



PRISM Explained -
How the Central Bank of Ireland is
Implementing Risk-Based Regulation

February 2016

Why we introduced risk-based supervision

We intend to supervise all financial firms in a way which makes it materially less likely that they will, collectively or individually, fail in a way which endangers financial stability or consumers. We see systematic risk-based supervision as offering the best route to that goal.

Much hard work has already been done and much has changed in the wake of the financial crisis and the ensuing Honohan and Nyberg reports. We appreciate the dedication shown by Central Bank staff working under pressure during the crisis – without it we could not have responded effectively. We want to build on their efforts to further improve the culture of regulation at the Central Bank and to ensure a consistent approach to supervision of firms.

For this reason, the Probability Risk and Impact System (PRISM) was introduced in 2011, which gives the Central Bank a unified and much more systematic risk-based framework – making it easier for our supervisors to challenge the financial firms they regulate, judge the risks therein and take action to mitigate those risks – securing meaningful change on behalf of consumers, citizens and the State.

Under PRISM, the most significant firms - those with the ability to have the greatest impact on financial stability and the consumer - will receive a high level of supervision under structured engagement plans, leading to early interventions to mitigate potential risks. Conversely, those firms which have the lowest potential adverse impact will be supervised reactively or through thematic assessments, with the Central Bank taking targeted enforcement action against firms across all impact categories whose poor behaviour risks jeopardising our statutory objectives including financial stability and consumer protection.

PRISM is designed to deliver value for the taxpayer. It explicitly recognises that we can only have a finite number of supervisors and that we must deploy them where they can make the greatest difference – on the firms which have the most impact. In launching PRISM, we do not pretend that we can or should prevent all firms failing. Firms will and must be allowed to fail in a functioning market economy – the direct costs of staffing the Central Bank to guarantee absolutely no failures ever would be prohibitive. Because economic dynamism and growth in the economy call for a degree of risk taking, the indirect damage to the economy that such a style of regulation would cause would be greater still. What PRISM does is to focus attention on the firms with the highest impact, making it materially less likely that they will fail in a disorderly fashion. We are moving to a system designed to make every euro we spend on supervision go as far as possible, a system which encourages supervisors to focus on the issues which really count and to resolve them swiftly and efficiently. As such, it will make a significant contribution to our on-going efforts to help our economy recover.

What is risk-based supervision?

Risk-based supervision starts with the premise that not all firms are equally important to the economy and that a regulator can deliver most value through focusing its energies on the firms which are most significant and on the risks that pose the greatest threat to financial stability and consumers.

A risk-based system will also provide a systematic and structured means of assessing different types of risk, ensuring that idiosyncratic approaches to firm supervision are avoided and that potential risks are analysed for the higher impact firms using a common framework. This will allow judgements about potential risk in different firms to be made using a common risk typology on a common scale.

At its core, risk-based supervision accepts the premise that resources are finite, that there is no unlimited pool of public or industry funding on which to draw and that every regulator has to make choices as to what it will do and what it will not do. It makes no *a priori* judgement on what the right level of resources should be but seeks to deploy the available resources in the most efficient fashion.

At the Central Bank, risk-based supervision means that we have a lower appetite for significant issues at higher impact firms relative to issues at lower impact firms. For our most important (high impact) firms, the avoidance of failure is our top priority. For this type of firm, if there is to be failure, it is important that the failure does not entail taxpayer support and there must be no disorderly failure as this would have a detrimental impact on financial stability and the consumer. Risks which are likely to give rise to such outcomes will, once detected, be rigorously mitigated. Mitigation may include deploying resolution tools¹ to ensure that significant failures are, if unavoidable, at least orderly. Since the implementation of the Bank Recovery and Resolution Directive on 1 January 2015, all Member States of the EU have to apply a single rulebook for the resolution of banks and large investment firms. For our low impact firms, we aim to regulate to avoid sector-wide issues - such as widespread misselling by intermediaries - but there are *circa* ten thousand low impact firms and we will not seek to prevent individual failure. Rather, we will supervise these firms reactively - ensuring that an administrator or liquidator is appointed when they fail and that there is an orderly revocation of authorisation and winding-up in accordance with insolvency legislation, with the rights of customers² appropriately protected according to the law.

PRISM is the vehicle that we have developed to put the theory of risk-based supervision into practice. It is designed to be implemented by a few hundred supervisors on several thousand regulated firms. PRISM is both a supervisory tool and a software application.

PRISM is designed to allow us to:-

¹ Including using the powers set out in the Central Bank and Credit Institutions (Resolution) Act 2011

² An effective deposit guarantee, insurance compensation, investor compensation and client asset protection framework acts as a safety net to protect customers from losses in the event of the failure of a lower impact (or indeed any type of) firm. It is important this framework is robust to underpin the risk-based approach to low impact firms. The Central Bank is currently conducting a review of its client asset standards to strengthen this element.

- adopt a consistent way of thinking about risk across all supervised firms;
- allocate resources based on impact and probability;
- undertake a sufficient level of engagement with all higher impact firms;
- assess firm risks in a systematic and structured fashion;
- ensure that action is taken to mitigate unacceptable risks in firms;
- provide firms with clarity around our view of the risks they pose;
- operate a risk-based supervisory framework similar to that operated by significant financial regulators such as OSFI³ in Canada, APRA⁴ in Australia, the US Federal Reserve, De Nederlandsche Bank⁵, and the new Prudential Regulation Authority in the UK;
- use quality control mechanisms to encourage challenge and sharpen our supervisory approach; and
- analyse better management information about the risk profiles of the firms and sectors we supervise.

As developments in global financial supervision continue, it is recognised that one approach to identifying risk in the various financial sectors supervised by the Central Bank may no longer be appropriate and PRISM will evolve to reflect this.

³ The Office of the Superintendent of Financial Institutions

⁴ Australian Prudential Regulation Authority

⁵ The prudential financial services regulator in the Netherlands

How does PRISM work?

