of the following information regarding the valuation of the technical provisions of the insurance or reinsurance undertaking for solvency purposes:

(a)   separately for each material line of business, the value of technical provisions, including the amount of the best estimate and the risk margin, and a description of the bases, methods and main assumptions used for its valuation for solvency purposes, including, where relevant, the consideration of sustainability risks and factors in the valuation methods;

(b)   a description of the level of uncertainty associated with the value of technical provisions;

(c)   for material lines of business, an explanation of any material differences between the bases, methods and main assumptions used by that undertaking for the valuation for solvency purposes and those used for their valuation in financial statements;

(d)   a statement on whether the phasing-in mechanism for extrapolation laid down in Article 77a(2) of Directive 2009/138/EC is used, and a quantification of the impact of not applying the phasing-in mechanism;

(e)   where the matching adjustment referred to in Article 77b of Directive 2009/138/EC is applied, a description of the matching adjustment and of the portfolio of obligations and assigned assets to which the matching adjustment is applied, and a quantification of the impact of a change to zero of the matching adjustment on the amount of technical provisions;

(f)   a statement on whether the volatility adjustment referred to in Article 77d of Directive 2009/138/EC is used by the undertaking, a description per currency of the volatility adjustment used and the amount of the best estimate it is applied to, and quantification of the impact of a change to zero of the volatility adjustment on the amount of technical provisions;

(g) a statement on whether the transitional risk-free interest rate-term structure referred to Article 308c of Directive 2009/138/EC is applied, the reason for applying that transitional risk-free interest rate-term structure, a quantification of the impact of not applying that risk-free interest rate-term structure on the amount of technical provisions, and the prospect to reduce any dependence on the transitional risk-free interest rate-term structure by the end of the transitional period;

(h) a statement on whether the transitional deduction referred to in Article 308d of Directive 2009/138/EC is applied, the reason for applying that transitional deduction, a quantification of the impact of not applying the transitional deduction on the amount of technical provisions and the prospect to reduce any dependence on the transitional deduction by the end of the transitional period;

(i) a description of the following:

    (i) the recoverables from reinsurance contracts and separately, from special purpose vehicles;

    (ii) any material changes in the relevant assumptions made in the calculation of technical provisions compared to the previous reporting period.

3. The solvency and financial condition report shall contain all of the following information regarding the valuation of the other liabilities of the insurance or reinsurance undertaking for solvency purposes:

(a) separately for each material class of other liabilities the value of other liabilities and a description of the bases, methods and main assumptions used for their valuation for solvency purposes;

(b) for each material classes of other liabilities, an explanation of any material differences with the valuation bases, methods and main assumptions used by the undertaking for the valuation for solvency purposes and those used for their valuation in financial statements.

4. The solvency and financial condition report shall contain information on the areas set out in Article 263 in complying with the disclosure requirements of the insurance or reinsurance undertaking as laid down in paragraphs 1 and 3 of this Article.

5. The solvency and financial condition report shall contain in a separate section any other material information regarding the valuation of assets and liabilities for solvency purposes.

Article 297

Information targeted at market professionals: Capital management and risk profile

1. The solvency and financial condition report shall contain all of the following information regarding the own funds of the insurance or reinsurance undertaking:

(a) information on the objectives of the insurance or reinsurance undertaking in managing its own funds, including information on the time horizon used for business planning and explanations for any material changes to those objectives over the reporting period;

(b) the eligible amount of own funds to cover the Solvency Capital Requirement, classified by tiers, at the end of the reporting period and at the end of the previous reporting period, including an analysis of the material changes in each tier over the reporting period;

(c) the eligible amount of basic own funds to cover the Minimum Capital Requirement, classified by tiers;

(d) where the phasing-in mechanism for extrapolation referred to in Article 77a(2) of Directive 2009/138/EC is applied, a quantification of the impact of not applying the phasing-in mechanism on:

    (i) the basic own funds;

    (ii) the amounts of own funds eligible to cover the Minimum Capital Requirement and the Solvency Capital Requirement;

(e) where the matching adjustment referred to in Article 77b of Directive 2009/138/EC is applied, a quantification of the impact of a change to zero of the matching adjustment on:

    (i) the basic own funds;

    (ii) the amounts of own funds eligible to cover the Minimum Capital Requirement and the Solvency Capital Requirement;

(f) where the volatility adjustment referred to in Article 77d of Directive 2009/138/EC is used by the undertaking a quantification of the impact of a change to zero of the volatility adjustment on:

    (i) the basic own funds;

    (ii) the amounts of own funds eligible to cover the Minimum Capital Requirement and the Solvency Capital Requirement;

(g) where the transitional risk-free interest rate-term structure referred to Article 308c of Directive 2009/138/EC is applied a quantification of the impact of not applying the transitional measure on:

    (i) the basic own funds;

    (ii) the amounts of own funds eligible to cover the Minimum Capital Requirement and the Solvency Capital Requirement;

(h) where the transitional deduction referred to in Article 308d of Directive 2009/138/EC is applied a quantification of the impact of not applying the deduction measure on:

    (i) the basic own funds;

    (ii) the amounts of own funds eligible to cover the Minimum Capital Requirement and the Solvency Capital Requirement;

(i) a quantification of the combined impact on the undertaking's financial position of not applying the transitional measures laid down in Article 77a(2), Articles 308c and 308d and, where relevant, Article 111(1), second subparagraph, of Directive 2009/138/EC;

(j) an analysis of significant changes in own funds during the reporting period, including:

    (i) the value of own fund items issued during the year;

    (ii) the extent to which an issuance as referred to in point (i) has been used to fund redemption;

    (iii) the value of instruments redeemed during the year;

    (iv) changes with regard to the key elements of the reconciliation reserve;

(k) a quantitative and qualitative explanation of any material differences between equity as shown in the undertaking's financial statements and the excess of assets over liabilities as calculated for solvency purposes;

(l) for each material item of ancillary own funds:

    (i) a description of the item concerned;

    (ii) the amount of the ancillary own-fund item;

    (iii) where a method by which to determine the amount of the ancillary own-fund item has been approved:

        (1) that method;

        (2) the nature and the names of the counterparty or group of counterparties for the items referred to in Article 89(1), points (a), (b) and (c) of Directive 2009/138/EC;

(m)   a description of any item deducted from own funds and a brief description of any significant restriction affecting the availability and transferability of own funds within the undertaking;

For the purposes of the first subparagraph, point (l), the names of the counterparties shall not be disclosed where such disclosure is legally not possible or impracticable or where the counterparties concerned are not material.

2.   The solvency and financial condition report shall contain all of the following information regarding the Solvency Capital Requirement and the Minimum Capital Requirement of the insurance or reinsurance undertaking:

(a)   the amounts of the undertaking's Solvency Capital Requirement and the Minimum Capital Requirement and the eligible own funds and ratio of coverage for both the Solvency Capital Requirement and the Minimum Capital Requirement at the end of the reporting period, accompanied, where applicable, by a statement that the final amount of the Solvency Capital Requirement is still subject to supervisory assessment;

(b)   with regard to risk sensitivity, a description of the methods used, the assumptions made and the outcome of the sensitivity analysis for material risks and events;

(c)   where the phasing-in mechanism for extrapolation laid down in Article 77a(2) of Directive 2009/139/EC is applied, a quantification of the impact of non applying that phasing-in mechanism on the Solvency Capital Requirement and the Minimum Capital Requirement;

(d)   where the matching adjustment referred to in Article 77b of Directive 2009/138/EC is applied, a quantification of the impact of a change to zero of that matching adjustment on the Solvency Capital Requirement and on the Minimum Capital Requirement;

(e)   where the volatility adjustment referred to in Article 77d of Directive 2009/138/EC is used, a quantification of the impact of a change to zero of that volatility adjustment on the Solvency Capital Requirement and on the Minimum Capital Requirement;

(f)   where the transitional risk-free interest rate-term structure referred to Article 308c of Directive 2009/138/EC is applied a quantification of the impact of not applying that transitional risk-free interest rate-term structure on the Solvency Capital Requirement and on the Minimum Capital Requirement;

(g)   where the transitional deduction referred to in Article 308d of Directive 2009/138/EC is applied a quantification of the impact of not applying that transitional deduction on the Solvency Capital Requirement and on the Minimum Capital Requirement;

(h)   the amount of the undertaking's Solvency Capital Requirement split by risk modules where that undertaking applies the standard formula, and by risk categories where the undertaking applies an internal model and a qualitative description of the material risks captured by the Solvency Capital Requirement calculation;

(i)   information on whether the undertaking is using simplified calculations, and for which risk modules and sub-modules of the standard formula;

(j)   information on whether and for which parameters of the standard formula that undertaking is using undertaking-specific parameters pursuant to Article 104(7) of Directive 2009/138/EC;

(k)   information on the inputs used by the undertaking to calculate the Minimum Capital Requirement;

(l)   any material change to the Solvency Capital Requirement and to the Minimum Capital Requirement over the reporting period, and the reasons for any such change.

3.   The solvency and financial condition report shall contain all of the following information regarding the option set out in Article 304 of Directive 2009/138/EC:

(a)   a statement that the undertaking is using the duration-based equity risk sub-module set out in that Article for the calculation of its Solvency Capital Requirement, after approval from its supervisory authority;

(b)   the amount of the capital requirement for the duration-based equity risk sub-module resulting from such use.

The solvency and financial condition report shall contain all of the following information regarding the application of Article 105a of Directive 2009/138/EC:

(a)   a statement on whether the insurance and reinsurance undertaking applies the prudential treatment set out in Article 105a of that Directive for the calculation of its Solvency II capital requirement, and where applicable, the amount of equity investments that are classified as long-term equity investments, and the share of such investments within the equity portfolio;

(b)   information on any non-compliance with the conditions laid down in Article 105a(1), second subparagraph, of that Directive during the financial year covered by the report, including all of the following:

(i)   information on the conditions that are or were not met and the reasons for non-compliance;

(ii)   the duration of the non-compliance;

(iii)   whether the insurance or reinsurance undertaking has restored compliance.

An insurance or reinsurance undertaking that is required to cease to classify any equity investment as long-term equity investments in accordance with Article 105a(3), fourth subparagraph, of that Directive shall disclose that information and the remaining duration of the prohibition to apply the risk factor referred to in Article 105a(4) of Directive 2009/138/EC.

4.   Where an internal model is used to calculate the Solvency Capital Requirement, the solvency and financial condition report shall also contain all of the following information:

(a)   a description of the various purposes for which that undertaking is using its internal model;

(b)   a description of the scope of the internal model in terms of business units and risk categories;

(c)   where a partial internal model is used, a description of the technique which has been used to integrate any partial internal model into the standard formula including, where relevant, a description of alternative techniques used;

(d)   a description of the methods used in the internal model for the calculation of the probability distribution forecast and the Solvency Capital Requirement;

(e)   an explanation, by risk module, of the main differences in the methodologies and underlying assumptions used in the standard formula and in the internal model;

(f)   the risk measure and time period used in the internal model, and where they are not the same as those set out in Article 101(3) of Directive 2009/138/EC, an explanation of why the Solvency Capital Requirement calculated using the internal model provides policy holders and beneficiaries with a level of protection equivalent to that set out in Article 101 of that Directive;

(g)   a statement on whether a dynamic volatility adjustment is used in the internal model.

5.   For risk concentration and liquidity risk, the solvency and financial condition report shall contain all of the following:

(a)   a description of the material risk concentrations to which the insurance or reinsurance undertaking is exposed;

(b)   the total amount of the expected profit included in future premiums as calculated in accordance with Article 260(2);

(c)   the total amount of the expected profit included in future fees for servicing and management of funds as calculated in accordance with Article 260(2a).

6.   For risk mitigation, the solvency and financial condition report shall describe the techniques used for mitigating risks.

7.   The solvency and financial condition report shall contain both quantitative information regarding the reporting period, and information on the risk exposure arising from off-balance sheet positions and the transfer of risk to special purpose vehicles.

8.   The solvency and financial condition report shall describe how the undertaking has determined its overall solvency needs given its risk profile and how its capital management activities and its risk management system interact with each other.

9.   The solvency and financial condition report shall contain all of the following information regarding any non-compliance with the Minimum Capital Requirement or significant non-compliance with the Solvency Capital Requirement of the insurance or reinsurance undertaking:

(a)   regarding any non-compliance with that undertaking's Minimum Capital Requirement:

      (i)   the period and maximum amount of each non-compliance during the reporting period;

      (ii)   explanation of the origin and consequences of the non-compliance;

      (iii)   any remedial measures taken, as provided for under Article 51(1b), point (d)(vi), of Directive 2009/138/EC;

      (iv)   an explanation of the effects of the remedial measures referred to in point (iii);

(b)   where non-compliance with the undertaking's Minimum Capital Requirement has not been subsequently resolved, the amount of and the consequences of the non-compliance at the reporting date;

(c)   regarding any non-compliance with the undertaking's Solvency Capital Requirement during the reporting period:

      (i)   the period and maximum amount of each significant non-compliance;

      (ii)   the explanation of its origin and consequences and any remedial measures taken, as provided for under Article 51(1b), point (d)(vi), of Directive 2009/138/EC;

      (iii)   an explanation of the effects of such remedial measures referred to in point (ii);

(d)   where a non-compliance with the undertaking's Solvency Capital Requirement has not been subsequently resolved, the amount of and the consequences of the non-compliance at the reporting date.

10.   The solvency and financial condition report shall contain in a separate section any other material information regarding the risk profile and the capital management of the insurance or reinsurance undertaking.';

(89)   the following Article 297a is inserted:

'*Article 297a*

Information targeted at market professionals: Sustainability-related information

1.   The solvency and financial condition report shall contain the elements of the plans to be disclosed in accordance with Article 44 of Directive 2009/138/EC, including relevant quantifiable targets.

2.   The solvency and financial condition report shall state whether the undertaking discloses the plans referred to in Article 19a or Article 29a of Directive 2013/34/EU, and where applicable, contain the internet link to those plans.

3.   The solvency and financial condition report shall state whether the undertaking has any material exposure to climate change-related risks following the materiality assessment referred to in Article 45a(1) of Directive 2009/138/EC, and, where relevant, whether it has taken any actions to manage such exposure.

4.   An insurance or reinsurance undertaking that intends to use the solvency and financial condition report to comply with the disclosure obligations laid down in Regulation (EU) 2019/2088 of the European Parliament and of the Council (*) and Regulation (EU) 2020/852, shall disclose the relevant information required by those Regulations together with the information required by paragraphs 1, 2 and 3 of this Article.

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(*)   Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (OJ L 317, 9.12.2019, p. 1, ELI: http://data. europa.eu/eli/reg/2019/2088/oj).';

(90)   the following Article 298a is inserted:

'*Article 298a*

Languages

1.   Where the insurance contract was concluded with a policyholder from another Member State under the freedom of establishment or the freedom to provide services, the part of the solvency and financial condition report referred to in Article 51(1a) of Directive 2009/138/EC, shall upon request from the policyholder be provided to that policyholder in the official language or one of the official languages of that Member State as chosen by the policyholder. Where the translation is generated by a machine translation tool, insurance or reinsurance undertakings shall disclose to that policyholder that that part of the solvency and financial condition report has been machine translated. Insurance and reinsurance undertakings shall send the translated part of the solvency and financial condition report within 10 working days from that request.

2.   Paragraph 1 shall not apply where the translation in the requested language is available online.';

(91)   in Article 299, the following title is inserted:
'**Non-disclosure of information**';

(92)   in Article 300, paragraph 1 is replaced by the following:

'1.   Insurance and reinsurance undertakings shall disclose both parts of their solvency and financial condition report in accordance with Article 51(7) of Directive 2009/138/EC.';

(93)   Article 301 is replaced by the following:

'*Article 301*

Means of disclosure

1.   Insurance and reinsurance undertakings that own and maintain a website related to their business shall disclose both parts of the solvency and financial condition report on that website.

2.   Where insurance and reinsurance undertakings that do not own and maintain a website but are a member of a trade association which does own and maintain a website shall, where permitted by that trade association, disclose both parts of the solvency and financial condition report on the website of that association.

3.   Where insurance and reinsurance undertakings disclose both parts of their solvency and financial condition report on a website in accordance with paragraph 1 or 2, both parts shall be easily accessible and shall remain available on that website for at least five years after the disclosure date referred to in Article 300(1).

4.   Insurance and reinsurance undertakings that do not disclose both parts of their solvency and financial condition report on a website in accordance with paragraphs 1 and 2 shall send an electronic copy of those parts to any person who, within five years of the disclosure date referred to in Article 300(1) requests those parts. Insurance and reinsurance undertakings shall send those parts within 10 working days from that request.

5.   Insurance and reinsurance undertakings shall submit to the supervisory authorities both parts of their solvency and financial condition report, and any updated version of those parts thereto, in electronic form allowing for application of search function for relevant text and numbers.

6.   Insurance and reinsurance undertakings shall submit to supervisory authorities, together with the information referred to in Article 304(1), point (d), the exact location on the website where both parts of the solvency and financial condition report are or will be available. Where that location changes during the subsequent three years, insurance and reinsurance undertakings shall notify the updated location to supervisory authorities.';

(94)   in Article 302, paragraph 2 is replaced by the following:

'2.   Without prejudice to any disclosure which shall be immediately provided by insurance and reinsurance undertakings in accordance with Article 54(1) of Directive 2009/138/EC, any updated version of the solvency and financial condition report shall be identified as an updated version and disclosed with the date of update as soon as possible after the major development referred to in paragraph 1 of this Article, in accordance with Article 301 of this Regulation replacing the previous version disclosed.';

(95)   Article 303 is deleted;

(96)   Articles 304 and 305 are replaced by the following:

'*Article 304*

Elements of the regular supervisory reporting

1.   The information which supervisory authorities require insurance and reinsurance undertakings to submit at predefined periods in accordance with Article 35(2), point (a)(i) of Directive 2009/138/EC shall comprise the following:

(a)   both parts of the solvency and financial condition report disclosed by the insurance or reinsurance undertaking in accordance with Article 300 of this Regulation, together with any equivalent information disclosed publicly under other legal or regulatory requirements which the solvency and financial condition report refers to, and any updated version of that report disclosed in accordance with Article 302 of this Regulation;

(b)   the regular supervisory report comprising the information referred to in Articles 307 to 311 of this Regulation. It shall also present any information referred to in Articles 293 to 297 of this Regulation which supervisory authorities have permitted insurance and reinsurance undertakings not to disclose in their solvency and financial condition report, in accordance with Article 53(1) of Directive 2009/138/EC. The regular supervisory report shall follow the same structure as the one set out in Annex XX, Section B;

(c)   the own-risk and solvency assessment supervisory report ("ORSA supervisory report"), comprising the results of each regular own risk and solvency assessment performed by the insurance and reinsurance undertakings in accordance with Article 45(6) of Directive 2009/138/EC, whenever an own-risk and solvency assessment is performed in accordance with Article 45(5) of that Directive;

(d)   annual and quarterly quantitative templates specifying in greater detail and supplementing the information presented in the solvency and financial condition report and in the regular supervisory report, taking into account possible limitations and exemptions as referred to in Article 35a of Directive 2009/138/EC.

For the purposes of point (d), to the extent that undertakings are exempted from quarterly reporting obligations in accordance with Article 35a(1) of Directive 2009/138/EC they shall submit annual quantitative templates only. Annual reporting obligations shall not include reporting on an item-by-item basis where undertakings are exempted from such reporting pursuant to Article 35a(2) of Directive 2009/138/EC.

2.   The scope of the quarterly quantitative templates shall be narrower than that of the annual quantitative templates.

3.   Paragraph 1 shall be without prejudice to the power of supervisory authorities to require insurance and reinsurance undertakings to communicate on a regular basis any other information prepared under the responsibility of, or at the request of, the administrative, management or supervisory body of those undertakings.

Article 305

Materiality

For the purposes of this Chapter, the information or the changes to any information submitted to supervisors shall be considered material where its omission or misstatement could influence the decision-making or judgement of the supervisory authorities.';

(97)   Articles 307 and 308 are replaced by the following:

'*Article 307*

Business and performance

1.   The regular supervisory report shall contain all of the following information about the business of the insurance or reinsurance undertaking:

(a)   the name and legal form of the undertaking;

(b)   where available, the legal entity identifier of the insurance or reinsurance undertaking, as specified pursuant to Article 7(4), point (b), of Regulation (EU) 2023/2859;

(c)   the main trends and factors that contribute to the development, performance and position of the undertaking over its business planning time period including the undertaking's competitive position and any significant legal or regulatory issues;

(d)   a description of the business objectives of the undertaking, including the relevant strategies and timeframes.

2.   The regular supervisory report shall include all of the following qualitative and quantitative information regarding the underwriting performance of the insurance or reinsurance undertaking, as shown in the undertaking's financial statements:

(a)   an analysis of the undertaking's overall underwriting performance during the reporting period and reasons for any material changes compared to the previous reporting period;

(b)   projections of the undertaking's underwriting performance with information on significant factors that might affect such underwriting performance, over its business planning time period.

3.   The regular supervisory report shall contain all of the following qualitative and quantitative information regarding the performance of the investments of the insurance or reinsurance undertaking, as shown in the undertaking's financial statements:

(a)   an analysis, by relevant asset class, of the undertaking's overall investment performance during the reporting period, and, where applicable, the reasons for any material changes to that performance compared to the previous reporting period;

(b)   projections of the undertaking's expected investment performance, with information on significant factors that might affect such investment performance, over its business planning time period;

(c)   the key assumptions which the undertaking makes in its investment decisions with respect to the movement of interest rates, exchange rates, and other relevant market parameters, over its business planning time period;

(d)   information about any investments in securitisation, and the undertaking's risk management procedures in respect of such securities or instruments.

4.   The regular supervisory report shall contain information about any material income and expenses, other than underwriting or investment income and expenses, over the undertaking's business planning time period.

5.   The regular supervisory report shall contain any other material information regarding their business and performance.

Article 308

System of governance

1.   The regular supervisory report shall contain all of the following information regarding the insurance or reinsurance undertaking's system of governance:

(a)   a description of the structure of the undertaking's administrative, management or supervisory body of its main roles and responsibilities and of the segregation of responsibilities within those bodies, and in particular whether relevant committees exist within them, and a description of the main roles and responsibilities of key functions;

(b)   the remuneration entitlements of the members of the administrative, management or supervisory body and other key function, over the reporting period and the reasons for any material changes to those entitlements compared to the previous reporting period, including an explanation of the relative importance of the fixed and variable components of remuneration.

2.   The regular supervisory report shall contain all of the following information regarding the compliance of the insurance or reinsurance undertaking with fit and proper requirements:

(a)   a list of the persons in the undertaking that are responsible for key functions;

(b)   a description of the undertaking's specific requirements concerning skills, knowledge and expertise applicable to the persons who effectively run the undertaking or have other key functions.

3.   The regular supervisory report shall contain all of the following information regarding the risk management system of the insurance or reinsurance undertaking:

(a)   a description of how the risk management system including the risk management function, are implemented and integrated into the organisational structure and decision-making processes of the undertaking;

(b)   information on the undertaking's risk management strategies, objectives, processes and reporting procedures for each category of risk;

(c)   information on how the undertaking verifies the appropriateness of credit assessments from external credit assessments institutions, including information on how, and the extent to which, the undertaking uses credit assessments from external credit assessments institutions;

(d)   results of the assessments regarding the extrapolation of the risk-free rate, the matching adjustment and the volatility adjustment, as referred to in Article 44(2a) of Directive 2009/138/EC.

4.   The regular supervisory report shall describe the process undertaken by the undertaking to fulfil its obligation to conduct an own risk and solvency assessment as part of its risk management system and how the own risk and solvency assessment is integrated into the organisational structure and decision-making processes of the undertaking.

5.   The regular supervisory report shall contain all of the following information regarding the internal control system of the insurance or reinsurance undertaking:

(a)   a description of the undertaking's internal control system elements and, where applicable, any material failures of that internal control system;

(b)   information on the advice given and assessments performed, as referred to in Article 46(2) of Directive 2009/138/EC during the reporting period, including any planned activities that were not implemented and the reason for their non-implementation;

(c)   information on the undertaking's compliance policy, any major activities taken under the compliance plan and any material compliance problems identified during the reporting period.

6.   The regular supervisory report shall contain all of the following information regarding the internal audit function of the insurance or reinsurance undertaking:

(a)   a description of internal audits performed during the reporting period, with:

   (i)   a summary of the material findings and recommendations reported to the undertaking's administrative, management or supervisory body;

   (ii)   a summary of and any action taken with respect to those material findings and recommendations;

   (iii)   any information on outstanding material issues;

(b)   a description of the undertaking's internal audit policy, and the frequency of its revision;

(c)   a description of the undertaking's audit plan, including future internal audits and the rationale for those future audits.

7.   The regular supervisory report shall contain all of the following information regarding the actuarial function of the insurance or reinsurance undertaking:

(a)   a description of how the actuarial function of the insurance or reinsurance undertaking is implemented;

(b)   an overview of the activities undertaken by the actuarial function in each of its areas of responsibility during the reporting period, describing how the actuarial function contributes to the effective implementation of the undertaking's risk management system and describing the main findings of the actuarial function.

8.   The regular supervisory report shall contain all of the following information regarding outsourcing:

(a)   a description of the outsourcing policy of the insurance or reinsurance undertaking;

(b)   a list of the persons responsible for the outsourced key functions in the service provider.

9.   The regular supervisory report shall contain any other material information regarding the system of governance of the insurance or reinsurance undertaking.';

(98)   Article 309 is deleted;

(99)   in Article 310, paragraphs 2 and 3 are replaced by the following:

'2.   The regular supervisory report shall describe in detail the most relevant assumptions used in the calculation of the best estimate, the sensitivity of the best estimate to changes and results of any back testing.

3.   The regular supervisory report shall contain the following information regarding the obligations laid down in Article 263 of this Regulation:

(a)   a justification of why alternative valuation methods are used by class of assets and liabilities;

(b)   the assumptions of each alternative valuation method used for assets and liabilities;

(c)   the valuation uncertainty by class of assets and liabilities;

(d)   information about the adequacy of the valuation of the assets and liabilities for which the alternative valuation is used, assed by comparison against experience.';

(100)   Article 311 is replaced by the following:

'*Article 311*

Capital management and risk profile

1.   The regular supervisory report shall contain all of the following information regarding the own funds of the insurance or reinsurance undertaking:

(a)   information on the policies and processes employed by the undertaking for managing its own funds;

(b)   information on the material terms and conditions of the main items of own funds held by the undertaking;

(c)   the expected developments of the undertaking's own funds over its business planning time period given the undertaking's business strategy, taking into account appropriately stressed capital plans;

(d)   whether there is any intention to repay or redeem any own-fund item or whether there are plans to raise additional own funds;

(e)   information regarding deferred taxes, including:

   (i)   a description of the calculated amount of deferred tax assets without an assessment of their probable utilisation, and the extent to which those deferred tax assets have been recognised;

   (ii)   for deferred tax assets which have been recognised, a description of the amounts being recognised as likely to be utilised by reference to probable future taxable profit and by reference to the reversion of deferred tax liabilities relating to income taxes levied by the same tax authority;

   (iii)   a detailed description of the underlying assumptions used for the projection of probable future taxable profit for the purposes of Article 15;

   (iv)   an analysis of the sensitivity of the net deferred tax assets to changes in the underlying assumptions referred to in point (iii), where net deferred tax assets shall be calculated as the difference between:

      (1)   the amount of deferred tax assets calculated in accordance with Article 15;

      (2)   the amount of deferred tax liabilities against which the deferred tax assets may be set off by taking into account detailed scheduling.

2.   The regular supervisory report shall contain all of the following information regarding the Solvency Capital Requirement and the Minimum Capital Requirement of the insurance or reinsurance undertaking:

(a)   the expected developments of the undertaking's anticipated Solvency Capital Requirement and Minimum Capital Requirement over its business planning time period given the undertaking's business strategy, where the same information is not included in the ORSA Supervisory Report;

(b)   an estimate of the undertaking's Solvency Capital Requirement, determined in accordance with the standard formula, where the supervisory authority has required the undertaking to provide such estimate pursuant to Article 112(7) of Directive 2009/138/EC, or where no such estimate was required in the year of adoption of the regular supervisory report, the most recent available calculation, accompanied by an indication of the reference year of that calculation;

(c)   a description on the approach taken for the calculation of the capital requirements for immaterial risks of the SCR standard formula, including a brief description of the modules or sub-modules which are subject to such approach and of the volume measures that have been used to calculate the immaterial risks;

(d) for the future profit projected for the purposes of the loss-absorbing capacity of deferred taxes in accordance with Article 207 of this Regulation:

    (i) a description, and the relevant amount of each of the components used to demonstrate a positive value of the increase in deferred tax assets;

    (ii) a detailed description of the underlying assumptions used for the projection of probable future taxable profit for the purposes of Article 207;

    (iii) an analysis of the sensitivity of the value of the adjustment to changes in the underlying assumptions referred to in point (ii);

(e) the volume and nature of the loan portfolio of the insurance or reinsurance undertaking.

3. Where an internal model is used to calculate the Solvency Capital Requirement, the regular supervisory report shall also contain:

(a) the results of the review of the sources of profits and the causes of losses, as required by Article 123 of Directive 2009/138/EC, for each major business unit;

(b) a description of how the categorisation of risk chosen in the internal model explains those sources of profits and causes of losses.

4. Where undertaking-specific parameters are used to calculate the Solvency Capital Requirement, or a matching adjustment is applied to the relevant risk-free interest term structure, the regular supervisory report shall also state whether there have been changes to the information in the application for approval concerning undertaking-specific parameters or matching adjustment.

5. The regular supervisory report shall contain all of the following information regarding the holding of long-term equity investments as referred to in Article 105a of the Directive 2009/138/EC:

(a) a statement of whether the insurance or reinsurance undertaking applies the prudential treatment set out in Article 105a of that Directive, and where that is the case, the amount and characteristics of equity investments that are classified as long-term equity investments, including:

    (i) the geographical location of those equity investments;

    (ii) the share of such equity investments within the equity portfolio;

(b) a description of how the insurance or reinsurance undertaking complies with the conditions laid down in Article 105a(1), second subparagraph of Directive 2009/138/EC;

(c) a description of the methods used to demonstrate the ability to avoid forced sales in accordance with Article 171a of this Regulation.

The regular supervisory report shall also contain the information laid down in the third subparagraph, where one of the following conditions is met:

(a) long-term equity investments represent more than 4 % of total assets held by insurance or reinsurance undertakings;

(b) the insurance or reinsurance undertaking would not comply with the Solvency Capital Requirement without applying Article 105a of Directive 2009/138/EC.

The information referred to in the second subparagraph shall be the following:

(a) a quantification of the impact on the value of the market risk module of non-application of Article 105a of Directive 2009/138/EC to any equity investment;

(b) information on the actions that the insurance or reinsurance undertaking would take in case of breach of, or persisting non-compliance with, the conditions laid down in Article 105a(1), second subparagraph, of Directive 2009/138/EC.

6. With respect to the liquidity risk, the regular supervisory report shall contain:

(a) information about the expected profit included in future premiums and the expected profit included in future fees for servicing and management of funds as calculated in accordance with Article 260 (2) and (2a) respectively of this Regulation for each line of business;

(b) the result of the qualitative assessment referred to in Article 260(1), point (d)(ii);

(c) a description of the methods and main assumptions used to calculate the expected profit included in future premiums.

The regular supervisory report shall also contain information on any material liquidity risk exposure to financing transactions or agreements, including factoring, in which the insurance or reinsurance undertaking has entered directly or indirectly.

7. With respect to risk concentration the regular supervisory report shall contain:

(a) information on the material risk concentrations to which the undertaking is exposed to;

(b) an overview of any future risk concentrations anticipated over the business planning time period in line with that undertaking's business strategy;

(c) an explanation on how the risk concentrations referred to in point (a) and (b) will be managed.

8. The regular supervisory report shall contain all of the following information regarding the risk exposure of the insurance or reinsurance undertaking, including the exposure arising from off-balance sheet positions and the transfer of risk to special purpose vehicles:

(a) where the undertaking sells or re-pledges collateral, within the meaning of Article 214 of this Regulation, the amount of that collateral, valued in accordance with Article 75 of Directive 2009/138/EC;

(b) where the undertaking has provided collateral, within the meaning of Article 214:

   (i) the nature of the collateral;

   (ii) the nature and value of assets provided as collateral;

   (iii) the corresponding actual and contingent liabilities created by the collateral arrangement;

(c) information on the material terms and conditions associated with the collateral arrangement;

(d) where the undertaking sells variable annuities, information on guarantee riders and hedging of the guarantees;

(e) a description of the financing transactions, including factoring, in which the insurance or reinsurance undertaking has entered directly or indirectly, and the corresponding amounts of the off-balance sheet liabilities.

9. The regular supervisory report shall contain all of the following information regarding the risk-mitigation techniques of the insurance or reinsurance undertaking:

(a) a description of the techniques used to mitigate risks;

(b) a description of any material risk-mitigation techniques that the undertaking is considering purchasing or entering into over the business planning time period given the undertaking's business strategy, and the rationale for and effect of such risk mitigation techniques;

(c) where the insurance or reinsurance undertaking holds collateral, within the meaning of Article 214 of this Regulation, information on the material terms and conditions associated with the collateral arrangement.

10. The regular supervisory report shall contain qualitative and quantitative information about the material risks not captured by the Solvency Capital Requirement calculation and not captured in the previous paragraphs, where the same information is not covered by the ORSA supervisory report.

11.   The regular supervisory report shall contain all of the following information about the risk sensitivity of the insurance or reinsurance undertaking, where the same information is not covered by the ORSA supervisory report:

(a)   a description of the stress tests and scenario analysis referred to in Article 259(3), carried out by the undertaking including its outcome;

(b)   a description of the methods used and the main assumptions underlying the stress tests and scenario analysis referred to in Article 259(3).

12.   The regular supervisory report shall contain information about any reasonably foreseeable risk of non-compliance with the undertaking's Minimum Capital Requirement or Solvency Capital Requirement, and the undertaking's plans for ensuring that compliance with each is maintained, where the same information is not included in the ORSA supervisory report.

13.   The regular supervisory report shall contain any other material information about the capital management and risk profile of the insurance or reinsurance undertaking.

14.   For the purposes of paragraphs 6 and 8, "factoring" shall mean a contractual agreement between a business (the "assignor") and a financial entity (the "factor") in which the assignor assigns or sells its receivables to the factor in exchange for the factor providing the assignor with one or more of the following services with regard to the receivables assigned:

(a)   an advance of a percentage of the amount of the assigned receivables, generally short-term, uncommitted and without automatic roll-over;

(b)   receivables management, collection and credit protection, whereby, in general, the factor administers the assignor's sales ledger and collects the receivables in the factor's own name.';

(101)   in Title 1, Chapter XIII, Section 2, the title is replaced by the following:

'*SECTION 2*

Information on material changes and means of communications';

(102)   Articles 312 and 313 are replaced by the following:

'*Article 312*

Information on material changes

Where there is no requirement for a regular supervisory report to be submitted in relation to a given financial year, insurance and reinsurance undertakings shall nevertheless submit to their supervisory authority information on any material changes that occurred during the financial year compared to the latest information submitted to that supervisory authority in accordance with this Chapter. They shall also provide a concise explanation about the causes and effects of such changes. The submission of information on material changes shall not be considered a change in frequency of the regular supervisory report set out in Article 35a of Directive 2009/138/EC.

Article 313

Means of communication

Insurance and reinsurance undertakings shall submit the information referred to in Article 304(1) in a machine-readable electronic form which allows for application of search function for relevant text and numbers.';

(103)   Article 314 is deleted;

(104) in Title I, the following Chapter XVI is added:

'CHAPTER XVI

PROPORTIONALITY MEASURES

Article 327a

Investments in intangibles asset capital requirement for identifying small and non-complex undertakings

For the purposes of Article 29a(1), points (a)(iv)(3), (b)(v)(3) and (c)(vii)(3) of Directive 2009/138/EC, the capital requirement that is applicable to investments in intangible assets that are not covered by the market risk and the counterparty default risk modules shall be the capital requirement for intangible asset risk referred to in Article 203 of this Regulation.

Article 327b

Reduction of the frequency of the regular supervisory report

1.   The supervisory authority shall approve the use of the proportionality measure provided for in Article 35(5a) of Directive 2009/138/EC by an insurance and reinsurance undertaking that is not classified as a small and non-complex undertaking, where all of the following conditions are met:

(a)   the supervisory authority concludes, on the basis of the supervisory review process, that the undertaking:

   (i)   is able to withstand any current or future risks;

   (ii)   does not require a more frequent supervisory assessment than the one requested by the insurance or reinsurance undertaking;

   (iii)   is not subject to on-going supervisory measures to remedy material non-compliance with Directive 2009/138/EC;

(b)   the supervisory authority concludes that the undertaking does not have a complex business model, taking into account the undertaking's business strategy and business plan, the complexity of the insurance products offered and its investment portfolio;

(c)   the undertaking meets all of the following conditions, subject to paragraphs 2, 3 and 4:

   (i)   the technical provisions from life activities, gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC, are not higher than EUR 12 000 000 000;

   (ii)   the annual gross written premium income from non-life activities is not higher than EUR 2 000 000 000;

   (iii)   the undertaking does not represent more than 5 % of the life market or non-life market of the home Member State of the undertaking, where the life market share is based on gross technical provisions and the non-life market share is based on gross written premiums;

(d)   the supervisory authority has not identified unresolved material concerns arising from the system of governance of the undertaking;

(e)   the undertaking's Solvency Capital Requirement is exceeded by an appropriate margin taking also into account the internal target solvency position of the undertaking as specified in its medium-term capital management plan;

(f)   the supervisory authority has not identified unresolved material concerns with the last Regular Supervisory Report and is satisfied with the information in the Solvency and Financial Condition Report, and the annual and where applicable quarterly Quantitative Reporting Templates.

