INTERNATIONAL ORGANISATION OF PENSION SUPERVISORS

IOPS RISK-BASED SUPERVISION TOOLKIT

MODULE 5

SUPERVISORY RESPONSE

Public version

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The **IOPS Risk Based Supervision Toolkit** provides a 5-module framework for pensions supervisors looking to apply a system of risk-based supervision. A web-based format allows: a flexible approach to providing updates and additions; users to download each module separately as required; and a portal offering users more detailed resources, case studies and guidance. The website is accessible to IOPS members only at https://one-communities.oecd.org/community/iops/SitePages/RBS-Toolkit(1).aspx

This document contains the guidance for **Module 5: Supervisory Response**

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INTRODUCTION

Figure 1: RBS Cycle
Source: IOPS Secretariat

Risk-based supervision (RBS) is a structured approach which focuses on the early identification of potential risks faced by pension plans or funds[1] and the assessment of the financial and operational factors in place to minimise and mitigate those risks.

This process then allows the supervisory authority[2] to direct its resources towards the issues and institutions which pose the greatest threat thereby supporting timely action and escalation where determined necessary.

A. Purposes

A fundamental aspect of risk-based supervision is that a logical connection should be made between the outcome of any risk analysis undertaken (which is described in detail in Module 4 of the IOPS Toolkit) and the nature of the subsequent supervisory action taken in response. Knowledge of where the greatest risks remain is of little value unless the supervisor has the authority and capability to act upon this knowledge and, in fact, does so. Pension supervisory authorities may wish to devise a response matrix to help determine and organise their supervisory action. Such matrixes also help authorities plan their actions or supervisory timetable and use their resources in an efficient fashion.

[1] According to the OECD's taxonomy (OECD, 2005), a pension fund is a legally separated pool of assets forming an independent legal entity that is bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits. The plan/fund members have a legal or beneficial right or some other contractual claim against the assets of the pension fund. Pension funds take the form of either a special purpose entity with legal capacity (such as a trust, foundation, or corporate entity) or a legally separated fund without legal capacity managed by a dedicated provider (pension fund management company) or other financial institution on behalf of the plan/fund members.

A pension plan is a legally binding contract having an explicit retirement objective (or – in order to satisfy tax-related conditions or contract provisions – the benefits cannot be paid at all or without a significant penalty unless the beneficiary is older than a legally defined retirement age). This contract may be part of a broader employment contract, it may be set forth in the plan rules or documents, or it may be required by law. In addition to having an explicit retirement objective, pension plans may offer additional benefits, such as disability, sickness, and survivors' benefits. In EU countries, this module may not apply to those pension funds and pension plans that fall outside the scope of the EU Directive 2016/2341/EC of the European Parliament and of the Council of 14 December 2016 on the activities and supervision of institutions for occupational retirement provision (IORPs), e.g. pensions funded via book reserves (c.f. art. 2 of the Directive).

[2] Pension supervisory authorities referred to in the IOPS Toolkit for Risk-based Supervision are defined as any entity responsible in whole or in part for the supervision of pension funds, plans, schemes or arrangements in a country, or the subdivision of a country, whether invested with its own personality or not.

Once the supervisory authority has determined what supervisory action it should take in response to the level of risk identified and that response has been suitably communicated, the authority needs to determine how to monitor that any actions required from supervised entities are followed, how to adapt its own supervisory response accordingly and how to increase the supervisory pressure should the level of risk be seen to escalate. In order to carefully 'pitch' its initial response to a problem in a proportional and fair fashion, and then follow up in an appropriate way, supervisory authorities may wish to develop an 'enforcement pyramid'.

The purpose of this module is to provide an overview of how pension supervisors might determine, organise and tailor their supervisory response according to detected or suspected risks. Suggestions and examples of how to build a supervisory response matrix will be provided, along with an overview of how to escalate their supervisory response.

B. Principles and Guidelines

This module builds on the following IOPS *Principles of Private Pension Supervision* (IOPS, 2010):

Principle 5: Risk-based Supervision

Pension supervisory authorities should adopt a risk-based approach.

Principle 6: Proportionality and Consistency

Pension supervisory authorities should ensure that investigatory and enforcement requirements are proportional to the risks being mitigated and that their actions are consistent.

Principle 9: Transparency

Pension supervisory authorities should conduct their operations in a transparent manner.

The IOPS *Guidelines for Supervisory Assessment* (IOPS, 2008) also provide the following guidance:

Guideline 6: In-depth Evaluations – Planning and Preparation

Pension supervisory authorities should carefully coordinate on-going monitoring and in-depth inspection procedures to ensure maximum efficiency and avoid duplication.

Guideline 8: In-depth Evaluation – Assessment and Reporting

The results of in-depth evaluations should be fed into the supervisory authority's risk assessment mechanisms.

Where appropriate, pension supervisory authorities should provide clear findings and recommendations for action following in-depth inspections, provide the opportunity for the pension fund to respond and follow up to ensure that they have been acted upon.

In addition, this Module 5 of the IOPS Toolkit is designed to provide in-depth and practical support to the IOPS *Guidelines for Supervisory Intervention, Sanctions and Enforcement* (IOPS, 2009a).

Guideline 1: Goals of intervention, enforcement and sanctions

The pension supervisory authorities should have clear and well defined strategic supervisory goals for the use of intervention, enforcement and sanction powers.

Guideline 2: Intervention, enforcement and sanction powers

The pension supervisory authority should have adequate intervention, enforcement and sanction powers to fulfill its supervisory duties and responsibilities.

Guideline 3: Decision making process

When a potential or actual breach of legislation or standards is identified, a well defined decision making process should be in place and followed.

Guideline 4: Consistency of decisions

The actions of the pension supervisory authority should be consistent, following well documented procedures.

Guideline 5: Proportionality and escalation of response

The investigatory and enforcement response of the pension supervisory authority should be proportional to the risks being examined. Subject to the availability of regulatory and administrative powers and measures, the response should be escalated appropriately to achieve the desired regulatory objectives.

Guideline 9: Information disclosure

A transparent information disclosure mechanism and timely publication of intervention and sanction decisions should be in place subject to relevant confidentiality requirements.

SECTION 1: SUPERVISORY RESPONSE MODELS

A key step in designing a risk-based supervision (RBS) framework is establishing a methodology for allocating scarce supervisory resources to where the risks to the supervisor's objectives are assessed to be greatest.