Impact

To be properly risk-based one has to know where risks lie. Impact is a major component of this as impact indicates the degree of damage a firm could cause to the financial system, economy and citizens were it to fail. PRISM enables firms to be categorised based on impact so that supervisors can guard against the potential failure of firms posing higher potential impact. Under PRISM – irrespective of the likelihood of failure – we will always devote a considerable amount of time to the firms which have the greatest potential impact. Popular perception that a large firm has a strong board and good profits will not lead to us ceasing to allocate significant resources to understanding it and its risks.

In December 2010, we launched a consultation on what measures would be good empirical determinants of impact. Having examined the results of the consultation, a number of indicators of impact for firms in each sector⁶ were selected. The different indicators were then combined to calculate an impact score for each firm so that, for each sector, we have a list of all the firms in that sector ordered by impact. These lists were used to divide all regulated firms into four categories: high impact⁷, medium-high impact, medium-low impact and low impact.

Changes in firm size and, by implication, impact will be tracked based on returns submitted by firms. For example, in one quarter a bank might have an impact score of 1,500 (a number derived directly from the impact metrics for the bank). This score would make it medium-high impact. The next quarter, having purchased a substantial book of business from another bank, it might have a materially larger balance sheet. When the bank submits its regulatory returns, the PRISM system will automatically detect that it has grown so that it has a new impact score of e.g. 3,000, the bank will be recategorised as high impact – automatically triggering a higher level of supervision because its metrics have increased. Impact classifications are a matter of supervisory judgement and are not subject to appeal. We have internal processes to allow all firms to have their impact category *increased* based on judgemental override but decreases are not permitted.

Impact Category	Firms
High (including ultra-high)	c. 20
Medium High	c. 80
Medium Low	c. 370
Low	c. 9,000

⁶ These impact metrics are shown in Appendix D.

⁷ Including a subset – ultra high impact – where additional resourcing is required.

Resourcing

The impact categorisation of a firm determines the number of supervisors allocated to that firm. This number includes those dedicated to direct supervision and those specialists within the bank who provide expert advice and support.

Impact Category of Firm	Supervisors allocated to firm⁸
Ultra-High	Eight
High	Between two and four supervisors
Medium-High	Between 50% and 100% of a supervisor
Medium-Low	Between 10% and 20% of a supervisor

In addition to these prudentially focused supervisors, additional Consumer Directorate supervisors will undertake in-depth themed conduct inspections (e.g. Payment Protection Insurance sales quality) across retail firms in all sectors.

Similarly, markets directorate staff have responsibility for a large number of low impact firms and investment funds (as well as responsibility for market conduct matters). We have to deploy a relatively small number of supervisors to deal with a very high number of low impact firms. Expert teams will cover different types of financial services firm. They will be supervising on a predominantly reactive basis with thematic work used to assess key sectoral issues. In taking this approach we are making a conscious choice to focus our finite supervisory staff on our most important firms because those are the ones which we cannot allow to fail in a disorderly manner.

To support this risk-based model, it is critical that the Enforcement and Policy teams are adequately staffed and their strategies are aligned with PRISM. For lower impact (i.e. smaller) firms, reactive supervision will be paired with strong enforcement. If firms do not comply with their regulatory requirements, they must assume that we will use our enforcement powers swiftly and effectively to achieve our objectives.

Our policy teams help us to effectively represent the Central Bank in European and international regulatory fora and to improve regulation when our supervisors identify potential policy gaps in our regulatory practice and/or where sectoral issues identify the need to strengthen our regulatory toolkit.

Engagement

We engage with firms to understand what they are doing and whether what they are doing poses a threat to financial stability or consumers. Firms in each impact category will be supervised through the completion of engagement tasks. We will engage with all firms at a level that corresponds to their impact category; the higher the impact category, the higher the level of engagement. This engagement will consist of a variety of reviews, assessments and

⁸ We plan to review these resourcing levels in the light of experience.

meetings⁹. It is our means of obtaining sound intelligence about a firm in order to accurately assess the risks that it poses.

A specific set of engagement tasks will be conducted on high impact firms, whereas a different set of engagement tasks will be conducted on medium-high impact firms and a different one again on medium-low impact firms. For firms in different impact categories, the depth to which it is likely to be necessary to go in order to obtain an appropriate understanding of a firm's business and the associated risks will be materially different. While there is commonality of engagement tasks where this makes sense (e.g. regular interviews of a firm's chief executive officer), the intensity and frequency of these tasks have been designed to be proportionate to the amount of resource available based on the impact categorisation.

High-impact firms can expect to receive an inspection visit every quarter with each visit having a different focus – for example governance, business model, credit risk, operational risk, liquidity risk, underwriting concentration or risk appetite. Some of these visits will be tailored to the type of firm being examined – clearly underwriting concentration is more pertinent to an insurer whilst liquidity risk is generally more pertinent to a bank. In addition, some engagements, such as those reviewing governance and business models, will apply to all high impact firms.

Medium-high impact firms will see risk assessments conducted every two to four years. These will look at the full spectrum of risks a firm is likely to face. Approximately ten percent of medium-low impact firms will also be subject to proportionate risk assessment visits each year. In addition to these visits, the Central Bank's European obligations with respect to the Supervisory Review and Evaluation Process required for all firms subject to the Capital Requirements Directive and for insurance companies required to conduct Own Risk and Solvency Assessments under the Solvency II Directive will be met through PRISM. There will also be a regular programme of interaction with the directors and senior management of such firms to ensure that supervisors can understand strategic developments and emerging risks at such firms.

Low-impact firms will be regulated using a combination of reactive and pro-active thematic techniques. We will increasingly use technology to supervise these firms in an efficient way: by investing in technology to automate receipt and analysis of financial returns – minimising the time spent on process. Our objective is to have the capacity to get automatic alerts to dedicated teams when a low-impact firm fails key financial health checks. In addition, consumer focused low impact firms will be subject to conduct focused thematic visits to ensure that they are treating customers fairly. Some financial sectors will also be subject to prudentially focused thematic work, for example on client asset security. Finally, we may conduct occasional summary inspections of low impact firms.