The supervisory authority shall withdraw the approval granted to an insurance or reinsurance undertaking that is not classified as small and non-complex undertaking to use the proportionality measure provided for in Article 35(5a) of Directive 2009/138/EC, where any of the conditions set out in the first subparagraph are no longer fulfilled.

2.   Paragraph 1, first subparagraph, point (c)(i), shall only apply to life undertakings and to undertakings pursuing both life and non-life activities whose technical provisions related to the life activities represent 20 % or more of the total technical provisions gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC.

3.   Paragraph 1, first subparagraph, point (c)(ii), shall only apply to non-life undertakings and to undertakings pursuing both life and non-life activities whose annual gross written premium income related to the non-life activities represent 40 % or more of its total annual gross written premium income.

4.   Notwithstanding paragraph 1, first subparagraph, supervisory authorities may still approve the use of the proportionality measure provided for in Article 35(5a) of Directive 2009/138/EC to an insurance and reinsurance undertaking which does not meet the condition set out in point (c) of that paragraph, where they conclude, on the basis of the elements of the supervisory review process that are relevant for this proportionality measure, that the risk profile of the undertaking is sufficiently low.

Article 327c

Combination of key functions

1.   The supervisory authority shall approve the use of the proportionality measure provided for in Article 41(2a), second subparagraph of Directive 2009/138/EC by an insurance and reinsurance undertaking that is not classified as small and non-complex undertaking, where all of the following conditions are met:

(a)   the supervisory authority concludes, on the basis of the supervisory review process, that the undertaking:

   (i)   is able to withstand any current or future risks;

   (ii)   is not subject to on-going supervisory measures to remedy material non-compliance with Directive 2009/138/EC;

(b)   the supervisory authority concludes that the undertaking does not have a complex business model, taking into account its business strategy its business plan, the complexity of the insurance products offered and its investment portfolio;

(c)   the undertaking meets all of the following conditions, subject to paragraphs 2, 3 and 4:

   (i)   the technical provisions from life activities, gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC, are not higher than EUR 12 000 000 000;

   (ii)   the annual gross written premium income from non-life activities is not higher than EUR 2 000 000 000;

   (iii)   the undertaking does not represent more than 5 % of the life market or non-life market of the home Member State of the undertaking, where the life market share is based on gross technical provisions and the non-life market share is based on gross written premiums;

(d)   the supervisory authority has not identified unresolved material concerns arising from the system of governance of the undertaking;

(e)   the persons responsible for the key functions of risk management, actuarial and compliance possess at all times sufficient knowledge, skills and experience to perform their duties, and the combination of functions or the combination of a function with a membership of the administrative, management or supervisory body does not compromise the person's ability and availability to carry out her or his responsibilities;

(f)   the supervisory authority is satisfied that the cost of maintaining separate functions would be disproportionate for the undertaking.

The supervisory authority shall withdraw the approval granted to an insurance or reinsurance undertaking that is not classified as small and non-complex undertaking to use the proportionality measure provided for in Article 41(2a) of Directive 2009/138/EC, where any of the conditions set out in the first subparagraph are no longer fulfilled.

2.   Paragraph 1, first subparagraph, point (c)(i), shall only apply to life undertakings and to undertakings pursuing both life and non-life activities whose technical provisions related to the life activities represent 20 % or more of the total technical provisions gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC.

3.   Paragraph 1, first subparagraph, point (c)(ii), shall only apply to non-life undertakings and to undertakings pursuing both life and non-life activities whose annual gross written premium income related to the non-life activities represent 40 % or more of its total annual gross written premium income.

4.   Notwithstanding paragraph 1, first subparagraph, supervisory authorities may still approve the use of the proportionality measure provided for in Article 41(2a) of Directive 2009/138/EC to an insurance and reinsurance undertaking which does not meet the condition set out in paragraph 1, first subparagraph, point (c), of this Article, where they conclude, on the basis of the elements of the supervisory review process that are relevant for this proportionality measure, that the risk profile of the undertaking is sufficiently low.

Article 327d

Reduction of the frequency of the review of written policies

1.   The supervisory authority shall approve the use of the proportionality measure provided for in Article 41(3), second subparagraph of Directive 2009/138/EC by an insurance and reinsurance undertaking that is not classified as small and non-complex undertaking, where all of the following conditions are met:

(a)   the supervisory authority concludes, on the basis of the supervisory review process, that the undertaking:

    (i)   is able to withstand any current or future risks;

    (ii)   does not require a more frequent supervisory assessment than the one requested by the insurance or reinsurance undertaking;

    (iii)   is not subject to on-going supervisory measures to remedy material non-compliance with Directive 2009/138/EC;

(b)   the supervisory authority concludes that the undertaking does not have a complex business model, taking into account its business strategy, its business plan, the complexity of the insurance products offered and its investment portfolio;

(c)   the undertaking meets all of the following conditions, subject to paragraphs 2, 3 and 4:

    (i)   the technical provisions from life activities, gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC, are not higher than EUR 12 000 000 000;

    (ii)   the annual gross written premium income from non-life activities is not higher than EUR 2 000 000 000;

    (iii)   the undertaking does not represent more than 5 % of the life market or non-life market of the home Member State of the undertaking, where the life market share is based on gross technical provisions and the non-life market share is based on gross written premiums;

(d)   the supervisory authority has not identified unresolved material concerns arising from the system of governance of the undertaking.

The supervisory authority shall withdraw the approval granted to an insurance or reinsurance undertaking that is not classified as small and non-complex undertaking to use the proportionality measure provided for in Article 41(3) of Directive 2009/138/EC, where any of the conditions set out in the first subparagraph are no longer fulfilled.

2.   Paragraph 1, first subparagraph, point (c)(i), shall only apply to life undertakings and to undertakings pursuing both life and non-life activities whose technical provisions related to the life activities represent 20 % or more of the total technical provisions gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC.

3.   Paragraph 1, first subparagraph, point (c)(ii), shall only apply to non-life undertakings and to undertakings pursuing both life and non-life activities whose annual gross written premium income related to the non-life activities represent 40 % or more of its total annual gross written premium income.

4.   Notwithstanding paragraph 1, first subparagraph, supervisory authorities may still approve the use of the proportionality measure provided for in Article 41(3), second subparagraph of Directive 2009/138/EC to an insurance and reinsurance undertaking which does not meet the condition set out in paragraph 1, first subparagraph, point (c), of this Article, where they conclude, on the basis of the elements of the supervisory review process that are relevant for this proportionality measure, that the risk profile of the undertaking is sufficiently low.

Article 327e

Reduction of the frequency of the own risk and solvency assessment

1.   The supervisory authority shall approve the use of the proportionality measure provided for in Article 45(5), second subparagraph, of Directive 2009/138/EC by an insurance and reinsurance undertaking that is not classified as small and non-complex undertaking, where all of the following conditions are met:

(a)   the supervisory authority concludes, on the basis of the supervisory review process, that the undertaking:

   (i)   is able to withstand any current or future risks;

   (ii)   does not require a more frequent supervisory assessment than the one requested by the insurance or reinsurance undertaking;

   (iii)   is not subject to on-going supervisory measures to remedy material non-compliance with Directive 2009/138/EC;

(b)   the supervisory authority concludes that the undertaking does not have a complex business model, taking into account its business strategy, its business plan, the complexity of the insurance products offered and its investments portfolio;

(c)   the undertaking meets all of the following conditions, subject to paragraphs 2, 3 and 4:

   (i)   the technical provisions from life activities, gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC, are not higher than EUR 12 000 000 000;

   (ii)   the annual gross written premium income from non-life activities is not higher than EUR 2 000 000 000;

   (iii)   the undertaking does not represent more than 5 % of the life market or non-life market of the home Member State of the undertaking, where the life market share is based on gross technical provisions and the non-life market share is based on gross written premiums;

(d)   the supervisory authority has not identified unresolved material concerns arising from the system of governance of the undertaking;

(e) the undertaking's Solvency Capital Requirement is exceeded by an appropriate margin taking into account the internal target solvency position of the undertaking as specified in its medium-term capital management plan;

(f) the supervisory authority is satisfied with the information provided in the undertaking's last own risk and solvency assessment pursuant to Article 45(2) of Directive 2009/138/EC and Article 306 of this Regulation, taking into account its risk profile;

(g) the undertaking is able to demonstrate to the satisfaction of the supervisory authority that the reduced frequency of the own risk and solvency assessment report would not negatively affect the risk management system of the undertaking referred to Article 44 of Directive 2009/138/EC;

(h) the undertaking maintains an effective process to monitor circumstances that require an ad hoc own risk and solvency assessment report and has sufficient resources to draw up such ad hoc report, when required.

The supervisory authority shall withdraw the approval granted to an insurance or reinsurance undertaking that is not classified as small and non-complex undertaking to use the proportionality measure provided for in Article 45(5), second subparagraph, of Directive 2009/138/EC, where any of the conditions set out in the first subparagraph are no longer fulfilled.

2. Paragraph 1, first subparagraph, point (c)(i), shall only apply to life undertakings and to undertakings pursuing both life and non-life activities whose technical provisions related to the life activities represent 20 % or more of the total technical provisions gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC.

3. Paragraph 1, first subparagraph, point (c)(ii), shall only apply to non-life undertakings and to undertakings pursuing both life and non-life activities whose annual gross written premium income related to the non-life activities represent 40 % or more of its total annual gross written premium income.

4. Notwithstanding paragraph 1, first subparagraph, supervisory authorities may still approve the use of the proportionality measure provided for in Article 45(5), second subparagraph, of Directive 2009/138/EC to an insurance and reinsurance undertaking which does not meet the condition set out in paragraph 1, first subparagraph, point (c), of this Article, where they conclude, on the basis of the elements of the supervisory review process that are relevant for this proportionality measure, that the risk profile of the undertaking is sufficiently low.

Article 327f

Use of the prudent deterministic valuation of the best estimate for life obligations with options and guarantees that are deemed immaterial

1. The supervisory authority shall approve the use of the proportionality measure provided for in Article 77(8) of Directive 2009/138/EC by an insurance and reinsurance undertaking that is not classified as small and non-complex undertaking, where all of the following conditions are met:

(a) the supervisory authority concludes, on the basis of the supervisory review process, that the undertaking:

(i) is able to withstand any current or future risks;

(ii) is not subject to on-going supervisory measures to remedy material non-compliance with Directive 2009/138/EC;

(b) the supervisory authority concludes that the undertaking does not have a complex business model, taking into account its business strategy, its business plan, the complexity of the insurance products offered and its investment portfolio;

(c)   the undertaking meets all of the following conditions, subject to paragraphs 2 and 3:

      (i)   the technical provisions from life activities, gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC, are not higher than EUR 12 000 000 000;

      (ii)   the undertaking does not represent more than 5 % of the life market or non-life market of the home Member State of the undertaking, where the life market share is based on gross technical provisions and the non-life market share is based on gross written premiums;

(d)   the supervisory authority has not identified unresolved material concerns arising from the system of governance of the undertaking;

(e)   the undertaking is able to demonstrate that the use a prudent deterministic valuation is proportionate in relation to the nature, scale and complexity of the risks arising from the obligations for which the undertaking seeks to apply that valuation;

(f)   the time value of options and guarantees, measured based on the prudent harmonised reduced set of scenarios, of the contracts where the prudent deterministic valuation is applied represent less than 5 % of the Solvency Capital Requirement.

Where an insurance or reinsurance undertaking is granted the approval referred to in the first subparagraph, Article 34a(2) and (3), shall apply.

The supervisory authority shall withdraw the approval granted to an insurance or reinsurance undertaking that is not classified as small and non-complex undertaking to use the proportionality measure provided for in Article 77(8) of Directive 2009/138/EC, where any of the conditions set out in the first subparagraph are no longer fulfilled during at least one year.

2.   Paragraph 1, first subparagraph, point (c)(i), shall only apply to life undertakings and to undertakings pursuing both life and non-life activities whose technical provisions related to the life activities represent 20 % or more of the total technical provisions gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC.

3.   Notwithstanding paragraph 1, first subparagraph, supervisory authorities may still approve the use of the proportionality measure provided for in Article 77(8) of Directive 2009/138/EC to an insurance and reinsurance undertaking which does not meet the condition set out in point (c) of that paragraph, where they conclude, on the basis of the elements of the supervisory review process that are relevant for this proportionality measure, that the risk profile of the undertaking is sufficiently low.

Article 327g

Waiver from liquidity risk management plan covering liquidity analysis over the short term

1.   The supervisory authority shall approve the use of the proportionality measure provided for in Article 144a(4) of Directive 2009/138/EC by an insurance and reinsurance undertaking that is not classified as small and non-complex undertaking, the supervisory authority shall take into account the following conditions:

(a)   the supervisory authority concludes, on the basis of the supervisory review process, that the undertaking:

      (i)   is able to withstand any current or future risks;

      (ii)   is not subject to on-going supervisory measures to remedy material non-compliance with Directive 2009/138/EC;

(b)   the supervisory authority concludes that the undertaking does not have a complex business model, taking into account its business strategy, its business plan, the complexity of the insurance products offered and its investment portfolio;

(c)   the undertaking meets all of the following conditions, subject to paragraphs 2, 3 and 4:

    (i)   the technical provisions from life activities, gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC, are not higher than EUR 12 000 000 000;

    (ii)   the annual gross written premium income from non-life activities is not higher than EUR 2 000 000 000;

    (iii) the undertaking does not represent more than 5 % of the life market or non-life market of the home Member State of the undertaking, where the life market share is based on gross technical provisions and the non-life market share is based on gross written premiums;

(d)   the undertaking's Solvency Capital Requirement is exceeded by an appropriate margin taking into account the internal target solvency position of the undertaking as specified in its medium-term capital management plan;

(e)   the supervisory authority has not identified unresolved material concerns arising from the system of governance of the undertaking;

(f)   the undertaking is not exposed to material liquidity risk from both the asset and liability sides of the balance sheet, taking into account:

    (i)   the availability of liquid assets and other liquidity sources;

    (ii)   the level of liquidity of insurance contracts;

    (iii) the liquidity needs arising from insurable events;

    (iv)   the potential impact of policy holders' behaviour on the liquidity position of the undertaking;

    (v)   the exposure to off-balance sheet items;

    (vi)   the concentration of counterparty exposures to reinsurance undertakings

    (vii) where the undertaking is part of a group, the fungibility, availability and transferability of liquid assets across the group;

(g)   the supervisory authority has not identified material concerns about the liquidity position of the undertaking stemming from economic or macroeconomic market trend or the amount and quality of own funds items.

The supervisory authority shall withdraw the approval granted to an insurance or reinsurance undertaking that is not classified as small and non-complex undertaking to use the proportionality measure provided for in Article 144a(4) of Directive 2009/138/EC, where any of the conditions set out in the first subparagraph are no longer fulfilled.

2.   Paragraph 1, first subparagraph, point (c)(i), shall only apply to life undertakings and to undertakings pursuing both life and non-life activities whose technical provisions related to the life activities represent 20 % or more of the total technical provisions gross of the amounts recoverable from reinsurance contracts and special purpose vehicles, as referred to in Article 76 of Directive 2009/138/EC.

3.   Paragraph 1, first subparagraph, point (c)(ii), shall only apply to non-life undertakings and to undertakings pursuing both life and non-life activities whose annual gross written premium income related to the non-life activities represent 40 % or more of its total annual gross written premium income.

4.   Notwithstanding paragraph 1, first subparagraph, supervisory authorities may still approve the use of the proportionality measure provided for in Article 144a(4) of Directive 2009/138/EC to an insurance and reinsurance undertaking which does not meet the condition set out in paragraph 1, first subparagraph point (c), of this Article, where they conclude, on the basis of the elements of the supervisory review process that are relevant for this proportionality measure, that the risk profile of the undertaking is sufficiently low.';

(105) in Article 328, paragraph 1 is amended as follows:

    (a) the introductory wording is replaced by the following:

    'When assessing whether the exclusive application of method 1 is not appropriate, thus allowing the group solvency to be calculated in accordance with method 2 or a combination of methods 1 and 2 laid down in Articles 230 to 233a of Directive 2009/138/EC, the group supervisor shall, in consultation with the other supervisory authorities concerned and the participating insurance or reinsurance undertaking or the insurance holding company or the mixed financial holding company, consider all of the following elements:';

    (b) the following point (ca) is inserted:

    '(ca) whether, for the purposes of point (b), the group indicates in accordance with Article 343(5), point (a)(iii), that it intends to apply the integration technique 1 referred to in Annex XVIII, Section B, to the related undertaking which is not included in the scope of the internal model;';

(106) Article 329 is amended as follows:

    (a) paragraph 1 is replaced by the following

    '1. For the purposes of this Title, Article 228(1) of Directive 2009/138/EC shall apply.';

    (b) paragraph 2 is replaced by the following:

    '2. For the purposes of this Title, Article 226(1) of Directive 2009/138/EC shall apply.

    For the purposes of Article 235 of Directive 2009/138/EC, where the parent insurance holding company or mixed financial holding company has issued subordinated debt or has other eligible own funds subject to the limits set out in Article 98 of that Directive, Article 226(2) of that Directive shall apply.';

(107) Article 330 is amended as follows:

    (a) paragraph 1 is replaced by the following:

    '1. When assessing whether certain own funds that are eligible to cover the Solvency Capital Requirement referred to in Articles 69, 72, 74, 76, 78, and 79 of a related insurance or reinsurance undertaking, a related third country insurance or reinsurance undertaking, an insurance holding company or a mixed financial holding company, cannot effectively be made available to cover the group Solvency Capital Requirement, the supervisory authorities shall consider all of the following elements:

        (a) whether the own-fund item is subject to legal or regulatory requirements that restrict the ability of that item to absorb all types of losses wherever they arise in the group;

        (b) whether there are legal or regulatory requirements that restrict the transferability of assets to another insurance or reinsurance undertaking;

        (c) whether making those own funds available for covering the group Solvency Capital Requirement would not be possible within a maximum of 9 months.';

    (b) in paragraph 2, the first subparagraph is replaced by the following:

    'In the assessment referred to paragraph 1, the supervisory authorities shall consider the restrictions that would exist on a going-concern basis.';

    (c) paragraph 3 is replaced by the following:

    '3. The following items shall be assumed not to be effectively available to cover the group Solvency Capital Requirement:

        (a) ancillary own funds;

        (b) preference shares, subordinated mutual members account and subordinated liabilities;

(c)   an amount equal to the value of net deferred tax assets;

(d)   items referred to in Article 222(2) of Directive 2009/138/EC.

For the purposes of point (c) of the first subparagraph, the amount of deferred tax asset may be reduced by the amount of the associated deferred tax liability provided that those deferred tax assets and associated deferred tax liabilities both arise from the tax law of one Member State or third country and the taxation authority of that Member State or third country permits such offsetting.

Where the participating undertaking can demonstrate to the satisfaction of the group supervisor that the assumption referred to in points (a), (b) and (c) of the first subparagraph for one of the items is inappropriate in the specific circumstances of the group, the participating undertaking may include that item in the own funds available to cover the group Solvency Capital Requirement.';

(d)   the following paragraph 4a is inserted:

‘4a.   The amount of minority interest in a subsidiary exceeding the contribution of that subsidiary to the group solvency as referred to in paragraph 4, point (a), shall be calculated by multiplying the amount referred to in point (a) of this paragraph by the factor referred to in point (b) of this paragraph:

(a)   the difference between the total eligible own funds of the subsidiary net of intragroup subordinated debt and ancillary own funds, and the higher of the following:

    (i)   the contribution of the subsidiary undertaking to the group Solvency Capital Requirement referred to in paragraph 6;

    (ii)   the total amount of non-available own fund items other than those referred to in paragraph 4 from the subsidiary undertaking, net of intragroup subordinated debt and ancillary own funds;

(b)   the difference between 1 and the proportion of the subscribed capital that is held, directly or indirectly, by the parent undertaking belonging to the group for which the group solvency is calculated.';

(e)   in paragraph 6, the following subparagraph is added:

‘The percentage referred to in the first subparagraph, point (a), shall not exceed 100 %.';

(108)   Article 331 is amended as follows:

(a)   the title is replaced by the following:

‘*Article 331*

Classification of own-fund items of insurance and reinsurance undertakings at group level';

(b)   paragraph 1 is replaced by the following:

‘1.   Where an own-fund item has been classified into one of the three tiers based on the criteria set out in Title I, Chapter IV, Section 2 by an insurance or reinsurance undertaking that is included in the calculation of the group solvency, the own-fund item shall be classified in the same tier at group level provided that all of the following additional requirements are met:

(a)   the undertaking concerned complies with Articles 71, 73 and 77 of this Regulation;

(b)   the own-fund item is clear of encumbrances, including within the meaning of Article 222(6) of Directive 2009/138/EC, and is not connected with any other transaction, which when considered with the own-fund item could result in that own-fund item not satisfying the requirements set out in Article 94 of that Directive at group level.';

(c)   in paragraph 2, point (a) is replaced by the following:

'(a)   the term "Solvency Capital Requirement" in Articles 71, 73 and 77 of this Regulation shall mean both the Solvency Capital Requirement of the undertaking that has issued the own-fund item and the group Solvency Capital Requirement;';

(d)   paragraph 4 is replaced by the following:

'4.   Notwithstanding paragraph 1, where an insurance or reinsurance undertaking has included in Tier 2 an own-fund item which would qualify for inclusion in Tier 1 in accordance with Article 73(1), point (j), that classification shall not prohibit the classification of the same own-fund item in Tier 1 at group level, provided that the limit set out in Article 82(3) is complied with at group level.';

(e)   the following paragraph 5 is added:

'5.   Notwithstanding paragraph 2, point (a), for own-fund items issued by an insurance or reinsurance undertaking before it became part of the group, the term "Solvency Capital Requirement" in Articles 71, 73 and 77 of this Regulation shall be understood as referring only to the Solvency Capital Requirement of that related undertaking, where the undertaking has been a related undertaking of the group for less than two financial years and is included in the calculation of the group solvency.

The first subparagraph shall only apply where the group has been subject to group supervision for at least three years, and the participating insurance or reinsurance undertaking, the insurance holding company or mixed financial holding company demonstrates in the own-risk and solvency assessment that it will be able to comply with its group Solvency Capital Requirement without such own-fund items, once the related undertaking has been part of the group for more than two financial years.';

(109)   Article 332 is amended as follows:

(a)   the title is replaced by the following:

'*Article 332*

Classification of own-fund items of third-country insurance and reinsurance undertakings at group level';

(b)   paragraph 1 is replaced by the following:

'1.   Where an own-fund item has been issued by a third-country insurance or reinsurance undertaking, the participating undertaking shall classify the own-fund item using the criteria for classification set out in Title I, Chapter IV, Section 2, provided that all of the following additional requirements are met:

(a)   the undertaking concerned complies with Articles 71, 73 and 77 of this Regulation;

(b)   the own-fund item is clear of encumbrances, including within the meaning of Article 222(6) of Directive 2009/138/EC, and is not connected with any other transaction, which when considered with the own-fund item, could result in that own-fund item not satisfying the requirements set out in Article 94 of that Directive at group level.';

(c)   the following paragraph 3 is added:

'3.   Paragraph 2, point (a), shall not apply to own-fund items issued by a third-country insurance or reinsurance undertaking before it became part of the group, where that undertaking has been a related undertaking of that group for less than two financial years and is included in the calculation of the group solvency.

The first subparagraph shall only apply where the group has been subject to group supervision for at least three years, and the participating insurance or reinsurance undertaking, the insurance holding company or mixed financial holding company demonstrates in the own-risk and solvency assessment that it will be able to comply with its group Solvency Capital Requirement, without such own-fund items, once the related undertaking has been part of the group for more than two financial years.';

(110)　Article 333 is amended as follows:

(a)　in paragraph 1, point (b) is replaced by the following:

'(b)　the own-fund item is clear of encumbrances, including within the meaning of Article 222(6) of Directive 2009/138/EC, and is not connected with any other transaction, which when considered with the own-fund item, could result in that own-fund item not satisfying the requirements set out in Article 94 of that Directive at group level.';

(b)　the following paragraph 4 is added:

'4.　Paragraph 2, point (a) shall not apply to own-fund items issued by intermediate insurance holding companies, intermediate mixed financial holding companies or subsidiary ancillary services undertakings before they became part of the group, where such undertakings have been related undertakings of the group for less than two financial years and are included in the calculation of the group solvency.

The first subparagraph shall only apply where the group has been subject to group supervision for at least three years, and the participating insurance or reinsurance undertaking, the insurance holding company or mixed financial holding company demonstrates in the own-risk and solvency assessment that it will be able to comply with its group Solvency Capital Requirement without such own-fund items once the related undertaking has been part of the group for more than two financial years.';

(111)　Article 335 is amended as follows:

(a)　the title is replaced by the following:

'*Article 335*

Determination of consolidated data';

(b)　paragraph 1 is replaced by the following:

'1.　Consolidated data for the calculation of group solvency in accordance with method 1 or a combination of methods as referred to in Articles 230 and 233a of Directive 2009/138/EC respectively, shall consist of all of the following:

(a)　full consolidation of data of all the insurance or reinsurance undertakings, third-country insurance or reinsurance undertakings, insurance holding companies, mixed financial holding companies, holding companies of third-country insurance and reinsurance undertakings and ancillary services undertakings which are subsidiaries of the parent undertaking;

(b)　full consolidation of data of special purpose vehicles to which the participating undertaking or one or several of its subsidiaries has transferred risk and which are not excluded from the scope of the group solvency calculation pursuant to Article 329(3);

(c)　proportional consolidation of data of the insurance or reinsurance undertakings, third-country insurance or reinsurance undertakings, insurance holding companies, mixed financial holding companies, holding companies of third-country insurance and reinsurance undertakings and ancillary services undertakings managed by an undertaking as referred to in point (a) or by the participating undertaking of the group for which the group solvency is calculated, together with one or more undertakings not included in point (a) and different from the participating undertaking, where those undertakings' responsibility is limited to the share of the capital they hold and those undertakings have rights to the assets and obligations for the liabilities, relating to the related undertakings;

(d)　on the basis of the adjusted equity method referred to in Article 13(3), data of all holdings in related insurance or reinsurance undertakings, third-country insurance or reinsurance undertakings, insurance holding companies, mixed financial holding companies and holding companies of third-country insurance and reinsurance undertakings, which are not subsidiaries of the parent undertaking and which are not covered by points (a) and (c);

(e) for the sole purposes of Article 233a(1), point(b), of Directive 2009/138/EC, the difference between the following:

   (i) the value of holdings in related undertakings referred to in Article 220(3) of that Directive to which method 2 applies, calculated in accordance with Article 13 of this Regulation;

   (ii) the proportional share of the Solvency Capital Requirement of those related undertakings;

(f) in accordance with Article 13 of this Regulation, data of all related undertakings, including ancillary services undertakings, collective investment undertakings and investments packaged as funds, other than those referred to in points (a) to (e) of this paragraph.';

(c) the following paragraph 4 is added:

'4. For the purposes of paragraph 1, point (e), of this Article, "holdings in related undertakings" shall mean the ownership, direct or by way of control, of eligible own funds of such related undertakings.';

(112) Article 336 is replaced by the following

'*Article 336*

Calculation of the Solvency Capital Requirement at group level calculated on the basis of consolidated data

For the purposes of Article 230(1), second subparagraph, point (b), and Article 233a(1), point (b)(i), of Directive 2009/138/EC, the Solvency Capital Requirement at group level calculated on the basis of consolidated data shall be the sum of the following:

(a) a Solvency Capital Requirement calculated on the basis of consolidated data as referred to in Article 335(1), points (a), (b), (c) and (e), data of collective investment undertakings and investments packaged as funds which are subsidiaries of the parent undertaking, following the rules laid down in Title I, Chapter VI, Section 4 of Directive 2009/138/EC;

(b) the proportional share of the Solvency Capital Requirement of each undertaking referred to in Article 335(1), point (d), of this Regulation;

(c) for undertakings as referred to in Article 335(1), point (f), of this Regulation, other than undertakings covered by points (a) and (d) of this paragraph, the amount determined in accordance with Article 13, Articles 168 to 171d, Articles 182 to 187 and Article 188 of this Regulation;

(d) for related collective investment undertakings or investments packaged as funds as referred to in Article 335(1), point (f) of this Regulation which are not subsidiaries of the participating insurance or reinsurance undertaking, and to which Article 84(1) of this Regulation is applied at solo level, the amount determined in accordance with Title I, Chapter V and Article 84(1) of this Regulation.

For the purposes of the first subparagraph, point (a), Articles 168 to 171d shall not apply to holdings in related undertakings referred to in Article 220(3) of Directive 2009/138/EC.

For the purposes of the first subparagraph, point (b), the Solvency Capital requirement shall be calculated for a related third-country insurance or reinsurance undertaking which is not a subsidiary as if that undertaking had its head office in the Union.';

(113)   the following Articles 336a and 336b are inserted:

'*Article 336a*

Long-term equity investments at group level

1.   For the purposes of Article 336, point (a), the amount of equities that are treated as long-term equity investments shall not be higher than the sum of the following:

(a)   the amounts of equities that are classified as long-term equity investments by undertakings referred to in Article 335(1), point (a);

(b)   the proportional share of equities that are classified as long-term equity investments by undertakings referred to in Article 335(1), point (c).

2.   Notwithstanding paragraph 1, where a group is exposed to significant liquidity risk that is not captured at the level of individual insurance or reinsurance undertakings, or where there are significant intragroup transactions which may result in the calculation of the first subparagraph not being adequate, the group supervisor may require that the participating undertaking shall recalculate, on the basis of the consolidated data referred to in Article 335, the amount of equities that may be treated as long-term equity investments at group level for the purposes of paragraph 1, point (a), of this Article, instead of assuming that equities that are classified as long-term equity investments by an insurance or reinsurance undertaking may automatically qualify as long-term equity investments at group level.

Article 336b

Simplified calculation for participations in immaterial related undertakings

1.   Paragraphs 2 and 3 of this Article shall apply to participations in immaterial related undertakings as referred to in Article 229a of Directive 2009/138/EC, other than undertakings as referred to in Article 228 of that Directive.

2.   By way of derogation from Article 335(1), where the participating insurance or reinsurance undertaking, the insurance holding company or the mixed financial holding company is allowed to apply a simplified approach to participations in related undertakings that are immaterial, such related undertakings shall be included in the consolidated data in accordance with Article 13 of this Regulation.

3.   By way of derogation from Article 336, where the participating insurance or reinsurance undertaking, the insurance holding company or the mixed financial holding company is allowed to apply a simplified approach to participations in related undertakings that are immaterial, such undertakings shall not be included in points (a) to (e) of that Article.

Where the immaterial related undertaking is an insurance or reinsurance undertaking, the simplified approach shall consist in adding to the sum referred to in Article 336 the maximum of the following:

(a)   the amount determined in accordance with Article 13, Articles 168 to 171d, Articles 182 to 187 and Article 188 of this Regulation;

(b)   the Solvency Capital Requirement of the related undertaking.

Where the immaterial related undertaking is a third-country insurance or reinsurance undertaking, the simplified approach shall consist in adding to the sum referred to in Article 336 the maximum of the following:

(a)   the amount determined in accordance with Article 13, Articles 168 to 171d, Articles 182 to 187 and Article 188 of this Regulation;

(b)   the capital requirement, as laid down in the third country concerned.

For immaterial related undertakings other than those referred to in the second and third subparagraphs, the simplified approach shall consist in adding to the sum referred to in Article 336 the amount determined in accordance with Article 13, Articles 168 to 171d, Articles 182 to 187 and Article 188.';

(114) Article 341 is deleted;

(115) in Article 343(5), point (a)(iii), the following text is added:

', and the application shall describe the techniques used to integrate undertakings as a whole, which are excluded from the scope of the model, and demonstrate the appropriateness of those techniques as required by Article 239(4) of this Regulation, including in cases where the techniques set out in Annex XVIII to this Regulation are applied to undertakings as a whole and not to specific risks. Where it is intended to apply the integration technique 1 referred to in section B of Annex XVIII to this Regulation to one or more of the undertakings that are excluded from the scope of the partial internal model, the application shall also explain why that integration technique would be more appropriate than applying a combination of methods 1 and 2 laid down in Article 233a of Directive 2009/138/EC, where method 2 would be applied to such undertakings;';

(116) Article 359 is amended as follows:

(a) the introductory wording is replaced by the following:

'Article 290, Article 291 and Articles 293 to 298 of this Regulation shall apply to the group solvency and financial condition report which participating insurance and reinsurance undertakings, insurance holding companies or mixed financial holding companies are required to disclose publicly. In addition, the group solvency and financial condition report shall contain all of the following information:';

(b) point (b) is replaced by the following:

'(b) regarding the group's system of governance, information on any material intra-group outsourcing arrangements;';

(c) in point (e), point (ii) is replaced by the following:

'(ii) qualitative and quantitative information on any significant restriction to the fungibility and transferability of own funds eligible for covering the group Solvency Capital Requirement, including the quantification referred to in Article 308b(17), second subparagraph of Directive 2009/138/EC;';

(117) in Article 360, paragraph 3 is deleted;

(118) Article 362 is deleted;

(119) in Article 363, paragraph 2 is replaced by the following:

'2. Without prejudice to the requirements for immediate disclosure set out in Article 54(1) of Directive 2009/138/EC, any updated version of the group solvency and financial condition report shall be clearly identified, and shall indicate the date of the update. It shall be disclosed as soon as possible after the major development referred to in paragraph 1 of this Article, and shall replace the previously disclosed version.';

(120) Article 364 is deleted;

(121) in Article 365, paragraph 3 is replaced by the following:

'3. The information at group level shall follow the structure set out in Annex XX Section A.2. The information for any subsidiary covered by that report shall contain the information required by Article 51 of Directive 2009/138 /EC and shall follow the structure set out in Annex XX, Section A. Participating insurance and reinsurance undertakings, insurance holding companies or mixed financial holding companies may decide, when providing any part of the information to be disclosed for a subsidiary covered other than information included in the part targeted at policy holders and beneficiaries, to refer to the corresponding information disclosed at group level, provided that such information is equivalent in both nature and scope to the information that would otherwise be provided at the level of the subsidiary.';

(122)   Article 366 is amended as follows:

(a)   in paragraph 2, 'consultating' is replaced by 'consulting';

(b)   paragraph 3 is replaced by the following:

'3.   Where any of the subsidiaries covered by the single solvency and financial condition report has its head office in a Member State whose official language or languages are different from the language or languages in which that report is disclosed in accordance with paragraphs 1 and 2, the supervisory authority concerned may, after having consulted the group supervisor and the group itself, require the participating insurance and reinsurance undertaking, insurance holding company or mixed financial holding company to include in that report a translation of the information related to that subsidiary into an official language of that Member State. The participating insurance and reinsurance undertaking, insurance holding company or mixed financial holding company shall disclose a translation of the information from that report related to that subsidiary, unless an exemption has been granted by the supervisory authority concerned.';

(123)   Article 368 is deleted;

(124)   in Article 369, paragraph 2 is replaced by the following:

'2.   Without prejudice to the requirements for immediate disclosure set out in Article 54(1) of Directive 2009/138/EC, any updated version of the single solvency and financial condition report shall be clearly identified as such and shall indicate the date of the update. It shall be disclosed as soon as possible after the major development referred to in paragraph 1 of this Article and shall replace the previously disclosed version.';

(125)   Article 371 is deleted;

(126)   Article 372 is replaced by the following:

'*Article 372*

Elements and contents

1.   Articles 304 to 311 of this Regulation shall apply to the information which participating insurance and reinsurance undertakings, insurance holding companies or mixed financial holding companies are to submit to the group supervisor. Where all insurance and reinsurance undertakings in the group are exempted from quarterly reporting obligations pursuant Article 35a(1) of Directive 2009/138/EC, the group regular supervisory report shall include annual quantitative templates only. Annual reporting obligations shall not include reporting on an item-by-item basis where all undertakings in the group are exempted from such reporting on an item-by-item basis in accordance with Article 35a(2) of that Directive.