Supervisory authorities should have an organised and transparent approach for deciding how the risk-scores (described in Module 4 of the IOPS Toolkit), and/or the results of other types of risk analysis – including systemic analysis – translate into supervisory action.

A risk matrix or other structured response model (discussed further below) can guide supervisors on the range of tools and activities to be applied in certain scenarios. For example, the models will often guide supervisors on the specific activities to be undertaken should a risk or issue be identified.

The supervisory response will generally be reflected within a supervision plan or strategy that can be set at a risk, entity or industry level. Supervisory planning will often be undertaken on an annual basis to align to budget planning and will account for the need to monitor and identify risks, the outcomes of risk assessments and the corresponding output from a supervisory response model.

Due to the dynamic nature of risk-based supervision, planning does need to remain flexible and adaptable and able to respond to changes identified during the supervisory programme. Decisions may need to be made to drop activities in favour of more urgent matters. Therefore, it is important that risk response models support supervisors to not only consider what additional work is needed as a result of identified risks and issues, but also what matters can be deferred or deprioritised.

A variety of tools and techniques are available to support supervisors undertaking risk-based supervision with further details set out in attachment 1. The specific supervisory tools, response models and methodology applied, however, will differ between jurisdictions to account for differences in the nature of pension systems and supervisory objectives, access to resources and the legislative and policy framework.

A. Individual Entity Risk

Response Matrix

One way to direct the response of the supervisory authority to specific entities which have been identified as posing a greater threat is via a supervisory response matrix. This may be a simple "intervention" index generated by the product of probability and impact, or some variant of this. More complex supervisory models allow for grouping (e.g. all funds/institutions with a score on the intervention index that falls within a certain range may be classified as requiring the same level of supervisory attention, such as "low attention", or "intense oversight", or "wind up"). Grouping can also be on a pre-screening basis shaped by the authority's risk focus. Where the authority has oversight responsibilities for a large number of small entities, a sampling approach may be also used.

Inputs into Matrix

Where supervisory authorities derive a risk-score and apply a risk matrix approach (as described in Module 4 of the IOPS Toolkit), the categories into which these scores are divided (i.e., high, medium, low) can feed directly into the supervisory response matrix.

Results of stress tests may also be fed into the supervisory response matrix – for example Portugal uses value-at-risk and stress testing scenarios to determine an entity's impact. Some attempt to make stress testing more forward-looking by projecting solvency results, is done by the Office of the Superintendent of Financial Institutions (OSFI) in Canada.

Table 1: Inputs Driving Supervisory Responses

Supervisory Authority	*Entity Risk-score*	*Solvency Measures*	*Systemic Analysis*	*Probability*	*Impact*
APRA, Australia	✓ (includes systemic analysis)	(incorporated into entity risk assessment)	(incorporated into industry strategy and entity risk assessment)	(incorporated into entity risk assessment)	✓
OSFI, Canada	✓	✓			
SP, Chile	✓		✓	✓	✓
BaFin, Germany	✓ (includes solvency and stress tests)				✓
MNB, Hungary	✓	✓	✓	✓	✓
CONSAR, Mexico		✓ (VaR)			
DNB, Netherlands	✓	✓	✓	✓	✓
FSB, South Africa				✓ (includes entity risk score)	✓
TPR, UK			✓	✓ (including solvency measures)	✓

The supervisory response matrix itself is usually divided into a series of risk categories, indicating a range of supervisory tools that would typically be employed to entities within each category.

The lowest risk category would require a less intensive supervisory touch (e.g. regular oversight), whilst the highest would justify or require more intensive supervisory tools to be used (such as in-depth analysis, on-site inspections[3], detailed directions, etc.). For example, the Financial Services Board (FSB) in South Africa conducts compliance visits on all high-risk funds and administrators (i.e. with a risk rating score over 80 and 81, respectively) and on all high impact funds (i.e. with an asset value exceeding $13.4 million) and high impact administrators (with the total value of assets under administration exceeding $1,330 billion).

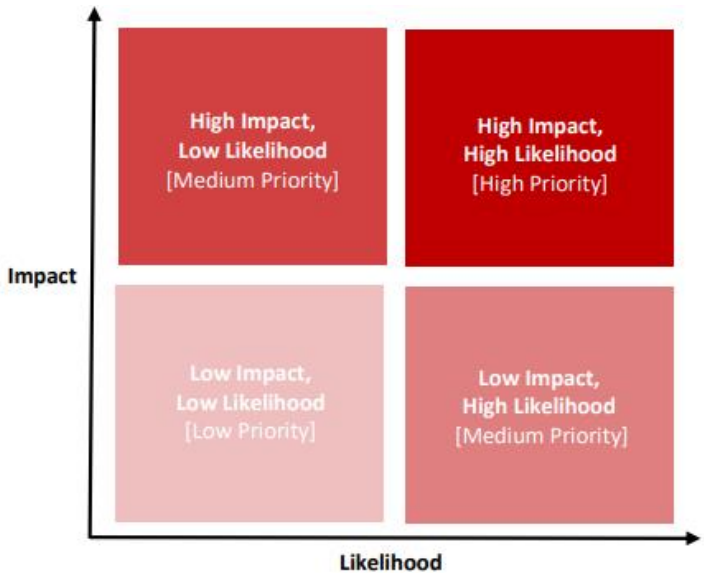
[3] On site reviews referred to in the IOPS Toolkit are reviews which take place physically at the premises of the supervised entity.

One response may be financial (where authorities are funded by supervised entities) - applying a lower levy to institutions with a lower risk rating (as the FSB is considering) – though implications arising from disclosure issues would have to be considered (see following section).

The number of rows and columns in the response matrix will depend on the preferences of the supervisory authority and the environment in the country. For example, the FSB in South Africa operates 5 (based on 5 rating scores). The Retirement Benefits Fund (RBA) in Kenya classifies its supervisory intervention into four broad categories based on the result of the risk assessment, and further employs a risk ranking process to determine the supervisory priority that divides the regulated entities into four quartiles (see below) based on 2 impact and 2 probability levels.

Example: Kenya

In Kenya, the RBA uses the results of their risk ranking process to determine the supervisory priority as set out below.