⁹ See Appendix B for further details.

The implementation of the Single Supervisory Mechanism (SSM) on 4 November 2014, created a new system of banking supervision comprising the European Central Bank (ECB) and the national competent authorities (NCA) of participating EU countries. Credit Institutions within the Eurozone have been categorised into “significant” and “less significant” institutions. The ECB directly supervises significant banks (SIs) while less significant banks (LSIs) continue to be supervised by national competent authorities, such as the Central Bank. A separate Minimum Engagement Model has been devised for those credit institutions categorised as LSIs where the Central Bank remains as the direct responsible regulator.

Enforcement action will be taken against firms that are failing to meet appropriate prudential and consumer protection standards. We have significantly increased resources in this area to reflect the new approach.

Throughout all engagement tasks, our supervisors will challenge the staff and leadership of the firms they supervise, adopting a questioning and sceptical attitude, placing a premium on understanding the important issues a firm faces as opposed to conducting process audits.

Box 1 - Risk appetite: will PRISM prevent failures of regulated firms?

A “No Failure” approach is not compatible with a dynamic market economy. Nevertheless, we want to minimise the impact of failure on financial stability and the citizen. While failure of firms is expected, for higher impact firms we will seek to actively manage key issues to prevent disorderly failure and to protect the taxpayer. For the lower impact firms, we will not generally be actively involved prior to a failure but we will still wish to see an orderly sale or winding down of operations.

Our PRISM engagement model has been designed to provide different levels of assurance about firms of different importance. The higher the impact, the greater the extent and frequency of the engagement. For low-impact firms, the engagement will be limited. Low-impact firms will potentially fail more often but the impact on the economy or consumers will be several orders of magnitude less than the impact of a high-impact firm failing.

To be clear, we are conscious that the media, politicians and other key figures in society are likely to be critical of us when firms, even small firms, fail and ask why we did not prevent it. It is right and proper that we should be held up to such public scrutiny but that does not make it appropriate for us to redirect resources from the most important firms to smaller firms in response to failures where there is a minimal impact on financial stability and the consumer.

By way of analogy, An Garda Síochána does not take detectives off its Special Detective Unit to patrol shops after every case of shoplifting that is reported. Neither will we take resources from our most important firms to closely supervise economically insignificant firms. Clearly if there is spate of “shoplifting” in an area, we will undertake appropriate investigation (as any police force would) and may reform our working practices/enforcement appetite to deal with the issue robustly to deter other firms from tolerating similar failings. However, it would be inappropriate to pour more resources into low impact firms when doing so would deprive us of our ability to supervise higher impact firms appropriately. Alternatively, we could reduce our risk appetite by “promoting” large numbers of firms out of the lower impact category and significantly increasing our resources. However, these additional costs would need to be borne by these low-impact firms which may be impractical, or subsidised by the taxpayer, which may be undesirable.

Judging Probability

During the engagement tasks on high, medium-high and medium-low impact firms, supervisors will form judgements on the risks posed by them. Probability is the risk or likelihood that a firm will fail and, as such, is distinct from impact. Whereas impact represents the degree of damage the failure of a firm might cause, probability is an indication of the likelihood of a firm failing, regardless of the damage such a failure might cause. The same Probability Risk categories and sub-categories apply across all sectors with the exception of Insurance sectors where a specific set of Probability Risk categories have been introduced which largely mirror the Solvency II requirements,

Supervisors will assess a firm's risk probability in a number of categories and sub-categories such as credit risk, operational risk, governance risk etc. The probability categories are set out in Appendix C.

Supervisors will form judgements on the risk probability posed by the firm in relation to each risk category. PRISM is a judgement-based system in that supervisors of higher impact firms¹⁰ will be required to make a conscious choice as to the riskiness of a firm at each level in each category. We constructed¹¹ such a system because we believe that judgements based on good quality quantitative and qualitative analysis are likely to be materially more reliable than the alternative – a black box system based on complex equations. The experience of investment banks during the financial crisis was that such black box systems were understood by few (and bitter experience indicates that even those few had limited understanding) and thus were not subject to adequate challenge. Furthermore, even the best black box systems contain a number of simplifying assumptions embedded within the mathematical coding of their guiding equations. Such simplifying assumptions may or may not be appropriate for a specific firm or issue but, because they are embedded deep within the code and are known to only a few, it is very difficult to subject them to appropriate scrutiny.

Our supervisors will be required to provide a written rationale for their judgements within the PRISM system. This allows their logic to be easily reviewed by others in the Central Bank before actions are taken on the basis of their judgements.

Supervisors will be required to consider all risk categories in order to arrive at a balanced judgement as to the overall risk probability posed by a firm. Particular emphasis, in response to lessons learned during the financial crisis, is being placed on a thorough analysis of governance and business models as poor governance and a weak business model are good leading indicators that problems at a firm are likely to emerge.

In making judgements on probability, supervisors will be assisted by:-

- the information and insights they have acquired through engagement tasks. Some engagement tasks, for example stress testing, will have a significant quantitative

¹⁰ Simplified procedures will apply for supervisors of medium-low impact firms whilst low impact firms will not be probability rated.

¹¹ Assisted by d-Fine Consulting - www.d-fine.de/en

element, while others, such as interviews with key firm directors, will be more qualitative;

- key risk indicators - key ratios and data drawn from the regulatory returns submitted to the Central Bank and processed by the PRISM application (which will highlight unusual changes);
- risk guidance materials on each risk category, prepared and kept up to date by subject matter experts throughout the Central Bank. These materials also provide links to in-depth guidance published by the European Supervisory Authorities and other bodies which should assist a supervisor undertaking a thorough analysis of a risk category;
- alerts generated by the PRISM application to draw a supervisor's attention to significant changes in key risk indicator or impact data; and
- peer group intelligence – firms supervised by the Central Bank has been placed in peer groups. PRISM allows supervisors to access pertinent quantitative and qualitative information about other firms in their peer group which will allow for easy comparison of key quantitative risk indicators.