2.   The group regular supervisory report shall contain all of the following additional information:

(a)   regarding the group's business and performance:

(i)   a description of the activities and sources of profits or losses for each material related undertaking referred to in Article 256a of Directive 2009/138/EC and for each significant branch referred to in Article 354(1) of this Regulation;

(ii)   qualitative and quantitative information on significant intra-group transactions by insurance and reinsurance undertakings with the group, the amount of such transactions over the reporting period, and the outstanding balances at the end of the reporting period;

(b)   regarding the group's system of governance:

(i)   a description of how the risk management and internal control systems and reporting procedures are implemented consistently by all undertakings within the scope of group supervision, as required by Article 246 of Directive 2009/138/EC;

      (ii)   qualitative and quantitative information on material specific risks at group level that are not captured by the Group Solvency Capital Requirement calculation and were not already covered by the ORSA supervisory report;

      (iii)   information on any material intragroup outsourcing arrangements;

(c)   regarding the group's capital management:

      (i)   qualitative and quantitative information on the Solvency Capital Requirement and own funds, in a format that allows for the assessment of the availability of own funds at group level, for any of the following related undertakings, insofar as the undertaking is included in the calculation of the group solvency:

            (1)   each insurance or reinsurance undertaking within the group;

            (2)   each intermediate insurance holding company, insurance holding company, intermediate mixed financial holding company, mixed financial holding company and ancillary services undertaking within the group, in which case notional solvency capital requirements shall be calculated in accordance with Article 226(1) of Directive 2009/138/EC;

            (3)   each related undertaking which is a credit institution, an investment firm, a financial institution, a UCITS management company, an alternative investment fund manager, or an institution for occupational retirement provisions;

            (4)   each related undertaking which is a non-regulated undertaking carrying out financial activities in which case notional solvency capital requirement shall be calculated;

            (5)   each related third country insurance or reinsurance undertaking;

            (6)   any other related undertaking;

      (ii)   a description of special purpose vehicles within the group which comply with Article 211 of Directive 2009/138/EC;

      (iii)   a description of special purpose vehicles within the group which are regulated by a third-country supervisory authority and comply with requirements equivalent to those set out in Article 211(2) of Directive 2009/138/EC, together with a description of the verification carried out by the participating insurance and reinsurance undertaking, insurance holding company or mixed financial holding company, assessing whether the requirements to which these special purpose vehicles are subject to in the third country are equivalent to those set out in Article 211(2) of Directive 2009/138/EC;

      (iv)   a description of each special purpose entity within the group other than those referred to in points (iii) and (vii) together with qualitative and quantitative information on the solvency requirement and own funds of those entities, where such is included in the calculation of the group solvency;

      (v)   where relevant, for all related insurance and reinsurance undertakings which are included in the calculation of the group solvency, qualitative and quantitative information on how those undertakings comply with Article 222(2) to (5) of Directive 2009/138/EC;

      (vi)   where relevant, qualitative and quantitative information on the own- fund items referred to in Article 222(3) of Directive 2009/138/EC that cannot effectively be made available to cover the Solvency Capital Requirement of the participating insurance or reinsurance undertaking, insurance holding company or mixed financial holding company for which the group solvency is calculated, including a description of how the adjustment to group own funds has been made;

      (vii)   where relevant, qualitative information on the reasons for the classification of own-fund items referred to in Articles 332 and 333 of this Regulation.

For the purposes of point (c)(i)(5), for undertakings whose head office is headquartered in a third-country whose solvency regime is deemed to be equivalent pursuant to Article 227 of Directive 2009/138/EC, where method 2 within the meaning of Article 233 of that Directive is used, the Solvency Capital Requirement and the own funds eligible to satisfy that requirement as laid down by the third country concerned shall be separately identified.';

(127)   the following Article 372a is inserted:

'*Article 372a*

Single Regular Supervisory Report: Structure and contents

1.   Where participating insurance and reinsurance undertakings, insurance holding companies or mixed financial holding companies provide a single regular supervisory report, this Section shall apply.

2.   The single regular supervisory report shall present separately the information to be reported at group level in accordance with Article 372, and the information to be reported in accordance with Articles 307 to 312 for each subsidiary covered by that report.

3.   The information at group level and the information for any subsidiary covered by the single regular supervisory report shall each follow the structure set out in Annex XX, Section B. Participating insurance and reinsurance undertakings, insurance holding companies or mixed financial holding companies may decide, when providing any part of the information to be reported for a subsidiary covered, to refer to information at group level, where that information is equivalent in both nature and scope.';

(128)   Articles 373 and 374 are replaced by the following:

'*Article 373*

Information on material changes

Article 312 of this Regulation shall apply in relation to the group regular supervisory report or single regular supervisory report.

Article 374

Languages

1.   Participating insurance and reinsurance undertakings, insurance holding companies or mixed financial holding companies shall report their group regular supervisory reporting in the language or languages determined by the group supervisor.

2.   For the purposes of paragraph 1, where there is a college of supervisors and where the group supervisor intends to request the group regular supervisory reporting in multiple languages after having consulted the other supervisory authorities and the group itself, the languages to be used shall include at least one language commonly understood by the supervisory authorities concerned, as agreed in the college of supervisors.

3.   Where any of the subsidiaries covered by the single regular supervisory reporting has its head office in a Member State whose official language or languages are different from the language or languages in which that report is reported in accordance with paragraphs 1 and 2, the group supervisor shall, at the request of the supervisory authority concerned, require the participating insurance and reinsurance undertaking, insurance holding company or mixed financial holding company to include in that report a translation of the information related to that subsidiary into an official language of that Member State.';

(129)　Article 375 is deleted;

(130)　in Title II, the following Chapter VII is added:

'CHAPTER VII

PROPORTIONALITY MEASURES AT GROUP LEVEL

Article 377a

Investments in intangibles asset capital requirement for identifying small and non-complex groups

The capital requirements referred to in Article 213a(1), point (e)(iii), of Directive 2009/138/EC shall be the capital requirement for intangible asset risk referred to in Article 203 of this Regulation.

Article 377b

Proportionality measures for groups that are not classified as small and non-complex

1.　When assessing whether to approve the use of a proportionality measure as referred to in Article 29d(1) of Directive 2009/138/EC to a parent insurance or reinsurance undertaking, insurance holding company or mixed financial holding company of a group as referred to in Article 213 of that Directive, Title I, Chapter XVI of this Regulation shall apply at the level of the group.

2.　When assessing whether the group does not have a complex business model, the group supervisor shall also take into account the following:

(a)　the group structure;

(b)　the number of jurisdictions in which the group operates;

(c)　the proportion of the group's total revenues stemming from activities conducted outside the home Member State of the parent undertaking;

(d)　the significance, both in numbers and revenues, of undertakings within the group that are not insurance or reinsurance undertakings;

(e)　the materiality of the intragroup transactions.';

(131)　Annex III is amended in accordance with Annex I to this Regulation;

(132)　Annex V is amended in accordance with Annex II to this Regulation;

(133)　Annex VI is amended in accordance with Annex III to this Regulation;

(134)　Annex VII is replaced by the text in Annex IV to this Regulation;

(135)　Annex VIII is replaced by the text in Annex V to this Regulation;

(136)　the text in Annex VI to this Regulation is inserted as Annex VIIIa;

(137)　Annex IX is amended in accordance with Annex VII to this Regulation;

(138)　Annex X is replaced by the text in Annex VIII to this Regulation;

(139)　Annex XIII is amended in accordance with Annex IX to this Regulation;

(140)　Annex XVI is amended in accordance with Annex X to this Regulation;

(141)　Annex XIX is replaced by the text in Annex XI to this Regulation;

(142)　Annex XX is replaced by the text in Annex XII to this Regulation;

(143)　Annex XXI is amended in accordance with Annex XIII to this Regulation;

(144)　Annex XXII is amended in accordance with Annex XIV to this Regulation;

(145)　Annex XXIII is amended in accordance with Annex XV to this Regulation;

(146)　Annex XXIV is amended in accordance with Annex XVI to this Regulation;

(147)　Annex XXV is amended in accordance with Annex XVII to this Regulation;

(148)　Annex XXVI is amended in accordance with Annex XVIII to this Regulation.

Article 2

Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 30 January 2027.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 29 October 2025.

For the Commission
The President
Ursula VON DER LEYEN

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ANNEX I

Annex III to Delegated Regulation (EU) 2015/35 is amended as follows:

(1)   point 5 is replaced by the following:

        '5.   Notwithstanding paragraph 1, the factor for geographical diversification shall be equal to 1 for segments 6, 10 and 11 set out in Annex II and for segment 4 set out in Annex XIV.';

(2)   in point 8, in the list of territories that region 4 (Southern Europe) consists of, 'former Yugoslav Republic of Macedonia' is replaced by 'North Macedonia'.

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ANNEX II

In Annex V to Delegated Regulation (EU) 2015/35, the table corresponding to regions and windstorm risk factors is replaced by the following:

'Regions and windstorm risk factors

Abbreviation of region *r*	Region *r*	Windstorm risk factor $Q(windstorm,r)$
AT	Republic of Austria	0,06 %
BE	Kingdom of Belgium	0,16 %
CZ	Czech Republic	0,04 %
CH	Swiss Confederation; Principality of Liechtenstein	0,09 %
DK	Kingdom of Denmark	0,25 %
FI	Republic of Finland	0,04 %
FR	French Republic ([1]); Principality of Monaco; Principality of Andorra	0,12 %
DE	Federal Republic of Germany	0,07 %
HU	Hungary	0,02 %
IS	Republic of Iceland	0,06 %
IE	Ireland	0,22 %
LU	Grand Duchy of Luxembourg	0,12 %
NL	Kingdom of the Netherlands	0,18 %
NO	Kingdom of Norway	0,08 %
PL	Republic of Poland	0,03 %
SI	Republic of Slovenia	0,04 %
ES	Kingdom of Spain	0,01 %
SE	Kingdom of Sweden	0,085 %
UK	United Kingdom of Great Britain and Northern Ireland	0,17 %
GU	Guadeloupe	6,00 %
MA	Martinique	5,00 %
SM	Collectivity of Saint Martin	10,00 %
RE	Réunion	2,50 %

([1]) Except Guadeloupe, Martinique, the Collectivity of Saint Martin and Réunion.'

ANNEX III

In Annex VI to Delegated Regulation (EU) 2015/35, the table corresponding to regions and earthquake risk factors is replaced by the following:

'Regions and earthquake risk factors

Abbreviation of region *r*	Region *r*	Earthquake risk factor $Q(earthquake,r)$
AT	Republic of Austria	0,10 %
BE	Kingdom of Belgium	0,02 %
BG	Republic of Bulgaria	1,60 %
CR	Republic of Croatia	1,60 %
CY	Republic of Cyprus	2,12 %
CZ	Czech Republic	0,10 %
CH	Swiss Confederation; Principality of Liechtenstein	0,25 %
FR	French Republic ([1]); Principality of Monaco; Principality of Andorra	0,06 %
DE	Federal Republic of Germany	0,10 %
HE	Hellenic Republic	1,75 %
HU	Hungary	0,20 %
IT	Italian Republic; Republic of San Marino; Vatican City State	0,77 %
MT	Republic of Malta	1,00 %
PT	Portuguese Republic	1,20 %
RO	Romania	1,00 %
SK	Slovak Republic	0,16 %
SI	Republic of Slovenia	1,00 %
GU	Guadeloupe	4,09 %
MA	Martinique	4,71 %
SM	Collectivity of Saint Martin	5,00 %

([1])   Except Guadeloupe, Martinique, the Collectivity of Saint Martin and Réunion.'

ANNEX IV

'ANNEX VII

PARAMETERS FOR THE FLOOD RISK SUB-MODULE

Regions and flood risk factors

Abbreviation of region *r*	Region *r*	Flood risk factor $Q(flood,r)$
AT	Republic of Austria	0,13 %
BE	Kingdom of Belgium	0,12 %
BG	Republic of Bulgaria	0,15 %
CZ	Czech Republic	0,25 %
CH	Swiss Confederation; Principality of Liechtenstein	0,30 %
DE	Federal Republic of Germany	0,20 %
FR	French Republic ([1]); Principality of Monaco; Principality of Andorra	0,12 %
HU	Hungary	0,25 %
IT	Italian Republic; Republic of San Marino; Vatican City State	0,15 %
PL	Republic of Poland	0,16 %
RO	Romania	0,13 %
SI	Republic of Slovenia	0,30 %
SK	Slovak Republic	0,35 %
UK	United Kingdom of Great Britain and Northern Ireland	0,12 %
LU	Grand Duchy of Luxembourg	0,13 %
IE	Ireland	0,17 %
NL	Kingdom of the Netherlands	0,035 %
NO	Kingdom of Norway	0,05 %
SE	Kingdom of Sweden	0,045 %
FI	Republic of Finland	0,04 %
DK	Kingdom of Denmark	0,04 %

([1])   Except Guadeloupe, Martinique, the Collectivity of Saint Martin and Réunion.

Flood risk correlation coefficients for regions

	AT	BE	BG	CH	CZ	DE	FR	HU	IT	PL	RO	SI	SK	UK	LU	IE	NL	NO	SE	FI	DK
AT	1,00	0,00	0,25	0,25	0,50	0,75	0,00	0,50	0,00	0,25	0,25	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
BE	0,00	1,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00
BG	0,25	0,00	1,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
CH	0,25	0,00	0,00	1,00	0,00	0,25	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
CZ	0,50	0,00	0,00	0,00	1,00	0,50	0,00	0,25	0,00	0,75	0,25	0,00	0,75	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
DE	0,75	0,25	0,00	0,25	0,50	1,00	0,25	0,25	0,00	0,75	0,25	0,00	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00
FR	0,00	0,25	0,00	0,25	0,00	0,25	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00
HU	0,50	0,00	0,25	0,00	0,25	0,25	0,00	1,00	0,00	0,25	0,50	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
IT	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
PL	0,25	0,00	0,00	0,00	0,75	0,75	0,00	0,25	0,00	1,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
RO	0,25	0,00	0,50	0,00	0,25	0,25	0,00	0,50	0,00	0,25	1,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
SI	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
SK	0,50	0,00	0,00	0,00	0,75	0,25	0,00	0,25	0,00	0,25	0,25	0,25	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
UK	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00
LU	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00
IE	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	1,00	0,00	0,00	0,00	0,00	0,00
NL	0,00	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00
NO	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00
SE	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00
FI	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00
DK	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00’

ANNEX V

'*ANNEX VIII*

PARAMETERS FOR THE HAIL RISK SUB-MODULE

Regions and hail risk factors

Abbreviation of region r	Region r	Hail risk factor $Q(hail,r)$
AT	Republic of Austria	0,08 %
BE	Kingdom of Belgium	0,035 %
CZ	Czech Republic	0,045 %
CH	Swiss Confederation; Principality of Liechtenstein	0,06 %
FR	French Republic ([1]); Principality of Monaco; Principality of Andorra	0,02 %
DE	Federal Republic of Germany	0,03 %
IT	Italian Republic; Republic of San Marino; Vatican City State	0,05 %
LU	Grand Duchy of Luxembourg	0,10 %
NL	Kingdom of the Netherlands	0,03 %
ES	Kingdom of Spain	0,01 %
SI	Republic of Slovenia	0,08 %
PL	Republic of Poland	0,02 %

([1])   Except Guadeloupe, Martinique, the Collectivity of Saint Martin and Réunion.

Hail risk correlation coefficients for regions

	AT	BE	CZ	FR	DE	IT	LU	NL	CH	SI	ES	PL
AT	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
BE	0,00	1,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00
CZ	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
FR	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
DE	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
IT	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00
LU	0,00	0,25	0,00	0,00	0,00	0,00	1,00	0,25	0,00	0,00	0,00	0,00
NL	0,00	0,25	0,00	0,00	0,00	0,00	0,25	1,00	0,00	0,00	0,00	0,00
CH	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00
SI	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00
ES	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00
PL	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00'

ANNEX VI

'*ANNEX VIIIA*

PARAMETERS FOR THE SUBSIDENCE RISK SUB-MODULE

Regions and subsidence risk factors

Abbreviation of region r	Region r	Subsidence risk factor $Q(subsidence,r)$
FR	French Republic ([1]); Principality of Monaco; Principality of Andorra	0,06 %
BE	Kingdom of Belgium	0,02 %

([1]) Except Guadeloupe, Martinique, the Collectivity of Saint Martin and Réunion.

Subsidence risk correlation coefficients for regions

	FR	BE
FR	100 %	0 %
BE	0 %	100 %'

ANNEX VII

Annex IX to Delegated Regulation (EU) 2015/35 is amended as follows:

(1)   the title is replaced by the following:

'**THE GEOGRAPHICAL DIVISION OF REGIONS SET OUT IN ANNEXES V-VIIIa INTO RISK ZONES**';

(2)   the first sentence is replaced by the following:

'The risk zones of regions set out in Annexes V-VIIIa as referred to in Annexes X-XIII shall be equal to the postal code areas or administrative units in the following tables.';

(3)   in the section 'Mappings of risk zones for regions where the zonation is based on postal codes', the table is replaced by the following:

'Region/Risk Zone	AT	BE	CZ	DE	HE	IT	NL	PL	SK	ES	UK	PT	RO
1	10	1	10	1	10	0	10	0	1	1	AB	10	01
2	11	2	11	2	11	1	11	1	2	2	AL	11	02
3	12	3	12	3	12	2	12	2	3	3	B	12	03
4	13	4	13	4	13	3	13	3	4	4	BA	13	04
5	20	5	14	6	14	4	14	4	5	5	BB	14	05
6	21	6	15	7	15	5	15	5	6	6	BD	15	06
7	22	7	16	8	16	6	16	6	7	7	BH	16	07
8	23	8	17	9	17	7	17	7	8	8	BL	17	08
9	24	9	18	10	18	8	18	8	9	9	BN	18	10
10	25		19	12	19	9	19	9	81	10	BR	19	11
11	26		25	13	20	10	20	10	82	11	BS	20	12
12	27		26	14	21	11	21	11	83	12	BT	21	13
13	28		27	15	22	12	22	12	84	13	CA	22	14
14	30		28	16	23	13	23	13	85	14	CB	23	20
15	31		29	17	24	14	24	14	90	15	CF	24	21
16	32		30	18	25	15	25	15	91	16	CH	25	22
17	33		31	19	26	16	26	16	92	17	CM	26	23
18	34		32	20	27	17	27	17	93	18	CO	27	24
19	35		33	21	28	18	28	18	94	19	CR	28	30
20	36		34	22	29	19	29	19	95	20	CT	29	31
21	37		35	23	30	20	30	20	96	21	CV	30	32
22	38		36	24	31	21	31	21	97	22	CW	31	33
23	39		37	25	32	22	32	22	98	23	DA	32	40
24	40		38	26	33	23	33	23	99	24	DD	33	41
25	41		39	27	34	24	34	24		25	DE	34	42
26	42		40	28	35	25	35	25		26	DG	35	43

'Region/Risk Zone	AT	BE	CZ	DE	HE	IT	NL	PL	SK	ES	UK	PT	RO
27	43		41	29	36	26	36	26		27	DH	36	44
28	44		43	30	37	27	37	27		28	DL	37	45
29	45		44	31	38	28	38	28		29	DN	38	50
30	46		46	32	40	29	39	29		30	DT	40	51
31	47		47	33	41	30	40	30		31	DY	41	52
32	48		50	34	42	31	41	31		32	E	42	53
33	49		51	35	43	32	42	32		33	EC	43	54
34	50		53	36	44	33	43	33		34	EH	44	55
35	51		54	37	45	34	44	34		35	EN	45	60
36	52		55	38	46	35	45	35		36	EX	46	61
37	53		56	39	47	36	46	36		37	FK	47	62
38	54		57	40	48	37	47	37		38	FY	48	70
39	55		58	41	49	38	48	38		39	G	49	71
40	56		59	42	50	39	49	39		40	GL	50	72
41	57		60	44	51	40	50	40		41	GU	51	73
42	60		61	45	52	41	51	41		42	GY	52	80
43	61		62	46	53	42	52	42		43	HA	53	81
44	62		63	47	54	43	53	43		44	HD	54	82
45	63		64	48	55	44	54	44		45	HG	60	90
46	64		66	49	56	45	55	45		46	HP	61	91
47	65		67	50	57	46	56	46		47	HR	62	92'
48	66		68	51	58	47	57	47		48	HS	63	
49	67		69	52	59	48	58	48		49	HU	64	
50	68		70	53	60	50	59	49		50	HX	70	
51	69		71	54	61	51	60	50			IG	71	
52	70		72	55	62	52	61	51			IM	72	
53	71		73	56	63	53	62	52			IP	73	
54	72		74	57	64	54	63	53			IV	74	
55	73		75	58	65	55	64	54			JE	75	
56	74		76	59	66	56	65	55			KA	76	
57	75		77	60	67	57	66	56			KT	77	
58	80		78	61	68	58	67	57			KW	78	
59	81		79	63	69	59	68	58			KY	79	
60	82			64	70	60	69	59			L	80	
61	83			65	71	61	70	60			LA	81	
62	84			66	72	62	71	61			LD	82	
63	85			67	73	63	72	62			LE	83	
64	86			68	74	64	73	63			LL	84	

'Region/Risk Zone	AT	BE	CZ	DE	HE	IT	NL	PL	SK	ES	UK	PT	RO
65	87			69	80	65	74	64			LN	85	
66	88			70	81	66	75	65			LS	86	
67	89			71	82	67	76	66			LU	87	
68	90			72	83	70	77	67			M	88	
69	91			73	84	71	78	68			ME	89	
70	92			74	85	72	79	69			MK	90	
71	93			75		73	80	70			ML	91	
72	94			76		74	81	71			N	92	
73	95			77		75	82	72			NE	93	
74	96			78		80	83	73			NG	94	
75	97			79		81	84	74			NN	95	
76	98			80		82	85	75			NP	96	
77	99			81		83	86	76			NR	97	
78				82		84	87	77			NW	98	
79				83		85	88	78			OL	99	
80				84		86	89	80			OX		
81				85		87	90	81			PA		
82				86		88	91	82			PE		
83				87		89	92	83			PH		
84				88		90	93	84			PL		
85				89		91	94	85			PO		
86				90		92	95	86			PR		
87				91		93	96	87			RG		
88				92		94	97	88			RH		
89				93		95	98	89			RM		
90				94		96	99	90			S		
91				95		97		91			SA		
92				96		98		92			SE		
93				97				93			SG		
94				98				94			SK		
95				99				95			SL		
96								96			SM		
97								97			SN		
98								98			SO		
99								99			SP		
100											SR		
101											SS		
102											ST		

'Region/Risk Zone	AT	BE	CZ	DE	HE	IT	NL	PL	SK	ES	UK	PT	RO
103											SW		
104											SY		
105											TA		
106											TD		
107											TF		
108											TN		
109											TQ		
110											TR		
111											TS		
112											TW		
113											UB		
114											W		
115											WA		
116											WC		
117											WD		
118											WF		
119											WN		
120											WR		
121											WS		
122											WV		
123											YO		
124											ZE		

(4)   in the section 'Mapping of risk zones for regions where the zonation is based on administrative units – part 1', the table is replaced by the following:

'Region/Risk Zone	BG	CR	HU
1	Sofiya-Grad (incl. City of Sofiya)	Zagrebacka	City of Budapest
2	Sofiya	Krapinsko-zagorska	Gyor-Sopron
3	Pernik	Sisacko-moslavacka	City of Gyor
4	Kyustendil	Karlovacka	Vas
5	Blagoevgrad	Varazdinska	Zala
6	Pazardzhik	Koprivnicko-krizevac	Veszprem
7	Smolyan	Bjelovarsko-bilogors	Somogy
8	Plovdiv	Primorsko-goranska	Komarom
9	Kurdzahli	Licko-senjska	Fejer
10	Khaskovo	Viroviticko-podravsk	Tolna

'Region/Risk Zone	BG	CR	HU
11	Stara Zagora	Pozesko-slavonska	Baranya
12	Sliven	Brodsko-posavska	City of Pecs
13	Yambol	Zadarska	Nograd
14	Burgas	Osjecko-baranjska	Pest
15	Varna	Sibensko-kninska	Bacs-Kiskun
16	Dobrich	Vukovarsko-srijemska	Borsod-Abauj-Zemplen
17	Shumen	Splitsko-dalmatinska	City of Miskolc
18	Silistra	Istarska	Heves
19	Razgrad	Dubrovacko-neretvanska	Szolnok
20	Turgovishte	Medimurska	Csongrád-Csanád
21	Ruse	Grad Zagreb	Szabolcs-Szatmar
22	Veliko Turnovo		Hadju-Bihar
23	Gabrovo		City of Debrecen
24	Lovech		Bekes'
25	Pleven		
26	Vrasta		
27	Montana		
28	Vidin		

(5)   the section 'Mappings of risk zones for the regions with only one risk zone which are part of another region', is amended as follows:

(a)   in the first sentence, 'Lichtenstein' is replaced by 'Liechtenstein';

(b)   in the first column, second row of the table, 'Lichtenstein' is replaced by 'Liechtenstein';

(6)   the title 'Mapping of risk zones for the Republic of France' is replaced by 'Mapping of risk zones for the French Republic'.

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ANNEX VIII

'ANNEX X

RISK WEIGHTS FOR CATASTROPHE RISK ZONES

Risk weights for windstorm risk

Zone/ Region	AT	BE	CH	CZ	DE	DK	ES	FI	FR	HU	IE	NL	NO	PL	SE	SI	UK
1	0,6	0,9	1,4	1,2	0,9	1,1	2,3	0,8	1,0	0,5	1,4	0,9	1,4	0,6	0,2	0,9	0,9
2	0,7	1,0	1,1	1,0	0,8	1,6	0,8	1,2	2,0	2,0	1,1	1,0	0,7	0,6	0,3	0,9	1,1
3	0,9	0,9	1,5	1,0	0,8	0,9	0,6	3,6	1,7	0,6	1,5	1,0	0,5	0,6	0,3	1,4	0,7
4	1,5	0,9	1,3	1,0	1,2	2,0	0,6	1,1	0,8	1,7	1,3	1,1	0,8	0,6	0,8	1,4	1,5
5	1,6	1,0	1,5	1,2	1,3	1,3	1,5	1,4	1,5	1,6	1,5	1,5	1,2	0,6	0,5	0,9	1,1
6	1,4	1,0	0,7	1,2	1,1	1,4	1,1	0,8	0,6	1,8	0,7	1,2	0,8	0,6	0,7	1,4	0,9
7	1,5	1,2	1,5	1,2	1,0	1,4	0,2	0,3	0,7	2,2	1,5	1,6	1,0	0,8	0,8	1,4	1,5
8	1,1	1,6	1,1	1,0	1,1	1,6	1,3	0,5	1,7	1,5	1,1	1,9	0,9	0,7	2,2	0,7	0,9
9	1,4	1,1	1,1	1,2	0,5	0,9	2,3	0,8	1,2	2,2	1,1	1,4	1,0	0,6	1,6	0,9	1,9
10	1,1		1,6	1,2	0,7	0,6	1,5	1,2	1,7	2,1	1,6	1,4	1,5	0,9	3,5	0,9	0,7
11	1,1		1,8	1,4	0,7	1,8	1,5	0,8	0,9	1,5	1,8	0,9	2,8	1,0	5,2	0,7	1,3
12	1,1		0,9	1,5	1,0		1,1	1,0	1,2	1,4	0,9	1,4	2,6	0,9	2,4		1,2
13	1,2		1,1	1,5	1,1		0,8	2,9	0,8	1,3	1,1	1,7	3,6	0,8	0,6		1,6
14	1,1		2,0	1,3	1,3		1,1	3,7	3,3	1,4	2,0	1,3	2,9	1,0	0,4		1,5
15	1,2		1,2	1,4	1,6		2,5	7,9	1,6	2,0	1,2	1,4	1,4	1,2	0,3		1,5
16	1,5		1,2	1,6	2,1		1,3	7,0	1,6	1,2	1,2	1,2	1,7	0,5	0,4		1,3
17	1,6		1,3	1,6	1,9		1,7	2,7	3,0	0,3	1,3	1,5	1,3	0,6	0,5		2,4
18	1,3		1,4	1,6	1,4		0,8	1,2	1,8	1,9	1,4	1,3	0,7	0,5	0,4		3,2
19	1,5		1,3	1,6	1,7		1,5	3,8	1,2	2,0	1,3	1,1	0,2	0,6	1,0		0,7
20	1,5		1,4	1,7	1,1		2,5		1,3	2,1	1,4	1,0		0,7	0,6		2,0
21	1,8		1,5	1,9	2,0		1,3		1,1	1,1	1,5	0,9		0,5	0,6		1,2
22	2,0		1,1	1,8	1,9		2,1		2,9	2,0	1,1	1,5		0,5			1,3
23	2,0		1,2	1,2	2,9		0,8		1,8	0,3	1,2	1,7		0,4			2,3
24	1,3		1,2	1,4	2,7		2,3		1,3	2,2	1,2	1,2		0,4			1,2
25	2,1		0,9	1,3	2,2		1,9		0,8		0,9	1,1		0,5			1,3
26	1,8		1,3	1,6	1,5		1,5		0,8		1,3	0,9		0,6			1,6
27	1,8			1,6	1,6		2,5		2,2			1,3		0,6			0,9
28	1,5			1,7	1,6		1,1		2,3			0,9		0,5			1,1
29	1,5			1,7	1,8		1,3		3,4			0,9		0,5			3,8
30	1,7			1,4	1,8		0,6		0,6			0,9		0,7			2,2
31	3,2			1,5	1,7		2,3		1,0			1,0		0,6			0,8
32	1,6			1,2	1,3		2,5		1,6			1,1		0,5			0,6
33	3,1			1,1	1,1		2,5		1,3			1,4		0,5			0,4

Zone/Region	AT	BE	CH	CZ	DE	DK	ES	FI	FR	HU	IE	NL	NO	PL	SE	SI	UK
34	1,4			1,1	1,2		2,3		0,7			2,0		0,4			0,8
35	2,4			1,1	1,4		0,0		2,5			1,7		0,5			0,8
36	2,3			1,1	1,5		2,5		1,7			1,3		0,4			1,9
37	1,8			0,9	1,7		1,7		1,8			1,6		0,4			1,1
38	1,6			0,9	1,5		0,0		0,8			1,1		0,4			2,4
39	2,2			1,1	1,8		2,5		1,0			0,8		0,4			0,8
40	2,0			1,0	1,2		1,7		1,5			1,1		0,4			1,4
41	1,9			0,8	1,1		1,3		1,7			0,7		0,6			1,0
42	1,6			0,8	1,2		1,9		1,0			1,0		0,7			3,1
43	2,0			0,8	1,8		1,5		1,3			0,9		0,7			0,6
44	2,1			0,9	1,7		1,3		2,7			1,0		0,7			1,0
45	2,0			0,8	2,1		1,3		1,7			0,7		0,7			1,2
46	2,2			0,9	2,0		0,8		1,0			0,7		0,9			1,2
47	2,4			0,9	1,3		1,9		1,3			0,6		1,0			1,4
48	2,6			0,7	1,2		2,5		1,3			0,7		0,8			1,6
49	2,2			0,7	1,5		2,1		2,3			0,8		0,9			1,9
50	2,1			0,5	1,3		1,9		4,8			1,0		1,0			1,0
51	2,7			0,5	1,3				1,6			0,9		1,2			0,7
52	1,6			0,5	1,2				1,4			0,7		1,2			1,8
53	1,9			0,4	1,2				3,1			0,8		1,2			1,9
54	1,2			0,6	1,0				1,1			0,7		1,2			1,0
55	1,3			0,6	1,1				1,4			0,7		1,2			2,5
56	1,3			0,6	1,7				3,3			0,8		1,2			1,6
57	1,6			0,7	0,8				1,1			1,1		1,3			0,7
58	1,1			0,8	1,3				1,7			0,8		1,1			1,4
59	1,4			0,8	0,9				1,6			0,8		1,3			1,2
60	1,5				1,1				1,9			0,9		1,7			1,1
61	1,6				1,1				3,2			0,8		1,7			1,7
62	1,7				1,1				2,2			0,9		1,6			2,2
63	1,6				1,1				1,2			0,8		1,4			1,3
64	1,1				1,0				1,3			0,6		1,3			1,9
65	1,4				0,9				1,5			0,8		2,0			3,2
66	2,3				0,7				0,8			0,7		1,8			0,7
67	1,7				0,9				0,9			0,9		2,3			1,2
68	1,9				0,8				0,7			1,0		1,6			0,6
69	2,1				0,8				0,7			1,2		1,7			6,1
70	2,2				1,0				1,0			1,1		2,3			1,3
71	1,9				0,8				1,3			1,1		3,4			1,1

Zone/Region	AT	BE	CH	CZ	DE	DK	ES	FI	FR	HU	IE	NL	NO	PL	SE	SI	UK
72	1,9				0,9				2,4			0,9		3,6			0,5
73	1,9				0,9				1,1			1,3		3,6			0,7
74	1,8				0,9				0,9			1,8		2,9			1,2
75	1,7				0,9				0,6			1,2		3,0			1,4
76	1,8				0,9				2,5			1,6		3,3			1,4
77	2,1				0,8				1,3			1,5		3,2			1,5
78					0,9				1,3			1,8		2,6			0,5
79					0,9				2,2			1,8		3,0			0,8
80					0,8				2,4			1,1		1,9			1,6
81					0,8				1,1			1,4		2,7			1,3
82					0,8				1,2			1,4		1,4			3,2
83					1,0				0,8			1,2		1,8			1,4
84					1,0				0,5			1,2		2,9			2,1
85					0,8				3,4			0,8		1,5			1,7
86					0,8				1,8			1,0		1,5			1,5
87					0,9				1,5			1,0		1,2			1,2
88					0,7				1,0			1,0		1,4			1,0
89					0,8				1,7			1,4		1,9			1,1
90					0,8				0,6			1,4		0,8			0,9
91					0,9				1,1					0,8			2,1
92					0,9				0,6					0,8			0,6
93					1,1				0,6					0,8			1,4
94					1,0				0,7					0,8			0,9
95					1,4				1,0					0,8			1,0
96														0,7			0,6
97														0,7			1,5
98														0,9			1,1
99														0,9			1,6
100																	0,8
101																	4,8
102																	1,2
103																	0,5
104																	1,8
105																	1,6
106																	1,3
107																	1,2
108																	1,3
109																	1,7

Zone/Region	AT	BE	CH	CZ	DE	DK	ES	FI	FR	HU	IE	NL	NO	PL	SE	SI	UK
110																	2,4
111																	0,8
112																	0,8
113																	0,8
114																	0,4
115																	1,1
116																	0,4
117																	0,9
118																	1,0
119																	1,1
120																	1,4
121																	0,8
122																	0,8
123																	2,0
124																	1,5

Risk weights for earthquake risk

Zone/Region	AT	BE	BG	CZ	CH	CR	CY	DE	FR	HE	HU	IT	PT	RO	SI	SK
1	3,5	0,8	1,5	0,1	1,1	0,8	0,6	0,1	1,4	2,2	2,6	4,3	1,7	3,4	1,4	1,8
2	3,1	0,4	0,3	0,1	1,3	1,3	1,9	0,2	0,1	1,8	0,4	2,0	2,3	2,7	0,8	0,8
3	3,2	1,7	0,5	0,1	1,8	0,1	1,3	0,2	0,3	2,5	0,0	6,8	1,9	1,6	0,7	1,3
4	4,0	1,8	0,3	0,1	3,1	0,7	2,0	1,1	3,1	2,7	0,8	6,0	1,2	1,4	1,4	0,6
5	0,9	1,1	0,6	0,1	3,8	1,0	0,4	0,7	1,0	2,0	1,6	3,2	1,4	2,9	0,7	0,6
6	1,6	2,4	0,4	0,1	1,4	0,5	0,2	1,5	4,1	2,1	1,0	5,0	3,6	2,5	0,4	0,6
7	2,4	3,3	0,1	0,1	1,5	0,3		2,7	1,1	1,8	0,6	4,7	2,4	2,1	0,2	0,6
8	3,4	0,7	0,7	0,1	1,0	0,8		0,6	0,1	2,2	1,0	0,0	2,1	0,9	0,2	1,1
9	3,2	0,5	0,1	0,1	2,1	0,4		0,1	4,9	2,1	0,6	0,0	3,4	2,1	1,7	1,0
10	3,8		0,3	0,1	1,2	0,2		0,1	0,1	2,9	0,0	0,0	2,0	0,8	1,3	3,2
11	3,6		0,1	0,1	1,7	0,3		0,1	2,9	3,5	0,4	1,9	1,6	4,0	1,0	2,9
12	3,8		0,1	0,1	1,5	0,3		0,2	0,1	3,2	0,0	1,8	1,5	1,3		3,2
13	2,5		0,2	0,1	0,7	0,6		0,2	2,7	3,1	0,5	1,4	0,6	0,4		3,2
14	1,9		0,1	0,1	2,5	0,3		0,2	0,2	3,2	1,7	1,3	1,3	0,2		2,6
15	1,2		0,5	0,1	2,3	1,8		0,1	0,2	2,6	0,1	0,8	0,6	0,3		1,6
16	0,6		0,6	0,1	0,6	0,3		0,1	0,6	2,6	0,0	1,6	0,8	0,3		2,2
17	0,2		0,5	0,1	1,7	0,6		0,2	0,7	3,8	0,0	1,2	2,0	0,4		1,9
18	1,7		0,7	0,1	1,7	0,6		0,1	0,1	3,1	1,8	1,8	1,6	0,6		1,1
19	0,2		0,5	0,6	1,4	0,8		0,2	0,1	7,2	0,7	3,2	2,6	0,2		1,8