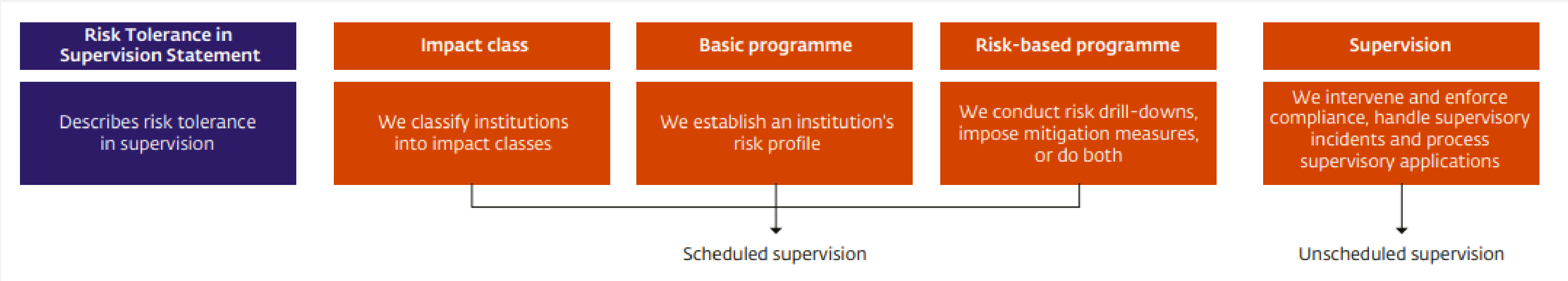
Thresholds should be set which highlight suitably risky cases, but equally do not place too much burden on what is often a limited number of supervisory staff. The objective should be for most plans or funds to fall into the lower risk categories (so that few need any intervention). If plans or funds move into a higher risk category the supervisory authority should know about it rapidly and should have the goal of returning the plan or fund to the lower categories as soon as possible.

Other supervisory response models

An alternate approach to the matrix has been observed in several jurisdictions (e.g. Australia and the Netherlands). A level of supervision intensity (or routine supervision) is first determined based solely on the potential impact the pension fund might have on the supervisory objectives. The supervisory response and its intensity are then further adjusted to account for the outcome of the risk assessment for that entity. This type of approach allows for more resources to be allocated to those entities that are assessed to be more impactful irrespective of their risk profile. However, it may also mean that, for less impactful entities, some issues may not be identified due to the lighter level of supervision applied. In jurisdictions such as the Netherlands and Australia where this approach is taken, the supervisory authority makes clear statements about its risk appetite and how it will treat entities of differing levels of impact (see Module 3).

Example: the Netherlands[4]

In the Netherlands, all entities within an impact category are subjected to the same basic supervisory programme. The scope of the basic program differs between impact classes and is smaller for lower impact entities. The basic programme's purpose is to identify risks and concerns and where it exposes risks outside of risk tolerance, additional activities are undertaken in accordance with a risk-based program.



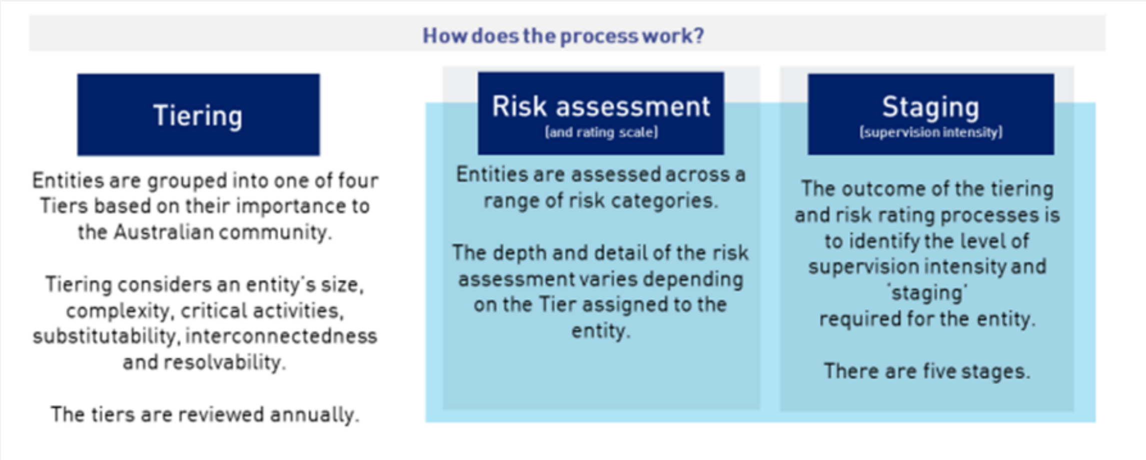
[4] https://www.dnb.nl/en/sector-information/open-book-supervision/brochure-atm

Example: Australia

In Australia, the Australian Prudential Regulation Authority (APRA) does not assign a risk rating to each of its pension funds. Rather, risk assessments are made in respect to the registrable superannuation entity licensees (RSEL) and incorporate the assessments of associated registrable superannuation entities (RSE) and small APRA funds as appropriate.

Entities are categorized into tiers based on their importance to the Australian community and potential impact should a risk materialise.

In the absence of any identified risk or issue, the tier of the entity will inform the nature and scope of supervision activities. A risk assessment is conducted and will guide the supervisor on the level of supervision intensity and action necessary to address any identified concerns or risk.[5] The tiering of the entity also guides the depth of risk assessment undertaken.



Uses of structured response models

As well as helping to determine and organise their supervisory action and response to detected risks, such supervisory response models also allow authorities to plan their supervisory timetable and use their resources in an efficient manner. Structured response models allow for the choice of appropriate supervisory responses to take place in an atmosphere of careful consideration and discussion – as opposed to formulating plans only when an emergency situation arises or may arise – thereby better enabling consistency in supervision actions and responses.

In addition to the intensity of the supervisory response, these models may be used to determine the timing of supervisory action - i.e. how urgently the supervisory authority needs to respond. For example the lowest risk category might require only regular supervisory oversight (e.g. regular data submissions - quarterly or annually - and a regularly scheduled, more in-depth review every few years). For higher risk categories a more urgent - if not immediate - supervisory response would be required (e.g. stepping up reviews from tri-annual to annually). Institutions whose risk rating is deteriorating over time may

[5] https://www.apra.gov.au/supervision-risk-and-intensity-sri-model

also require more intensive or urgent supervision (this being one factor considered by De Nederlandsche Bank (DNB), for example).

A matrix or other structured model can also be used to establish a supervisory response to a supervised entity as a whole or to prioritise between business lines, operations or functions within a larger conglomerate or supervised institution.