Box 2 – How does thematic work fit within PRISM?

We undertake both consumer conduct and prudentially focused thematic work across firms in all impact categories. By looking at a specific issue across a range of firms, we can analyse concerns across a sector. We can use thematic work to determine whether overall standards in an industry are at or near the level where we would expect them to be or whether there appears to be an industry-wide issue which may require policy changes, widespread moral suasion or an intense enforcement action to secure appropriate change.

Under the PRISM framework, we will continue to use thematic visits as our principal tool for understanding consumer conduct risk. PRISM will also be used to assist our financial crime prevention work and, separately, to ensure that we maintain and improve our prudential understanding of sectors - such as funds and intermediaries - where a large proportion of the firms are individually low impact. We will take into account the differences between sectors (e.g. funds and intermediaries) and the different risks they present when deciding on the subjects to focus on and the thematic resource to be devoted to each sector. We would anticipate that thematic reviews will lead to enforcement action against specific firms where contraventions are identified.

Mitigating Risk

Our PRISM framework is judgement-based and outcome focused. This means that supervisors are required to focus not only on analysing and identifying risks but also on ensuring that appropriate and achievable mitigating actions are taken to address any risks deemed unacceptable. For example, if a supervisor discovered that Firm A could plausibly lose €50 million on a derivatives product it had sold to a client and the firm only had €40 million capital, he or she might require it to raise more capital or to hedge the risk with another firm.

Supervisors, having judged probability for each risk category on a scale of low, medium-low, medium-high or high probability (or 1-4 for Insurance sector risk categories, with 1 being low and 4 being high), will be required to take action to reduce those risks which are too high

for us to accept. This is not about our trying to stop firms taking commercial risks. We appreciate that firms need to take risks in order to succeed and make an economic return on capital. Rather, it is about the Central Bank seeking to mitigate risks which pose an unacceptable threat to financial stability or consumer protection.

Any risk category which is probability rated as medium-high or high (3 or above for the Insurance sector) must be mitigated. If a supervisor rates a firm medium-high or high probability in any risk category¹² (3 or above for the Insurance sector), he or she will be prompted by the PRISM application to open a Risk Mitigation Programme (RMP) issue, explaining the nature of the risk. Having opened the issue, the supervisor will construct one or more outcome focused actions to reduce the risk to an acceptable level by a given deadline. Examples of outcome focused actions include requiring a firm to raise more capital, cease an activity or strengthen the control framework around a business line. On occasion we may suggest to a firm's directors that the staff running a particular business line or support function lack the requisite skills and need help to obtain them or alternative management action.

We will not raise RMP actions to resolve every risk we perceive at a firm. We will focus our energies on the risks which really count, the risks which, if left unmitigated, could ultimately threaten the financial future of the firm or lead to material mistreatment of consumers.

Many RMP actions will require mitigation action to be undertaken by the regulated firm. When the firm has completed such an RMP action, it will provide appropriate information to the supervisor. The supervisor will evaluate the quality of the improvement and consider whether the RMP action has successfully obtained the outcome we sought – namely reducing the risk to financial stability or consumers to an acceptable level. If the required outcome has been achieved, the RMP action will be closed. If the supervisor, in consultation with supervisory management, considers that the RMP action has not mitigated the risk, he or she will construct a further RMP action to mitigate the risk. The nature of that RMP action will take into account the degree to which the firm has engaged in a constructive manner to reduce the risk materially during the course of completing the previous RMP action. Wilful non-compliance with an RMP action will be taken seriously.

Quality Assurance

Any system for evaluating risk has potential weaknesses. We have adopted a system which requires supervisors to make judgements having evaluated appropriate quantitative and qualitative information. In order to mitigate the risk that a firm could be exposed to inappropriate judgements by a single supervisor, PRISM incorporates a number of quality assurance processes to ensure that high quality judgements are made and that appropriate outcome focused RMP actions are constructed based on those judgements:-

¹² Ibid.

- *Risk Governance Panels* – We have now been operating firm-focused panels since the introduction of PRISM in November 2011 together with senior staff and risk advisors outside the supervisory chain of command to scrutinise a supervision team’s strategy, judgements and risk mitigation programme for a given firm. Such meetings are normally held directly after a significant inspection visit, giving the members of the panel an opportunity to review the probability judgements and draft RMP actions prior to their being sent to a firm. We also hold panels to review findings following significant pieces of thematic work. Panels give the supervisor an opportunity to debate their findings with a wider audience who are likely to have had extensive experience of supervising similar firms. Normally, such panels will help calibrate the judgements of the supervisory team and may suggest amendments to RMP actions deemed too robust or not sufficiently demanding of the firm in question.
- *Management oversight* – Any draft RMP action which is not scrutinised by a Risk Governance Panel will be reviewed and approved by a member of the supervisor’s divisional management team prior to being sent to a firm.
- *Firm review of draft actions* – We will, when doing so does not conflict with timely or effective risk mitigation, aim to share draft RMPs with firms to enable them to highlight factual flaws in our descriptions of the issues giving rise to the RMP actions. Firms will have an opportunity to suggest alternative actions to ensure our risk mitigation outcomes are achieved in the most expeditious fashion.
- *Management Information* – The PRISM system will deliver regular, focused, qualitative and quantitative information on firms and supervisors’ activity to the Central Bank’s leadership team. This management information will allow us to review trends in different financial sectors, impact changes, probability rating changes, risk mitigation programme success rates and engagement task completion rates. We use such information to ask questions about outlying probability ratings or, about probability ratings which appear inappropriately clustered together. We are also able to easily review RMP actions relating to different probability categories and see the comparative progress of different types of mitigation action.
- *Supervisory Risk Committee* – Each week, a committee of senior regulators, chaired by the Deputy Governor, Regulation, meets to review significant risk issues arising at industry and firm level and to evaluate the approaches put forward by supervisory staff to resolve those issues.
- *Supervision Support* – The supervision support team assists in reviews of the quality of firm supervision being provided by the supervisory Divisions. As well as helping to ensure high quality supervision is delivered consistently within Divisions and across the organisation this also alerts senior management to areas of weakness in supervisory practice, the regulatory toolkit, training and judgement, allowing

management to take appropriate remedial action to help ensure that all supervision teams are appropriately resourced and function effectively.