Zone/Region	AT	BE	BG	CZ	CH	CR	CY	DE	FR	HE	HU	IT	PT	RO	SI	SK
20	0,1		0,3	0,6	0,5	0,3		0,1	0,2	2,8	0,0	4,0	1,8	0,1		1,9
21	0,4		0,4	2,5	0,9	1,3		0,1	0,3	4,8	0,2	1,5	0,4	0,1		0,6
22	0,0		0,2	1,5	2,1			0,1	0,2	6,8	0,0	0,8	0,6	0,0		2,2
23	0,0		0,1	0,1	1,4			0,1	0,2	2,7	0,0	1,4	0,3	0,0		0,2
24	0,0		0,1	0,1	2,6			0,1	0,1	2,6	0,1	1,8	0,2	0,0		1,6
25	0,0		0,1	0,1	0,8			0,1	2,0	1,6		4,3	0,1	0,0		
26	0,0		0,2	0,1	1,3			0,2	2,5	3,1		4,5	0,1	0,1		
27	0,0		0,1	0,1				0,2	0,1	3,4		3,1	0,1	0,2		
28	0,0		0,0	1,1				0,1	0,1	3,3		1,9	0,1	0,0		
29	0,0			0,9				0,1	0,2	3,6		1,1	0,3	0,2		
30	0,0			0,1				0,1	1,4	1,9		3,2	0,3	0,0		
31	0,0			0,1				0,1	1,4	3,1		3,0	0,3	1,5		
32	0,1			0,7				0,2	2,6	2,0		8,0	0,2	0,0		
33	0,0			1,3				0,4	0,1	4,8		5,3	0,2	0,0		
34	0,4			0,1				0,9	0,6	1,7		4,3	0,2	0,1		
35	0,1			1,5				0,2	0,2	1,9		3,4	0,1	2,0		
36	0,1			1,5				0,1	0,5	2,2		3,0	0,2	0,5		
37	0,2			0,1				0,3	0,5	1,8		6,5	0,2	5,2		
38	0,4			0,1				1,9	3,0	4,1		5,0	0,1	0,3		
39	0,5			0,1				6,4	0,8	1,9		2,5	0,3	0,0		
40	0,5			0,1				0,2	5,5	0,5		1,2	0,2	0,0		
41	1,0			0,1				0,1	0,2	1,1		5,9	0,1	1,0		
42	2,4			0,1				0,2	0,3	1,3		6,1	0,2	1,3		
43	1,8			0,1				0,3	0,2	1,0		6,0	0,1	0,9		
44	1,7			0,1				1,6	0,5	0,6		5,1	0,1	0,1		
45	1,1			0,1				0,1	0,1	0,5		5,5	0,1	0,0		
46	1,8			0,1				0,1	0,1	0,6		2,3	0,3	2,2		
47	1,0			0,1				5,8	0,1	0,6		3,6	0,1	2,0		
48	2,0			7,6				2,1	0,2	0,6		6,4	0,1			
49	1,4			8,8				8,1	0,5	0,5		6,4	0,1			
50	1,8			10,5				3,4	0,4	0,6		5,5	0,8			
51	1,2			11,0				0,2	0,1	0,4		6,3	0,4			
52	3,1			10,5				1,9	0,1	1,0		4,2	0,5			
53	1,7			11,3				2,0	0,2	0,7		3,2	0,1			
54	3,4			9,5				0,2	0,1	1,1		5,9	0,5			
55	1,4			0,1				0,1	0,1	0,9		5,1	1,3			
56	0,9			0,1				0,1	0,3	1,0		4,2	0,9			
57	0,4			0,1				2,2	0,1	0,6		3,0	0,6			
58	0,7			0,1				1,4	0,1	1,0		1,9	0,3			
59	1,1			6,6				1,1	1,8	0,6		6,7	0,7			

Zone/Region	AT	BE	BG	CZ	CH	CR	CY	DE	FR	HE	HU	IT	PT	RO	SI	SK
60	1,0							2,0	0,1	3,1		5,3	2,9			
61	0,3							2,2	0,2	3,1		5,0	1,4			
62	0,3							0,1	0,9	2,5		5,7	3,1			
63	0,6							2,5	0,4	2,6		6,0	1,9			
64	2,2							2,7	16,5	2,5		5,9	1,9			
65	1,1							2,0	23,4	0,9		5,4	1,3			
66	0,8							3,1	13,5	1,5		3,7	1,4			
67	0,2							3,4	5,0	2,6		10,9	4,6			
68	0,7							6,4	10,4	0,9		1,4	1,2			
69	0,7							2,3	0,5	1,2		5,5	1,3			
70	0,5							1,7	0,8	2,3		0,5	0,2			
71	0,6							2,8	0,4			1,0	0,3			
72	0,6							5,0	0,3			1,4	0,1			
73	0,9							6,1	4,5			3,1	0,1			
74	1,6							3,4	7,2			3,7	0,3			
75	1,2							7,1	0,2			3,1	0,8			
76	1,0							0,2	0,1			7,0	1,0			
77	0,8							0,2	0,1			6,3	1,4			
78								1,1	0,1			2,8	2,1			
79								2,3	0,7			5,3	1,7			
80								0,2	0,1			6,6				
81								0,4	0,2			9,1				
82								0,7	0,1			7,9				
83								4,0	0,5			10,5				
84								3,6	3,5			6,3				
85								2,2	0,6			2,5				
86								0,1	0,7			2,1				
87								0,1	0,2			3,6				
88								0,2	0,5			5,3				
89								0,2	0,1			8,4				
90								0,1	4,1			7,7				
91								0,4	0,1			6,3				
92								0,2	0,2			10,1				
93								0,1	0,1							
94								0,3	0,2							
95								0,3	0,1							

Risk weights for flood risk

Zone/Region	AT	BE	BG	CH	CZ	DE	FR	IT	HU	PL	RO	SI	SK	UK
1	0,1	0,3	1,3	2,0	0,6	1,5	1,9	8,0	0,6	0,4	1,8	1,3	1,5	1,3
2	0,1	1,0	2,8	1,8	1,6	0,8	1,1	2,4	4,2	0,1	0,9	1,2	1,0	0,5
3	0,5	0,5	0,0	1,8	0,5	0,5	1,1	1,2	4,9	0,1	0,9	0,8	0,8	1,5
4	0,0	3,5	2,6	1,8	0,4	1,5	0,5	0,8	0,5	1,7	1,2	2,7	3,8	7,8
5	0,9	3,8	0,2	1,8	0,9	2,5	0,3	1,6	0,3	0,8	1,1	0,6	0,2	10,5
6	4,0	0,5	0,1	3,3	1,5	1,3	0,2	2,0	0,1	0,7	0,4	1,1	0,3	5,8
7	0,4	0,5	0,1	1,3	1,4	0,5	0,7	4,8	0,3	2,4	1,7	1,8	1,5	1,3
8	0,2	1,0	0,5	1,3	1,6	0,3	1,3	0,0	1,0	1,0	3,3	1,5	1,5	3,3
9	0,5	2,8	0,3	4,2	1,7	1,0	0,6	0,0	1,2	0,8	0,7	0,9	1,5	1,3
10	1,0		0,8	3,0	0,5	1,3	1,3	0,0	3,4	2,5	1,3	0,1	0,0	2,3
11	0,2		0,1	3,0	1,1	1,8	1,4	4,8	0,8	1,0	0,7	1,7	0,0	6,0
12	0,3		0,7	3,0	1,6	2,0	0,4	0,0	0,1	2,0	2,0		0,0	0,0
13	0,3		0,4	1,5	1,6	0,8	6,1	2,4	0,2	2,6	4,6		0,5	4,3
14	0,5		0,2	3,8	1,5	0,8	1,1	0,4	1,4	2,2	3,3		0,0	2,8
15	0,9		0,2	4,5	2,7	0,3	0,3	2,0	3,2	1,2	0,7		0,2	7,0
16	0,4		0,0	1,3	2,5	0,3	1,1	2,4	2,3	0,0	2,0		2,1	2,0
17	1,4		0,1	2,8	4,5	1,3	2,2	0,0	0,4	1,8	4,0		1,1	1,5
18	2,6		2,5	1,8	1,1	2,3	1,3	0,8	0,6	1,3	1,3		1,3	1,5
19	3,6		0,8	2,5	1,8	4,5	0,4	0,8	4,9	1,4	2,0		0,9	2,0
20	2,2		0,9	2,0	2,3	2,0	0,0	0,0	4,8	1,8	2,0		0,3	2,8
21	0,5		7,5	2,0	1,7	0,8	1,6	3,2	3,1	0,0	2,0		2,8	3,0
22	1,6		4,2	5,0	1,5	0,3	0,3	0,0	2,8	1,3	3,3		2,7	2,5
23	1,0		0,8	1,5	1,6	0,5	0,3	1,6	0,3	0,7	2,0		0,1	3,3
24	3,6		0,8	3,3	2,1	2,0	1,0	1,6	4,0	1,4	2,0		0,0	1,3
25	1,8		7,5	1,5	2,0	2,3	0,7	3,2		3,1	0,7			4,0
26	0,8		5,8	1,8	2,2	2,5	1,1	1,6		0,2	3,3			5,5
27	2,0		3,3		3,1	4,3	1,2	3,2		0,8	2,6			8,5
28	2,4		2,5		1,1	2,8	0,5	3,2		3,6	3,3			3,0
29	0,7				2,9	2,3	0,3	0,0		5,9	0,7			1,3
30	4,4				1,7	0,8	3,0	0,8		0,8	1,3			1,3
31	2,0				1,3	0,3	1,6	4,8		0,6	1,3			2,0
32	3,3				1,1	1,8	1,3	4,8		0,1	0,7			2,5
33	0,9				2,0	1,0	2,8	1,6		5,9	1,3			0,3
34	4,6				2,2	0,3	1,7	2,4		9,8	1,3			3,5
35	1,5				1,4	3,0	0,7	0,0		7,3	2,6			3,0
36	0,3				1,8	2,3	0,7	2,4		0,5	2,0			2,8

Zone/Region	AT	BE	BG	CH	CZ	DE	FR	IT	HU	PL	RO	SI	SK	UK
37	0,4				2,6	2,5	2,0	1,2		2,2	2,6			2,8
38	4,4				2,6	3,3	1,4	6,4		7,3	2,0			3,3
39	1,2				0,8	1,0	1,7	2,4		10,6	0,7			3,5
40	0,4				1,0	0,8	1,7	1,2		5,4	1,3			1,8
41	0,2				3,9	0,3	1,4	6,4		0,0	2,0			2,5
42	0,3				4,2	0,3	0,7	1,2		0,7	4,0			0,0
43	0,1				1,2	2,0	0,4	0,8		1,7	11,9			3,0
44	0,2				1,5	3,8	1,9	0,8		3,1	7,9			7,5
45	0,6				0,8	3,5	1,7	1,6		0,3	2,0			2,8
46	0,1				1,1	2,0	0,8	4,8		2,8	3,3			1,0
47	0,1				0,7	4,5	2,3	3,2		1,1	4,6			19,5
48	1,5				3,6	2,5	0,2	0,4		5,6				0,5
49	0,1				2,1	0,3	2,5	1,6		2,2				3,0
50	2,4				1,9	3,3	0,9	3,6		3,0				5,8
51	2,8				1,0	2,0	1,1	0,8		1,1				3,3
52	0,4				2,2	4,3	0,6	3,2		2,1				0,0
53	0,3				1,2	6,0	0,4	0,4		0,3				2,0
54	0,0				2,8	0,3	1,0	0,0		0,1				2,5
55	0,1				3,5	1,0	1,2	0,8		0,2				0,0
56	0,1				1,9	0,8	0,7	4,8		4,9				4,0
57	0,1				4,8	1,5	1,0	0,0		4,9				3,8
58	0,3				3,3	0,3	1,3	0,0		2,3				1,0
59	0,9				2,4	3,8	0,9	0,8		4,6				1,8
60	0,1					1,3	1,0	0,0		7,0				2,0
61	0,1					3,3	0,5	0,4		0,1				10,0
62	0,1					2,3	0,8	0,8		0,9				13,3
63	0,1					4,0	0,7	0,0		0,9				2,8
64	0,4					3,0	0,9	0,8		1,7				2,8
65	1,1					1,5	1,2	4,0		3,0				0,8
66	0,5					0,5	0,8	1,6		0,1				8,5
67	0,9					0,3	4,3	2,4		2,9				1,0
68	0,0					1,5	2,9	3,2		4,6				6,0
69	0,0					0,5	1,6	1,2		4,6				4,3
70	0,0					1,3	1,5	0,8		8,8				3,3
71	0,0					0,8	1,9	0,0		1,9				2,0
72	0,0					3,5	1,4	1,6		1,2				2,0
73	0,0					1,0	0,9	1,2		2,2				2,0
74	0,0					0,5	0,5	3,2		1,6				6,8

EN

Zone/Region	AT	BE	BG	CH	CZ	DE	FR	IT	HU	PL	RO	SI	SK	UK
75	0,0					1,0	6,2	6,4		8,8				1,5
76	0,0					0,8	1,1	1,2		0,1				4,5
77	0,1					0,5	1,3	2,4		0,3				1,3
78						1,0	1,2	1,6		0,6				2,0
79						3,0	0,7	1,6		1,6				3,8
80						2,3	0,8	0,8		1,5				2,5
81						2,3	0,5	1,2		0,1				2,8
82						3,0	2,5	0,0		12,6				2,0
83						1,3	0,7	0,0		3,9				5,5
84						0,5	2,7	3,2		0,1				0,8
85						1,3	2,0	0,0		0,8				1,3
86						0,3	0,8	0,8		2,1				2,5
87						1,0	0,3	1,2		0,9				2,0
88						0,8	0,6	0,8		2,4				2,8
89						1,5	0,9	1,6		1,9				1,5
90						2,3	0,8	0,0		0,1				4,5
91						0,5	1,0	0,0		0,2				6,5
92						2,5	6,1	1,2		0,1				1,5
93						5,0	1,4			0,2				1,5
94						0,8	5,0			0,1				3,5
95						2,0	1,1			1,2				2,8
96										0,8				1,0
97										0,8				2,5
98										1,3				1,8
99										2,1				2,0
100														1,0
101														1,5
102														1,0
103														1,5
104														3,5
105														3,0
106														13,3
107														1,0
108														3,0
109														3,8
110														0,8
111														3,8
112														2,8

Zone/Region	AT	BE	BG	CH	CZ	DE	FR	IT	HU	PL	RO	SI	SK	UK
113														1,5
114														1,3
115														6,8
116														0,3
117														0,3
118														5,0
119														3,8
120														3,5
121														2,0
122														2,3
123														2,3
124														0,5

Zone/Region	IE	DK	FI	SE	NL	NO
1	1,9	1,4	0,5	1,4	2,10	3,2
2	2,6	1,7	0,7	1,0	1,57	1,2
3	1,5	1,7	7,7	2,6	2,40	1,2
4	2,1	1	1,5	1,7	1,67	4,6
5	3,2	1,6	1,3	1,1	4,21	1,1
6	1,4	1,9	0,9	1,0	2,31	6,6
7	0,5	1,6	5,9	0,7	1,02	1,1
8	1,5	0,7	1,9	0,6	2,57	4,6
9	3,2	2,3	2,8	0,9	3,75	1,4
10	4,1	2	2	0,8	2,14	1,4
11	0,4	2,2	5,5	0,6	2,14	1,0
12	1,3		2,4	2,7	0,98	1,8
13	2,9		3,5	3,1	1,31	2,7
14	0,8		1,9	2,1	3,11	0,8
15	0,8		2,5	1,8	2,07	1,5
16	1,0		1,9	3,3	2,04	1,1
17	1,5		2,7	1,9	1,73	0,9
18	0,7		8,9	1,5	1,46	0,9
19	1,4		0,3	0,7	1,84	1,8
20	0,6			1,5	0,71	
21	0,2			1,7	1,77	
22	1,9				1,52	
23	0,9				1,33	

EN

Zone/Region	IE	DK	FI	SE	NL	NO
24	0,2				1,51	
25	1,9				1,26	
26	1,3				1,74	
27					6,90	
28					1,05	
29					1,10	
30					1,27	
31					0,93	
32					1,42	
33					2,05	
34					2,07	
35					1,44	
36					1,85	
37					2,16	
38					2,07	
39					1,22	
40					1,61	
41					0,90	
42					1,13	
43					1,35	
44					1,27	
45					0,93	
46					0,87	
47					1,04	
48					0,97	
49					1,59	
50					1,76	
51					1,57	
52					4,47	
53					3,86	
54					4,03	
55					2,97	
56					1,95	
57					1,15	
58					1,53	
59					1,36	
60					1,45	
61					1,20	
62					0,85	

Zone/Region	IE	DK	FI	SE	NL	NO
63					1,15	
64					1,36	
65					1,05	
66					1,05	
67					0,74	
68					0,86	
69					0,98	
70					0,77	
71					1,39	
72					0,99	
73					0,85	
74					0,64	
75					0,81	
76					2,13	
77					2,54	
78					1,29	
79					0,98	
80					1,01	
81					1,41	
82					0,72	
83					0,54	
84					0,69	
85					0,64	
86					0,57	
87					4,83	
88					2,20	
89					3,95	
90					1,38	
91						
92						
93						
94						
95						
96						
97						
98						
99						
100						
101						

Zone/Region	IE	DK	FI	SE	NL	NO
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						
121						
122						
123						
124						

Risk weights for hail risk

Zone/Region	AT	BE	CH	CZ	ES	DE	FR	IT	NL	SI	PL
1	3,1	2,8	2,8	4,1	7,5	0,5	12,6	3,7	4,0	3,7	1,6
2	3,4	2,7	1,6	4,7	1,7	0,0	1,9	3,7	5,8	2,7	1,6
3	1,8	2,0	0,3	5,1	6,7	0,0	5,7	3,7	5,3	2,1	1,7
4	23,6	3,1	2,1	5,7	0,0	0,8	8,7	0,0	1,4	3,6	1,8
5	0,2	2,0	6,7	4,6	1,7	0,4	5,4	0,0	6,6	2,8	1,7
6	1,9	3,9	4,0	4,5	3,3	2,7	3,9	0,8	0,1	2,1	1,2
7	8,3	2,0	0,1	5,1	16,7	0,4	12,3	0,8	0,3	3,5	1,7
8	0,3	2,8	0,2	5,2	2,5	0,8	2,7	0,0	2,9	3,0	1,5
9	1,4	2,4	1,5	5,0	1,7	0,2	27,6	0,0	9,6	3,6	1,4
10	0,8		0,3	3,8	0,0	0,1	1,7	0,0	0,1	3,1	1,2
11	3,1		6,1	2,7	7,5	0,9	6,8	10,8	6,1	2,6	0,9

Zone/Region	AT	BE	CH	CZ	ES	DE	FR	IT	NL	SI	PL
12	2,8		3,0	3,2	0,0	0,1	8,7	10,8	2,8		1,1
13	1,0		0,1	3,0	0,0	0,0	2,8	10,8	2,0		1,7
14	17,4		2,7	2,7	6,7	0,1	0,3	10,8	0,6		1,5
15	0,2		4,4	4,1	1,7	0,0	3,7	10,8	0,2		1,3
16	0,9		0,3	4,5	10,0	0,0	8,5	10,8	2,0		0,8
17	1,7		1,4	4,3	5,0	0,2	0,6	10,8	0,1		1,2
18	1,4		1,9	4,9	2,5	0,0	7,2	10,8	0,1		1,5
19	0,3		5,9	3,0	10,0	0,1	12,4	10,8	3,4		1,9
20	0,3		0,5	2,8	0,0	0,0	2,5	10,8	1,5		1,4
21	0,4		1,3	3,4	3,3	0,0	8,1	7,5	5,6		1,5
22	1,1		1,3	4,2	3,3	0,0	0,1	7,5	0,5		1,4
23	0,2		1,4	2,7	3,3	0,0	10,2	7,5	0,5		1,4
24	5,3		1,2	2,3	6,7	5,5	2,0	7,5	4,2		2,0
25	15,9		1,3	2,6	5,0	0,5	8,3	7,5	1,4		1,8
26	5,8		4,9	3,2	3,3	0,1	25,3	7,5	11,6		2,6
27	1,6			2,9	8,4	0,1	1,0	7,5	12,0		1,3
28	3,8			3,2	0,0	3,3	4,7	7,5	1,3		2,0
29	5,4			4,6	5,0	1,7	0,0	10,8	4,3		1,5
30	7,9			3,4	6,7	3,1	3,6	7,5	2,6		2,7
31	16,5			3,9	3,3	17,4	14,0	3,3	0,4		2,8
32	5,6			2,8	6,7	1,8	7,7	3,3	13,4		3,0
33	5,9			3,2	2,5	2,0	5,8	3,3	12,0		1,6
34	2,4			2,8	6,7	1,7	0,3	3,3	0,3		2,0
35	2,7			2,8	1,7	2,1	0,2	3,3	3,2		2,1
36	14,1			4,3	10,0	2,2	1,3	3,3	0,2		2,3
37	0,4			2,9	2,5	6,1	7,6	3,3	10,6		2,2
38	3,5			4,1	0,0	19,7	10,6	3,3	3,4		1,6
39	6,1			3,0	2,5	5,4	11,6	3,3	3,1		2,1
40	3,1			3,7	7,5	7,9	2,8	3,3	0,2		2,1
41	10,4			4,8	2,5	3,7	2,3	7,5	5,9		1,7
42	5,4			4,6	3,3	3,5	10,4	7,5	7,2		1,9
43	1,1			4,2	6,7	3,0	4,8	7,5	3,8		1,8
44	5,9			3,8	3,3	9,8	0,1	7,5	3,5		2,0
45	11,3			5,0	12,5	3,4	3,4	7,5	3,9		2,0
46	4,5			3,2	1,7	2,7	12,2	3,3	3,2		1,6
47	0,3			2,3	6,7	13,2	18,1	7,5	1,2		1,9
48	3,3			2,8	0,1	11,9	13,7	7,5	2,5		2,1
49	1,3			2,7	0,5	8,7	2,1	7,5	0,6		2,3

Zone/Region	AT	BE	CH	CZ	ES	DE	FR	IT	NL	SI	PL
50	2,1			4,0	1,2	13,9	1,9	3,7	4,7		2,6
51	11,4			4,5		11,2	6,4	3,7	2,9		2,0
52	2,7			5,0		2,1	10,9	3,7	4,6		2,1
53	0,2			3,0		6,0	4,7	3,7	0,3		2,1
54	0,4			3,2		5,0	2,0	3,7	2,4		1,8
55	7,9			3,0		3,3	0,8	3,7	5,8		2,5
56	0,4			3,0		11,2	0,1	3,7	2,4		1,3
57	0,2			4,1		0,3	2,7	3,7	5,2		2,0
58	8,2			2,8		4,3	19,9	3,7	2,1		2,6
59	3,6			2,7		2,4	1,9	3,7	8,5		2,1
60	4,7					3,0	1,9	0,8	9,7		1,4
61	1,5					0,7	16,1	0,8	8,9		1,7
62	3,9					18,2	1,4	0,8	0,1		1,6
63	2,6					5,3	2,6	0,8	0,1		1,1
64	2,4					4,9	15,3	0,8	7,4		1,5
65	4,8					0,3	20,0	0,8	4,1		1,2
66	0,8					8,0	2,0	0,8	0,8		1,1
67	1,2					15,3	4,6	0,8	0,3		1,6
68	0,4					11,7	12,1	0,0	3,2		2,3
69	10,7					7,7	17,1	0,0	1,5		2,1
70	1,3					1,7	13,6	0,0	1,6		2,3
71	4,5					6,4	12,1	0,0	2,9		0,7
72	15,0					5,6	0,7	0,0	7,1		0,9
73	0,3					5,0	15,3	0,0	4,1		1,2
74	1,2					7,8	9,5	0,0	1,6		1,6
75	1,3					8,0	6,2	0,0	1,4		1,7
76	0,2					55,9	0,7	0,0	0,1		0,4
77	4,2					41,6	1,9	0,0	0,4		1,2
78						7,9	1,7	0,0	0,3		1,4
79						10,7	1,1	0,0	0,0		1,6
80						8,7	4,6	0,8	5,1		0,9
81						7,8	3,7	0,0	0,7		0,9
82						15,8	20,4	0,0	0,3		1,3
83						5,2	0,6	0,0	1,0		1,0
84						3,2	0,6	0,0	1,1		1,1
85						12,4	1,3	0,0	5,1		1,0
86						9,1	1,3	0,0	2,5		1,6
87						4,2	1,7	0,0	1,8		1,2

Zone/Region	AT	BE	CH	CZ	ES	DE	FR	IT	NL	SI	PL
88						8,5	3,2	0,0	0,3		1,6
89						3,9	3,3	0,0	4,4		1,6
90						6,4	6,0	0,0	3,0		0,3
91						2,7	2,3	0,0			1,0
92						3,0	1,0	0,0			2,1
93						2,5	4,0				1,9
94						2,5	0,7				1,2
95						1,4	2,3				1,9
96											1,9
97											1,3
98											1,7
99											1,9

Risk weights for subsidence risk

Zone	FR	BE	Zone	FR	BE	Zone	FR	BE	Zone	FR	BE	Zone	FR	BE
1	0,5	0,4	20	0,3		39	0,5		58	0,3		77	2,5	
2	0,3	0,6	21	0,5		40	0,3		59	6,0		78	2,0	
3	0,5	1,7	22	0,3		41	0,5		60	0,3		79	0,8	
4	0,3	0,9	23	0,3		42	0,3		61	0,3		80	0,3	
5	0,3	1,1	24	1,8		43	0,3		62	1,0		81	0,8	
6	0,5	0,9	25	0,3		44	0,5		63	0,8		82	0,8	
7	0,3	1,5	26	0,3		45	1,5		64	0,5		83	0,5	
8	0,3	1,8	27	0,3		46	0,3		65	0,5		84	0,5	
9	0,3	1,2	28	0,5		47	1,0		66	0,3		85	0,5	
10	0,3		29	0,3		48	0,3		67	0,3		86	1,0	
11	0,5		30	0,3		49	1,3		68	0,3		87	0,3	
12	0,3		31	6,3		50	0,3		69	0,5		88	0,3	
13	2,5		32	1,0		51	0,3		70	0,3		89	0,5	
14	0,3		33	4,8		52	0,3		71	0,5		90	0,3	
15	0,3		34	0,5		53	0,3		72	0,8		91	1,5	
16	0,5		35	0,3		54	0,5		73	0,3		92	0,5	
17	2,3		36	0,5		55	0,3		74	0,3		93	0,8	
18	0,5		37	1,5		56	0,3		75	0,3		94	1,0	
19	0,3		38	0,3		57	1,0		76	0,3		95	0,8'	

ANNEX IX

In Annex XIII to Delegated Regulation (EU) 2015/35, 'Lichtenstein' is replaced by 'Liechtenstein'.

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ANNEX X

Annex XVI to Delegated Regulation (EU) 2015/35 is amended as follows:

(1)   'Republic of Hungary' is replaced by 'Hungary';

(2)   'Grand Duchy of Luxemburg' is replaced by 'Grand Duchy of Luxembourg'.

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'ANNEX XIX

MCR RISK FACTORS FOR NON-LIFE AND HEALTH INSURANCE OR REINSURANCE OBLIGATIONS

	Segment	Lines of business, as set out in Annex I, that the segment consists of	Factor for technical provisions for segment s (α_s)	Factor for premiums written for segment s (β_s)
1	Medical expense insurance	1 and 13	5,4 %	4,7 %
2	Income protection insurance	2 and 14	13,1 %	8,0 %
3	Workers' compensation insurance	3 and 15	10,3 %	9,0 %
4	Motor vehicle liability insurance and proportional reinsurance	4 and 16	8,5 %	9,4 %
5	Other motor insurance and proportional reinsurance	5 and 17	7,5 %	7,5 %
6	Marine, aviation and transport insurance and proportional reinsurance	6 and 18	10,3 %	14 %
7	Fire and other damage to property insurance and proportional reinsurance	7 and 19	9,4 %	7,5 %
8	General liability insurance and proportional reinsurance	8 and 20	10,3 %	13,1 %
9	Credit and suretyship insurance and proportional reinsurance	9 and 21	16,0 %	17,7 %
10	Legal expenses insurance and proportional reinsurance	10 and 22	5,2 %	7,8 %
11	Assistance and its proportional reinsurance	11 and 23	20,3 %	6,0 %
12	Miscellaneous financial loss insurance and proportional reinsurance	12 and 24	18,6 %	12,2 %
13	Non-proportional casualty reinsurance	26	18,6 %	15,9 %
14	Non-proportional marine, aviation and transport reinsurance	27	18,6 %	15,9 %
15	Non-proportional property reinsurance	28	18,6 %	15,9 %
16	Non-proportional health reinsurance	25	15,9 %	15,9 %'

ANNEX XII

'ANNEX XX

STRUCTURE OF THE SOLVENCY AND FINANCIAL CONDITION REPORT AND REGULAR SUPERVISORY REPORT

A. **Structure of the solvency and financial condition report**

1. *Structure of the part targeted at policy holders and beneficiaries*

   A. Languages in which this part is available

   B. Business and Performance

   C. Capital Management and Risk Profile

   D. Other information

2. *Structure of the part targeted at market professionals*

   A. Business and Performance

   A.1 Business

   A.2 Underwriting Performance

   A.3 Investment Performance

   A.4 Performance of other activities

   A.5 Any other information

   B. System of Governance

   B.1 General information on the system of governance

   B.2 Outsourcing

   B.3 Any other information

   C. Valuation for Solvency Purposes

   C.1 Assets

   C.2 Technical provisions

   C.3 Other liabilities

   C.4 Alternative methods for valuation

   C.5 Any other information

   D. Capital Management and Risk Profile

   D.1 Own funds

   D.2 Solvency Capital Requirement and Minimum Capital Requirement

   D.3 Use of the duration-based equity risk sub-module and of the provision on long-term equity investments in the calculation of the Solvency Capital Requirement

   D.4 Differences between the standard formula and any internal model used

   D.5 Material liquidity risks and material risk concentrations

   D.6 Risk-mitigation techniques

   D.7 Material risks not captured by the Solvency Capital Requirement

   D.8 Overall solvency needs

   D.9 Non-compliance with the Minimum Capital Requirement and non-compliance with the Solvency Capital Requirement

   D.10 Any other information

   E. Sustainability-related information

B. **Structure of the regular supervisory report**

A. Business and Performance

A.1 Business

A.2 Underwriting Performance

A.3 Investment Performance

A.4 Performance of other activities

A.5 Any other information

B. System of Governance

B.1 General information on the system of governance

B.2 Fit and proper requirements

B.3 Risk management system including the own risk and solvency assessment

B.4 Internal control system

B.5 Internal audit function

B.6 Actuarial function

B.7 Outsourcing

B.8 Any other information

C. Valuation for Solvency Purposes

C.1 Assets

C.2 Technical provisions

C.3 Other liabilities

C.4 Alternative methods for valuation

C.5 Any other information

D. Capital Management and Risk Profile

D.1 Own funds

D.2 Solvency Capital Requirement and Minimum Capital Requirement

D.3 Use of the duration-based equity risk sub-module and of the provision on long-term equity investments in the calculation of the Solvency Capital Requirement

D.4 Material liquidity risks and material risk concentrations

D.5 Off-balance sheet exposures

D.6 Risk-mitigation techniques

D.7 Material risks not captured by the Solvency Capital Requirement

D.8 Risk sensitivities

D.9 Non-compliance with the Minimum Capital Requirement and non-compliance with the Solvency Capital Requirement

D.10 Any other information'

ANNEX XIII

Part B of Annex XXI to Delegated Regulation (EU) 2015/35 is amended as follows:

(1)   the following points are added:

'(20)   the number of undertakings classified as small and non-complex, how many of them were requested to refrain from using one or more proportionality measures in accordance with Article 29c(2) of Directive 2009/138/EC;

(21)   the number of undertakings which are allowed to apply one or several proportionality measures in accordance with Article 29d of Directive 2009/138/EC as well as in Article 327g of this Regulation, broken down by proportionality measure;

(22)   the number of groups classified as small and non-complex, how many of them were requested to refrain from using one or more proportionality measures in accordance with Article 29c(2) of Directive 2009/138/EC;

(23)   the number of groups which are allowed to apply one or several proportionality measures in accordance with Article 29d of Directive 2009/138/EC as well as in Article 327g of this Regulation, broken down by proportionality measure;

(24)   The number of groups for which group supervision does not apply, on the basis of a decision not to include one or several undertakings in the group supervision in accordance with Article 214 of Directive 2009/138/EC, and the number of groups for which group supervision only applies at the level of an intermediate participating undertaking, on the basis of a decision not to include one or several undertakings in the group supervision in accordance with Article 214 of that Directive.';

(2)   the last sentence of Part B is replaced by the following:

'The information set out in paragraphs 2 to 24 shall be provided in relation to the last calendar year.'.

———

ANNEX XIV

Annex XXII to Delegated Regulation (EU) 2015/35 is amended as follows:

(1)   'Republic of Ireland' is replaced by 'Ireland';

(2)   'Republic of Hungary' is replaced by 'Hungary'.

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ANNEX XV

Annex XXIII to Delegated Regulation (EU) 2015/35 is amended as follows:

(1)   the title 'Correlation coefficients for earthquake risk in the Republic of Hungary' is replaced by 'Correlation coefficients for earthquake risk in Hungary';

(2)   the section 'Correlation coefficients for earthquake risk in the Republic of Romania' is replaced by the following:

'**Correlation coefficients for earthquake risk in Romania**

i/j	01	02	03	04	05	06	07	08	10	11	12	13	14	20	21	22
01	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	0,75	0,75	0,25	0,25
02	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	0,75	0,75	0,25	0,25
03	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	0,75	0,75	0,25	0,25
04	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	0,75	0,75	0,25	0,25
05	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	0,75	0,75	0,25	0,25
06	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	0,75	0,75	0,25	0,25
07	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	0,75	0,75	0,25	0,25
08	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75	1,00	0,75	0,50	0,25
10	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	1,00	0,75	1,00	1,00	0,75	0,50	0,25	0,00
11	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	1,00	0,50	0,75	0,75	0,75	0,50	0,25
12	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	1,00	0,50	1,00	0,75	0,75	0,50	0,25	0,00
13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,75	0,75	1,00	1,00	0,75	0,50	0,25
14	0,75	0,75	0,75	0,75	0,75	0,75	0,75	1,00	0,75	0,75	0,75	1,00	1,00	0,75	0,50	0,25
20	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,75	0,50	0,75	0,75	1,00	0,75	0,50
21	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,50	0,25	0,50	0,25	0,50	0,50	0,75	1,00	0,75
22	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,00	0,25	0,25	0,50	0,75	1,00

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
01	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,75	0,50
02	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,75	0,50
03	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,75	0,50

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
04	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,75	0,50
05	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,75	0,50
06	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,75	0,50
07	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,75	0,50
08	0,75	0,50	0,00	0,00	0,00	0,25	0,50	0,00	0,50	0,25	0,00	0,25	0,50	0,50	0,50	0,75
10	0,50	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,75	0,50
11	0,75	0,75	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,25	0,00	0,25	0,50	0,25	0,75	0,50
12	0,50	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,75	0,50
13	1,00	0,75	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	0,75	0,50
14	1,00	0,75	0,00	0,00	0,00	0,25	0,50	0,00	0,50	0,25	0,00	0,25	0,50	0,50	0,50	0,75
20	1,00	0,75	0,00	0,00	0,00	0,25	0,50	0,25	0,50	0,25	0,00	0,25	0,50	0,50	0,50	0,75
21	0,75	0,50	0,00	0,25	0,00	0,25	0,50	0,25	0,50	0,25	0,00	0,25	0,25	0,50	0,25	0,75
22	0,50	0,25	0,00	0,25	0,25	0,25	0,75	0,25	0,75	0,50	0,25	0,50	0,25	0,50	0,25	0,50

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
01	0,00	0,00	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75	1,00	0,50	0,50	0,75	1,00
02	0,00	0,00	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75	1,00	0,50	0,50	0,75	1,00
03	0,00	0,00	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75	1,00	0,50	0,50	0,75	1,00
04	0,00	0,00	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75	1,00	0,50	0,50	0,75	1,00
05	0,00	0,00	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75	1,00	0,50	0,50	0,75	1,00
06	0,00	0,00	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75	1,00	0,50	0,50	0,75	1,00
07	0,00	0,00	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75	1,00	0,50	0,50	0,75	1,00
08	0,50	0,25	0,50	0,75	0,50	0,75	0,75	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75
10	0,00	0,00	0,75	0,75	0,75	0,75	0,75	0,50	0,75	0,75	0,75	0,50	0,25	0,50	0,75
11	0,50	0,50	0,75	0,75	0,50	0,75	0,75	0,75	0,75	0,50	0,75	0,50	0,25	0,25	0,50
12	0,25	0,00	0,75	0,75	0,75	0,50	0,50	0,50	0,75	0,75	1,00	0,50	0,25	0,25	0,75
13	0,25	0,25	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	1,00	0,75	0,25	0,50	0,50

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
14	0,50	0,25	0,75	0,75	0,50	0,75	1,00	0,75	0,75	0,75	0,75	0,50	0,50	0,50	0,50
20	0,50	0,25	0,50	0,75	0,50	0,75	0,75	0,75	0,75	0,50	0,75	0,50	0,50	0,25	0,50
21	0,50	0,50	0,25	0,50	0,25	0,50	0,75	0,75	0,50	0,25	0,25	0,50	0,50	0,25	0,25
22	0,50	0,50	0,25	0,25	0,00	0,25	0,50	0,50	0,25	0,25	0,25	0,25	0,50	0,25	0,25

i/j	01	02	03	04	05	06	07	08	10	11	12	13	14	20	21	22
23	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,75	0,50	1,00	1,00	1,00	0,75	0,50
24	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	0,50	0,75	0,75	0,75	0,50	0,25
30	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
31	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25
32	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25
33	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25
40	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,50	0,25	0,25	0,50	0,50	0,50	0,75
41	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25
42	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,25	0,50	0,50	0,50	0,75
43	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,25	0,25	0,25	0,25	0,50
44	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25
45	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,25	0,25	0,25	0,50
50	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,50	0,50	0,50	0,25	0,50	0,50	0,50	0,25	0,25
51	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,25	0,50	0,50	0,50	0,50
52	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,75	0,75	0,75	0,75	0,50	0,50	0,25	0,25
53	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	0,50	0,50	0,50	0,50	0,75	0,75	0,75	0,50

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
23	1,00	0,75	0,00	0,00	0,00	0,50	0,50	0,00	0,50	0,25	0,00	0,25	0,50	0,50	0,50	0,75
24	0,75	1,00	0,00	0,00	0,00	0,00	0,50	0,00	0,50	0,25	0,00	0,25	0,50	0,50	0,50	0,75
30	0,00	0,00	1,00	0,25	0,00	0,00	0,50	0,00	0,50	0,25	0,00	0,00	0,00	0,25	0,00	0,00