Example: Mexico

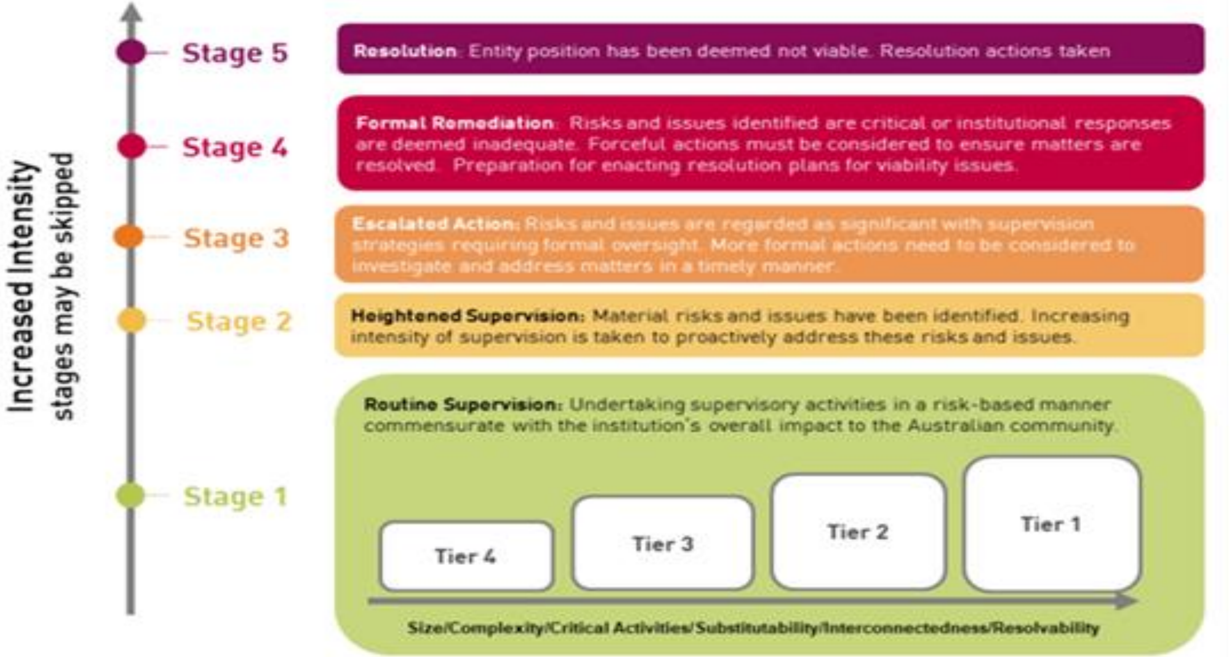
In **Mexico**, where the supervisory authority, Comision Nacional del Sistema de Ahorro para el Retiro (CONSAR), has a limited number of entities to oversee, inspections are conducted on the basis of an integrated risk map. Such a map allows the supervisory authority to identify the different events that, due to their relative importance, likelihood and economic impact, can affect the pension funds being supervised.

Figure 3: Supervisory Matrix of the Central Bank of Hungary (MNB) applicable to pension funds

<table>
<tr><td>STRONG IMPACT</td><td colspan="2">– Close supervision
– Supervision program
– Comprehensive institution assessment</td><td colspan="2">– Close supervision
– Supervision program
– Comprehensive institution assessment
– Intense monitoring,
Information to management</td><td rowspan="3">– Immediate action
– Intense monitoring
– Information to management</td></tr>
<tr><td>ABOVE MEDIUM IMPACT</td><td colspan="2">– Standard supervision
– Supervision program
– Simplified institution assessment</td><td>– Close supervision
– Supervision program
– Simplified institution assessment</td><td>– Close supervision
– Supervision program
– Comprehensive institution assessment
– Intense monitoring,
– Information to management</td></tr>
<tr><td>BELOW MEDIUM IMPACT</td><td colspan="3" rowspan="2">– Monitoring
– Supervision program Action upon breaching of laws, CEO letter</td><td>– Standard supervision
– Supervision programAction upon breaching of laws, CEO letter
– Follow-up</td></tr>
<tr><td>WEAK IMPACT</td><td>– Monitoring
– Supervision program
– Action upon breaching of laws, CEO letter
– Follow-up</td><td>– Immediate action
– Basic monitoring</td></tr>
<tr><td></td><td>LOW RISK</td><td>MODERATE RISK</td><td>SIGNIFICANT RISK</td><td>HIGH RISK</td><td>OCCURRED RISK</td></tr>
</table>

Example: Australia

In Australia, the Australian Prudential Regulation Authority (APRA) does not assign a risk ratings to each of its pension funds. Rather, risk assessments are made in respect to the registrable superannuation entity licensees (RSEL) and incorporate the assessments of associated registrable superannuation entities (RSE) and small APRA funds as appropriate. Entities are categorised into tiers based on their importance to the Australian community and potential impact should a risk materialise. In the absence of any identified risk or issue, the nature and scope of supervision activities will be commensurate with the tiering of the entity and will be aligned to APRA's overall supervisory risk appetite and the nuances of the industry. A risk assessment is conducted and will guide the supervisor on the stage and, thereby, the level of supervision intensity and action necessary to address any identified concerns or risk.[6]



[6] APRA Guide: Supervision Risk and Intensity Model (SRI Model)

SECTION 2: RESPONSE, ESCALATION AND ENFORCEMENT[7]

Once the supervisory authority has determined which supervisory response category an entity should be subject to, a more detailed individual response to the entity needs to be established. As outlined above, a logical connection should be made between the risk analysis and the scope, nature and depth of the supervisory practice. The interventions and/or sanctions imposed by the pension supervisory authority should be proportional to the problem (risk) which is addressed, taking into account the nature, scale and complexity of the risk and potential compliance irregularities relating to the relevant party.

To maintain the credibility of the supervisory system, supervisory responses and their escalation should be perceived by supervised entities as meaningful and appropriate to the circumstances. This is particularly important for RBS. With rules-based supervision, the response to a pension fund being in violation to a regulation is likely to be more clear cut (i.e. the consequence of violating rule X is penalty Y).