Appendix A – What PRISM means for your firm?

- PRISM has now been implemented for all financial sectors regulated by the Central Bank. This was achieved in a phased process with banks and insurers on 25th November 2011 and credit unions, intermediaries, investment firms, trustees, administrators and funds in late May / early June 2012. We transitioned to using PRISM for conduct focused thematic work between November 2011 and November 2012.
- We corresponded with all relationship managed banks and insurers¹³ in December 2011 to inform them of their impact categories. We consulted publicly on which metrics to use in December 2010. The impact rating will only change if a firm grows or shrinks its business.
- Higher impact firms can expect a cycle of engagement activities with the Central Bank. High impact firms can expect to have one of our teams on site once a quarter reviewing an aspect of the firm's risk. Medium-high impact firms can expect to have a risk assessment with extensive on site investigatory work once every two to four years. Medium-low impact firms will also receive periodic risk assessments. The leadership of all these categories of firm will also benefit from a regular cycle of meetings with our supervisors.
- Low impact firms need to ensure they comply fully with all regulatory requirements in the same fashion as higher impact firms. They will be monitored through a combination of semi-automated checking of returns and thematic visits, as well as issues identified arising from any summary inspections that may be conducted. As with other impact categories, failure to comply with requirements may lead to enforcement action.
- In addition to the minimum engagement activities, there will be additional engagement where needed to address identified issues, request additional information or conduct thematic reviews.
- Your supervisory team will assess the risk probability your firm poses thorough the completion of engagement tasks and will periodically let you know the areas in which we adjudge the key risks to lie. If we judge some risks to be unacceptable, we will set you a Risk Mitigation Programme which will require you to take action to mitigate the risk.
- You will have ten working days to comment on factual inaccuracies in our findings, to the extent that providing you with an opportunity to do this is not incompatible with Central Bank objectives – we reserve the right to require immediate action on any issue of concern at any time. We do not enter into extended dialogue with firms about RMP actions and, when the premise upon which they were written is sound, we do not remove them or water them down in response to feedback.
- The final risk ratings and risk mitigation programme (RMP) will be communicated to the firm's board. For high impact firms, we will present our findings and the required RMP to the firm's board.
- PRISM will enable us to better track RMP actions. We will actively follow up on them and will expect the required actions to be fully completed by the specified deadline.

¹³ All banks and insurers which are not low impact.

- Under PRISM you should expect your supervisor to have searching and demanding conversations with you, focusing on the important issues which matter for your firm, for financial stability and for consumer protection. If there are serious issues presenting unacceptable risks, we will expect you to engage constructively to resolve them swiftly.

Appendix B – How the Central Bank will engage with firms

This table lists some of the tasks which will feature in our engagement programme. Our engagement programme will differ by impact category so not every engagement task set out below will affect every firm.

Business Model Analysis	Supervisors will gain an understanding of how the firm organises itself, manages itself, manufactures and delivers its product to market on a profitable basis while minimising the risk of business failure. A firm should understand how it makes money and the risks it takes to do so.
Governance	Supervisors will seek an understanding of how the firm is governed. Good corporate governance acts as a control mechanism providing confidence to stakeholders that the institution is managed in a sound and prudent manner. Supervision will look at both the governance structure, the quality of the individuals and how the structures operate in practice.
Financial Risk Reviews	Each firm (non insurance entities) has major risks that it encounters in carrying on its business. These will vary between sectors. These risks will be reviewed to ensure that the firm is not taking excessive risks, that these risks are understood and that there are appropriate policies and systems in place to actively manage and control the risks.
Targeted Risk Assessments (TRA)	These engagements are specific to the Insurance Sector. The TRAs will focus on the major risks that the insurance undertaking encounters in carrying on business. These risks will be reviewed to ensure that the firm is not taking excessive risks, that these risks are understood and that there are appropriate policies and systems in place to actively manage and control the risks. Each TRA may require a series of meetings with key personnel at different levels within a firm and include an in-depth examination of key aspects of a firm which give rise to concern.
Stress Testing	Benign market conditions can mask latent problems in the nature of a firm’s business which only become apparent in a downturn. It is important that firms understand what changes would destabilise their business. Supervisors will want to be satisfied that realistic stress testing scenarios are used appropriately by firms and that boards are mitigating unacceptable risks which stress tests highlight.
Review of the Firms Capital Adequacy Assessment (SREP or ORSA¹⁴)	Regulated firms have an obligation to maintain adequate levels of capital to support their activities. We will undertake reviews to ensure that the capital amount, as determined by the firm, is adequate taking into account findings from the other engagement tasks undertaken.
Full Risk Assessment	For regulated entities, excluding insurance undertakings ¹⁵ , Supervisors, following a desk based review of the information they have requested from a firm to better understand key issues, will hold a series of meetings with key personnel at different levels within a firm to obtain an overview of governance, strategy and key financial risks. They will also undertake an in-depth examination of key aspects of a firm which

¹⁴ Supervisory Review and Evaluation Process (banks and investment firms) & Own Risk and Solvency Assessment (insurers)