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
31	0,00	0,00	0,25	1,00	0,25	0,50	0,75	0,25	0,75	0,50	0,25	0,50	0,00	0,50	0,00	0,50
32	0,00	0,00	0,00	0,25	1,00	0,50	0,50	0,25	0,75	0,25	0,00	0,50	0,00	0,50	0,00	0,25
33	0,50	0,00	0,00	0,50	0,50	1,00	1,00	0,75	1,00	0,75	0,25	1,00	0,00	0,00	0,00	0,75
40	0,50	0,50	0,50	0,75	0,50	1,00	1,00	0,75	1,00	0,75	0,50	1,00	0,50	1,00	0,50	0,75
41	0,00	0,00	0,00	0,25	0,25	0,75	0,75	1,00	0,75	0,50	0,25	0,75	0,00	0,75	0,00	0,50
42	0,50	0,50	0,50	0,75	0,75	1,00	1,00	0,75	1,00	1,00	0,50	1,00	0,50	1,00	0,25	0,75
43	0,25	0,25	0,25	0,50	0,25	0,75	0,75	0,50	1,00	1,00	0,50	0,75	0,25	0,75	0,25	0,50
44	0,00	0,00	0,00	0,25	0,00	0,25	0,50	0,25	0,50	0,50	1,00	0,50	0,25	0,50	0,00	0,25
45	0,25	0,25	0,00	0,50	0,50	1,00	1,00	0,75	1,00	0,75	0,50	1,00	0,25	1,00	0,25	0,75
50	0,50	0,50	0,00	0,00	0,00	0,00	0,50	0,00	0,50	0,25	0,25	0,25	1,00	0,50	0,50	0,75
51	0,50	0,50	0,25	0,50	0,50	0,00	1,00	0,75	1,00	0,75	0,50	1,00	0,50	1,00	0,25	0,75
52	0,50	0,50	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,25	0,00	0,25	0,50	0,25	1,00	0,75
53	0,75	0,75	0,00	0,50	0,25	0,75	0,75	0,50	0,75	0,50	0,25	0,75	0,75	0,75	0,75	1,00

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
23	0,50	0,25	0,75	0,75	0,50	1,00	1,00	0,75	0,75	0,75	0,75	0,50	0,50	0,50	0,50
24	0,50	0,50	0,50	0,75	0,50	0,75	0,75	0,75	0,50	0,50	0,50	0,50	0,25	0,25	0,25
30	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00
31	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00
32	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00
33	0,75	0,50	0,00	0,00	0,00	0,00	0,75	0,75	0,00	0,00	0,00	0,50	0,50	0,00	0,00
40	1,00	0,75	0,25	0,50	0,25	0,50	0,50	0,50	0,50	0,25	0,50	0,50	0,75	0,50	0,50
41	0,50	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00
42	1,00	0,75	0,25	0,50	0,00	0,50	0,75	0,75	0,50	0,25	0,25	0,75	0,75	0,25	0,50
43	0,75	0,50	0,00	0,25	0,00	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,50	0,25	0,25
44	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00
45	0,75	0,50	0,00	0,25	0,00	0,25	0,50	0,50	0,25	0,00	0,25	0,50	0,50	0,25	0,25

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	0,50	0,50	0,50	0,50	0,50	0,25	0,25	0,50
51	1,00	0,75	0,00	0,25	0,00	0,25	0,75	0,75	0,25	0,25	0,25	0,50	0,75	0,25	0,25
52	0,25	0,25	1,00	0,75	1,00	0,75	0,75	0,50	0,75	0,75	0,75	0,50	0,25	0,25	0,50
53	0,75	0,50	0,50	0,75	0,50	0,75	0,75	0,75	0,75	0,50	0,50	0,50	0,75	0,50	0,50

i/j	01	02	03	04	05	06	07	08	10	11	12	13	14	20	21	22
54	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,50	0,25	0,25	0,50	0,50	0,50	0,50
55	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,50	0,00	0,25	0,25	0,25	0,50	0,50
60	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,75	0,75	0,75	0,75	0,75	0,50	0,25	0,25
61	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,25
62	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	0,50	0,75	0,75	0,50	0,50	0,25	0,00
70	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,75	0,75	0,75	0,50	0,25
71	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	0,75	0,75	0,50	0,75	1,00	0,75	0,75	0,50
72	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75	0,75	0,50
73	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,25
80	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,75	0,50	0,75	0,75	0,75	0,50	0,25	0,25
81	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	1,00	0,75	0,75	0,25	0,25
82	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	0,50	0,50	0,50	0,25
90	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	0,25	0,25	0,25	0,25	0,50	0,50	0,50	0,50
91	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,50	0,25	0,25	0,50	0,50	0,25	0,25	0,25
92	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,50	0,75	0,50	0,50	0,50	0,25	0,25

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
54	0,50	0,50	0,25	0,50	0,50	0,75	1,00	0,50	1,00	0,75	0,50	0,75	0,50	1,00	0,25	0,75
55	0,25	0,50	0,25	0,25	0,25	0,50	0,75	0,25	0,75	0,50	0,25	0,50	0,50	0,75	0,25	0,50
60	0,75	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,50	0,00	1,00	0,50
61	0,75	0,75	0,00	0,00	0,00	0,00	0,50	0,00	0,50	0,25	0,00	0,25	0,50	0,25	0,75	0,75

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
62	0,50	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,00	1,00	0,50
70	1,00	0,75	0,00	0,00	0,00	0,00	0,50	0,00	0,50	0,25	0,00	0,25	0,50	0,25	0,75	0,75
71	1,00	0,75	0,00	0,00	0,00	0,75	0,50	0,25	0,75	0,25	0,00	0,50	0,75	0,75	0,75	0,75
72	0,75	0,75	0,00	0,00	0,00	0,75	0,50	0,25	0,75	0,25	0,00	0,50	0,50	0,75	0,50	0,75
73	0,75	0,50	0,00	0,00	0,00	0,00	0,50	0,00	0,50	0,25	0,00	0,25	0,50	0,25	0,75	0,75
80	0,75	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	0,75	0,50
81	0,75	0,50	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,25	0,00	0,25	0,50	0,25	0,75	0,50
82	0,50	0,50	0,00	0,00	0,00	0,50	0,50	0,00	0,75	0,25	0,00	0,50	0,50	0,50	0,50	0,50
90	0,50	0,25	0,25	0,25	0,25	0,50	0,75	0,25	0,75	0,50	0,25	0,50	0,25	0,75	0,25	0,75
91	0,50	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,25	0,00	0,25	0,25	0,25	0,25	0,50
92	0,50	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,50	0,25	0,00	0,25	0,50	0,25	0,50	0,50

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
54	1,00	0,75	0,25	0,50	0,25	0,50	0,50	0,50	0,50	0,25	0,25	0,50	0,75	0,25	0,50
55	0,75	1,00	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,50	0,25	0,25
60	0,25	0,25	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	0,75	0,50	0,00	0,25	0,25
61	0,50	0,25	1,00	1,00	0,75	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,25	0,25	0,50
62	0,25	0,00	1,00	0,75	1,00	0,75	0,75	0,50	1,00	1,00	0,75	0,50	0,00	0,25	0,25
70	0,50	0,25	1,00	1,00	0,75	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,25	0,25	0,50
71	0,50	0,50	1,00	1,00	0,75	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,50	0,50	0,50
72	0,50	0,25	0,75	1,00	0,50	1,00	1,00	1,00	0,75	0,50	0,75	0,50	0,50	0,25	0,25
73	0,50	0,25	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	0,75	0,75	0,25	0,25	0,50
80	0,25	0,25	1,00	0,75	1,00	0,75	0,75	0,50	1,00	1,00	1,00	0,50	0,25	0,25	0,50
81	0,25	0,25	0,75	0,75	0,75	0,75	0,75	0,75	0,75	1,00	1,00	0,75	0,50	0,50	0,75
82	0,50	0,25	0,50	0,75	0,50	0,75	0,75	0,50	0,75	0,50	0,75	1,00	0,50	0,25	0,50
90	0,75	0,50	0,00	0,25	0,00	0,25	0,50	0,50	0,25	0,25	0,50	0,50	1,00	0,75	0,50
91	0,25	0,25	0,25	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,50	0,25	0,75	1,00	0,75
92	0,50	0,25	0,25	0,50	0,25	0,50	0,50	0,25	0,50	0,50	0,75	0,50	0,50	0,75	1,00’

ANNEX XVI

Annex XXIV to Delegated Regulation (EU) 2015/35 is amended as follows:

(1)   the title 'Correlation coefficients for flood risk in the Republic of Hungary' is replaced by 'Correlation coefficients for flood risk in Hungary';

(2)   the section 'Correlation coefficients for flood risk in the Republic of Romania' is replaced by the following:

'**Correlation coefficients for flood risk in Romania**

i/j	01	02	03	04	05	06	07	08	10	11	12	13	14	20	21	22
01	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,00
02	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,00
03	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,00
04	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,00
05	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,00
06	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,00
07	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,00
08	0,50	0,50	0,50	0,50	0,50	0,50	0,50	1,00	0,00	0,25	0,00	0,50	0,50	0,25	0,00	0,25
10	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
11	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,00	1,00	0,00	0,50	0,25	0,00	0,00	0,00
12	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,00
13	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,00	0,50	0,00	1,00	0,00	0,00	0,00	0,00
14	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,00	1,00	0,25	0,00	0,25
20	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	1,00	0,50	0,50
21	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	1,00	0,00
22	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,50	0,00	1,00

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
02	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
03	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
04	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
05	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
06	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
07	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
08	0,25	0,00	0,00	0,25	0,25	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,25	0,00
10	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00
11	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
12	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00
13	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
14	0,50	0,25	0,00	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25
20	0,50	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00
21	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
22	0,25	0,00	0,00	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,25

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00
02	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00
03	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00
04	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00
05	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00
06	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00
07	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00
08	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,50	0,25
10	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00
11	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25
12	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,50	0,25	0,00	0,00	0,00
13	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,50

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
14	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,00
20	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25
21	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
22	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,00

i/j	01	02	03	04	05	06	07	08	10	11	12	13	14	20	21	22
23	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,50	0,50	0,00	0,25
24	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
30	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
31	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25
32	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,50
33	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,50	0,25
40	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25
41	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25
42	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,25
43	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25
44	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
45	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
51	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25
52	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,50	0,00	0,25	0,00	0,00	0,00
53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
23	1,00	0,50	0,00	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,25	0,25
24	0,50	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25
30	0,00	0,00	1,00	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
31	0,25	0,00	0,25	1,00	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00
32	0,25	0,00	0,50	0,25	1,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00
33	0,25	0,00	0,00	0,50	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25
40	0,25	0,00	0,00	0,00	0,00	0,00	1,00	0,50	0,50	0,25	0,00	0,50	0,00	0,00	0,00	0,00
41	0,25	0,00	0,00	0,00	0,25	0,00	0,50	1,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
42	0,25	0,00	0,00	0,00	0,25	0,00	0,50	0,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00
43	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	1,00	0,50	0,50	0,00	0,00	0,00	0,00
44	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	1,00	0,00	0,00	0,00	0,00	0,00
45	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,50	0,00	0,50	0,00	1,00	0,00	0,00	0,00	0,00
50	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,50	0,25
51	0,25	0,00	0,00	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,25
52	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	1,00	0,50
53	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,50	1,00

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
23	0,25	0,25	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,00
24	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
30	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
31	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25
32	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25
33	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
40	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25
41	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25
42	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25
43	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
44	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
45	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
50	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25
51	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25
52	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,25
53	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25

i/j	01	02	03	04	05	06	07	08	10	11	12	13	14	20	21	22
54	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
55	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
60	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
61	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
62	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
70	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
71	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
72	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
73	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
80	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,25	0,00	0,00	0,25
81	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,00	0,25
82	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25
90	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,25	0,25	0,00	0,25
91	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,00	0,25	0,00	0,25	0,25	0,25	0,00	0,25
92	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,50	0,00	0,25	0,00	0,00

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
54	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,50
55	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,25
60	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
61	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

i/j	23	24	30	31	32	33	40	41	42	43	44	45	50	51	52	53
62	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
70	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
71	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
72	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
73	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
80	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00
81	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00
82	0,25	0,00	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25
90	0,25	0,00	0,00	0,25	0,25	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00
91	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00
92	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,25	0,25

i/j	54	55	60	61	62	70	71	72	73	80	81	82	90	91	92
54	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
55	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
60	0,00	0,00	1,00	0,50	0,25	0,25	0,25	0,25	0,00	0,50	0,25	0,25	0,00	0,00	0,00
61	0,00	0,00	0,50	1,00	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,00	0,00	0,00
62	0,00	0,00	0,25	0,25	1,00	0,25	0,25	0,25	0,00	0,75	0,50	0,00	0,00	0,00	0,00
70	0,00	0,00	0,25	0,00	0,25	1,00	0,50	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,00
71	0,00	0,00	0,25	0,25	0,25	0,50	1,00	0,75	0,25	0,25	0,25	0,25	0,00	0,00	0,00
72	0,00	0,00	0,25	0,50	0,25	0,50	0,75	1,00	0,00	0,25	0,25	0,25	0,00	0,00	0,00
73	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,00	1,00	0,50	0,00	0,25	0,00	0,00	0,00
80	0,00	0,00	0,50	0,25	0,75	0,25	0,25	0,25	0,50	1,00	0,50	0,50	0,00	0,00	0,25
81	0,00	0,00	0,25	0,25	0,50	0,25	0,25	0,25	0,00	0,50	1,00	0,50	0,50	0,25	0,50
82	0,25	0,25	0,25	0,25	0,00	0,25	0,25	0,25	0,25	0,50	0,50	1,00	0,50	0,25	0,25
90	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,50	1,00	0,50	0,50
91	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,50	1,00	0,50
92	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,50	0,25	0,50	0,50	1,00'

(3) the following sections are added:

'**Correlation coefficients for flood risk in Ireland**

i/j	CE	CK	CN	CW	DL	DN	GY	KE	KK	KY	LD	LH	LK	LM
CE	1,00	0,00	0,75	0,50	0,25	0,00	1,00	0,75	0,50	0,25	0,25	0,50	0,75	0,75
CK	0,00	1,00	0,00	0,25	0,00	0,25	0,00	0,25	0,25	0,25	0,50	0,00	0,50	0,00
CN	0,75	0,00	1,00	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,50	0,25	0,50	0,50
CW	0,50	0,25	0,25	1,00	0,00	0,25	0,25	0,75	0,75	0,00	0,25	0,00	0,50	0,00
DL	0,25	0,00	0,25	0,00	1,00	0,00	0,25	0,25	0,00	0,00	0,25	0,00	0,75	0,50
DN	0,00	0,25	0,25	0,25	0,00	1,00	0,00	0,75	0,25	0,00	0,00	0,25	0,25	0,25
GY	1,00	0,00	0,25	0,25	0,25	0,00	1,00	0,50	0,25	0,25	0,25	0,00	1,00	0,50
KE	0,75	0,25	0,25	0,75	0,25	0,75	0,50	1,00	0,75	0,25	0,00	0,50	1,00	0,00
KK	0,50	0,25	0,00	0,75	0,00	0,25	0,25	0,75	1,00	0,00	0,25	0,00	1,00	0,00
KY	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	1,00	0,00	0,00	1,00	0,25
LD	0,25	0,50	0,50	0,25	0,25	0,00	0,25	0,00	0,25	0,00	1,00	0,25	0,25	0,25
LH	0,50	0,00	0,25	0,00	0,00	0,25	0,00	0,50	0,00	0,00	0,25	1,00	0,50	0,25
LK	0,75	0,50	0,50	0,50	0,75	0,25	1,00	1,00	1,00	1,00	0,25	0,50	1,00	0,75
LM	0,75	0,00	0,50	0,00	0,50	0,25	0,50	0,00	0,00	0,25	0,25	0,25	0,75	1,00

i/j	LS	MH	MN	MO	OY	RN	SO	TY	WD	WH	WW	WX	WX
CE	0,50	0,75	0,75	0,75	0,75	1,00	0,50	0,75	0,50	0,50	0,50	0,50	0,50
CK	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,25
CN	0,25	0,25	0,75	0,00	0,25	0,25	0,25	0,50	0,00	0,50	0,00	0,00	0,00
CW	0,75	0,25	0,25	0,00	0,50	0,00	0,00	0,50	0,50	0,25	0,50	0,75	0,75
DL	0,00	0,00	0,25	0,25	0,00	0,25	0,50	0,25	0,00	0,00	0,00	0,00	0,00
DN	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,50	0,25	0,25
GY	0,25	0,25	0,00	0,50	0,50	0,50	0,50	0,50	0,00	0,25	0,00	0,00	0,00
KE	0,75	0,75	0,25	0,00	0,50	0,00	0,00	0,75	0,25	0,50	0,75	0,50	0,50
KK	0,50	0,25	0,00	0,00	0,25	0,00	0,00	0,50	0,75	0,25	0,25	0,75	0,75

i/j	LS	MH	MN	MO	OY	RN	SO	TY	WD	WH	WW	WX	WX
KY	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00
LD	0,25	0,50	0,25	0,25	0,50	0,50	0,25	0,50	0,25	0,50	0,25	0,25	0,25
LH	0,25	0,50	0,50	0,00	0,25	0,25	0,25	0,25	0,00	0,50	0,00	0,00	0,00
LK	0,75	0,75	0,25	0,50	0,50	0,75	0,75	1,00	0,50	0,50	0,25	0,50	0,50
LM	0,25	0,25	0,50	0,25	0,25	0,50	0,50	0,25	0,00	0,25	0,00	0,00	0,00

i/j	CE	CK	CN	CW	DL	DN	GY	KE	KK	KY	LD	LH	LK	LM
LS	0,50	0,25	0,25	0,75	0,00	0,25	0,25	0,75	0,50	0,00	0,25	0,25	0,75	0,25
MH	0,75	0,00	0,25	0,25	0,00	0,25	0,25	0,75	0,25	0,00	0,50	0,50	0,75	0,25
MN	0,75	0,00	0,75	0,25	0,25	0,25	0,00	0,25	0,00	0,00	0,25	0,50	0,25	0,50
MO	0,75	0,00	0,00	0,00	0,25	0,00	0,50	0,00	0,00	0,25	0,25	0,00	0,50	0,25
OY	0,75	0,00	0,25	0,50	0,00	0,00	0,50	0,50	0,25	0,00	0,50	0,25	0,50	0,25
RN	1,00	0,25	0,25	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,50	0,25	0,75	0,50
SO	0,50	0,00	0,25	0,00	0,50	0,00	0,50	0,00	0,00	0,25	0,25	0,25	0,75	0,50
TY	0,75	0,25	0,50	0,50	0,25	0,25	0,50	0,75	0,50	0,00	0,50	0,25	1,00	0,25
WD	0,50	0,50	0,00	0,50	0,00	0,25	0,00	0,25	0,75	0,00	0,25	0,00	0,50	0,00
WH	0,50	0,25	0,50	0,25	0,00	0,25	0,25	0,50	0,25	0,00	0,50	0,50	0,50	0,25
WW	0,50	0,25	0,00	0,50	0,00	0,50	0,00	0,75	0,25	0,00	0,25	0,00	0,25	0,00
WX	0,50	0,25	0,00	0,75	0,00	0,25	0,00	0,50	0,75	0,00	0,25	0,00	0,50	0,00

i/j	LS	MH	MN	MO	OY	RN	SO	TY	WD	WH	WW	WX	WX
LS	1,00	0,25	0,25	0,00	0,50	0,25	0,00	0,75	0,25	0,50	0,25	0,50	0,50
MH	0,25	1,00	0,25	0,00	0,25	0,25	0,00	0,50	0,25	0,75	0,25	0,25	0,25
MN	0,25	0,25	1,00	0,00	0,25	0,25	0,25	0,25	0,00	0,25	0,00	0,00	0,00
MO	0,00	0,00	0,00	1,00	0,25	0,25	0,50	0,25	0,00	0,25	0,00	0,00	0,00
OY	0,50	0,25	0,25	0,25	1,00	0,50	0,25	0,50	0,25	0,50	0,00	0,25	0,25
RN	0,25	0,25	0,25	0,25	0,50	1,00	0,50	0,50	0,00	0,25	0,00	0,00	0,00

i/j	LS	MH	MN	MO	OY	RN	SO	TY	WD	WH	WW	WX	WX
SO	0,00	0,00	0,25	0,50	0,25	0,50	1,00	0,25	0,00	0,25	0,00	0,00	0,00
TY	0,75	0,50	0,25	0,25	0,50	0,50	0,25	1,00	0,75	0,50	0,50	0,50	0,50
WD	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,75	1,00	0,25	0,25	0,50	0,50
WH	0,50	0,75	0,25	0,25	0,50	0,25	0,25	0,50	0,25	1,00	0,25	0,25	0,25
WW	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	1,00	0,50	0,50
WX	0,50	0,25	0,00	0,00	0,25	0,00	0,00	0,50	0,50	0,25	0,50	1,00	1,00

Correlation coefficients for flood risk in the Kingdom of Denmark

i/j	01	02	03	04	05	06	07	08	09	10	11
01	1,00	0,00	0,75	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00
02	0,00	1,00	0,00	1,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00
03	0,75	0,00	1,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,50
04	0,00	1,00	0,25	1,00	0,75	0,25	0,00	0,25	0,00	0,00	0,00
05	0,00	0,50	0,00	0,75	1,00	0,50	0,00	0,25	0,00	0,00	0,00
06	0,50	0,00	0,25	0,25	0,50	1,00	0,25	0,25	0,00	0,25	0,00
07	0,00	0,00	0,00	0,00	0,00	0,25	1,00	0,50	0,75	1,00	0,00
08	0,00	0,00	0,00	0,25	0,25	0,25	0,50	1,00	0,50	0,75	0,00
09	0,00	0,00	0,00	0,00	0,00	0,00	0,75	0,50	1,00	1,00	0,00
10	0,00	0,00	0,00	0,00	0,00	0,25	1,00	0,75	1,00	1,00	0,00
11	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00

Correlation coefficients for flood risk in the Republic of Finland

i/j	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
01	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
02	0,00	1,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,50
03	0,00	0,25	1,00	0,75	1,00	0,25	0,50	0,25	0,00	0,50	0,00	0,00	1,00	0,75	1,00	1,00	0,00	0,00	0,00

i/j	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
04	0,00	0,00	0,75	1,00	0,75	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,75	1,00	0,50	0,75	0,00	0,00	0,25
05	0,00	0,25	1,00	0,75	1,00	0,25	0,25	0,25	0,00	0,50	0,00	0,00	0,75	0,75	0,75	1,00	0,00	0,00	0,25
06	0,00	0,00	0,25	0,25	0,25	1,00	1,00	0,75	1,00	0,50	0,00	0,75	0,00	0,00	0,00	0,00	0,75	0,50	0,00
07	0,00	0,00	0,50	0,00	0,25	1,00	1,00	1,00	1,00	0,75	0,00	1,00	0,25	0,00	0,00	0,25	0,75	0,50	0,00
08	0,00	0,00	0,25	0,00	0,25	0,75	1,00	1,00	1,00	0,50	0,00	0,75	0,25	0,00	0,00	0,25	0,75	0,75	0,00
09	0,00	0,00	0,00	0,00	0,00	1,00	1,00	1,00	1,00	0,75	0,00	1,00	0,00	0,00	0,00	0,00	0,75	0,50	0,00
10	0,00	0,00	0,50	0,00	0,50	0,50	0,75	0,50	0,75	1,00	0,00	0,75	0,50	0,00	0,00	0,50	0,50	0,50	0,00
11	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
12	0,00	0,00	0,00	0,00	0,00	0,75	1,00	0,75	1,00	0,75	0,00	1,00	0,00	0,00	0,00	0,00	0,75	0,50	0,00
13	0,00	0,25	1,00	0,75	0,75	0,00	0,25	0,25	0,00	0,50	0,00	0,00	1,00	0,75	1,00	1,00	0,00	0,00	0,50
14	0,00	0,00	0,75	1,00	0,75	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,75	1,00	0,75	0,75	0,00	0,00	0,00
15	0,00	0,00	1,00	0,50	0,75	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,75	1,00	1,00	0,00	0,00	0,25
16	0,00	0,25	1,00	0,75	1,00	0,00	0,25	0,25	0,00	0,50	0,00	0,00	1,00	0,75	1,00	1,00	0,00	0,00	0,50
17	0,00	0,00	0,00	0,00	0,00	0,75	0,75	0,75	0,75	0,50	0,00	0,75	0,00	0,00	0,00	0,00	1,00	0,75	0,00
18	0,00	0,00	0,00	0,00	0,00	0,50	0,50	0,75	0,50	0,50	0,00	0,50	0,00	0,00	0,00	0,00	0,75	1,00	0,00
19	0,00	0,50	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,50	0,00	0,00	1,00

Correlation coefficients for flood risk in the Kingdom of Sweden

i/j	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21
01	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,75	0,50	0,00	0,25	0,25	0,00	1,00	1,00	0,50	0,25	0,00	0,00	0,00	0,00
02	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,75	0,25	0,00	0,00	0,25	0,00	1,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00
03	1,00	1,00	1,00	1,00	0,50	0,75	0,75	1,00	0,25	0,00	0,25	0,50	0,00	1,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00
04	0,75	0,75	1,00	1,00	0,75	0,75	0,75	1,00	0,50	0,00	0,50	0,75	0,00	0,75	0,75	0,25	0,00	0,00	0,00	0,00	0,00
05	0,50	0,50	0,50	0,75	1,00	0,25	0,50	0,25	0,50	0,00	0,00	0,25	0,00	0,50	0,50	0,00	0,00	0,00	0,00	0,00	0,00
06	0,50	0,50	0,75	0,75	0,25	1,00	1,00	0,75	0,50	0,00	0,75	0,75	0,00	0,50	0,50	0,00	0,00	0,00	0,00	0,00	0,00
07	0,50	0,50	0,75	0,75	0,50	1,00	1,00	0,75	0,75	0,00	0,75	0,50	0,00	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,00
08	0,75	0,75	1,00	1,00	0,25	0,75	0,75	1,00	0,00	0,25	0,50	0,50	0,00	0,75	0,25	0,00	0,00	0,00	0,00	0,00	0,00

i/j	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21
09	0,50	0,25	0,25	0,50	0,50	0,50	0,75	0,00	1,00	0,00	0,25	0,50	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00
10	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
11	0,25	0,00	0,25	0,50	0,00	0,75	0,75	0,50	0,25	0,25	1,00	0,75	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
12	0,25	0,25	0,50	0,75	0,25	0,75	0,50	0,50	0,50	0,00	0,75	1,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00
13	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,25	0,75	0,75	0,75	0,25	0,50
14	1,00	1,00	1,00	0,75	0,50	0,50	0,75	0,75	0,25	0,00	0,00	0,25	0,00	1,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00
15	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,25	0,25	0,00	0,00	0,00	0,00	1,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00
16	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	1,00	0,75	0,25	0,25	0,00	0,00
17	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,75	1,00	0,50	0,75	0,00	0,00
18	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,25	0,50	1,00	0,75	0,00	0,50
19	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,25	0,75	0,75	1,00	0,00	0,25
20	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,25
21	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,50	0,25	0,25	1,00

Correlation coefficients for flood risk in the Kingdom of the Netherlands

i/j	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10	1,00	1,00	0,50	0,50	1,00	0,25	0,00	0,75	0,50	0,50	0,50	1,00	1,00	0,75	1,00	0,50
11	1,00	1,00	1,00	1,00	0,75	1,00	0,25	0,50	0,75	1,00	1,00	0,75	1,00	0,75	1,00	1,00
12	0,50	1,00	1,00	0,50	0,75	0,50	0,00	0,25	0,75	0,50	0,25	0,25	0,50	0,50	1,00	0,00
13	0,50	1,00	0,50	1,00	0,50	0,50	0,50	0,00	0,25	0,25	0,25	0,50	0,50	0,50	1,00	0,25
14	1,00	0,75	0,75	0,50	1,00	1,00	0,50	1,00	1,00	0,25	0,50	0,50	1,00	0,75	1,00	1,00
15	0,25	1,00	0,50	0,50	1,00	1,00	0,75	0,75	1,00	1,00	1,00	0,75	1,00	0,75	1,00	0,25
16	0,00	0,25	0,00	0,50	0,50	0,75	1,00	0,50	0,50	0,75	0,25	0,25	0,25	0,25	0,50	0,00
17	0,75	0,50	0,25	0,00	1,00	0,75	0,50	1,00	0,75	0,25	0,50	0,50	0,75	0,50	1,00	0,75
18	0,50	0,75	0,75	0,25	1,00	1,00	0,50	0,75	1,00	1,00	0,75	1,00	1,00	0,75	1,00	0,75
19	0,50	1,00	0,50	0,25	0,25	1,00	0,75	0,25	1,00	1,00	0,75	1,00	0,75	0,50	1,00	0,00
20	0,50	1,00	0,25	0,25	0,50	1,00	0,25	0,50	0,75	0,75	1,00	1,00	1,00	1,00	1,00	0,00
21	1,00	0,75	0,25	0,50	0,50	0,75	0,25	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00

i/j	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
22	1,00	1,00	0,50	0,50	1,00	1,00	0,25	0,75	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00
23	0,75	0,75	0,50	0,50	0,75	0,75	0,25	0,50	0,75	0,50	1,00	1,00	1,00	1,00	1,00	1,00
24	1,00	1,00	1,00	1,00	1,00	1,00	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
25	0,50	1,00	0,00	0,25	1,00	0,25	0,00	0,75	0,75	0,00	0,00	1,00	1,00	1,00	1,00	1,00

i/j	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
10	0,25	1,00	1,00	0,00	0,25	0,00	0,00	0,00	0,50	0,50	0,25	0,25	0,50	0,25	0,00
11	0,50	0,75	0,75	0,50	0,75	0,50	0,50	0,75	1,00	1,00	0,75	1,00	0,50	0,25	0,00
12	0,00	0,75	0,50	0,25	0,00	0,25	0,25	0,25	1,00	0,25	0,25	0,75	0,25	0,25	0,00
13	0,00	0,50	0,50	0,50	0,25	0,25	0,25	0,25	0,50	0,25	0,50	0,50	0,25	0,25	0,25
14	0,25	0,75	1,00	0,00	0,75	0,00	0,00	0,25	0,50	1,00	0,75	1,00	0,25	0,25	0,00
15	0,25	0,50	0,50	0,50	0,25	0,50	0,50	0,25	1,00	0,75	0,50	0,75	0,25	0,25	0,00
16	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,50	0,00	0,00	0,25
17	0,25	0,75	1,00	0,25	0,50	0,25	0,00	0,25	0,50	0,50	0,25	0,25	0,00	0,25	0,00
18	0,25	1,00	1,00	0,50	0,50	0,50	0,50	0,75	1,00	0,75	0,50	0,75	0,25	0,50	0,00
19	0,00	0,50	0,75	0,75	0,00	0,25	0,50	0,50	1,00	0,50	0,00	0,50	0,25	0,25	0,00
20	0,00	0,75	1,00	0,50	0,25	0,25	0,25	0,25	1,00	0,50	0,25	0,25	0,00	0,25	0,25
21	0,25	1,00	0,75	1,00	0,75	0,50	1,00	0,75	1,00	0,50	0,25	0,75	0,25	0,25	0,25
22	0,50	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	1,00	0,50	0,50	0,50	0,50	0,25
23	0,75	1,00	1,00	1,00	0,75	1,00	0,75	0,75	0,75	0,75	0,50	0,50	0,25	0,25	0,75
24	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50
25	0,50	1,00	1,00	0,50	0,75	0,50	0,25	0,25	0,50	0,25	0,50	0,00	0,00	0,00	0,00

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
10	0,00	0,75	0,00	0,00	0,00	1,00	0,75	0,00	0,25	0,00	1,00	0,00	0,00	0,00	0,00
11	0,50	1,00	0,25	0,00	0,00	0,25	0,25	0,25	0,50	0,75	0,50	0,75	0,25	0,25	0,25
12	0,25	1,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,50	0,25	0,50	0,25	0,25	0,25

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
13	0,25	0,75	0,25	0,00	0,25	0,25	0,25	0,25	0,75	0,50	0,50	0,50	0,25	0,25	0,50
14	0,00	1,00	0,00	0,00	0,00	0,75	1,00	0,00	1,00	0,25	1,00	0,00	0,00	0,00	0,00
15	0,25	1,00	0,25	0,00	0,25	0,25	0,00	0,25	0,75	0,50	0,50	0,50	0,25	0,25	0,25
16	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,25	0,00	0,00
17	0,00	0,75	0,00	0,00	0,00	0,25	0,25	0,00	0,75	0,25	0,50	0,25	0,25	0,00	0,00
18	0,00	1,00	0,25	0,00	0,00	0,25	0,50	0,25	1,00	0,50	0,25	0,50	0,25	0,50	0,00
19	0,50	1,00	0,25	0,00	0,50	0,50	0,25	0,25	1,00	0,50	0,75	0,50	0,50	0,50	0,50
20	0,25	1,00	0,00	0,00	0,00	0,25	0,25	0,25	0,50	0,75	0,50	0,50	0,25	0,25	0,25
21	0,25	0,75	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	0,75	0,75	0,50	0,25	0,50
22	0,50	1,00	0,50	0,00	0,25	0,75	0,50	0,50	1,00	0,75	0,75	0,75	0,25	0,25	0,50
23	0,75	1,00	0,25	0,25	0,25	0,25	0,50	0,25	1,00	0,50	1,00	0,25	0,50	0,25	0,25
24	1,00	1,00	1,00	0,50	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
25	0,25	0,75	0,00	0,00	0,00	0,50	1,00	0,00	0,75	0,00	0,75	0,00	0,00	0,00	0,00

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
10	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
11	1,00	0,50	0,00	0,25	0,50	0,25	0,25	0,00	0,25	0,75	0,00	0,00	0,25	0,25	0,00
12	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00
13	0,50	0,50	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,25	0,00
14	0,50	0,75	0,00	0,00	1,00	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00
15	0,50	0,50	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,00
16	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00
17	0,50	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00
18	0,75	0,25	0,00	0,00	0,50	0,00	0,25	0,00	0,25	0,50	0,00	0,00	0,00	0,00	0,00
19	0,50	0,50	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,25	0,50	0,25	0,25	0,50	0,25
20	0,75	0,50	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00
21	0,75	0,75	0,25	0,25	0,25	0,50	0,25	0,00	0,00	0,50	0,25	0,50	0,50	0,50	0,25