However, with RBS, supervisors are attempting to deal with risks and problems before they occur. Thus, a graded way of dealing with issues as/if they develop is required (including moving entities up into higher risk categories if identified risks are not dealt with or the response of the supervised entity is not satisfactory). The supervisory authority should communicate its initial response to a problem in a proportional and fair fashion, and then follow up in an appropriate way. Supervised entities need to be convinced of the need to act on the recommendation of the supervisor, rather than debating the soundness of supervisory conclusions and the appropriateness of remedial actions. Supervisors therefore need to be seen to be not only fair and reasonable, but also decisive and firm. Due process should be considered at each stage when deciding on the appropriate supervisory action to be taken.

A. Escalation and Enforcement Tools and Approaches

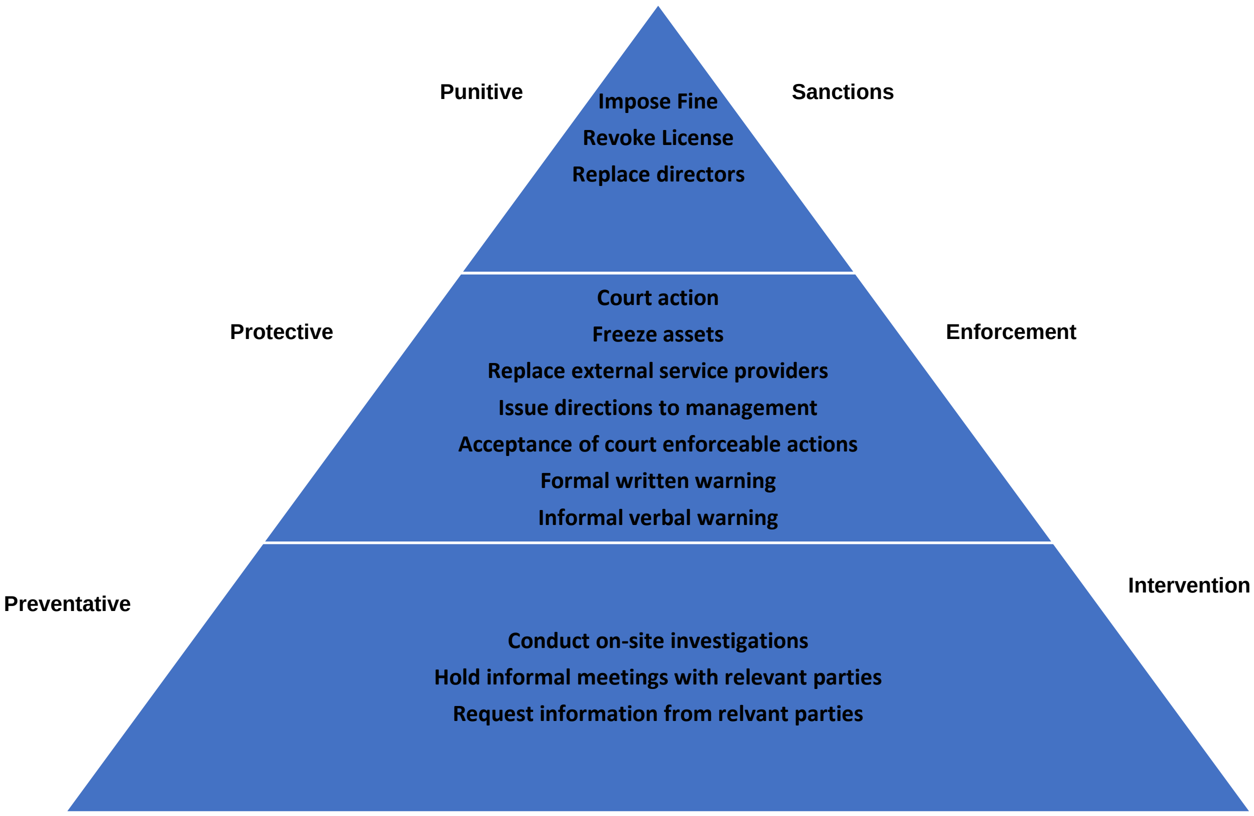
In order to ensure such proportionate responses internally, and to be able to explain them to supervised entities, some supervisory authorities have found the concept of the enforcement pyramid useful.[8] In essence, the pyramid is a graphical representation of an action plan for intervention, allowing the supervisory authority to consider in advance various scenarios and to develop appropriate strategies for supervisory action, rather than waiting until problems arise and then, under pressure, having to decide what action should be taken.[9] The categorisation of problems is needed to ensure that the supervisory authority properly balances the severity of the failure or weakness with the appropriate enforcement tool and the related sanction. The processes for collecting the evidence of the violation and determining its severity must be applied in an even-handed manner. Generally, failures of similar severity would prompt enforcement actions of similar strength, and different entities with similar violations would receive similar treatment.

[7] See Ayres and Braitwait (1992), Baldwin and Black (2007), and Black (2008b).

[8] An enforcement pyramid may also be known as an intervention ladder -e.g. in the Insurance Core Principles and Common Framework for the Supervision of Internationally Active Insurance Groups.

[9] It should be noted that, in keeping with the concept of proactive / risk-based supervision, supervisory strategies can be triggered by high-risk situations that have not yet given rise to actual problems or situations of noncompliance.