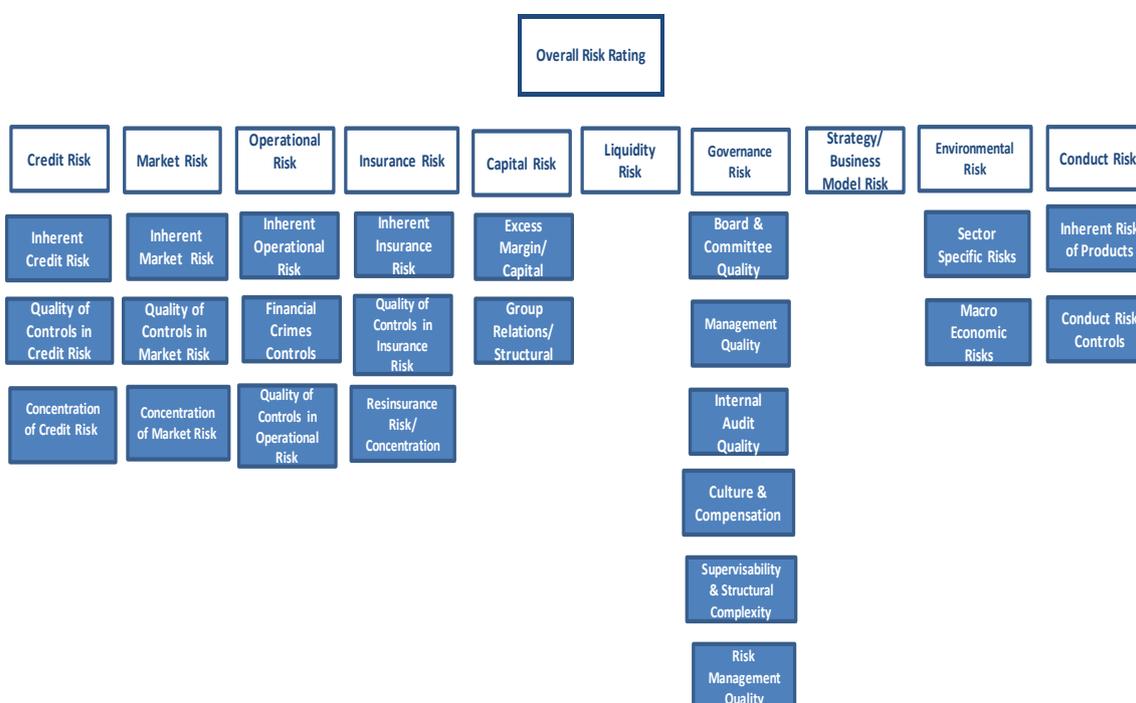
¹⁵ Insurance Undertakings are covered by the Targeted Risk Assessments

	give rise to concern. Where appropriate, such full risk assessments will incorporate the SREP reviews discussed above.
<p>Regular meetings with:</p> <ul style="list-style-type: none"> • Chairman and non-Executive Directors • Chief Executive Officer, Chief Financial Officer, Chief Risk Officer • External Auditor 	Meetings are an integral part of the programme and will often take place in the course of other engagement tasks. Meetings are likely to cover matters such as the strategic direction of the firm, strengths and vulnerabilities, issues of governance, and risk profile. They will also provide supervisors with a view on the suitability and competence of a firm's leadership. In the case of the external auditor, they provide an opportunity to share information about areas of concern.

Appendix C - Risk Probability Structure & Explanation

As stated previously within this document, probability is the probability or likelihood that a firm will fail and as such is distinct from impact. Probability is an indication of the likelihood of a firm failing, regardless of the damage such a failure might cause.

We will assess the same risk headings in the majority of supervised firms (see table below) within the medium-low to high-impact categories, with the understanding that firms in different sectors face the same risks - sometimes in different ways or to varying degrees. Assessment will be performed at up to three levels, namely overall, category and sub-category. The table below shows the probability categories. They are outlined in high level terms below the table. A separate set of Probability Risk Categories has been introduced in respect of Insurance firms, following the implementation of the Solvency II Regulations.



Credit Risk

The assessment of credit risk is made at the inherent credit risk level explicitly, and then takes into account the assessment of credit risk management processes and controls and credit concentration risk effects. Inherent credit risk is the risk of financial loss arising from an obligor, borrower, issuer, surety, guarantor or counterparty who fails to meet its obligations in accordance with agreed terms. Inherent credit risk arises anytime firm funds are extended, committed, invested or otherwise exposed. These risks may be either on or off the balance sheet. The assessment of inherent credit risk is made without considering credit risk management processes and controls.

Credit concentration risks are exposure(s) with common characteristics that may arise within or across different asset categories throughout a firm with the potential to produce: (i) losses large enough to threaten the firm's health or ability to maintain its core operations; or (ii) a material change in a firm's risk profile.

Credit risk controls cover the appropriateness and effectiveness of the checks in place to ensure that the firm is not overly exposed to particular obligors, sectors, product types etc. and that the firm has appropriate risk mitigants in place (for example, security on loans). They are central to managing the credit risk profile of the firm.

Market Risk

Market risk is the risk that the value of an investment or portfolio decreases. Standard market risk factors requiring assessment include stock prices, interest rates, foreign exchange rates, commodity prices, and changes in real or implied volatility in such factors.

Market risk controls refer to the way in which risk appetites and limits are set, communicated and are subsequently identified, measured, monitored and managed within a firm.

In assessing market risk, it is also important to be mindful of market concentration risk, which can arise in a portfolio on two main levels, (i) a portfolio with a large portion invested in a single asset e.g. a single equity investment, and (ii) a portfolio comprised of several assets which are all related to the same risk factor e.g. oil related commodity investment.

Operational Risk

Operational Risk is defined in the Capital Requirements Directive and the Solvency II Directive as "the risk of loss resulting from inadequate or failed internal processes, people/personnel and systems or from external events". Operational risk can stem from the nature of the firm's business, the appropriateness and effectiveness of the controls in place to minimise the risk, or from internal or external fraud. Examples of operational risks include: hardware or software failures, misuse of confidential client information, data entry errors, and natural disasters.

Insurance Risk

Inherent insurance risk relates the reliance by non insurance firms on insurance contracts to protect against insurance losses e.g. fraud, operational risk, professional indemnity, catastrophe risk etc.

Capital Risk

Capital is required to act as a cushion to absorb losses arising from business operations and allow an entity to remain solvent under challenging conditions. Capital risk arises mainly as a result of the quality or quantity of capital available, the sensitivity of a firm's exposures to external shocks and/or the level of capital planning and management process. Capital risk could potentially impair a firm's ability to meet its obligations to customers (depositors, policyholders, investors, etc.) and senior creditors in an adverse situation.