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
22	0,75	0,75	0,00	0,25	0,50	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,50	0,25
23	0,75	0,50	0,00	0,25	0,50	0,25	0,00	0,00	0,00	0,50	0,25	0,00	0,00	0,00	0,00
24	1,00	1,00	0,25	0,75	1,00	1,00	1,00	0,25	0,75	1,00	1,00	0,50	0,75	0,75	0,50
25	0,00	0,25	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

i/j	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
10	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,00	0,00
11	0,00	0,00	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,50	0,50	0,25	0,00	0,75	0,75
12	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,50	0,25	0,00	0,50	0,75
13	0,00	0,00	0,25	0,25	0,25	0,50	0,25	0,00	0,00	0,25	0,50	0,25	0,00	1,00	1,00
14	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,75	0,25	0,00	0,00	1,00	0,50
15	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,75	1,00
16	0,25	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,25	0,75	1,00
17	0,00	0,00	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,75	0,00	0,00	1,00	0,75
18	0,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00	0,75	0,50	0,00	0,00	0,50	0,50
19	0,00	0,00	0,50	0,50	0,50	0,50	0,50	0,00	0,00	0,25	1,00	0,25	0,00	1,00	1,00
20	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,50	0,75
21	0,00	0,50	0,25	0,75	0,50	0,75	0,50	0,25	0,00	0,25	0,50	0,25	0,00	1,00	1,00
22	0,00	0,00	0,25	0,50	0,75	0,50	0,50	0,00	0,00	0,50	0,75	0,25	0,00	1,00	1,00
23	0,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00	0,25	0,75	0,00	0,00	1,00	0,50
24	0,00	0,00	0,50	1,00	1,00	0,75	0,50	0,00	0,00	1,00	1,00	0,00	0,00	1,00	1,00
25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,75	0,00

i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
10	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	1,00	0,00	1,00
11	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	1,00	0,25	0,00	1,00
12	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25	0,00	0,25	1,00

i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
13	0,25	0,25	0,00	0,00	0,00	0,25	0,75	0,25	0,00	0,25	0,50	0,00	0,25	1,00
14	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,75	0,25	1,00
15	0,25	0,75	0,00	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,75	0,25	0,25	1,00
16	0,50	0,75	0,25	0,50	0,25	0,25	0,25	0,00	0,25	0,00	0,00	0,00	0,25	0,25
17	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	1,00
18	0,25	0,50	0,00	0,00	0,25	0,25	0,25	0,00	0,00	0,00	1,00	0,25	0,00	1,00
19	0,50	0,75	0,25	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25	0,25	0,25	1,00
20	0,25	0,25	0,25	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,50	0,25	0,25	1,00
21	0,75	1,00	0,00	0,75	0,50	0,00	0,50	0,00	0,25	0,00	1,00	0,25	0,75	1,00
22	0,25	0,25	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	1,00	0,25	0,25	1,00
23	0,00	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	1,00	0,00	0,00	1,00
24	0,75	0,50	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	1,00	1,00	0,75	1,00
25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,25	0,00	1,00

i/j	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	0,25	0,50	0,00	0,00	0,25	0,25	0,00	0,25	0,25	0,00	0,00	0,25	0,50	0,75	1,00	0,50
27	1,00	0,75	0,75	0,50	0,75	0,50	0,25	0,75	1,00	0,50	0,75	1,00	1,00	1,00	1,00	1,00
28	1,00	0,75	0,50	0,50	1,00	0,50	0,25	1,00	1,00	0,75	1,00	0,75	1,00	1,00	1,00	1,00
29	0,00	0,50	0,25	0,50	0,00	0,50	0,25	0,25	0,50	0,75	0,50	1,00	1,00	1,00	1,00	0,50
30	0,25	0,75	0,00	0,25	0,75	0,25	0,00	0,50	0,50	0,00	0,25	0,75	1,00	0,75	1,00	0,75
31	0,00	0,50	0,25	0,25	0,00	0,50	0,00	0,25	0,50	0,25	0,25	0,50	0,75	1,00	1,00	0,50
32	0,00	0,50	0,25	0,25	0,00	0,50	0,00	0,00	0,50	0,50	0,25	1,00	0,75	0,75	1,00	0,25
33	0,00	0,75	0,25	0,25	0,25	0,25	0,00	0,25	0,75	0,50	0,25	0,75	0,75	0,75	1,00	0,25
34	0,50	1,00	1,00	0,50	0,50	1,00	0,25	0,50	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,50
35	0,50	1,00	0,25	0,25	1,00	0,75	0,00	0,50	0,75	0,50	0,50	0,50	1,00	0,75	1,00	0,25
36	0,25	0,75	0,25	0,50	0,75	0,50	0,25	0,25	0,50	0,00	0,25	0,25	0,50	0,50	1,00	0,50
37	0,25	1,00	0,75	0,50	1,00	0,75	0,50	0,25	0,75	0,50	0,25	0,75	0,50	0,50	1,00	0,00

i/j	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
38	0,50	0,50	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,25	0,50	0,25	1,00	0,00
39	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,50	0,25	1,00	0,00
40	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,25	0,75	0,50	0,00

i/j	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
26	1,00	0,75	0,50	0,50	0,50	0,50	0,50	0,25	0,50	0,25	0,00	0,25	0,00	0,25	0,25
27	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,25	1,00	0,25	0,50	0,50
28	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,25	0,75	0,50	0,50	0,00
29	0,50	1,00	1,00	1,00	1,00	0,75	1,00	0,75	1,00	0,25	0,00	0,75	0,50	0,25	0,00
30	0,50	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,75	0,25	0,50	0,00	0,00	0,00	0,00
31	0,50	1,00	1,00	0,75	1,00	1,00	0,75	0,50	1,00	0,25	0,25	0,25	0,00	0,00	0,00
32	0,50	1,00	1,00	1,00	0,50	0,75	1,00	0,50	0,75	0,25	0,00	0,75	0,25	0,50	0,50
33	0,25	1,00	1,00	0,75	0,50	0,50	0,50	1,00	1,00	0,25	0,50	0,25	0,00	0,25	0,25
34	0,50	1,00	1,00	1,00	0,75	1,00	0,75	1,00	1,00	1,00	0,25	1,00	0,50	1,00	0,00
35	0,25	1,00	1,00	0,25	0,25	0,25	0,25	0,25	1,00	1,00	0,50	0,75	0,25	0,50	0,25
36	0,00	0,25	0,25	0,00	0,50	0,25	0,00	0,50	0,25	0,50	1,00	0,25	0,00	0,25	0,00
37	0,25	1,00	0,75	0,75	0,00	0,25	0,75	0,25	1,00	0,75	0,25	1,00	0,75	0,50	0,75
38	0,00	0,25	0,50	0,50	0,00	0,00	0,25	0,00	0,50	0,25	0,00	0,75	1,00	0,25	0,25
39	0,25	0,50	0,50	0,25	0,00	0,00	0,50	0,25	1,00	0,50	0,25	0,50	0,25	1,00	0,75
40	0,25	0,50	0,00	0,00	0,00	0,00	0,50	0,25	0,00	0,25	0,00	0,75	0,25	0,75	1,00

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
26	0,25	0,75	0,25	0,00	0,00	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	0,00	0,25
27	0,50	1,00	0,75	0,25	0,50	0,75	0,50	0,50	0,75	1,00	1,00	1,00	0,50	0,75	0,50
28	0,50	1,00	0,50	0,00	0,25	0,50	0,25	0,25	0,50	0,75	0,75	1,00	0,25	0,50	0,25
29	0,50	1,00	0,50	0,50	0,50	0,50	0,50	0,75	1,00	0,75	1,00	0,75	0,75	0,50	0,50
30	0,25	0,75	0,00	0,00	0,00	0,50	0,50	0,00	0,50	0,00	0,50	0,00	0,00	0,00	0,00

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
31	0,25	1,00	0,25	0,00	0,00	0,25	0,25	0,25	0,75	0,50	0,25	0,50	0,25	0,00	0,00
32	0,50	1,00	0,50	0,50	0,50	0,50	0,50	0,75	1,00	0,75	0,75	0,75	0,50	0,25	0,50
33	0,50	1,00	0,25	0,00	0,00	0,50	0,50	0,50	0,75	0,50	0,50	0,50	0,50	0,25	0,25
34	1,00	1,00	0,75	0,25	0,25	0,75	0,50	0,75	1,00	1,00	1,00	1,00	0,75	0,50	0,75
35	0,50	1,00	0,25	0,00	0,00	0,50	0,25	0,25	1,00	0,50	0,50	0,75	0,50	0,25	0,00
36	0,00	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,75	0,25	0,25	0,25	0,25	0,00	0,00
37	0,75	1,00	0,50	0,50	0,50	0,50	0,25	0,50	1,00	0,75	1,00	0,75	0,50	0,50	0,75
38	0,25	1,00	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,50	0,50	0,25	0,25	0,25	0,25
39	0,50	1,00	0,25	0,00	0,00	0,25	0,00	0,25	0,50	0,25	0,50	0,50	0,50	0,50	0,25
40	0,75	0,75	0,00	0,25	0,00	0,00	0,25	0,00	0,50	0,00	0,50	0,25	1,00	0,50	0,25

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
26	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
27	1,00	1,00	0,25	0,50	0,50	0,50	0,50	0,25	0,50	0,75	0,25	0,50	0,50	0,75	0,25
28	1,00	0,75	0,25	0,25	0,50	0,75	0,50	0,25	0,50	1,00	0,25	0,50	0,25	0,25	0,25
29	0,75	1,00	0,25	0,50	0,50	0,25	0,00	0,25	0,00	0,25	0,50	0,50	0,50	0,50	0,25
30	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
31	0,50	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00
32	0,50	0,75	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25
33	0,50	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,00
34	1,00	1,00	0,25	0,50	0,75	0,25	0,25	0,25	0,50	0,75	0,50	0,50	0,75	0,75	0,25
35	0,75	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,25	0,00
36	0,50	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00
37	0,75	0,75	0,50	0,25	0,50	0,25	0,00	0,00	0,00	0,50	0,50	0,50	0,50	0,50	0,50
38	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25	0,25
39	0,50	0,50	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,50	0,75	0,50	0,25	0,00
40	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,50	1,00	0,75	0,00	0,25	0,25

i/j	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
26	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,50	0,50
27	0,25	0,25	0,50	0,75	0,50	0,50	0,50	0,00	0,25	0,50	0,50	0,25	0,00	1,00	1,00
28	0,00	0,25	0,25	0,50	0,50	0,50	0,25	0,00	0,00	0,25	0,25	0,00	0,00	1,00	1,00
29	0,00	0,50	0,25	0,75	0,50	0,50	0,25	0,25	0,00	0,50	0,75	0,25	0,00	1,00	1,00
30	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	1,00	0,00
31	0,00	0,00	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,75
32	0,00	0,00	0,25	0,50	0,50	0,50	0,25	0,00	0,00	0,25	0,75	0,25	0,00	1,00	1,00
33	0,00	0,00	0,00	0,50	0,50	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,75	0,75
34	0,00	0,00	0,50	1,00	0,75	0,75	0,50	0,00	0,00	0,75	0,50	0,25	0,00	1,00	1,00
35	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,50	0,50
36	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,00	0,00	0,25	0,50	0,00	0,00	0,75	0,25
37	0,00	0,50	0,50	0,50	0,50	1,00	0,75	0,25	0,25	0,50	1,00	0,75	0,25	1,00	1,00
38	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,75	0,75	0,25	0,75	0,75
39	0,00	0,25	0,50	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,25	0,00	0,75	0,75
40	0,50	0,25	0,25	0,00	0,00	0,25	0,25	0,25	0,25	0,00	0,50	0,25	0,25	0,75	0,75

i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
26	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	1,00
27	0,50	1,00	0,25	0,50	0,25	0,00	0,50	0,00	0,25	0,00	1,00	0,50	1,00	1,00
28	0,50	1,00	0,00	0,50	0,25	0,00	0,25	0,00	0,25	0,00	1,00	0,75	0,25	0,75
29	0,75	1,00	0,00	0,75	0,25	0,00	0,25	0,00	0,25	0,00	0,25	0,25	0,50	1,00
30	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	1,00
31	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,00	1,00
32	0,25	0,75	0,25	0,00	0,25	0,00	0,75	0,00	0,00	0,00	0,00	0,00	0,25	1,00
33	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,50	0,25	0,25	1,00
34	0,50	0,50	0,00	0,25	0,00	0,00	0,75	0,00	0,00	0,00	1,00	0,50	0,75	1,00
35	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,75	0,25	0,00	1,00

i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
36	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	1,00	0,00	0,00	1,00
37	0,75	1,00	0,00	0,50	0,25	0,00	1,00	0,00	0,00	0,00	0,25	0,25	1,00	1,00
38	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,00	0,25	0,00	0,00	0,25	1,00
39	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,25	0,00	0,00	0,25	0,50
40	0,25	1,00	0,00	0,50	0,25	0,25	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,50

i/j	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
41	0,00	0,50	0,25	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	0,25	0,50	0,75	1,00	0,25
42	0,75	1,00	1,00	0,75	1,00	1,00	0,25	0,75	1,00	1,00	1,00	0,75	1,00	1,00	1,00	0,75
43	0,00	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,25	0,25	0,00	0,50	0,50	0,25	1,00	0,00
44	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,50	0,00
45	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,50	0,00	0,50	0,25	0,25	0,75	0,00
46	1,00	0,25	0,25	0,25	0,75	0,25	0,00	0,25	0,25	0,50	0,25	0,50	0,75	0,25	1,00	0,50
47	0,75	0,25	0,25	0,25	1,00	0,00	0,00	0,25	0,50	0,25	0,25	0,50	0,50	0,50	1,00	1,00
48	0,00	0,25	0,25	0,25	0,00	0,25	0,00	0,00	0,25	0,25	0,25	0,50	0,50	0,25	1,00	0,00
49	0,25	0,50	0,25	0,75	1,00	0,75	0,25	0,75	1,00	1,00	0,50	0,50	1,00	1,00	1,00	0,75
50	0,00	0,75	0,50	0,50	0,25	0,50	0,00	0,25	0,50	0,50	0,75	0,75	0,75	0,50	1,00	0,00
51	1,00	0,50	0,25	0,50	1,00	0,50	0,25	0,50	0,25	0,75	0,50	0,75	0,75	1,00	1,00	0,75
52	0,00	0,75	0,50	0,50	0,00	0,50	0,00	0,25	0,50	0,50	0,50	0,75	0,75	0,25	1,00	0,00
53	0,00	0,25	0,25	0,25	0,00	0,25	0,25	0,25	0,25	0,50	0,25	0,50	0,25	0,50	1,00	0,00
54	0,00	0,25	0,25	0,25	0,00	0,25	0,00	0,00	0,50	0,50	0,25	0,25	0,25	0,25	1,00	0,00
55	0,00	0,25	0,25	0,50	0,00	0,25	0,00	0,00	0,00	0,50	0,25	0,50	0,50	0,25	1,00	0,00

i/j	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	0,25	0,50	0,50	0,50	0,25	0,25	0,50	0,50	1,00	0,50	0,00	0,75	0,25	0,50	0,75
42	0,75	1,00	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	0,50	1,00	1,00	1,00	0,75
43	0,25	0,75	0,50	0,50	0,00	0,25	0,50	0,25	0,75	0,25	0,00	0,50	0,25	0,25	0,00

i/j	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
44	0,00	0,25	0,00	0,50	0,00	0,00	0,50	0,00	0,25	0,00	0,00	0,50	0,00	0,00	0,25
45	0,00	0,50	0,25	0,50	0,00	0,00	0,50	0,00	0,25	0,00	0,00	0,50	0,25	0,00	0,00
46	0,25	0,75	0,50	0,50	0,50	0,25	0,50	0,50	0,75	0,50	0,00	0,50	0,25	0,25	0,00
47	0,25	0,50	0,25	0,50	0,50	0,25	0,50	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,25
48	0,25	0,50	0,25	0,75	0,00	0,25	0,75	0,50	0,75	0,25	0,00	0,50	0,00	0,25	0,00
49	0,50	0,75	0,50	1,00	0,50	0,75	1,00	0,75	1,00	1,00	0,75	1,00	0,50	0,50	0,50
50	0,25	1,00	0,75	0,75	0,00	0,50	0,75	0,50	1,00	0,50	0,25	0,75	0,50	0,25	0,00
51	0,25	1,00	0,75	1,00	0,50	0,25	0,75	0,50	1,00	0,50	0,25	1,00	0,50	0,50	0,50
52	0,25	1,00	1,00	0,75	0,00	0,50	0,75	0,50	1,00	0,75	0,25	0,75	0,25	0,50	0,25
53	0,25	0,50	0,25	0,75	0,00	0,25	0,50	0,50	0,75	0,50	0,25	0,50	0,25	0,50	1,00
54	0,00	0,75	0,50	0,50	0,00	0,00	0,25	0,25	0,50	0,25	0,00	0,50	0,25	0,50	0,50
55	0,25	0,50	0,25	0,50	0,00	0,00	0,50	0,25	0,75	0,00	0,00	0,75	0,25	0,25	0,25

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
41	1,00	1,00	0,25	0,25	0,25	0,50	0,25	0,25	0,75	0,50	0,50	0,75	0,75	0,25	0,25
42	1,00	1,00	0,75	0,50	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,75
43	0,25	0,75	1,00	0,75	0,75	0,50	0,25	0,25	0,50	0,50	0,75	0,50	0,25	0,50	0,50
44	0,25	0,50	0,75	1,00	1,00	0,50	0,25	0,00	0,50	0,25	0,50	0,25	0,25	0,25	0,25
45	0,25	0,50	0,75	1,00	1,00	0,50	0,25	0,25	0,50	0,50	0,50	0,50	0,25	0,25	0,25
46	0,50	1,00	0,50	0,50	0,50	1,00	0,50	0,50	0,50	0,50	0,75	0,50	0,25	0,50	0,75
47	0,25	1,00	0,25	0,25	0,25	0,50	1,00	0,50	0,25	0,75	0,50	0,50	0,25	0,25	0,25
48	0,25	1,00	0,25	0,00	0,25	0,50	0,50	1,00	0,50	1,00	1,00	0,75	0,50	0,50	0,50
49	0,75	1,00	0,50	0,50	0,50	0,50	0,25	0,50	1,00	1,00	1,00	0,75	0,75	0,50	0,50
50	0,50	1,00	0,50	0,25	0,50	0,50	0,75	1,00	1,00	1,00	0,75	1,00	0,75	1,00	0,75
51	0,50	1,00	0,75	0,50	0,50	0,75	0,50	1,00	1,00	0,75	1,00	1,00	0,75	0,50	0,75
52	0,75	1,00	0,50	0,25	0,50	0,50	0,50	0,75	0,75	1,00	1,00	1,00	0,75	0,50	0,75
53	0,75	0,75	0,25	0,25	0,25	0,25	0,25	0,50	0,75	0,75	0,75	0,75	1,00	0,75	0,50

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
54	0,25	0,50	0,50	0,25	0,25	0,50	0,25	0,50	0,50	1,00	0,50	0,50	0,75	1,00	0,75
55	0,25	0,75	0,50	0,25	0,25	0,75	0,25	0,50	0,50	0,75	0,75	0,75	0,50	0,75	1,00

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
41	0,25	0,25	0,50	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,50	0,25	0,25	0,25
42	1,00	1,00	0,50	0,50	1,00	0,50	0,50	0,25	0,75	1,00	0,75	0,75	0,75	0,50	0,25
43	0,50	0,50	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25
44	0,25	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,25
45	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25
46	0,50	0,50	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25
47	0,75	0,50	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,00	0,00
48	0,75	0,50	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,00
49	1,00	0,50	0,50	0,50	0,50	0,75	0,50	0,00	0,25	0,50	0,50	0,75	0,50	0,25	0,25
50	1,00	0,75	0,25	0,50	0,75	0,25	0,00	0,25	0,25	0,50	0,25	0,25	0,50	0,50	0,25
51	0,75	1,00	0,50	0,50	0,50	0,50	0,25	0,25	0,00	0,50	0,50	0,50	0,50	0,50	0,50
52	0,75	0,75	0,25	0,50	0,50	0,00	0,00	0,25	0,25	0,75	0,50	0,50	0,50	0,50	0,25
53	0,50	0,75	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,75	0,75	0,50	0,50	0,25	0,25
54	0,75	1,00	0,75	0,25	0,50	0,00	0,00	0,00	0,00	0,50	0,75	0,50	0,50	0,50	0,25
55	1,00	1,00	0,50	0,50	0,50	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,50	0,25	0,25

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
41	0,25	0,25	0,50	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,50	0,25	0,25	0,25
42	1,00	1,00	0,50	0,50	1,00	0,50	0,50	0,25	0,75	1,00	0,75	0,75	0,75	0,50	0,25
43	0,50	0,50	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25
44	0,25	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,25
45	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25
46	0,50	0,50	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
47	0,75	0,50	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,00	0,00
48	0,75	0,50	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,00
49	1,00	0,50	0,50	0,50	0,50	0,75	0,50	0,00	0,25	0,50	0,50	0,75	0,50	0,25	0,25
50	1,00	0,75	0,25	0,50	0,75	0,25	0,00	0,25	0,25	0,50	0,25	0,25	0,50	0,50	0,25
51	0,75	1,00	0,50	0,50	0,50	0,50	0,25	0,25	0,00	0,50	0,50	0,50	0,50	0,50	0,50
52	0,75	0,75	0,25	0,50	0,50	0,00	0,00	0,25	0,25	0,75	0,50	0,50	0,50	0,50	0,25
53	0,50	0,75	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,75	0,75	0,50	0,50	0,25	0,25
54	0,75	1,00	0,75	0,25	0,50	0,00	0,00	0,00	0,00	0,50	0,75	0,50	0,50	0,50	0,25
55	1,00	1,00	0,50	0,50	0,50	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,50	0,25	0,25

i/j	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
41	0,25	0,50	0,25	0,50	0,00	0,50	0,50	0,25	0,25	0,25	0,50	0,25	0,00	0,75	1,00
42	0,00	0,50	0,50	0,75	1,00	0,50	0,25	0,25	0,00	0,50	0,75	0,25	0,00	1,00	1,00
43	0,00	0,00	0,25	0,50	0,25	0,50	0,25	0,00	0,00	0,25	0,50	0,25	0,00	1,00	1,00
44	0,25	0,25	0,00	0,25	0,00	0,50	0,25	0,25	0,25	0,00	0,50	0,25	0,00	0,50	0,75
45	0,00	0,25	0,00	0,25	0,00	0,50	0,25	0,25	0,00	0,00	0,50	0,00	0,00	0,75	1,00
46	0,00	0,25	0,25	0,50	0,25	0,50	0,50	0,00	0,00	0,25	0,50	0,25	0,00	1,00	1,00
47	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,75	0,75
48	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,00	1,00	1,00
49	0,25	0,50	0,25	0,50	0,00	0,50	0,50	0,25	0,25	0,25	0,50	0,50	0,00	0,75	1,00
50	0,00	0,25	0,50	0,75	0,75	0,50	0,25	0,00	0,00	0,50	0,75	0,00	0,00	1,00	1,00
51	0,00	0,50	0,50	0,75	0,50	0,75	0,50	0,50	0,25	0,50	0,75	0,25	0,00	1,00	1,00
52	0,25	0,25	0,50	0,75	0,75	0,75	0,75	0,25	0,25	0,50	0,75	0,25	0,00	1,00	1,00
53	0,25	0,25	0,25	0,50	0,25	0,75	0,50	0,00	0,25	0,25	0,75	0,25	0,25	1,00	1,00
54	0,25	0,50	0,25	0,75	0,50	0,75	0,25	0,25	0,00	0,25	1,00	0,25	0,00	1,00	1,00
55	0,25	0,25	0,25	0,50	0,25	0,50	0,50	0,25	0,25	0,25	0,75	0,25	0,00	0,75	1,00

i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
41	0,50	1,00	0,00	0,50	0,50	0,25	0,50	0,00	0,50	0,00	0,00	0,00	0,25	0,50
42	0,75	1,00	0,00	0,75	0,25	0,00	0,25	0,00	0,25	0,00	1,00	0,75	0,75	1,00
43	0,50	0,50	0,00	0,25	0,00	0,00	0,75	0,00	0,00	0,00	0,00	0,00	0,50	1,00
44	0,50	1,00	0,00	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,50
45	0,50	0,75	0,00	0,50	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,25	0,50
46	0,50	0,50	0,00	0,25	0,25	0,00	0,75	0,00	0,00	0,00	0,75	0,00	0,50	1,00
47	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	1,00	0,00	0,25	0,75
48	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,75
49	0,50	1,00	0,00	0,50	0,25	0,25	0,25	0,00	0,25	0,00	1,00	0,50	0,50	0,75
50	0,25	0,50	0,00	0,50	0,25	0,00	0,50	0,00	0,00	0,00	0,75	0,50	0,75	1,00
51	0,75	1,00	0,00	0,75	0,50	0,00	0,50	0,00	0,50	0,00	1,00	0,25	0,50	1,00
52	0,50	1,00	0,00	0,00	0,25	0,00	1,00	0,25	0,00	0,25	0,25	0,25	0,50	1,00
53	0,50	1,00	0,00	0,75	0,25	0,00	0,50	0,00	0,25	0,25	0,00	0,00	0,50	1,00
54	0,50	1,00	0,00	0,50	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,25	0,75
55	0,50	1,00	0,00	0,50	0,25	0,25	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,50

i/j	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
56	0,00	1,00	0,50	0,50	0,50	0,50	0,00	0,50	0,75	0,50	0,75	0,75	0,75	0,75	1,00	0,00
57	0,00	0,50	0,25	0,50	0,75	0,50	0,25	0,25	0,25	0,50	0,50	0,75	0,75	0,50	1,00	0,25
58	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,25	0,00
59	0,00	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,75	0,00
60	0,00	0,50	0,00	0,25	1,00	0,25	0,00	0,25	0,50	0,50	0,25	0,25	0,50	0,50	1,00	0,50
61	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	1,00	0,00
62	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,25	0,00	1,00	0,00
63	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00
64	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,00	0,75	0,00
65	0,00	0,75	0,25	0,25	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,50	0,50	0,50	1,00	0,00

i/j	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
66	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,50	0,00	0,25	0,25	0,25	1,00	0,00
67	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,50	0,25	0,00	0,50	0,00
68	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,50	0,25	0,00	0,75	0,00
69	0,00	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,50	0,00	0,50	0,50	0,00	0,75	0,00
70	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,50	0,00

i/j	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
56	0,25	1,00	1,00	0,75	0,00	0,50	0,50	0,50	1,00	0,75	0,50	0,75	0,50	0,50	0,25
57	0,25	1,00	0,75	1,00	0,00	0,25	0,75	0,25	1,00	0,25	0,25	0,75	0,25	0,50	0,25
58	0,00	0,25	0,25	0,25	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,50	0,00	0,00	0,25
59	0,00	0,50	0,25	0,50	0,00	0,00	0,25	0,25	0,50	0,00	0,00	0,25	0,00	0,25	0,00
60	0,25	0,50	0,50	0,50	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,50	0,00	0,00	0,00
61	0,00	0,50	0,75	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00
62	0,00	0,50	0,50	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00
63	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00
64	0,00	0,50	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00
65	0,00	0,75	1,00	0,25	0,00	0,25	0,25	0,25	0,75	0,25	0,25	0,50	0,50	0,25	0,50
66	0,00	0,25	0,25	0,50	0,00	0,00	0,25	0,00	0,50	0,25	0,00	0,50	0,25	0,50	1,00
67	0,00	0,50	0,50	0,50	0,00	0,00	0,25	0,00	0,50	0,00	0,00	0,50	0,25	0,75	0,75
68	0,00	0,50	0,25	0,50	0,00	0,00	0,25	0,00	0,75	0,25	0,00	0,50	0,25	0,50	0,00
69	0,00	0,75	0,25	0,50	0,00	0,00	0,25	0,25	0,75	0,25	0,00	0,50	0,25	0,25	0,25
70	0,00	0,25	0,25	0,25	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,50	0,25	0,00	0,25

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
56	0,25	1,00	0,50	0,25	0,50	0,50	0,75	0,75	1,00	1,00	0,75	0,75	0,50	0,75	1,00
57	0,25	1,00	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,75	1,00	0,75	0,75	1,00	1,00
58	0,50	0,50	0,25	0,25	0,25	0,25	0,00	0,00	0,50	0,25	0,50	0,25	0,25	0,75	0,50

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i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
59	0,25	0,50	0,00	0,00	0,25	0,25	0,00	0,00	0,50	0,50	0,50	0,50	0,25	0,25	0,50
60	0,25	1,00	0,25	0,00	0,25	0,25	0,00	0,25	0,50	0,75	0,50	0,50	0,50	0,50	0,50
61	0,00	0,50	0,00	0,00	0,00	0,25	0,25	0,00	0,75	0,25	0,50	0,00	0,00	0,00	0,00
62	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,00	0,00	0,00
63	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,00	0,00	0,25
64	0,00	0,75	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,00	0,00	0,00
65	0,25	1,00	0,00	0,00	0,00	0,25	0,25	0,25	0,50	0,50	0,50	0,75	0,75	0,50	0,25
66	0,25	0,75	0,25	0,25	0,25	0,25	0,25	0,00	0,50	0,25	0,50	0,50	0,75	0,75	0,25
67	0,50	0,75	0,25	0,25	0,25	0,25	0,00	0,25	0,75	0,25	0,50	0,50	0,50	0,50	0,25
68	0,25	0,75	0,25	0,00	0,25	0,25	0,25	0,25	0,50	0,50	0,50	0,50	0,50	0,50	0,50
69	0,25	0,50	0,25	0,25	0,25	0,25	0,00	0,25	0,25	0,50	0,50	0,50	0,25	0,50	0,25
70	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,50	0,25	0,25	0,25	0,25

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
56	1,00	1,00	0,50	0,75	1,00	0,25	0,25	0,25	0,25	0,75	0,50	0,25	0,50	0,50	0,50
57	1,00	1,00	1,00	0,75	0,75	0,50	0,25	0,25	0,00	0,75	0,50	0,50	0,50	0,50	0,50
58	0,50	1,00	1,00	0,50	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,50
59	0,75	0,75	0,50	1,00	0,50	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25
60	1,00	0,75	0,25	0,50	1,00	0,50	0,50	0,00	0,25	0,50	0,25	0,25	0,25	0,25	0,00
61	0,25	0,50	0,00	0,00	0,50	1,00	0,25	0,50	0,50	0,00	0,00	0,00	0,00	0,00	0,00
62	0,25	0,25	0,00	0,00	0,50	0,25	1,00	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00
63	0,25	0,25	0,00	0,00	0,00	0,50	0,50	1,00	0,75	0,00	0,00	0,00	0,00	0,00	0,00
64	0,25	0,00	0,00	0,00	0,25	0,50	0,25	0,75	1,00	0,00	0,00	0,00	0,00	0,00	0,00
65	0,75	0,75	0,25	0,25	0,50	0,00	0,00	0,00	0,00	1,00	0,50	0,25	0,25	0,25	0,25
66	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,50	1,00	0,75	0,75	0,50	0,25
67	0,25	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,75	1,00	0,50	0,25	0,25
68	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,75	0,50	1,00	0,75	0,25

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
69	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,50	0,25	0,75	1,00	0,50
70	0,50	0,50	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,50	1,00

i/j	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
56	0,00	0,50	0,50	0,75	0,75	0,75	0,75	0,00	0,25	0,75	0,75	0,50	0,25	1,00	1,00
57	0,25	0,50	0,50	0,75	0,50	1,00	0,25	0,25	0,00	0,50	1,00	0,25	0,00	1,00	1,00
58	0,25	0,50	0,25	0,25	0,00	0,50	0,25	0,25	0,25	0,00	0,50	0,25	0,00	0,75	1,00
59	0,00	0,25	0,25	0,50	0,25	0,50	0,25	0,00	0,00	0,00	0,50	0,00	0,00	1,00	1,00
60	0,00	0,00	0,25	0,50	0,25	0,50	0,00	0,00	0,00	0,25	0,25	0,00	0,00	1,00	1,00
61	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	1,00	0,00
62	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,50	0,00
63	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,50
64	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,25
65	0,00	0,00	0,00	0,25	0,50	0,25	0,25	0,00	0,00	0,25	0,50	0,00	0,00	0,50	0,75
66	0,00	0,25	0,25	0,25	0,25	0,50	0,50	0,25	0,00	0,00	0,50	0,00	0,00	0,75	1,00
67	0,00	0,50	0,50	0,50	0,00	0,50	0,25	0,00	0,00	0,00	0,50	0,25	0,00	0,75	1,00
68	0,00	0,25	0,50	0,50	0,25	0,50	0,50	0,00	0,00	0,25	0,50	0,25	0,00	1,00	1,00
69	0,00	0,75	0,50	0,50	0,50	0,50	0,50	0,00	0,00	0,25	0,75	0,25	0,00	0,75	1,00
70	0,50	0,50	0,25	0,25	0,00	0,75	0,50	0,25	0,25	0,00	0,25	0,00	0,00	0,50	1,00

i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
56	0,75	0,75	0,00	0,00	0,25	0,00	1,00	0,00	0,00	0,00	0,50	0,50	0,75	1,00
57	0,75	1,00	0,00	1,00	0,25	0,00	0,25	0,00	0,25	0,00	0,50	0,25	1,00	1,00
58	0,50	1,00	0,00	0,25	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,25	0,75
59	0,25	0,50	0,00	0,00	0,00	0,00	0,75	0,25	0,00	0,25	0,00	0,00	0,50	0,75
60	0,25	0,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	1,00	0,25	0,25	1,00
61	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	1,00

i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
62	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,75
63	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,50
64	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50
65	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,50	0,00	0,00	1,00
66	0,50	1,00	0,00	0,50	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,25	0,75
67	0,50	0,75	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,75
68	0,25	0,50	0,00	0,25	0,00	0,00	0,50	0,00	0,00	0,25	0,00	0,00	0,50	0,75
69	0,50	0,75	0,00	0,50	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,25	0,75
70	0,25	0,75	0,00	0,25	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,25	0,50

i/j	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
71	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
72	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
73	0,00	0,25	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,50	0,00	0,25	0,25	0,00	0,50	0,00
74	0,00	0,25	0,00	0,25	0,00	0,25	0,25	0,25	0,25	0,50	0,25	0,75	0,50	0,25	1,00	0,00
75	0,25	0,50	0,25	0,25	0,50	0,25	0,00	0,25	0,50	0,50	0,25	0,50	0,75	0,50	1,00	0,00
76	0,00	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,00	0,50	0,25	0,75	0,50	0,00	0,75	0,00
77	0,00	0,00	0,25	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	0,50	0,50	0,00	0,50	0,00
78	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00
79	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
80	0,75	0,50	0,00	0,25	0,75	0,25	0,00	0,25	0,75	0,25	0,25	0,25	0,50	0,25	1,00	0,00
81	0,00	0,50	0,50	0,50	0,25	0,25	0,25	0,75	0,50	1,00	0,25	0,50	0,75	0,75	1,00	0,00
82	0,00	0,25	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,00
83	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
84	0,00	0,75	0,50	1,00	1,00	0,75	0,75	1,00	0,50	1,00	0,50	1,00	1,00	1,00	1,00	0,75
85	0,00	0,75	0,75	1,00	0,50	1,00	1,00	0,75	0,50	1,00	0,75	1,00	1,00	0,50	1,00	0,00

EN

i/j	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
71	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50
72	0,00	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,25
73	0,00	0,50	0,25	0,25	0,00	0,00	0,25	0,00	0,50	0,00	0,00	0,50	0,25	0,50	0,25
74	0,00	0,75	0,50	0,75	0,00	0,25	0,50	0,50	1,00	0,25	0,25	0,50	0,25	0,25	0,00
75	0,25	0,50	0,50	0,50	0,00	0,25	0,50	0,50	0,75	0,25	0,25	0,50	0,25	0,25	0,00
76	0,00	0,50	0,50	0,50	0,00	0,25	0,50	0,25	0,75	0,00	0,00	1,00	0,25	0,25	0,25
77	0,25	0,50	0,25	0,25	0,00	0,00	0,25	0,00	0,50	0,00	0,25	0,75	0,25	0,25	0,25
78	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25
79	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25
80	0,25	0,50	0,25	0,50	0,25	0,00	0,25	0,25	0,75	0,25	0,25	0,50	0,25	0,25	0,00
81	0,25	0,50	0,25	0,75	0,00	0,00	0,75	0,25	0,50	0,25	0,50	1,00	0,75	0,25	0,50
82	0,00	0,25	0,00	0,25	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,75	0,75	0,25	0,25
83	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25
84	0,50	1,00	1,00	1,00	1,00	0,50	1,00	0,75	1,00	0,50	0,75	1,00	0,75	0,75	0,75
85	0,50	1,00	1,00	1,00	0,00	0,75	1,00	0,75	1,00	0,50	0,25	1,00	0,75	0,75	0,75

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
71	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,25	0,25	0,25
72	0,50	0,50	0,00	0,25	0,25	0,25	0,00	0,00	0,50	0,25	0,50	0,25	0,25	0,50	0,25
73	0,25	0,50	0,25	0,00	0,00	0,25	0,00	0,00	0,25	0,50	0,50	0,50	0,25	0,25	0,25
74	0,50	0,75	0,50	0,25	0,25	0,50	0,25	0,25	0,50	0,75	0,75	0,75	0,50	0,75	0,50
75	0,00	1,00	0,25	0,00	0,00	0,25	0,25	0,25	0,00	0,75	0,50	0,75	0,25	0,50	0,25
76	0,50	0,50	0,50	0,50	0,50	0,50	0,25	0,25	0,50	0,50	0,75	0,75	0,75	0,75	0,50
77	0,50	0,25	0,25	0,25	0,25	0,50	0,25	0,25	0,50	0,25	0,50	0,75	0,50	0,25	0,50
78	0,25	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,50	0,25	0,00	0,25	0,25
79	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,00	0,25
80	0,25	0,50	0,25	0,00	0,00	0,25	0,00	0,25	0,25	0,50	0,50	0,50	0,25	0,25	0,25

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
81	0,50	0,75	0,50	0,50	0,50	0,50	0,25	0,25	0,50	0,75	0,75	0,75	0,75	1,00	0,75
82	0,25	0,25	0,25	0,25	0,00	0,25	0,00	0,00	0,50	0,00	0,25	0,25	0,25	0,25	0,25
83	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00
84	0,75	1,00	1,00	0,50	0,75	1,00	0,75	1,00	0,75	1,00	1,00	1,00	1,00	1,00	0,75
85	1,00	1,00	1,00	0,75	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
71	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50
72	0,50	0,50	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,50	0,25	0,75	0,50
73	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,50	0,50	0,50	0,25
74	0,75	0,75	0,25	0,50	0,50	0,25	0,00	0,00	0,00	0,25	0,25	0,50	0,50	0,50	0,25
75	0,75	0,50	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,50	0,25	0,00	0,25	0,50	0,00
76	0,75	1,00	0,50	0,50	0,50	0,00	0,00	0,00	0,00	0,25	0,50	0,50	0,50	0,50	0,75
77	0,75	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,50	0,25	0,50	0,50	0,50
78	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25
79	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25
80	0,75	0,50	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,25	0,00
81	0,75	1,00	0,50	0,50	0,25	0,00	0,25	0,00	0,25	0,50	0,50	0,50	0,50	0,75	0,25
82	0,50	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,00
83	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
84	1,00	1,00	0,75	1,00	1,00	1,00	0,50	0,25	0,25	0,50	0,75	0,75	1,00	0,75	0,50
85	1,00	1,00	1,00	1,00	1,00	0,00	0,00	0,50	0,25	0,75	1,00	1,00	1,00	1,00	1,00

i/j	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
71	1,00	0,75	0,00	0,50	0,25	0,50	0,50	0,50	0,25	0,00	0,75	0,00	0,25	0,75	0,75
72	0,75	1,00	0,50	0,75	0,00	0,75	0,75	0,50	0,25	0,25	0,75	0,25	0,00	0,75	1,00
73	0,00	0,50	1,00	0,50	0,25	0,50	0,50	0,00	0,00	0,25	0,50	0,00	0,00	0,75	1,00

i/j	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
74	0,50	0,75	0,50	1,00	0,50	0,75	0,75	0,00	0,25	0,50	1,00	0,00	0,00	1,00	1,00
75	0,25	0,00	0,25	0,50	1,00	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	1,00	1,00
76	0,50	0,75	0,50	0,75	0,25	1,00	0,75	0,50	0,50	0,50	0,75	0,50	0,25	1,00	1,00
77	0,50	0,75	0,50	0,75	0,25	0,75	1,00	0,75	0,50	0,50	0,75	0,25	0,25	1,00	0,75
78	0,50	0,50	0,00	0,00	0,00	0,50	0,75	1,00	0,25	0,00	0,50	0,25	0,00	0,75	0,75
79	0,25	0,25	0,00	0,25	0,00	0,50	0,50	0,25	1,00	0,25	0,25	0,25	0,25	0,75	0,75
80	0,00	0,25	0,25	0,50	0,25	0,50	0,50	0,00	0,25	1,00	1,00	0,50	0,50	0,75	1,00
81	0,75	0,75	0,50	1,00	0,00	0,75	0,75	0,50	0,25	1,00	1,00	0,75	0,25	0,75	1,00
82	0,00	0,25	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,50	0,75	1,00	0,50	0,75	1,00
83	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,50	0,25	0,50	1,00	1,00	0,75
84	0,75	0,75	0,75	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75	0,75	1,00	1,00	1,00
85	0,75	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	1,00	1,00	0,75	1,00	1,00

i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
71	0,50	1,00	0,00	1,00	0,25	0,25	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,50
72	0,50	1,00	0,00	0,50	0,25	0,25	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,50
73	0,50	0,50	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,50
74	0,50	0,75	0,00	0,50	0,25	0,25	0,75	0,00	0,25	0,00	0,25	0,00	0,75	1,00
75	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	1,00
76	0,75	1,00	0,00	0,75	0,75	0,50	0,50	0,00	0,50	0,00	0,25	0,00	0,50	1,00
77	0,25	0,75	0,25	0,75	0,25	0,50	0,25	0,25	0,50	0,25	0,00	0,25	0,50	0,75
78	0,50	0,75	0,25	0,75	0,00	0,50	0,25	0,25	0,50	0,50	0,00	0,00	0,25	0,50
79	0,25	0,25	0,00	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,25
80	0,25	0,25	0,00	0,25	0,00	0,00	0,75	0,25	0,00	0,25	0,50	0,25	0,25	0,75
81	0,25	0,75	0,25	0,75	0,25	0,50	0,25	0,00	0,50	0,00	0,25	0,25	0,25	0,50
82	0,25	0,75	0,25	0,50	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,50
83	0,50	1,00	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,00	0,25