Figure 4: Enforcement Pyramid



Source: IOPS Secretariat

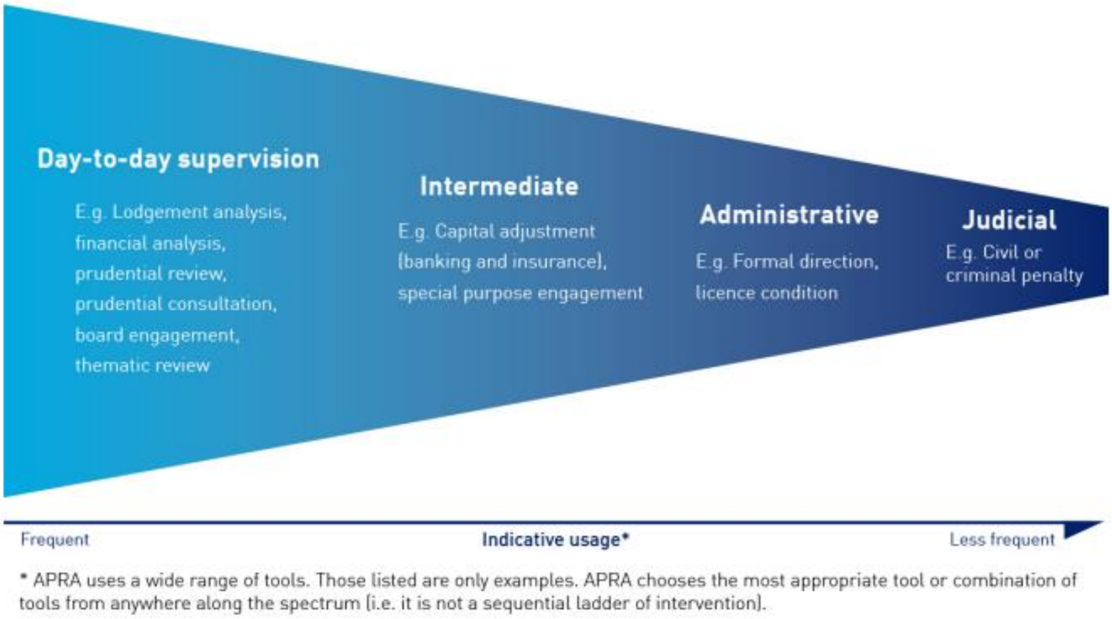
The enforcement pyramid, however, does have some limitations when applied to risk-based supervision as it is more focused on when non-compliance has been detected rather than on proactively avoiding non compliance.[10] Furthermore, the enforcement pyramid can be perceived as a linear approach whereas escalation in a risk based supervisory approach is not necessarily linear and needs to respond to the identified risk in a timely and proactive manner. Therefore, when using an enforcement pyramid, care must be taken to ensure that its use and application in a risk-based context is properly understood.

Some jurisdictions have developed their own escalation toolkits that form part of the broader supevisory response model. In Australia, APRA has documented its enforcement approach and includes the enforcement tools as part of the broader supervisory toolkit. When an entity moves into heightened stages of supervisory intensity, supervisors must consider the application of enforcement tools and apply them where appropriate. The Netherlands also incorporate their enforcement and intervention approach within their risk model and have categorised various activities and actions it might take based on their intended purpose (i.e. to drilldown, mitigate or intervene and enforce).

[10] Baldwin and Black (2007), Really responsive regulation.

Example: Australia

In Australia, APRA's Enforcement Approach[11] provides an overview of the enforcement and intervention tools it has available (see below). The Enforcement approach also sets expectations for the community around the objectives of APRA's enforcement activities, the criteria applied and the guiding principles under which its enforcement approach operates.



[11] https://www.apra.gov.au/sites/default/files/apras_enforcement_approach_-_final.pdf

Example: The Netherlands[12]

In the Netherlands, the DNB's risk-based programme includes supervisory activities that are aimed at drilling down and mitigating identified risks.

Drilling down means investigating risks identified in the basic programme in further detail, while mitigating aims to ensure that an institution's excessive risk ratings are lowered so they conform to the DNB's supervisory risk tolerance. Depending on the nature and scope of the risk, non-compliant behaviour, or both, the DNB may decide to intervene and enforce compliance as part of the mitigation process.

The supervisor's judgement is leading in selecting drill-down and mitigation activities that must be undertaken. To promote the effective and efficient deployment of its supervision resources, the DNB's risk-based programme indicates which drill-down or mitigation activity must be undertaken initially for a certain impact class or risk rating.

The guiding principle is that the DNB only use a heavier instrument if it has established that a lighter instrument is insufficiently effective.

In line with its risk tolerance in supervision, the drill down and mitigation activities applied to entities falling within the low impact class, in line are more limited in terms of their scope and duration.

Risk-based supervision is driven by factors such as the nature of the pension system being supervised, the level of legal and financial market development etc. (see Hinz 2005, IOPS 2007a). These varying approaches imply that some pension supervisor authorities may use their powers and engage with pension funds more regularly than other supervisory authorities. Accordingly, the enforcement approach also needs to account for the variances in the overall supervisory approach.

The pension supervisory authority should have clear and well-defined strategic supervisory goals for the use of intervention, enforcement and sanction powers, clearly establishing whether the goal of their action is preventative, protective or punitive and use the appropriate tools and powers accordingly. The supervisory authority should have a coherent, well thought-out policy for deciding on the mix of supervisory tools adopted and the ability to adapt this approach to changing circumstances.[13]

When utilising the enforcement pyramid outlined above, some authorities may start higher up the pyramid (e.g. may conduct more on-site reviews) and may escalate their response more rapidly than others. The pyramid should include as many scenarios as can reasonably be considered, including those that may be of a local or regional nature. Most markets have specific characteristics and supervisory issues that are somewhat unique to the environment, and it is important to build these into the pyramid structure.

[12] https://www.dnb.nl/en/sector-information/open-book-supervision/brochure-atm/

[13] IOPS (2009a), IOPS Guidelines for Supervisory Intervention, Sanctions and Enforcement

Alternatively, guiding principles and enforcement criteria may be developed that guide supervisors on when particular enforcement powers might be applied. Such an approach will be less prescriptive and allow greater flexibility in response but also has the potential of inconsistency between supervisors and so care must be taken to ensure adequate oversight.

As mentioned previously, in order to make the supervisory process as transparent as possible, the broad outline of the enforcement approach should be made public. This will help supervised entities understand what is expected of them, and what will happen in cases of non-compliance. The triggers for intervention - let alone any punitive action - should be as objective as possible, and should be clearly and transparently communicated, both within the supervisory authority and to supervised entities. Being able to articulate to an entity where an intervention may be triggered is a powerful tool and can act as a deterrent.

When applying an enforcement approach, it is important to know at what level the enforcement action should start and how quickly actions may escalate. A balance needs to be struck between too lenient and too strict approaches. The former does not protect individuals sufficiently and could undermine supervisory authority, leading to resistance if the supervisor does, unexpectedly, apply a tough approach. The latter could be costly and, if seen as unfair, can lead to resistance and non-compliance – in extreme cases is making the sector very difficult to supervise at all.[14] A balance therefore needs to be struck between an '*accommodative*' vs a '*deterrence*' based approach to supervision.

The escalation of action should be tailored to the individual situation. For example, supervisors do not need to move through every, graduated step in the enforcement pyramid in each case. They may need to escalate their response rapidly to ensure a swift response to an urgent problem. When deciding on the timeframe between the above phases, the seriousness of the breach or identified concern and the potential risks to members and beneficiaries should be taken into account. On the one hand, a feasible timeframe should be allowed between phases in order to enable the relevant parties to respond properly.