The way in which groups are structured, the nature, extent and size of transactions and/or commitments between them, and the degree of reliance of a firm on parts of its group can

have a significant potential impact on the capital position of a firm. In addition, group arrangements/structures may create or enhance imbalances in the levels of capital held at an entity level with the risks assumed by those entities.

Liquidity Risk

Liquidity risk is the risk that a firm will not be able to fund its cash outflows as they fall due. A firm can be illiquid even if it is solvent. Liquidity risk may stem from (i) a loss or reduction in the value of existing funding; (ii) off-balance sheet commitments being called; (iii) new lending, investments or acquisitions that require new funding; (iv) timing mismatches between asset maturities/realisation and liability cash flows; and (v) problems arising from holding difficult to sell assets to meet current liabilities.

Governance Risk

Governance covers the overall oversight and control mechanisms which a firm has in place to ensure that it is soundly and prudently managed. It refers in particular to the processes, structures and information flows which are used to allow the board and senior management to satisfy themselves that effective control mechanisms are in place to protect all stakeholders (i.e. depositors, policyholders, investors, shareholders, employees etc.) and contribute to the overall stability of the financial system. The financial crisis exposed serious shortcomings in the governance and risk management of some financial institutions. The board is the first line of defence in ensuring that firms are run correctly and do not adopt business models or strategies that will expose the firm to excessive risk. The effectiveness of the board in carrying out its governance role and oversight is a critical component in the overall regulatory framework. There are a range of areas that require assessment in order to rate a firm's policy, culture, procedures and practical approach to corporate governance, which include its risk management approach, the composition and quality of executive and non-executive board members, committee structures and remuneration policies. Other key areas for consideration are the complexity of group structures which might impact on how supervisors can evaluate firms under their supervision and whether, and how, boards evaluate their own performance.

Strategy/Business Model Risk

Strategy/Business Model Risk refers to the risk which firms face if they cannot compete effectively – for example, in a market economy, other firms may offer better products or substitute products at better prices and the firm may fail because they may not be able to compete at the same prices/product offerings. Strategy/business model risk also covers the inherent risk in the strategy (e.g. overly aggressive business growth, merger and acquisitions activity, and/or significant business diversification). Business model risk also covers areas such as potential 'funding mismatches' in banking, over-reliance on reinsurance in insurance, out-dated distribution models or cost bases out of line with competitors.

Environmental Risk

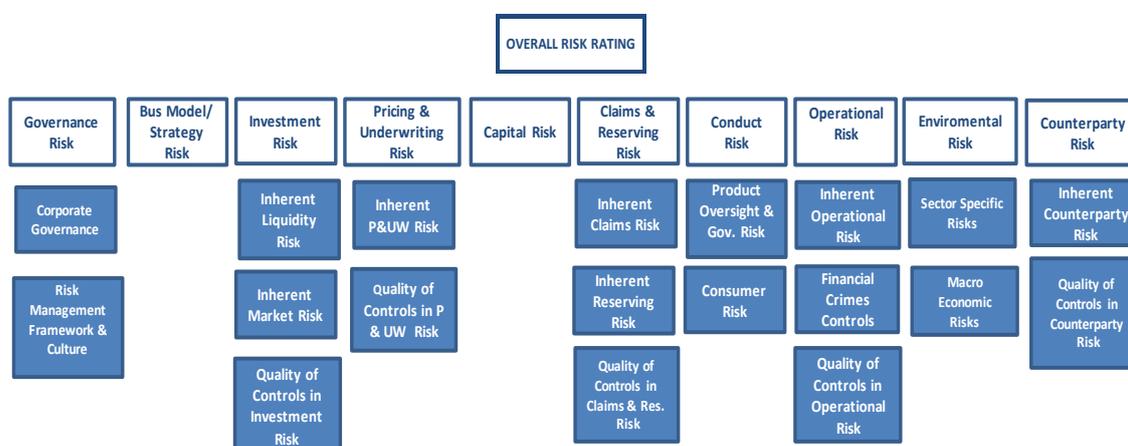
The environment firms operate in exposes them to risk in a number of ways. Macro-economic risk factors make themselves felt through domestic and international developments. Sector specific considerations must also be assessed as different industries and subsets of firms face a similar macro environment but different industry dynamics.

Conduct Risk

Conduct risk is the risk the firm poses to its customers from its direct interaction with them. This is assessed by Consumer Protection Directorate supervisors who examine the nature and scope of a firm’s products and how the firm controls the risks their products and other engagement with consumers present to them.

Insurance Sector Probability Risk Categories

Since the implementation of Solvency II on 1 January 2016, the Central Bank has introduced a separate set of Probability Risk Categories in respect of the Insurance Sector. These Risk Categories largely mirror the requirements for Solvency II and are outlined below. Furthermore, the existing ratings of Low to High have been replaced by Risk Scores of 1 - 4 (Low to High), with the + and – ratings continuing to apply. The table below shows the probability categories. These specific risks are outlined in high level terms below the table



Counterparty Risk

Counterparty Risk can arise from amounts recoverable from reinsurers, unpaid premiums from policyholders or brokers and the profile of the investment portfolio (e.g. deposits, securities bonds, derivatives) and activities such as stock lending arrangements and liquidity swaps etc.

In assessing inherent counterparty risk for insurance firms it is important to consider the range and quality of its reinsurers and other counterparties (such as brokers, large customers or credit institutions which provide guarantees in the case of structured life products) and any changes in terms of their status or in the composition of the investment portfolio. It is also important to consider the degree of concentration within the firm’s investment portfolio and within its reinsurers, insurance intermediaries and/or customers, and the appropriateness and effectiveness of credit controls.

Investments Risk

An undertakings' compliance with the investment rules as set out in Regulation 141 to 143 of the European Union (Insurance and Reinsurance) Regulation 2015, will be reviewed and evaluated under Investments Risk and the adequacy of controls applicable to this activity. It will also encapsulate an assessment of the inherent market and liquidity risk arising in the portfolio of investments.