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i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
84	1,00	1,00	0,50	1,00	1,00	0,75	1,00	0,50	0,75	0,00	1,00	0,75	0,75	1,00
85	1,00	1,00	0,50	1,00	1,00	1,00	1,00	0,25	0,75	0,00	0,50	0,50	1,00	1,00

i/j	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
86	0,00	0,25	0,00	0,25	0,25	0,25	0,50	0,25	0,25	0,50	0,25	0,75	0,25	0,00	0,75	0,00
87	0,00	0,00	0,00	0,25	0,25	0,75	0,75	0,00	0,50	0,75	0,25	1,00	0,25	0,25	0,50	0,25
88	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,25	0,00	0,00	0,25	0,00	0,25
89	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,00
90	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,00	0,00	0,50	0,00	0,00	0,00	0,00
91	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00
92	0,00	0,25	0,50	0,75	0,00	0,50	0,25	0,00	0,25	0,50	0,50	0,50	0,75	0,00	1,00	0,00
93	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
94	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00
95	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
96	1,00	1,00	0,25	0,50	1,00	0,75	0,00	1,00	1,00	0,25	0,50	1,00	1,00	1,00	1,00	1,00
97	1,00	0,25	0,00	0,00	0,75	0,25	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,00	1,00	0,25
98	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,75	0,25	0,00	0,75	0,00
99	1,00	1,00	1,00	1,00	1,00	1,00	0,25	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00

i/j	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
86	0,00	0,50	0,50	0,75	0,00	0,00	0,25	0,00	0,50	0,00	0,00	0,75	0,00	0,25	0,25
87	0,00	1,00	1,00	1,00	0,00	0,00	0,75	0,00	0,50	0,00	0,25	1,00	0,25	0,25	1,00
88	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00
89	0,00	0,50	0,50	0,75	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,50	0,00	0,00	0,50
90	0,00	0,25	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25
91	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25
92	0,00	0,50	0,25	0,25	0,00	0,25	0,75	0,25	0,75	0,00	0,00	1,00	0,50	0,50	0,50

i/j	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
93	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,25
94	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25
95	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,25
96	0,50	1,00	1,00	0,25	0,75	0,25	0,00	0,50	1,00	0,75	1,00	0,25	0,00	0,00	0,00
97	0,00	0,50	0,75	0,25	0,00	0,00	0,00	0,25	0,50	0,25	0,00	0,25	0,00	0,00	0,00
98	0,00	1,00	0,25	0,50	0,00	0,00	0,25	0,25	0,75	0,00	0,00	1,00	0,25	0,25	0,00
99	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,50

i/j	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
86	0,50	0,75	0,50	0,50	0,50	0,50	0,25	0,25	0,50	0,25	0,75	0,50	0,50	0,50	0,50
87	1,00	1,00	0,50	1,00	0,75	0,50	0,25	0,25	1,00	0,50	1,00	1,00	1,00	1,00	1,00
88	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
89	0,50	0,75	0,25	0,50	0,50	0,25	0,00	0,00	0,50	0,50	0,75	0,00	0,75	0,50	0,50
90	0,50	0,25	0,00	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,50	0,25	0,25	0,25	0,25
91	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25
92	0,50	0,25	0,75	0,25	0,25	0,75	0,50	0,50	0,25	0,50	0,50	1,00	0,50	0,25	0,50
93	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
94	0,50	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,00	0,50	0,00	0,25	0,25	0,25
95	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00
96	0,00	1,00	0,00	0,00	0,00	0,75	1,00	0,00	1,00	0,75	1,00	0,25	0,00	0,00	0,00
97	0,00	0,75	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,50	0,25	0,25	0,00	0,00	0,00
98	0,25	0,75	0,50	0,25	0,25	0,50	0,25	0,50	0,50	0,75	0,50	0,50	0,50	0,25	0,25
99	0,50	1,00	1,00	0,50	0,50	1,00	0,75	0,75	0,75	1,00	1,00	1,00	1,00	0,75	0,50

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
86	0,75	0,75	0,50	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,50	0,25	0,50	0,25
87	0,75	1,00	1,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,75	0,50	0,75	0,75

i/j	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
88	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
89	0,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,50	0,25
90	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,25
91	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
92	1,00	0,25	0,25	0,75	0,75	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,50	0,25	0,25
93	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
94	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,25
95	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00
96	0,50	0,50	0,00	0,00	1,00	0,25	0,25	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00
97	0,50	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
98	0,75	1,00	0,25	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,50	0,25	0,25
99	1,00	1,00	0,75	0,75	1,00	1,00	0,75	0,50	0,50	1,00	0,75	0,75	0,75	0,75	0,50

i/j	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
86	0,50	0,50	0,50	0,50	0,25	0,75	0,25	0,50	0,25	0,25	0,25	0,25	0,50	1,00	1,00
87	1,00	1,00	0,50	0,75	0,00	1,00	0,75	0,75	0,25	0,25	0,75	0,75	1,00	1,00	1,00
88	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,25	0,25	0,25	0,50	0,50
89	1,00	0,50	0,25	0,50	0,00	0,75	0,75	0,75	0,50	0,25	0,75	0,50	0,25	1,00	1,00
90	0,25	0,25	0,00	0,25	0,00	0,75	0,25	0,00	0,00	0,00	0,25	0,00	0,25	1,00	1,00
91	0,25	0,25	0,00	0,25	0,00	0,50	0,50	0,50	0,00	0,00	0,50	0,25	0,25	0,75	1,00
92	0,50	0,50	0,25	0,75	0,00	0,50	0,25	0,25	0,00	0,75	0,25	0,25	0,25	1,00	1,00
93	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,00	0,00	0,25	0,50	0,25
94	0,25	0,25	0,00	0,25	0,00	0,50	0,50	0,50	0,25	0,00	0,50	0,00	0,25	0,75	0,75
95	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,50	0,00	0,25	0,00	0,00	0,25	0,00	0,00
96	0,00	0,00	0,00	0,25	0,50	0,25	0,00	0,00	0,00	0,50	0,25	0,00	0,00	1,00	0,50
97	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,25	0,25	0,00	0,25	0,75	0,50
98	0,25	0,25	0,25	0,75	0,25	0,50	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,75	1,00
99	0,50	0,50	0,50	1,00	1,00	1,00	0,75	0,50	0,25	0,75	0,50	0,50	0,25	1,00	1,00

i/j	86	87	88	89	90	91	92	93	94	95	96	97	98	99
86	1,00	1,00	0,50	1,00	0,75	0,50	0,50	0,00	0,25	0,00	0,00	0,25	1,00	1,00
87	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,25	0,25	1,00	1,00
88	0,50	1,00	1,00	0,25	0,75	0,25	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,25
89	1,00	1,00	0,25	1,00	1,00	1,00	0,75	0,00	0,50	0,00	0,00	0,25	0,75	0,75
90	0,75	1,00	0,75	1,00	1,00	1,00	0,75	0,25	0,00	0,00	0,00	0,25	0,75	0,50
91	0,50	1,00	0,25	1,00	1,00	1,00	0,75	0,25	0,25	0,25	0,00	0,50	0,75	0,75
92	0,50	1,00	0,25	0,75	0,75	0,75	1,00	0,50	0,25	0,25	0,00	0,50	0,50	0,75
93	0,00	1,00	0,00	0,00	0,25	0,25	0,50	1,00	0,25	0,25	0,00	0,75	0,25	0,50
94	0,25	0,75	0,25	0,50	0,00	0,25	0,25	0,25	1,00	0,50	0,00	1,00	0,25	0,75
95	0,00	0,75	0,00	0,00	0,00	0,25	0,25	0,25	0,50	1,00	0,00	0,25	0,00	0,00
96	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,25	0,50	1,00
97	0,25	0,25	0,00	0,25	0,25	0,50	0,50	0,75	1,00	0,25	0,25	1,00	0,50	1,00
98	1,00	1,00	0,00	0,75	0,75	0,75	0,50	0,25	0,25	0,00	0,50	0,50	1,00	1,00
99	1,00	1,00	0,25	0,75	0,50	0,75	0,75	0,50	0,75	0,00	1,00	1,00	1,00	1,00

Correlation coefficients for flood risk in the Kingdom of Norway

i/j	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
01	1,00	0,00	0,00	1,00	0,75	1,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
02	0,00	1,00	1,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
03	0,00	1,00	1,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
04	1,00	0,00	0,00	1,00	0,75	1,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
05	0,75	0,00	0,00	0,75	1,00	0,75	0,75	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00
06	1,00	0,25	0,00	1,00	0,75	1,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00
07	1,00	0,50	0,50	1,00	0,75	1,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
08	0,25	0,00	0,00	0,00	0,00	0,25	0,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00
09	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	1,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
10	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

i/j	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
11	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	1,00	1,00	1,00	0,00	0,00	0,00	0,00	0,00
12	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	1,00	1,00	1,00	0,00	0,00	0,00	0,00	0,00
13	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	1,00	1,00	1,00	0,00	0,00	0,00	0,00	0,00
14	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	1,00	1,00	1,00	0,00	0,25	0,00	0,00	0,00
15	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,75	0,00	0,00	0,25
16	0,25	0,00	0,00	0,25	0,00	0,25	0,00	0,75	0,00	0,00	0,00	0,00	0,00	0,25	0,75	1,00	0,50	0,00	0,50
17	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	1,00	0,50	0,75
18	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	1,00	0,25
19	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,50	0,75	0,25	1,00'

In Annex XXV to Delegated Regulation (EU) 2015/35, the following section is added:

'**Correlation coefficients for hail risk in the Republic of Poland**

i/j	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
00	1,00	1,00	1,00	0,75	1,00	1,00	0,50	0,50	0,50	0,75	1,00	0,50	0,00	0,25	0,50	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,00	0,00	0,50
01	1,00	1,00	1,00	1,00	1,00	1,00	0,25	0,50	0,50	0,75	1,00	0,25	0,00	0,25	0,25	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,00	0,00	0,50
02	1,00	1,00	1,00	1,00	1,00	0,75	0,00	0,25	0,25	0,50	0,75	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,25
03	0,75	1,00	1,00	1,00	0,75	1,00	0,25	0,25	0,25	0,50	1,00	0,25	0,00	0,25	0,25	1,00	0,25	0,00	0,25	0,00	1,00	0,00	0,00	0,00	0,25
04	1,00	1,00	1,00	0,75	1,00	0,75	0,50	0,50	0,50	0,75	1,00	0,50	0,25	0,50	0,50	1,00	0,50	0,50	0,50	0,50	1,00	0,25	0,25	0,25	0,50
05	1,00	1,00	0,75	1,00	0,75	1,00	0,00	0,25	0,25	0,50	0,50	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,00
06	0,50	0,25	0,00	0,25	0,50	0,00	1,00	0,25	0,25	0,25	0,75	0,25	0,25	0,50	0,50	1,00	0,25	0,25	0,25	0,25	0,50	0,00	0,25	0,00	0,25
07	0,50	0,50	0,25	0,25	0,50	0,25	0,25	1,00	0,25	0,25	0,75	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,25	0,75	0,25	0,00	0,00	0,25
08	0,50	0,50	0,25	0,25	0,50	0,25	0,25	0,25	1,00	0,25	0,75	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,50	0,25	0,00	0,00	0,25
09	0,75	0,75	0,50	0,50	0,75	0,50	0,25	0,25	0,25	1,00	1,00	0,25	0,00	0,25	0,25	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,00	0,00	0,25
10	1,00	1,00	0,75	1,00	1,00	0,50	0,75	0,75	0,75	1,00	1,00	1,00	0,75	1,00	1,00	1,00	0,75	0,75	0,75	0,75	1,00	0,50	0,50	0,50	1,00
11	0,50	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	1,00	1,00	0,50	0,50	0,50	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50
12	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,00	0,75	0,50	1,00	0,75	0,50	0,75	0,25	0,50	0,25	0,50	0,25	0,00	0,25	0,25	0,25
13	0,25	0,25	0,00	0,25	0,50	0,00	0,50	0,25	0,25	0,25	1,00	0,50	0,75	1,00	0,75	1,00	0,50	0,50	0,25	0,50	0,50	0,25	0,25	0,25	0,50
14	0,50	0,25	0,00	0,25	0,50	0,00	0,50	0,25	0,25	0,25	1,00	0,50	0,50	0,75	1,00	1,00	0,25	0,50	0,25	0,50	0,75	0,25	0,25	0,25	0,50
15	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00	0,75	1,00	1,00	1,00	0,75	0,75	1,00	0,75	1,00	0,75	0,50	0,50	1,00
16	0,25	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,50	0,25	0,75	1,00	0,25	0,25	0,50	0,50	0,00	0,25	0,25	0,25
17	0,25	0,25	0,00	0,00	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,50	0,50	0,50	0,75	0,25	1,00	0,25	0,50	0,50	0,25	0,25	0,25	0,25
18	0,25	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	1,00	0,25	0,25	1,00	0,50	0,50	0,00	0,25	0,00	0,25
19	0,25	0,25	0,00	0,00	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,50	0,50	0,50	0,50	0,75	0,50	0,50	0,50	1,00	0,50	0,00	0,25	0,25	0,50
20	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,75	0,50	1,00	1,00	0,75	0,25	0,50	0,75	1,00	0,50	0,50	0,50	0,50	1,00	0,50	0,50	0,25	1,00
21	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,25	0,25	0,25	0,50	0,25	0,00	0,25	0,25	0,75	0,00	0,25	0,00	0,00	0,50	1,00	0,25	0,00	0,25
22	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	0,50	0,25	1,00	0,25	0,25

i/j	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
23	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25	0,50	0,25	0,25	0,00	0,25	0,25	0,00	0,25	1,00	0,25
24	0,50	0,50	0,25	0,25	0,50	0,00	0,25	0,25	0,25	0,25	1,00	0,50	0,25	0,50	0,50	1,00	0,25	0,25	0,25	0,50	1,00	0,25	0,25	0,25	1,00

i/j	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
00	1,00	0,50	0,25	0,25	0,00	0,75	0,75	0,50	0,50	0,50	1,00	0,25	0,50	0,50	0,50	1,00	0,75	0,50	0,50	0,75	1,00	0,25	0,50	0,25	0,25
01	0,75	0,50	0,25	0,25	0,00	0,75	0,75	0,50	0,50	0,50	1,00	0,25	0,25	0,50	0,50	0,75	0,75	0,50	0,50	0,75	1,00	0,25	0,50	0,25	0,00
02	0,25	0,25	0,00	0,00	0,00	0,50	0,50	0,25	0,25	0,25	0,50	0,00	0,00	0,25	0,25	0,50	0,50	0,25	0,25	0,50	0,75	0,00	0,00	0,00	0,00
03	0,50	0,25	0,25	0,00	0,00	0,50	0,75	0,25	0,25	0,25	0,75	0,00	0,25	0,25	0,25	0,50	0,50	0,25	0,25	0,50	1,00	0,00	0,25	0,00	0,00
04	1,00	0,50	0,50	0,25	0,25	0,50	0,50	0,25	0,50	0,25	1,00	0,25	0,50	0,50	0,50	0,75	0,50	0,50	0,25	0,50	1,00	0,25	0,50	0,25	0,25
05	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,25	0,50	0,00	0,00	0,00	0,00
06	0,50	0,00	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25
07	0,50	0,25	0,25	0,00	0,25	0,25	0,00	0,00	0,25	0,00	0,50	0,00	0,25	0,25	0,25	0,25	0,00	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,00
08	0,50	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,50	0,00	0,25	0,00	0,00
09	0,75	0,25	0,25	0,00	0,00	0,50	0,50	0,25	0,25	0,25	0,75	0,00	0,25	0,25	0,25	0,50	0,50	0,25	0,25	0,50	0,75	0,25	0,25	0,00	0,00
10	1,00	0,75	0,75	0,50	0,50	1,00	0,75	0,50	0,75	0,50	1,00	0,50	0,75	0,75	0,75	1,00	0,75	0,75	0,50	0,75	1,00	0,50	0,75	0,50	0,50
11	0,75	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,00	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,00	0,25	0,75	0,25	0,25	0,25	0,25
12	0,50	0,00	0,25	0,25	0,75	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,00	0,25	0,50
13	0,75	0,00	0,25	0,25	0,75	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,75	0,25	0,25	0,25	0,50
14	0,75	0,25	0,25	0,25	0,50	0,25	0,00	0,00	0,25	0,00	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,75	0,25	0,25	0,25	0,25
15	1,00	1,00	0,75	0,75	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,75	0,50
16	0,50	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25
17	0,50	0,00	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25
18	0,50	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25
19	0,75	0,00	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25
20	1,00	0,75	0,50	0,50	0,25	1,00	1,00	0,50	0,50	0,50	1,00	0,25	0,50	0,75	0,75	1,00	0,75	0,75	0,75	1,00	1,00	0,50	0,75	0,25	0,25
21	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
22	0,50	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00

i/j	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
23	0,50	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25
24	0,75	0,25	0,50	0,25	0,25	0,25	0,00	0,00	0,25	0,00	0,50	0,25	0,25	0,25	0,25	0,50	0,00	0,25	0,00	0,25	0,75	0,25	0,25	0,25	0,25

i/j	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
00	1,00	1,00	1,00	1,00	1,00	0,50	0,25	0,50	0,50	0,50	1,00	1,00	0,50	0,50	0,50	1,00	0,25	0,50	0,25	0,25	1,00	1,00	0,50	0,00	0,00
01	1,00	1,00	1,00	1,00	1,00	0,50	0,25	0,50	0,50	0,25	1,00	1,00	0,50	0,50	0,25	1,00	0,25	0,50	0,25	0,00	1,00	1,00	0,50	0,00	0,00
02	1,00	0,75	0,50	1,00	0,75	0,25	0,00	0,00	0,25	0,00	1,00	0,75	0,25	0,25	0,00	0,75	0,00	0,00	0,00	0,00	1,00	1,00	0,00	0,00	0,00
03	1,00	1,00	0,75	1,00	1,00	0,25	0,00	0,25	0,50	0,25	1,00	1,00	0,25	0,25	0,25	1,00	0,00	0,25	0,00	0,00	1,00	1,00	0,25	0,00	0,00
04	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,50	0,25	1,00	1,00	0,25	0,50	0,25	1,00	0,25	0,50	0,25	0,50	1,00	1,00	0,50	0,25	0,25
05	0,75	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,25	0,00	0,75	0,50	0,25	0,00	0,00	0,50	0,00	0,00	0,00	0,00	1,00	0,75	0,00	0,00	0,00
06	0,50	0,50	0,75	0,75	0,50	0,25	0,25	0,25	0,00	0,00	0,50	0,25	0,00	0,00	0,00	1,00	0,25	0,25	0,25	0,25	1,00	0,75	0,25	0,25	0,25
07	0,75	0,50	0,75	0,75	0,50	0,25	0,25	0,25	0,25	0,00	0,50	0,50	0,00	0,25	0,00	1,00	0,25	0,25	0,25	0,25	1,00	0,75	0,25	0,25	0,25
08	0,50	0,50	0,75	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,50	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,25	1,00	0,75	0,25	0,25	0,00
09	1,00	0,75	0,75	1,00	0,75	0,25	0,25	0,25	0,25	0,25	0,75	0,75	0,25	0,25	0,25	1,00	0,25	0,25	0,25	0,25	1,00	1,00	0,25	0,00	0,00
10	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75	0,50	1,00	1,00	0,50	0,75	0,50	1,00	0,50	1,00	0,50	1,00	1,00	1,00	1,00	0,75	0,50
11	0,75	0,50	0,75	0,75	0,50	0,25	0,25	0,25	0,00	0,25	0,50	0,50	0,00	0,25	0,00	1,00	0,25	0,25	0,25	0,50	1,00	0,75	0,25	0,25	0,25
12	0,25	0,25	0,75	0,50	0,25	0,00	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	1,00	0,00	0,25	0,50	0,75	1,00	0,75	0,25	0,50	0,50
13	0,50	0,50	1,00	0,75	0,50	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,25	0,50	0,50	0,75	1,00	1,00	0,50	0,50	0,50
14	0,75	0,50	1,00	1,00	0,50	0,25	0,25	0,25	0,00	0,25	0,50	0,25	0,00	0,25	0,00	1,00	0,25	0,50	0,25	0,50	1,00	1,00	0,50	0,50	0,25
15	1,00	1,00	1,00	1,00	1,00	0,75	0,75	1,00	1,00	0,75	1,00	1,00	1,00	1,00	0,75	1,00	0,75	1,00	0,75	1,00	1,00	1,00	1,00	0,75	0,50
16	0,50	0,50	0,75	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,50	1,00	0,75	0,25	0,25	0,25
17	0,50	0,50	0,75	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,50	1,00	0,75	0,25	0,25	0,25
18	0,50	0,50	0,75	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,25	1,00	0,75	0,25	0,25	0,25
19	0,50	0,50	0,75	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,50	0,75	1,00	0,75	0,25	0,50	0,25
20	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,75	0,50	1,00	1,00	0,50	0,75	0,50	1,00	0,50	0,75	0,25	0,50	1,00	1,00	0,75	0,25	0,25
21	0,50	0,25	0,50	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,75	0,00	0,25	0,00	0,25	0,75	0,50	0,25	0,00	0,00
22	0,25	0,25	0,50	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,25	0,75	0,50	0,25	0,25	0,25

i/j	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
23	0,25	0,25	0,50	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,25	0,75	0,50	0,25	0,25	0,25
24	0,75	0,75	0,75	1,00	0,75	0,25	0,25	0,25	0,25	0,25	0,50	0,50	0,00	0,25	0,25	1,00	0,25	0,50	0,25	0,50	1,00	1,00	0,50	0,25	0,25

i/j	75	76	77	78	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
00	1,00	0,25	0,25	0,25	1,00	1,00	0,50	0,75	0,50	1,00	0,75	0,75	0,50	0,50	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,50
01	1,00	0,25	0,00	0,25	1,00	1,00	0,50	0,75	0,50	1,00	0,75	0,75	0,25	0,25	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,50
02	0,75	0,00	0,00	0,00	1,00	1,00	0,25	0,50	0,25	1,00	0,25	0,25	0,00	0,00	1,00	1,00	0,25	0,50	0,75	0,50	0,25	0,25	0,25	0,00
03	1,00	0,25	0,00	0,00	1,00	1,00	0,25	0,50	0,25	1,00	0,50	0,50	0,25	0,25	1,00	1,00	0,75	0,75	1,00	0,50	0,25	0,25	0,25	0,25
04	1,00	0,50	0,50	0,50	1,00	1,00	0,50	0,75	0,50	1,00	0,75	0,50	0,50	0,50	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,75
05	0,25	0,00	0,00	0,00	1,00	0,75	0,00	0,25	0,25	0,75	0,00	0,25	0,00	0,00	1,00	1,00	0,25	0,25	0,50	0,25	0,25	0,00	0,00	0,00
06	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50	0,50	0,25	0,25	0,25	1,00	1,00	1,00	0,75	0,75	0,50	0,25	0,25	0,25	0,25
07	1,00	0,25	0,25	0,25	0,75	0,75	0,25	0,25	0,25	0,75	0,50	0,25	0,25	0,25	1,00	1,00	1,00	0,75	0,75	0,50	0,25	0,25	0,25	0,25
08	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	0,75	0,75	0,50	0,75	0,25	0,25	0,25	0,25	0,25
09	1,00	0,25	0,25	0,25	1,00	1,00	0,25	0,50	0,50	1,00	0,50	0,50	0,25	0,25	1,00	1,00	1,00	1,00	1,00	0,50	0,25	0,25	0,25	0,50
10	1,00	0,75	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00
11	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,50	0,75	0,50	0,25	0,25	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	0,25	0,25	0,50
12	1,00	0,50	0,50	0,25	0,25	0,75	0,25	0,25	0,50	0,25	0,25	0,00	0,25	0,25	1,00	1,00	1,00	0,75	1,00	0,25	0,00	0,00	0,00	0,25
13	1,00	0,50	0,50	0,25	0,50	1,00	0,50	0,25	0,50	0,50	0,50	0,25	0,50	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	0,25	0,25	0,50
14	1,00	0,50	0,50	0,25	0,50	1,00	0,50	0,25	0,50	0,75	0,50	0,25	0,50	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	0,25	0,25	0,50
15	1,00	0,75	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
16	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	1,00	1,00	0,50	0,75	0,25	0,25	0,25	0,25	0,25
17	1,00	0,25	0,50	0,25	0,25	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	0,75	1,00	0,50	1,00	0,25	0,25	0,25	0,25	0,25
18	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	1,00	1,00	0,75	0,75	0,25	0,25	0,25	0,25	0,25
19	1,00	0,50	0,50	0,25	0,25	0,75	0,25	0,25	0,50	0,50	0,25	0,00	0,25	0,25	1,00	1,00	1,00	0,75	1,00	0,25	0,25	0,25	0,25	0,50
20	1,00	0,50	0,50	0,50	1,00	1,00	0,75	1,00	0,75	1,00	1,00	0,75	0,50	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75
21	1,00	0,00	0,00	0,00	0,50	0,50	0,25	0,25	0,25	0,50	0,25	0,00	0,25	0,25	1,00	0,75	0,50	0,50	0,50	0,25	0,00	0,00	0,00	0,25
22	1,00	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,25	1,00	0,75	0,75	0,50	0,75	0,25	0,00	0,00	0,00	0,25

i/j	75	76	77	78	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
23	1,00	0,25	0,25	0,00	0,25	0,50	0,25	0,00	0,25	0,25	0,25	0,00	0,25	0,00	1,00	0,75	0,75	0,50	0,75	0,25	0,00	0,00	0,00	0,25
24	1,00	0,25	0,25	0,25	0,75	1,00	0,50	0,50	0,50	0,75	0,50	0,25	0,25	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	0,25	0,25	0,50

i/j	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
25	1,00	0,75	0,25	0,50	1,00	0,25	0,50	0,50	0,50	0,75	1,00	0,75	0,50	0,75	0,75	1,00	0,50	0,50	0,50	0,75	1,00	0,50	0,50	0,50	0,75
26	0,50	0,50	0,25	0,25	0,50	0,25	0,00	0,25	0,25	0,25	0,75	0,25	0,00	0,00	0,25	1,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,25
27	0,25	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,50	0,00	0,00	0,25	0,50
28	0,25	0,25	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25	0,75	0,00	0,25	0,00	0,25	0,50	0,00	0,00	0,00	0,25
29	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	0,75	0,75	0,50	0,50	0,25	0,50	0,25	0,50	0,25	0,00	0,25	0,25	0,25
30	0,75	0,75	0,50	0,50	0,50	0,25	0,25	0,25	0,25	0,50	1,00	0,25	0,00	0,00	0,25	1,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,25
31	0,75	0,75	0,50	0,75	0,50	0,25	0,00	0,00	0,00	0,50	0,75	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00
32	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
33	0,50	0,50	0,25	0,25	0,50	0,00	0,00	0,25	0,00	0,25	0,75	0,25	0,00	0,00	0,25	1,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25
34	0,50	0,50	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
35	1,00	1,00	0,50	0,75	1,00	0,50	0,50	0,50	0,50	0,75	1,00	0,50	0,25	0,50	0,50	1,00	0,50	0,50	0,50	0,50	1,00	0,25	0,25	0,25	0,50
36	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25	0,50	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,25
37	0,50	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,00	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,50	0,00	0,00	0,25	0,25
38	0,50	0,50	0,25	0,25	0,50	0,00	0,00	0,25	0,00	0,25	0,75	0,25	0,00	0,00	0,25	1,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,25
39	0,50	0,50	0,25	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,00	0,25	0,25	1,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,25
40	1,00	0,75	0,50	0,50	0,75	0,25	0,25	0,25	0,25	0,50	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,00	0,00	0,50
41	0,75	0,75	0,50	0,50	0,50	0,25	0,00	0,00	0,00	0,50	0,75	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,00
42	0,50	0,50	0,25	0,25	0,50	0,00	0,00	0,25	0,00	0,25	0,75	0,25	0,00	0,00	0,25	1,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,25
43	0,50	0,50	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,00
44	0,75	0,75	0,50	0,50	0,50	0,25	0,00	0,25	0,25	0,50	0,75	0,25	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,25
45	1,00	1,00	0,75	1,00	1,00	0,50	0,50	0,50	0,50	0,75	1,00	0,75	0,50	0,75	0,75	1,00	0,50	0,50	0,50	0,50	1,00	0,50	0,50	0,25	0,75
46	0,25	0,25	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,50	0,00	0,00	0,00	0,25
47	0,50	0,50	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,00	0,25	0,25	1,00	0,25	0,25	0,25	0,25	0,75	0,00	0,00	0,00	0,25

i/j	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
48	0,25	0,25	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25
49	0,25	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,50	0,25	0,50	0,50	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25

i/j	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
25	1,00	1,00	0,50	0,50	0,50	0,50	0,25	0,25	0,50	0,25	1,00	0,50	0,50	0,50	0,50	0,75	0,25	0,50	0,25	0,50	1,00	0,50	0,50	0,50	0,50
26	1,00	1,00	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,00	0,25	0,50	0,00	0,25	0,00	0,00
27	0,50	0,25	1,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
28	0,50	0,25	0,25	1,00	0,50	0,00	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
29	0,50	0,25	0,25	0,50	1,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,25	0,25	0,00	0,25	0,50
30	0,50	0,25	0,00	0,00	0,00	1,00	0,75	0,50	0,25	0,25	0,75	0,00	0,00	0,25	0,25	0,50	0,50	0,25	0,25	0,50	0,75	0,00	0,25	0,00	0,00
31	0,25	0,25	0,00	0,00	0,00	0,75	1,00	0,50	0,25	0,25	0,75	0,00	0,00	0,25	0,25	0,50	0,50	0,25	0,25	0,50	0,75	0,00	0,25	0,00	0,00
32	0,25	0,00	0,00	0,25	0,00	0,50	0,50	1,00	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,25	0,50	0,00	0,00	0,00	0,00
33	0,50	0,00	0,00	0,00	0,00	0,25	0,25	0,25	1,00	0,25	0,50	0,00	0,00	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00
34	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,25	1,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,50	0,25	0,50	0,00	0,00	0,00	0,00
35	1,00	0,50	0,50	0,25	0,25	0,75	0,75	0,25	0,50	0,25	1,00	0,50	0,50	0,50	0,50	0,75	0,50	0,50	0,50	0,50	1,00	0,25	0,50	0,25	0,25
36	0,50	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,50	1,00	0,25	0,25	0,50	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
37	0,50	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,25	1,00	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,00
38	0,50	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,00	0,50	0,25	0,25	1,00	0,25	0,25	0,25	0,25	0,00	0,25	0,50	0,00	0,00	0,00	0,00
39	0,50	0,25	0,25	0,25	0,00	0,25	0,25	0,25	0,25	0,00	0,50	0,50	0,25	0,25	1,00	0,25	0,25	0,25	0,00	0,25	0,50	0,00	0,25	0,00	0,00
40	0,75	0,25	0,25	0,25	0,00	0,50	0,50	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	1,00	0,50	0,50	0,50	0,50	0,75	0,25	0,25	0,25	0,25
41	0,25	0,25	0,00	0,00	0,00	0,50	0,50	0,25	0,25	0,25	0,50	0,00	0,00	0,25	0,25	0,50	1,00	0,50	0,50	0,50	0,50	0,00	0,25	0,00	0,00
42	0,50	0,25	0,00	0,00	0,25	0,25	0,25	0,25	0,00	0,00	0,50	0,00	0,00	0,25	0,25	0,50	0,50	1,00	0,25	0,25	0,50	0,25	0,25	0,00	0,00
43	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,25	0,00	0,50	0,50	0,00	0,00	0,00	0,00	0,50	0,50	0,25	1,00	0,50	0,50	0,00	0,25	0,00	0,00
44	0,50	0,25	0,00	0,00	0,00	0,50	0,50	0,25	0,25	0,25	0,50	0,00	0,00	0,25	0,25	0,50	0,50	0,25	0,50	1,00	0,75	0,00	0,50	0,25	0,00
45	1,00	0,50	0,50	0,50	0,25	0,75	0,75	0,50	0,50	0,50	1,00	0,50	0,50	0,50	0,50	0,75	0,50	0,50	0,50	0,75	1,00	0,50	0,75	0,50	0,50
46	0,50	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,00	0,00	0,50	1,00	0,25	0,25	0,50
47	0,50	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,25	0,25	0,25	0,25	0,25	0,50	0,75	0,25	1,00	0,50	0,00

i/j	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
48	0,50	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,50	0,25	0,50	1,00	0,25
49	0,50	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,50	0,00	0,25	1,00

i/j	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
25	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,25	0,50	1,00	0,75	0,25	0,50	0,25	1,00	0,50	0,75	0,50	0,75	1,00	1,00	0,75	0,50	0,50
26	0,75	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,25	0,00	0,50	0,50	0,00	0,00	0,00	0,75	0,00	0,25	0,00	0,00	1,00	0,75	0,25	0,00	0,00
27	0,50	0,50	0,50	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,25	0,75	0,50	0,25	0,25	0,00
28	0,50	0,25	0,50	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,00	0,25	0,75	0,50	0,25	0,00	0,00
29	0,25	0,25	0,75	0,50	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,25	0,50	1,00	1,00	0,75	0,25	0,75	0,50
30	1,00	0,75	0,75	1,00	0,75	0,25	0,00	0,25	0,25	0,25	1,00	0,75	0,25	0,25	0,00	1,00	0,00	0,25	0,00	0,00	1,00	1,00	0,25	0,00	0,00
31	1,00	0,75	0,75	1,00	0,75	0,25	0,00	0,00	0,25	0,00	1,00	0,75	0,25	0,25	0,00	0,75	0,00	0,00	0,00	0,00	1,00	1,00	0,00	0,00	0,00
32	0,75	0,50	0,25	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,50	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	1,00	0,50	0,00	0,00	0,00
33	0,50	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,50	0,00	0,00	0,00	0,75	0,00	0,25	0,00	0,00	1,00	0,50	0,25	0,00	0,00
34	0,75	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,50	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	1,00	0,50	0,00	0,00	0,00
35	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,50	0,50	1,00	1,00	0,25	0,50	0,25	1,00	0,25	0,50	0,25	0,50	1,00	1,00	0,50	0,25	0,25
36	0,25	0,25	0,50	0,50	0,25	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,00	0,25	0,75	0,50	0,25	0,25	0,00
37	0,50	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,00	0,25	1,00	0,75	0,25	0,00	0,00
38	0,75	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,25	0,00	0,50	0,50	0,00	0,00	0,00	0,75	0,00	0,25	0,00	0,00	1,00	0,75	0,25	0,00	0,00
39	0,75	0,50	0,50	0,75	0,50	0,25	0,00	0,25	0,25	0,00	0,50	0,50	0,00	0,25	0,00	1,00	0,00	0,25	0,00	0,00	1,00	0,75	0,25	0,00	0,00
40	1,00	1,00	1,00	1,00	0,75	0,25	0,25	0,25	0,25	0,25	0,75	0,75	0,25	0,25	0,25	1,00	0,25	0,50	0,25	0,25	1,00	1,00	0,25	0,00	0,00
41	1,00	0,75	0,50	1,00	0,75	0,25	0,00	0,00	0,25	0,00	0,75	0,75	0,25	0,00	0,00	0,75	0,00	0,00	0,00	0,00	1,00	0,75	0,00	0,00	0,00
42	0,75	0,50	0,50	1,00	0,50	0,00	0,00	0,00	0,25	0,00	0,50	0,50	0,00	0,00	0,00	0,75	0,00	0,25	0,00	0,00	1,00	0,75	0,00	0,00	0,00
43	0,75	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,75	0,50	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	1,00	0,75	0,00	0,00	0,00
44	1,00	0,75	0,50	1,00	0,75	0,25	0,00	0,25	0,25	0,25	0,75	0,75	0,25	0,25	0,00	0,75	0,00	0,25	0,00	0,00	1,00	0,75	0,00	0,00	0,00
45	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,50	0,50	1,00	1,00	0,50	0,50	0,50	1,00	0,50	0,75	0,50	0,50	1,00	1,00	0,75	0,50	0,25
46	0,50	0,25	0,75	0,75	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,25	0,75	0,50	0,25	0,25	0,25
47	0,75	0,50	0,50	0,75	0,50	0,25	0,00	0,25	0,25	0,00	0,50	0,50	0,00	0,00	0,00	1,00	0,00	0,25	0,00	0,25	1,00	0,75	0,25	0,00	0,00