Parties should also be given some flexibility, as deemed appropriate, in the manner in which regulatory compliance is achieved. On the other hand, given the fact that a long delay could increase risks to fund members and beneficiaries and the cost of remedying the particular risk (in some cases significantly), the above-mentioned timeframe and flexibility should be designed to be as appropriate as possible in order to avoid abuse. If the timeframe needed for a particular type of action is longer than acceptable in view of the seriousness of the situation, then a different and probably more severe intervention must be considered.

A reciprocal strategy is advised, with the supervisory authority adopting an accommodative approach when the supervised entity does so, but becoming increasingly strong in its response if non-compliance or non-cooperation is encountered.[15] Monitoring progress toward the successful implementation of an effective remedial action is consequently important – i.e. the supervisor needs to have a targeted way of following progress towards a measurable goal (which needs to be clearly defined, with steps to achieve it and a suitable timetable set).

Supervisors should seek to understand why non-compliance or violations have occurred to ensure that the underlying causes are addressed. Genuine mistakes, for example, need to be rectified, but may

[14] Black (2008b) discusses how principles-based regulation in particular will not survive overly punitive enforcement as regulated firms will demand detailed rules in order to know how to stay in compliance.

[15] In severe cases the supervisory authority may need to intervene to protect and stabilise a situation first, and then may go back and punish or seek restitution from culpable parties.

justify a less punitive response than wilful and persistent violations. The supervisory authority should be responsive to the supervised party's own behaviour – if the relevant parties are acting cooperatively, the supervisory authority should generally do so as well.[16]

Taking supervisory decisions with serious impact on supervised entities, such as the introduction of enforcement action/use of sanctions, etc., should in principle involve functional separation of duties between those proposing such decisions and those approving these decisions.[17]

Table 2: Suggestions for When to Use Supervisory Response Tools

Description of Supervisory Tool	When Appropriate to Use
Request information from relevant parties	Minor or emerging issues; cooperative management.
Informal meetings with relevant parties /Moral suasion	
On-site Reviews	Could be part of regular supervisory work. Resources directed towards higher risk cases, but also some medium to lower risk cases, partly for deterrent effect.
In-depth reviews and inspections	To supplement on-going supervisory efforts, to detect problems that may not otherwise be evident, and to confirm or investigate findings from regular monitoring programs.
Informal warnings	Minor or emerging issues; cooperative management.
Formal written warnings	More serious, developing issues; less cooperative management, attempts at informal remediation have failed.
Remediation plans	Problems which require longer period of correction especially related to inadequate funding or requiring changes to procedures (for example poor governance or internal controls).
Acceptance of court enforceable undertaking	More serious, developing issues; less cooperative management, where less drastic measures have failed.

[16] Baldwin and Black (2007) argue that to be 'really responsive' supervisors will have to consider more than just the response of the supervised entity. They will also need to take into account the entity's own operating and cognitive framework (their 'attitudinal settings' – whether accommodative, resistant, disengaged, etc.); the broader institutional environment of the regulatory regime (i.e. levels of authority's resources, other controls over authority etc.); the different logics of regulatory tools and strategies (i.e. strategies of disclosure, compliance or deterrence assume different models of behaviour from supervised entities); the regime's own performance (i.e. measuring whether enforcement tools are successful); and to changes in each of these elements. This approach should incorporate all different types of enforcement activity – i.e. detecting undesirable or non-compliant behaviour; developing tools and strategies for responding to that behaviour; enforcing those tools and strategies; assessing their success or failure; and modifying them accordingly.

[17] IOPS (2010), IOPS Principles of Private Pension Supervision.

Issue directions to management / Compliance directives	Increasingly problematic issues; uncooperative management, where previous efforts at voluntary remediation have failed.
Replace external service providers	Problematic service providers. This could affect just one or a few plans if the service provider is generally satisfactory, but has not handled relationship with a particular plan well, or it could involve the service provider itself, if it is incapable of providing adequate service – in this case the action would need to be directed against the service provider, and this will depend on the powers the pension supervisory authority has in regard to such service providers.
Freeze assets	Suspicion that assets are not being used exclusively for the benefit of plan members or that illegal or highly risky investments are being made. If inappropriate assets have been purchased they might be difficult to divest – legal action against fiduciaries might need to be contemplated.
Court Action	Serious problems which could not be solved by cooperative means. Could also be used as show strength of supervisors' intent as a deterrent to others.
Replace directors/ Replacement management	Suspicion that pension plan or fund is not being run exclusively for the benefit of members. Suspicion of fraud and diversion of funds. May lead to legal action against fiduciaries.
Revoke license/ Close to new members or other restrictive actions short of wind-up	Concern that funds' new members are being used to unreasonably subsidise current members (must be egregious, some degree of cross-subsidisation is acceptable, at least in defined benefit plans). In pension accumulation system this action could be taken to protect against "good money being thrown after bad", although would probably lead to wind-up as current members would probably withdraw as well. This action will only be used if pension plan and/or plan sponsors are in significant financial difficulties already.
Penalties and fines	Serious or repeated breaches of regulation or supervisory direction, or breaches of "compliance issues", such as serious history of non-payment of contributions or filing of documents.
Winding up	Continuation of pension plan poses more of a threat to members and beneficiaries than wind up. However, generally this action will be used rarely except in cases where the plan sponsor is already in financial difficulties or even insolvent.

Source: IOPS Secretariat

B. Systemic Risk[18]

Just as risks can be identified on a systemic, as well as an individual entity basis, so the **response** of the supervisory authority may also be industry wide rather than targeting certain entities.

The supervisory authority should select its supervisory response based on cost and impact – so that, if there is concern that a specific risk could impact the pension sector as a whole, it may be more efficient to devise a response on a system-wide level, rather than interacting with pension funds individually. For example, a supervisory authority might find that poor record-keeping and administration by pension funds is a systemic problem. The supervisory authority may therefore choose to focus resources on finding an industry-wide solution to improving record-keeping (e.g. through training, issuing of model or mandatory management information system requirements, imposing a centralised administration system, etc.) rather than devoting inspection resources to the record-keeping performances of individual pension funds and pursuing actions in a piecemeal fashion.