Pricing & Underwriting Risk

Pricing and Underwriting risk relates to the uncertainty regarding the adequacy of the price charged (premium); the occurrence, amount or timing of insurance claims, payments or liabilities (technical provisions) and the type and magnitude of risk being underwritten; and the overall level of exposure to the company. The nature and extent of risk facing a firm depends on a number of factors, including whether the firm is involved in Life, Non-Life or Reinsurance (which can be Life, Non-Life or both), the lines of business the firm writes, the concentration or diversification of business lines, the aggregate exposures involved, including size, type, locations and the type of policies or risks assumed, including policy options, guarantees, time period of cover.

Claims & Reserving Risk

Claims and Reserving risk relates to the uncertainty regarding the occurrence, amount or timing of insurance claims, payments or liabilities (technical provisions). The nature and extent of risk facing a firm depends on a number of factors, including whether the firm is involved in Life, Non-Life or Reinsurance (which can be Life, Non-Life or both), the lines of business the firm writes, the concentration or diversification of business lines, the aggregate exposures involved, including size, type, locations and the type of policies or risks assumed, including policy options, guarantees, time period of cover.

Appendix D – Impact metrics for firms in each sector¹⁶

AIFM Delegating
Assets under management
Number of funds
AIFM Non-Delegating
Assets under management
Client money value
Number of customers
Turnover
CIS:UCITs and other Service Prov: Administrators
Net Asset Value (Irish plus Non-Irish Authorised)
Net Asset Value (Irish Authorised)
Net Asset Value (Non-Irish Authorised)
Credit Institutions Retail Banks
Total Balance + Off Balance Sheet Size
Common Equity Tier 1 capital
Key Sector Concentration
Retail Deposit Base
Intra-financial system assets
Credit Institutions: Wholesale Banks
Total Balance + Off Balance Sheet Size
Common Equity Tier 1 capital
Concentration of Lending
Intra-financial system assets
Retail Deposit Base
Sectoral Concentration
Intra-financial System Assets
Credit Unions
Total Assets
D1 Firms
Assets under management
Number of customers
Total Balance of Client Assets at Period End
D2 Firms
Number of customers
Turnover
Total Balance of Client Assets at Period End

¹⁶ These differ slightly from those published in the Central Bank’s feedback statement on impact metrics of 27th May 2011. We have decided to use slightly different metrics in some impact categories in response to lessons learned during quantitative impact metric modelling and further input from supervisory divisions.

D2B Firms
Assets under management (client)
Number of customers
Turnover
D3 Firms
Assets under management (client)
Client money value
Number of customers
Turnover
Total Balance of Client Assets at Period End
D4 Firms
Assets under management (client)
Client money value
Number of customers
Turnover
Total Balance of Client Assets at Period End
D5 Firms
Assets under management (client)
Client money value
Number of customers
Turnover
Total Balance of Client Assets at Period End
D6 Firms
Turnover
Total Balance of Client Assets at Period End
D7 Firms
Assets under management (client)
Client money value
Number of customers
Turnover
Total Balance of Client Assets at Period End
D8 Firms
Total Balance of Client Assets at Period End
D9 Firms
Assets under management (client)
Client money value
Number of customers
Turnover
Total Balance of Client Assets at Period End
D10 Firms
Assets under management (client)

Client money value
Number of customers
Turnover
Total Balance of Client Assets at Period End
E2B Firms
Assets under management (client)
Number of customers
Turnover
Electronic Money Institutions
Number of agents
Number of distributors
Transaction volume
Throughput
Total E-Money outstanding at period end
Funds
Throughput
Net Asset Value (Irish Authorised)
Intermediaries
Number of MCR accredited employees
Number of Clients
Fee Income + Commission Income
Internally Managed AIF
Assets under management
Throughput
Life Insurers
Total Required Solvency Margin
Gross Reserves
Total Assets
Total Liabilities
Annual Premium Equivalent
Life Insurers - Variable Annuity
Total Required Solvency Margin
Gross Reserves
Total Assets
Total Liabilities
Annual Premium Equivalent
Money Lenders
Number of Customers
Turnover
Non-Life Insurers
Total Required Solvency Margin

Gross technical provisions
Net technical provisions
Gross Written Premium
Net Written Premium
Gross Written Premium : Irish Risk
Net Written Premium : Irish Risk
Total Liabilities
Dominance index
Non-Life Insurers- Captives
Total Required Solvency Margin
Gross technical provisions
Net technical provisions
Gross Written Premium
Net Written Premium
Gross Written Premium : Irish Risk
Net Written Premium : Irish Risk
Total Liabilities
Dominance index
Non-UCITS Delegating
Net Asset Value (Irish Authorised)
Non-UCITS Non-Delegating
Net Asset Value (Irish plus Non-Irish Authorised)
Net Asset Value (Irish Authorised)
Net Asset Value (Non-Irish Authorised)
Payment Institutions
Number of branches / agents
Transaction volume / money throughput
Throughput
Total Balance of Client Assets at Period End
Reinsurers
Total Required Solvency Margin
Net technical provisions
Gross technical provisions
Net written premium: total
Gross written premium: total
Reinsurers - Captives
Total Required Solvency Margin
Net technical provisions
Gross technical provisions
Net written premium: total
Gross written premium: total

Reinsurers - Variable Annuity Writers
Total Required Solvency Margin
Net technical provisions
Gross technical provisions
Net written premium: total
Gross written premium: total
SMICs
Throughput
Net Asset Value (Irish Authorised)
Trustees
Net Asset Value (Irish plus Non-Irish Authorised)
Net Asset Value (Irish Authorised)
Net Asset Value (Non-Irish Authorised)
UCITS Delegating
Net Asset Value (Irish Authorised)
UCITS Non-Delegating
Net Asset Value (Irish plus Non-Irish Authorised)
Net Asset Value (Irish Authorised)
Net Asset Value (Non-Irish Authorised)
Wholesale Banks - Branches
Concentration of Lending
Intra-financial system assets
Retail Deposit Base