| 48 | 0,50 | 0,25 | 0,50 | 0,50 | 0,25 | 0,00 | 0,00 | 0,25 | 0,00 | 0,00 | 0,25 | 0,25 | 0,00 | 0,00 | 0,00 | 1,00 | 0,00 | 0,25 | 0,25 | 0,25 | 0,75 | 0,50 | 0,25 | 0,25 | 0,25 |
| 49 | 0,25 | 0,25 | 0,50 | 0,50 | 0,25 | 0,25 | 0,25 | 0,25 | 0,00 | 0,00 | 0,25 | 0,00 | 0,00 | 0,00 | 0,00 | 1,00 | 0,00 | 0,25 | 0,25 | 0,50 | 0,75 | 0,50 | 0,25 | 0,25 | 0,25 |

i/j	75	76	77	78	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
25	1,00	0,50	0,50	0,50	1,00	1,00	0,75	0,75	0,75	1,00	0,75	0,50	0,75	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,75
26	1,00	0,00	0,00	0,00	0,75	0,75	0,25	0,25	0,25	0,75	0,25	0,25	0,00	0,00	1,00	1,00	0,50	0,50	0,75	0,25	0,25	0,25	0,25	0,25
27	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	0,75	0,75	0,50	0,75	0,25	0,25	0,25	0,25	0,25
28	1,00	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,50	0,25	0,00	0,25	0,00	1,00	0,75	0,75	0,50	0,75	0,25	0,00	0,00	0,00	0,25
29	1,00	0,50	0,50	0,25	0,00	0,50	0,25	0,00	0,25	0,25	0,00	0,00	0,25	0,25	1,00	1,00	1,00	0,50	1,00	0,00	0,00	0,00	0,00	0,25
30	1,00	0,00	0,00	0,00	1,00	1,00	0,25	0,50	0,25	1,00	0,25	0,25	0,00	0,25	1,00	1,00	0,50	0,75	1,00	0,50	0,25	0,25	0,25	0,25
31	0,75	0,00	0,00	0,00	1,00	1,00	0,25	0,50	0,25	1,00	0,25	0,25	0,00	0,00	1,00	1,00	0,25	0,50	0,75	0,25	0,25	0,25	0,25	0,25
32	0,50	0,00	0,00	0,00	0,50	0,75	0,00	0,25	0,00	0,50	0,25	0,25	0,00	0,00	1,00	0,75	0,25	0,50	0,50	0,25	0,00	0,00	0,00	0,00
33	1,00	0,00	0,00	0,00	0,75	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,00	0,00	1,00	1,00	0,50	0,50	0,75	0,25	0,00	0,25	0,25	0,25
34	0,50	0,00	0,00	0,00	0,75	0,75	0,00	0,25	0,25	0,75	0,25	0,25	0,00	0,00	1,00	0,75	0,25	0,50	0,50	0,25	0,00	0,00	0,00	0,00
35	1,00	0,50	0,50	0,50	1,00	1,00	0,50	0,75	0,75	1,00	0,75	0,50	0,50	0,50	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,75
36	1,00	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,00	1,00	0,75	0,75	0,50	0,75	0,25	0,00	0,00	0,00	0,25
37	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	1,00	0,75	0,50	0,75	0,25	0,25	0,25	0,25	0,25
38	1,00	0,00	0,00	0,00	0,75	0,75	0,25	0,25	0,25	0,75	0,25	0,25	0,00	0,00	1,00	1,00	0,50	0,50	0,75	0,25	0,25	0,25	0,25	0,25
39	1,00	0,00	0,00	0,00	0,75	0,75	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	1,00	1,00	0,75	0,75	0,75	0,50	0,25	0,25	0,25	0,25
40	1,00	0,25	0,25	0,25	1,00	1,00	0,25	0,50	0,50	1,00	0,50	0,50	0,25	0,25	1,00	1,00	1,00	1,00	1,00	0,50	0,25	0,25	0,50	0,50
41	0,75	0,00	0,00	0,00	1,00	1,00	0,25	0,25	0,25	1,00	0,25	0,25	0,00	0,00	1,00	1,00	0,25	0,50	0,75	0,25	0,25	0,25	0,25	0,25
42	1,00	0,00	0,00	0,00	0,75	0,75	0,25	0,25	0,25	0,75	0,25	0,25	0,00	0,00	1,00	1,00	0,50	0,50	0,75	0,25	0,25	0,25	0,25	0,25
43	0,50	0,00	0,00	0,00	0,75	0,75	0,00	0,25	0,25	0,75	0,00	0,25	0,00	0,00	1,00	0,75	0,25	0,25	0,50	0,25	0,00	0,00	0,00	0,00
44	1,00	0,00	0,00	0,00	1,00	1,00	0,25	0,50	0,25	1,00	0,25	0,25	0,00	0,00	1,00	1,00	0,50	0,50	0,75	0,50	0,25	0,25	0,25	0,25
45	1,00	0,50	0,50	0,50	1,00	1,00	0,75	0,75	0,75	1,00	1,00	0,75	0,50	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,75	0,75
46	1,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,50	0,25	0,00	0,25	0,25	1,00	0,75	0,75	0,50	0,75	0,25	0,00	0,25	0,25	0,25
47	1,00	0,25	0,00	0,25	0,50	0,75	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	1,00	1,00	0,75	0,75	0,75	0,50	0,25	0,25	0,25	0,25
48	1,00	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,25	1,00	0,75	0,75	0,50	0,75	0,25	0,00	0,00	0,00	0,25
49	1,00	0,25	0,25	0,00	0,25	0,50	0,25	0,00	0,25	0,25	0,25	0,00	0,25	0,25	1,00	0,75	0,75	0,50	1,00	0,25	0,00	0,00	0,00	0,25

i/j	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
50	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,75	0,50	1,00	1,00	0,75	0,25	0,50	0,75	1,00	0,50	0,50	0,50	0,50	1,00	0,50	0,25	0,25	0,75
51	1,00	1,00	0,75	1,00	1,00	0,50	0,50	0,50	0,50	0,75	1,00	0,50	0,25	0,50	0,50	1,00	0,50	0,50	0,50	0,50	1,00	0,25	0,25	0,25	0,75
52	1,00	1,00	0,50	0,75	1,00	0,50	0,75	0,75	0,75	0,75	1,00	0,75	0,75	1,00	1,00	1,00	0,75	0,75	0,75	0,75	1,00	0,50	0,50	0,50	0,75
53	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75	1,00	1,00	0,75	0,50	0,75	1,00	1,00	0,75	0,75	0,75	0,75	1,00	0,50	0,50	0,50	1,00
54	1,00	1,00	0,75	1,00	1,00	0,50	0,50	0,50	0,50	0,75	1,00	0,50	0,25	0,50	0,50	1,00	0,50	0,50	0,50	0,50	1,00	0,25	0,25	0,25	0,75
55	0,50	0,50	0,25	0,25	0,50	0,00	0,25	0,25	0,00	0,25	0,75	0,25	0,00	0,25	0,25	0,75	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25
56	0,25	0,25	0,00	0,00	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,50	0,00	0,00	0,00	0,25
57	0,50	0,50	0,00	0,25	0,50	0,00	0,25	0,25	0,00	0,25	0,75	0,25	0,00	0,25	0,25	1,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25
58	0,50	0,50	0,25	0,50	0,50	0,25	0,00	0,25	0,00	0,25	0,75	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,25
59	0,50	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,50	0,25	0,00	0,00	0,25	0,75	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25
60	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,75	1,00	0,50	0,25	0,25	0,50	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,00	0,50
61	1,00	1,00	0,75	1,00	1,00	0,50	0,25	0,50	0,25	0,75	1,00	0,50	0,00	0,25	0,25	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,00	0,00	0,50
62	0,50	0,50	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00	1,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
63	0,50	0,50	0,25	0,25	0,50	0,00	0,00	0,25	0,00	0,25	0,75	0,25	0,00	0,00	0,25	1,00	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,25
64	0,50	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00	0,75	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25
65	1,00	1,00	0,75	1,00	1,00	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00
66	0,25	0,25	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,25	0,50	0,25	0,00	0,25	0,25	0,75	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25
67	0,50	0,50	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,50	0,50	1,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,50
68	0,25	0,25	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,25	0,50	0,25	0,50	0,50	0,25	0,75	0,25	0,25	0,25	0,50	0,25	0,00	0,25	0,25	0,25
69	0,25	0,00	0,00	0,00	0,50	0,00	0,25	0,25	0,25	0,25	1,00	0,50	0,75	0,75	0,50	1,00	0,50	0,50	0,25	0,75	0,50	0,25	0,25	0,25	0,50
70	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00
71	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75	1,00	1,00	0,75	0,75	1,00	1,00	1,00	0,75	0,75	0,75	0,75	1,00	0,50	0,50	0,50	1,00
72	0,50	0,50	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,50	0,50	1,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,50
73	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,00	0,75	0,25	0,50	0,50	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,00	0,25	0,25	0,25
74	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	0,50	0,50	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,25	0,25

i/j	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
50	1,00	0,75	0,50	0,50	0,25	1,00	1,00	0,75	0,50	0,75	1,00	0,25	0,50	0,75	0,75	1,00	1,00	0,75	0,75	1,00	1,00	0,50	0,75	0,50	0,25
51	1,00	0,50	0,50	0,25	0,25	0,75	0,75	0,50	0,50	0,50	1,00	0,25	0,50	0,50	0,50	1,00	0,75	0,50	0,50	0,75	1,00	0,25	0,50	0,25	0,25
52	1,00	0,50	0,50	0,50	0,75	0,75	0,75	0,25	0,50	0,50	1,00	0,50	0,50	0,50	0,50	1,00	0,50	0,50	0,50	0,50	1,00	0,75	0,50	0,50	0,50
53	1,00	0,75	0,75	0,50	0,50	1,00	1,00	0,75	0,75	0,75	1,00	0,50	0,75	0,75	0,75	1,00	1,00	1,00	0,75	1,00	1,00	0,75	0,75	0,50	0,50
54	1,00	0,50	0,50	0,25	0,25	0,75	0,75	0,50	0,50	0,50	1,00	0,25	0,50	0,50	0,50	0,75	0,75	0,50	0,50	0,75	1,00	0,25	0,50	0,25	0,25
55	0,50	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25	0,25	0,25	0,00	0,00	0,25	0,50	0,25	0,25	0,00	0,25
56	0,50	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,00	0,00	0,25
57	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,50	0,25	0,25	0,25	0,25
58	0,25	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,50	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,50	0,00	0,25	0,00	0,00
59	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00
60	1,00	0,50	0,25	0,25	0,00	1,00	1,00	0,50	0,50	0,50	1,00	0,25	0,50	0,50	0,50	0,75	0,75	0,50	0,75	0,75	1,00	0,25	0,50	0,25	0,25
61	0,75	0,50	0,25	0,25	0,00	0,75	0,75	0,50	0,50	0,50	1,00	0,25	0,25	0,50	0,50	0,75	0,75	0,50	0,50	0,75	1,00	0,25	0,50	0,25	0,00
62	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00
63	0,50	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,25	0,50	0,00	0,00	0,00	0,00
64	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
65	1,00	0,75	1,00	1,00	1,00	1,00	0,75	0,50	0,75	0,50	1,00	1,00	1,00	0,75	1,00	1,00	0,75	0,75	0,50	0,75	1,00	1,00	1,00	1,00	1,00
66	0,50	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00
67	0,75	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,00	0,50	0,25	0,25	0,25	0,25	0,50	0,00	0,25	0,00	0,25	0,75	0,25	0,25	0,25	0,25
68	0,50	0,00	0,25	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,00	0,25	0,25
69	0,75	0,00	0,25	0,25	1,00	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,50
70	1,00	1,00	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,75	0,75
71	1,00	0,75	0,50	0,50	0,75	1,00	1,00	0,50	0,50	0,50	1,00	0,50	0,75	0,75	0,75	1,00	0,75	0,75	0,75	0,75	1,00	0,50	0,75	0,50	0,50
72	0,75	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,25	0,00	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,75	0,25	0,25	0,25	0,25
73	0,50	0,00	0,25	0,00	0,75	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,00	0,25	0,25
74	0,50	0,00	0,00	0,00	0,50	0,00	0,00	0,00	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,25	0,25

i/j	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
50	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,50	0,75	0,50	1,00	1,00	0,75	0,75	0,50	1,00	0,50	0,75	0,25	0,50	1,00	1,00	0,75	0,25	0,25
51	1,00	1,00	1,00	1,00	0,75	0,75	0,50	0,50	0,75	0,50	1,00	1,00	0,50	0,50	0,50	1,00	0,50	0,75	0,25	0,50	1,00	1,00	0,50	0,25	0,25
52	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,50	0,75	0,50	1,00	1,00	0,50	0,50	0,50	1,00	0,50	0,75	0,50	1,00	1,00	1,00	0,75	0,75	0,50
53	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	1,00	0,75	1,00	1,00	0,75	0,75	0,75	1,00	0,75	1,00	0,50	0,75	1,00	1,00	1,00	0,50	0,50
54	1,00	0,75	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,50	1,00	1,00	0,50	0,50	0,50	1,00	0,50	0,75	0,25	0,50	1,00	1,00	0,50	0,25	0,25
55	0,75	0,75	0,75	1,00	0,75	1,00	0,25	0,25	0,25	0,25	0,50	0,50	0,00	0,25	0,00	1,00	0,00	0,25	0,00	0,00	1,00	0,50	0,25	0,00	0,00
56	0,50	0,50	0,50	0,75	0,50	0,25	1,00	0,00	0,25	0,25	0,25	0,25	0,00	0,50	0,00	1,00	0,00	0,25	0,25	0,25	0,75	0,75	0,25	0,25	0,25
57	0,50	0,50	0,50	0,75	0,50	0,25	0,00	1,00	0,25	0,00	0,50	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,00	0,00	1,00	0,75	0,25	0,00	0,00
58	0,75	0,75	0,75	1,00	0,50	0,25	0,25	0,25	1,00	0,25	0,75	0,50	0,00	0,25	0,00	0,75	0,00	0,00	0,00	0,00	1,00	0,75	0,00	0,00	0,00
59	0,50	0,50	0,50	0,75	0,50	0,25	0,25	0,00	0,25	1,00	0,50	0,25	0,00	0,00	0,00	0,75	0,00	0,25	0,25	0,00	1,00	0,50	0,25	0,00	0,00
60	1,00	1,00	1,00	1,00	1,00	0,50	0,25	0,50	0,75	0,50	1,00	0,75	0,50	0,50	0,50	1,00	0,25	0,50	0,25	0,25	1,00	1,00	0,50	0,00	0,00
61	1,00	1,00	1,00	1,00	1,00	0,50	0,25	0,25	0,50	0,25	0,75	1,00	0,50	0,50	0,50	1,00	0,25	0,50	0,25	0,25	1,00	1,00	0,50	0,00	0,00
62	0,75	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,50	1,00	0,25	0,25	0,50	0,00	0,00	0,00	0,00	1,00	0,50	0,00	0,00	0,00
63	0,75	0,50	0,50	0,75	0,50	0,25	0,50	0,00	0,25	0,00	0,50	0,50	0,25	1,00	0,25	0,75	0,00	0,25	0,00	0,00	1,00	0,75	0,25	0,00	0,00
64	0,50	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,50	0,25	0,25	1,00	0,75	0,25	0,25	0,00	0,00	0,75	0,50	0,00	0,00	0,00
65	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	1,00	1,00	0,50	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
66	0,50	0,50	0,50	0,75	0,50	0,00	0,00	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,25	1,00	1,00	0,25	0,25	0,50	0,75	0,50	0,25	0,00	0,00
67	0,75	0,75	0,75	1,00	0,75	0,25	0,25	0,25	0,00	0,25	0,50	0,50	0,00	0,25	0,25	1,00	0,25	1,00	0,50	0,25	1,00	1,00	0,25	0,25	0,25
68	0,25	0,25	0,50	0,50	0,25	0,00	0,25	0,00	0,00	0,25	0,25	0,25	0,00	0,00	0,00	1,00	0,25	0,50	1,00	0,50	0,75	0,75	0,25	0,50	0,25
69	0,50	0,50	1,00	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,50	0,25	0,50	1,00	1,00	1,00	0,50	0,75	0,50
70	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,75	1,00	0,75	1,00	1,00	1,00	1,00	1,00	0,75
71	1,00	1,00	1,00	1,00	1,00	0,50	0,75	0,75	0,75	0,50	1,00	1,00	0,50	0,75	0,50	1,00	0,50	1,00	0,75	1,00	1,00	1,00	1,00	0,75	0,75
72	0,75	0,50	0,75	1,00	0,50	0,25	0,25	0,25	0,00	0,25	0,50	0,50	0,00	0,25	0,00	1,00	0,25	0,25	0,25	0,50	1,00	1,00	1,00	0,50	0,25
73	0,25	0,25	0,75	0,50	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,25	0,50	0,75	1,00	0,75	0,50	1,00	0,50
74	0,25	0,25	0,50	0,50	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,50	0,75	0,75	0,25	0,50	1,00

i/j	75	76	77	78	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
50	1,00	0,50	0,50	0,50	1,00	1,00	0,75	1,00	0,75	1,00	1,00	0,75	0,50	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75
51	1,00	0,50	0,50	0,50	1,00	1,00	0,50	0,75	0,75	1,00	0,75	0,75	0,50	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,75
52	1,00	0,75	0,75	0,75	1,00	1,00	0,75	0,75	1,00	1,00	1,00	0,75	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00
53	1,00	0,75	0,75	0,75	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	1,00	1,00
54	1,00	0,50	0,50	0,50	1,00	1,00	0,50	0,75	0,75	1,00	0,75	0,75	0,50	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,75
55	1,00	0,00	0,00	0,00	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	1,00	0,75	0,50	0,75	0,25	0,25	0,25	0,25	0,25
56	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	0,75	0,75	0,50	0,75	0,25	0,25	0,00	0,25	0,25
57	1,00	0,00	0,00	0,00	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	1,00	0,75	0,50	0,75	0,25	0,25	0,25	0,25	0,25
58	1,00	0,00	0,00	0,00	0,75	0,75	0,25	0,25	0,25	0,75	0,25	0,25	0,00	0,00	1,00	1,00	0,50	0,50	0,75	0,25	0,25	0,25	0,25	0,25
59	1,00	0,00	0,00	0,00	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,00	0,00	1,00	0,75	0,50	0,50	0,50	0,25	0,00	0,00	0,25	0,25
60	1,00	0,25	0,25	0,25	1,00	1,00	0,50	0,75	0,50	1,00	0,75	0,75	0,50	0,50	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,50
61	1,00	0,25	0,25	0,25	1,00	1,00	0,50	0,75	0,50	1,00	0,75	0,50	0,25	0,25	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,50	0,50	0,50
62	0,50	0,00	0,00	0,00	0,75	0,75	0,00	0,25	0,25	0,75	0,25	0,25	0,25	0,00	1,00	0,75	0,25	0,50	0,50	0,25	0,00	0,00	0,25	0,00
63	1,00	0,00	0,00	0,00	0,75	0,75	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,00	1,00	1,00	0,50	0,50	0,50	0,25	0,25	0,25	0,25	0,25
64	1,00	0,00	0,00	0,00	0,50	0,75	0,00	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	0,75	0,50	0,50	0,50	0,25	0,00	0,00	0,00	0,25
65	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
66	1,00	0,00	0,00	0,00	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,00	0,25	0,25	1,00	0,75	0,75	0,50	0,75	0,25	0,00	0,00	0,00	0,25
67	1,00	0,25	0,25	0,25	0,75	1,00	0,25	0,50	0,50	0,75	0,50	0,25	0,25	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	0,25	0,25	0,50
68	1,00	0,25	0,50	0,25	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,25	1,00	0,75	1,00	0,50	1,00	0,25	0,00	0,00	0,00	0,25
69	1,00	0,50	0,75	0,25	0,25	0,75	0,50	0,25	0,50	0,50	0,25	0,00	0,50	0,25	1,00	1,00	1,00	0,75	1,00	0,25	0,25	0,00	0,25	0,50
70	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
71	1,00	0,75	0,75	0,75	1,00	1,00	0,75	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00
72	1,00	0,25	0,25	0,25	0,50	1,00	0,25	0,25	0,50	0,75	0,50	0,25	0,25	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	0,25	0,25	0,50
73	1,00	0,50	0,50	0,25	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,25	1,00	1,00	1,00	0,50	1,00	0,25	0,00	0,00	0,00	0,25
74	1,00	0,25	0,25	0,25	0,25	0,50	0,25	0,00	0,25	0,25	0,25	0,00	0,25	0,25	1,00	0,75	0,75	0,50	1,00	0,25	0,00	0,00	0,00	0,25

i/j	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
75	1,00	1,00	0,75	1,00	1,00	0,25	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
76	0,25	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,50	0,50	0,50	0,75	0,25	0,25	0,25	0,50	0,50	0,00	0,25	0,25	0,25
77	0,25	0,00	0,00	0,00	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,50	0,50	0,50	0,75	0,25	0,50	0,25	0,50	0,50	0,00	0,25	0,25	0,25
78	0,25	0,25	0,00	0,00	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,50	0,00	0,00	0,00	0,25
80	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,75	0,50	1,00	1,00	0,50	0,25	0,50	0,50	1,00	0,50	0,25	0,50	0,25	1,00	0,50	0,25	0,25	0,75
81	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75	1,00	1,00	0,75	0,75	1,00	1,00	1,00	0,75	0,75	0,75	0,75	1,00	0,50	0,50	0,50	1,00
82	0,50	0,50	0,25	0,25	0,50	0,00	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,50	0,50	1,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,50
83	0,75	0,75	0,50	0,50	0,75	0,25	0,25	0,25	0,25	0,50	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,00	0,50
84	0,50	0,50	0,25	0,25	0,50	0,25	0,25	0,25	0,25	0,50	1,00	0,50	0,50	0,50	0,50	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50
85	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,75	0,50	1,00	1,00	0,75	0,25	0,50	0,75	1,00	0,50	0,50	0,50	0,50	1,00	0,50	0,25	0,25	0,75
86	0,75	0,75	0,25	0,50	0,75	0,00	0,50	0,50	0,25	0,50	1,00	0,50	0,25	0,50	0,50	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,25	0,50
87	0,75	0,75	0,25	0,50	0,50	0,25	0,25	0,25	0,25	0,50	0,75	0,25	0,00	0,25	0,25	1,00	0,25	0,25	0,25	0,00	0,75	0,00	0,00	0,00	0,25
88	0,50	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,50	0,50	1,00	0,25	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25
89	0,50	0,25	0,00	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,25	0,25	0,50	0,00	0,25	0,00	0,25
90	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
91	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00	0,75	0,75	0,75	1,00
92	1,00	1,00	0,25	0,75	1,00	0,25	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,75	0,75	1,00
93	1,00	1,00	0,50	0,75	1,00	0,25	0,75	0,75	0,50	1,00	1,00	0,75	0,75	0,75	0,75	1,00	0,50	0,50	0,75	0,75	1,00	0,50	0,50	0,50	0,75
94	1,00	1,00	0,75	1,00	1,00	0,50	0,75	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,75	1,00	1,00	0,50	0,75	0,75	1,00
95	0,75	0,75	0,50	0,50	0,75	0,25	0,50	0,50	0,25	0,50	1,00	0,50	0,25	0,50	0,50	1,00	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,25	0,50
96	0,50	0,50	0,25	0,25	0,50	0,25	0,25	0,25	0,25	0,25	0,75	0,25	0,00	0,25	0,25	1,00	0,25	0,25	0,25	0,25	0,75	0,00	0,00	0,00	0,25
97	0,50	0,50	0,25	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,00	0,25	0,25	1,00	0,25	0,25	0,25	0,25	0,75	0,00	0,00	0,00	0,25
98	0,50	0,50	0,25	0,25	0,50	0,00	0,25	0,25	0,25	0,25	0,75	0,25	0,00	0,25	0,25	1,00	0,25	0,25	0,25	0,25	0,75	0,00	0,00	0,00	0,25
99	0,50	0,50	0,00	0,25	0,75	0,00	0,25	0,25	0,25	0,50	1,00	0,50	0,25	0,50	0,50	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,50

i/j	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
75	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,50	1,00	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,50	1,00	1,00	1,00	1,00	1,00	1,00
76	0,50	0,00	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25
77	0,50	0,00	0,25	0,25	0,50	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,00	0,25	0,25
78	0,50	0,00	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,00	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,00	0,00
80	1,00	0,75	0,50	0,25	0,00	1,00	1,00	0,50	0,75	0,75	1,00	0,25	0,50	0,75	0,75	1,00	1,00	0,75	0,75	1,00	1,00	0,25	0,50	0,25	0,25
81	1,00	0,75	0,75	0,50	0,50	1,00	1,00	0,75	0,75	0,75	1,00	0,50	0,75	0,75	0,75	1,00	1,00	0,75	0,75	1,00	1,00	0,75	0,75	0,50	0,50
82	0,75	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,00	0,50	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,75	0,25	0,25	0,25	0,25
83	0,75	0,25	0,25	0,25	0,00	0,50	0,50	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,25	0,00
84	0,75	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25
85	1,00	0,75	0,50	0,50	0,25	1,00	1,00	0,50	0,50	0,75	1,00	0,25	0,50	0,75	0,75	1,00	1,00	0,75	0,75	1,00	1,00	0,50	0,75	0,25	0,25
86	0,75	0,25	0,25	0,25	0,00	0,25	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	0,50	0,25	0,25	0,00	0,25	1,00	0,25	0,25	0,25	0,25
87	0,50	0,25	0,25	0,00	0,00	0,25	0,25	0,25	0,25	0,25	0,50	0,00	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	0,75	0,00	0,25	0,00	0,00
88	0,75	0,00	0,25	0,25	0,25	0,00	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25
89	0,50	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,00	0,25	0,00	0,25	0,25	0,00	0,00	0,00	0,00	0,50	0,25	0,25	0,25	0,25
90	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
91	1,00	1,00	0,75	0,75	1,00	1,00	1,00	0,75	1,00	0,75	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	0,75	1,00	0,75	0,75
92	1,00	0,50	0,75	0,75	1,00	0,50	0,25	0,25	0,50	0,25	1,00	0,75	0,75	0,50	0,75	1,00	0,25	0,50	0,25	0,50	1,00	0,75	0,75	0,75	0,75
93	1,00	0,50	0,50	0,50	0,50	0,75	0,50	0,50	0,50	0,50	1,00	0,50	0,50	0,50	0,75	1,00	0,50	0,50	0,25	0,50	1,00	0,50	0,75	0,50	0,50
94	1,00	0,75	0,75	0,75	1,00	1,00	0,75	0,50	0,75	0,50	1,00	0,75	0,75	0,75	0,75	1,00	0,75	0,75	0,50	0,75	1,00	0,75	0,75	0,75	1,00
95	1,00	0,25	0,25	0,25	0,00	0,50	0,25	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,50	0,50	0,25	0,25	0,25	0,50	1,00	0,25	0,50	0,25	0,25
96	0,50	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,00	0,00	0,50	0,00	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,50	0,00	0,25	0,00	0,00
97	0,50	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,25	0,00	0,50	0,00	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,50	0,25	0,25	0,00	0,00
98	0,50	0,25	0,25	0,00	0,00	0,25	0,25	0,00	0,25	0,00	0,50	0,00	0,25	0,25	0,25	0,50	0,25	0,25	0,00	0,25	0,75	0,25	0,25	0,00	0,00
99	0,75	0,25	0,25	0,25	0,25	0,25	0,25	0,00	0,25	0,00	0,75	0,25	0,25	0,25	0,25	0,50	0,25	0,25	0,00	0,25	0,75	0,25	0,25	0,25	0,25

i/j	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,50	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00

i/j	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
76	0,50	0,50	0,75	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,50	1,00	0,75	0,25	0,50	0,25
77	0,50	0,50	0,75	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,50	0,75	1,00	0,75	0,25	0,50	0,25
78	0,50	0,50	0,75	0,75	0,50	0,00	0,25	0,00	0,00	0,00	0,25	0,25	0,00	0,00	0,00	1,00	0,00	0,25	0,25	0,25	1,00	0,75	0,25	0,25	0,25
80	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,75	0,50	1,00	1,00	0,75	0,75	0,50	1,00	0,50	0,75	0,25	0,25	1,00	1,00	0,50	0,25	0,25
81	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75	0,75	1,00	1,00	0,75	0,75	0,75	1,00	0,75	1,00	0,50	0,75	1,00	1,00	1,00	0,50	0,50
82	0,75	0,50	0,75	0,75	0,50	0,25	0,25	0,25	0,25	0,25	0,50	0,50	0,00	0,25	0,00	1,00	0,25	0,25	0,25	0,50	1,00	0,75	0,25	0,25	0,25
83	1,00	0,75	0,75	1,00	0,75	0,25	0,25	0,25	0,25	0,25	0,75	0,75	0,25	0,25	0,25	1,00	0,25	0,50	0,25	0,25	1,00	1,00	0,25	0,25	0,00
84	0,75	0,75	1,00	1,00	0,75	0,25	0,25	0,25	0,25	0,25	0,50	0,50	0,25	0,25	0,25	1,00	0,25	0,50	0,25	0,50	1,00	1,00	0,50	0,25	0,25
85	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,75	0,50	1,00	1,00	0,75	0,75	0,50	1,00	0,50	0,75	0,25	0,50	1,00	1,00	0,75	0,25	0,25
86	1,00	0,75	1,00	1,00	0,75	0,25	0,25	0,25	0,25	0,25	0,75	0,75	0,25	0,25	0,25	1,00	0,25	0,50	0,25	0,25	1,00	1,00	0,50	0,25	0,25
87	0,75	0,75	0,75	1,00	0,75	0,25	0,25	0,25	0,25	0,25	0,75	0,50	0,25	0,25	0,25	1,00	0,00	0,25	0,00	0,00	1,00	0,75	0,25	0,00	0,00
88	0,50	0,50	0,75	0,75	0,50	0,25	0,25	0,25	0,00	0,00	0,50	0,25	0,25	0,25	0,25	1,00	0,25	0,25	0,25	0,50	1,00	0,75	0,25	0,25	0,25
89	0,50	0,50	0,75	0,75	0,50	0,25	0,25	0,25	0,00	0,00	0,50	0,25	0,00	0,00	0,25	1,00	0,25	0,25	0,25	0,25	1,00	0,75	0,25	0,25	0,25
90	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
91	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	0,75	1,00	1,00	0,75	1,00	0,75	1,00	0,75	1,00	0,75	1,00	1,00	1,00	1,00	1,00	0,75
92	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,50	0,50	1,00	1,00	0,25	0,50	0,50	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75
93	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,50	0,50	1,00	1,00	0,50	0,50	0,50	1,00	0,50	0,75	0,50	0,75	1,00	1,00	0,75	0,50	0,50
94	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75	0,50	1,00	1,00	0,50	0,50	0,50	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
95	1,00	1,00	1,00	1,00	1,00	0,25	0,25	0,25	0,25	0,25	0,75	0,75	0,25	0,25	0,25	1,00	0,25	0,50	0,25	0,25	1,00	1,00	0,50	0,25	0,25
96	0,75	0,50	0,75	0,75	0,50	0,25	0,25	0,25	0,25	0,00	0,50	0,50	0,00	0,25	0,00	1,00	0,00	0,25	0,00	0,25	1,00	0,75	0,25	0,00	0,00
97	0,75	0,50	0,75	0,75	0,50	0,25	0,00	0,25	0,25	0,00	0,50	0,50	0,00	0,25	0,00	1,00	0,00	0,25	0,00	0,00	1,00	0,75	0,25	0,00	0,00
98	0,75	0,50	0,75	1,00	0,50	0,25	0,25	0,25	0,25	0,25	0,50	0,50	0,25	0,25	0,00	1,00	0,00	0,25	0,00	0,25	1,00	0,75	0,25	0,00	0,00
99	0,75	0,75	1,00	1,00	0,75	0,25	0,25	0,25	0,25	0,25	0,50	0,50	0,00	0,25	0,25	1,00	0,25	0,50	0,25	0,50	1,00	1,00	0,50	0,25	0,25

i/j	75	76	77	78	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
76	1,00	1,00	0,50	0,25	0,50	0,75	0,25	0,25	0,50	0,50	0,25	0,25	0,25	0,25	1,00	1,00	1,00	0,75	1,00	0,25	0,25	0,25	0,25	0,25

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i/j	75	76	77	78	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
77	1,00	0,50	1,00	0,25	0,25	0,75	0,25	0,25	0,50	0,50	0,25	0,00	0,25	0,50	1,00	1,00	1,00	0,75	1,00	0,25	0,25	0,00	0,25	0,25
78	1,00	0,25	0,25	1,00	0,50	0,75	0,25	0,25	0,25	0,50	0,25	0,25	0,25	0,25	1,00	1,00	0,75	0,75	0,75	0,25	0,25	0,25	0,25	0,25
80	1,00	0,50	0,25	0,50	1,00	1,00	0,50	1,00	0,75	1,00	1,00	1,00	0,50	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75
81	1,00	0,75	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	1,00	1,00
82	1,00	0,25	0,25	0,25	0,50	1,00	1,00	0,50	0,50	0,75	0,50	0,25	0,25	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	0,25	0,25	0,50
83	1,00	0,25	0,25	0,25	1,00	1,00	0,50	1,00	0,50	1,00	0,50	0,50	0,25	0,25	1,00	1,00	1,00	1,00	1,00	0,50	0,25	0,25	0,25	0,50
84	1,00	0,50	0,50	0,25	0,75	1,00	0,50	0,50	1,00	0,75	0,50	0,25	0,50	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	0,25	0,25	0,50
85	1,00	0,50	0,50	0,50	1,00	1,00	0,75	1,00	0,75	1,00	0,75	0,75	0,75	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	0,75
86	1,00	0,25	0,25	0,25	1,00	1,00	0,50	0,50	0,50	0,75	1,00	0,50	0,50	0,50	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,25	0,50	0,50
87	1,00	0,25	0,00	0,25	1,00	1,00	0,25	0,50	0,25	0,75	0,50	1,00	0,25	0,25	1,00	1,00	0,75	0,75	0,75	0,50	0,25	0,25	0,25	0,25
88	1,00	0,25	0,25	0,25	0,50	0,75	0,25	0,25	0,50	0,75	0,50	0,25	1,00	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	0,25	0,25	0,50
89	1,00	0,25	0,50	0,25	0,50	0,75	0,25	0,25	0,25	0,50	0,50	0,25	0,25	1,00	1,00	1,00	1,00	0,75	0,75	0,50	0,25	0,25	0,25	0,25
90	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
91	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
92	1,00	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,75	1,00
93	1,00	0,75	0,75	0,75	1,00	1,00	0,75	1,00	0,75	1,00	1,00	0,75	0,75	0,75	1,00	1,00	1,00	1,00	1,00	1,00	0,75	0,75	0,75	1,00
94	1,00	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	0,75	1,00
95	1,00	0,25	0,25	0,25	1,00	1,00	0,50	0,50	0,50	1,00	0,75	0,50	0,50	0,50	1,00	1,00	1,00	1,00	1,00	1,00	0,50	0,50	0,50	0,75
96	1,00	0,25	0,25	0,25	0,75	0,75	0,25	0,25	0,25	0,75	0,50	0,25	0,25	0,25	1,00	1,00	0,75	0,75	0,75	0,50	1,00	0,25	0,25	0,50
97	1,00	0,25	0,00	0,25	0,75	0,75	0,25	0,25	0,25	0,75	0,25	0,25	0,25	0,25	1,00	1,00	1,00	0,75	1,00	0,50	0,25	1,00	0,25	0,25
98	1,00	0,25	0,25	0,25	0,75	1,00	0,25	0,25	0,25	0,75	0,50	0,25	0,25	0,25	1,00	1,00	0,75	0,75	0,75	0,50	0,25	0,25	1,00	0,50
99	1,00	0,25	0,25	0,25	0,75	1,00	0,50	0,50	0,50	0,75	0,50	0,25	0,50	0,25	1,00	1,00	1,00	1,00	1,00	0,75	0,50	0,25	0,50	1,00'

ANNEX XVIII

Annex XXVI to Delegated Regulation (EU) 2015/35 is amended as follows:

(1) the first sentence is replaced by the following:

'The correlation parameter Corr$_{(subsidence,i,j)}$ referred to in Article 125(2) for region *r* shall be equal to the item set out in row i and in column j of the following correlation matrices.';

(2) the following section is added:

'Correlation coefficients for subsidence risk in the Kingdom of Belgium

i/j	1	2	3	4	5	6	7	8	9
1	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
2	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
3	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
4	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
5	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
6	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
7	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
8	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
9	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00'