Systemic responses from the supervisory authority can range from launching further in-depth thematic reviews on a particular topic or extraordinary requests for data (e.g. De Nederlandsche Bank (DNB)'s review of pension fund investment in alternative assets), to - in extremis - undertaking legislative initiatives (for example mandating that defined contribution plans use market or market related rates of return). Supervisory responses to systemic risks highlighted by the financial and economic crisis of 2008/2009 included temporarily suspending some potential counter-cyclical funding regulations, and intensifying stress tests and reporting requirements[19]. More recently, the Covid-19 pandemic required a coordinated response that included timely communication and increased engagement with supervised entities as well as easing some of the prudential requirements[20].

The supervisory authority may also consult with industry associations as to how identified systemic risks could be alleviated. For example, there could be poor working practices on the part of service providers. The pension supervisory authority can work with industry groups to improve these. Likewise, training may be needed to get trustees up to speed, or to improve the quality of data used (e.g. actuarial assumptions). For example, the German supervisory authority BaFin works closely with the German Actuarial Organisation and professional organisations that develop mortality tables for pension funds.

Internally, supervisory staff responsible for cross-sector, thematic analysis should make sure that individual supervisors are aware of the issue and give it proper weighting and importance in their analysis and risk scoring.

A key systemic response for a risk-based supervisor would be to issue guidance on an identified systemic risk issue. As discussed in Module 1 of the IOPS Toolkit, one of the key changes a pension supervisory authority has to make when adopting a risk-based approach is issuing guidance to supervised entities as to what is expected of them, thereby attempting to improve the system-wide standards. For example, if an industry survey shows weaknesses in pension funds risk-management systems, the

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[18] As noted in Module 3 of the IOPS Toolkit, the term 'systemic risk' used in the Toolkit refers to both systemic risk - i.e. a specific factor which can have an impact on the pension sector as a whole (e.g. increased volatility in worldwide capital markets, as was experienced in 2008/2009) – and also to 'system-wide risk' – i.e. a risk factor which may be prevalent in most pension funds (e.g. weak governance).

[19] For details, see IOPS (2009b), Private Pensions and Policy Responses to the Financial and Economic Crisis, IOPS Working Paper No. 9.

[20] For further details, see IOPS (2020), IOPS statement on pension supervisory actions to mitigate the consequences of the Covid-19 crisis.

supervisory authority may react by issuing a guidance note, directed at all funds, explaining what systems are expected to be in place. Likewise, if the stress tests required by the authority show low funding levels, the requirements for recovery plans for all funds may be adjusted in reaction.

It is important to ensure that there is a strong connection between entity and systemic risk responses. For example, the use of thematic reviews to address systemic concerns may need to be incorporated into individual entity planning. Strategies and plans at both industry and entity levels can support the connection and the link can also be built into risk models as discussed in Module 4.

Example: Hungary

The Central Bank of Hungary (MNB) in Hungary integrates both institutional and thematic analysis into their pension risk analysis framework.

The MNB assesses thematic risks in order to draw conclusions for the universe of supervised entities.

The MNB has a range of working methods to deal with thematic risks, including theme investigations, prudential discussions, extraordinary requests for data, theme analysis (of a particular topic), consultation with trade associations, consumer surveys or even test purchases. Though all these mechanisms achieve the same purpose and work towards the same goal, they are different in terms of flexibility. Selecting between these tools is based on which is most suitable and reliable in terms of the nature and special features of the information required, the number of institutions involved and the resources required.

If important risks are revealed during the thematic analysis in regard to one or more institutions, the authority has to consider whether the matter should be taken up via the institutional analysis process, investigating the individual institution – i.e. work which starts as thematic investigations can lead to targeted investigations.

Example: United Kingdom

The Pensions Regulator (TPR) in the United Kingdom runs regular campaigns around key themes where risks have been identified according to its Corporate Strategy or where new requirements are to be communicated. The approach is known as ‘Communications as a Regulatory Tool’ (CAART) and involves the use of a number of products. For example, its trusteeship initiative in 2018 included a dedicated website section, a series of emails each covering a different element of trusteeship over a 12 month period, workshops, guidance, e-learning and a consultation document. This campaign approach allowed for maximum reach of its communications while minimalising regulatory burden.

Policy areas with specific risks are identified within the TPR corporate plan which is published regularly, thereby adopting risk-analysis methods outside the prism of its risk-scoring model. For example, governance has been a focus of the TPR, whilst the authority envisages a shift in priority towards enforcement where sufficient progress has not been made towards the expectations set in its guidance, according to the risk a scheme presents.

C. Quality Control

Quality control mechanisms are needed to ensure that the supervisory response and escalation dedicated to each entity are appropriate. The consistency of risk scores applied to individual entities was discussed in Module 4 of the IOPS Toolkit. Here the same issues apply in relation to ensuring that supervisory responses are consistent. Consistency of actions by the supervisory authority should be ensured between pension funds and over time.

A balance needs to be struck between individual supervisor's judgement and central control, weighing responsiveness of the assessment system with accuracy. Mechanisms for ensuring that entities are allocated to supervisory categories in a consistent fashion include peer reviews, sign off protocols, benchmarking sessions, internal comparisons and validations, as well as training for supervisors. However, ensuring that internal control mechanisms do not become too cumbersome is key.

The supervisory response categories should be reviewed regularly to make sure that they are working and the correct supervisory approach (e.g. targeting, timing, supervisory tool, scope) is being applied to problems detected. Back-testing of matrixes could also provide a useful check.

Practical challenges are, however, associated with devising a supervisory response.[21] Whereas supervisors are said to allocate resources successfully according to the main risk categories, a harder task is to ensure that all entities within the high risk categories receive the appropriate attention (especially when supervisory resources are particularly scarce) and how to prioritise between institutions which have all been deemed 'high risk'.

A counter problem is establishing what the appropriate oversight for the low risk category should be, balancing the appropriate allocation of resources with making sure the supervisory authority does not overlook potential problems– in what can be described as dealing with the problem of the 'bulge' (as the bulk of the supervised entities will tend to fall in the low risk category). Approaches observed to supervise lower risk entities include[22]:

- information campaigns (informing small entities of their regulatory requirements);
- thematic or sample reviews and inspections;
- random inspections (detecting non-compliance, acting as a deterrent and protecting the supervisors credibility);
- reliance on data and offsite analysis including sending automated alerts to supervisors where an entity fails to meet specific key metrics; and
- effective use of enforcement where non-compliance is identified.

A related risk is that of missing what might be a low risk that is not significant at the individual fund level but may well have a significant impact if it occurs across a large proportion of funds. Hence the importance of systemic risk analysis and identification (as discussed in Module 3 of the IOPS Toolkit).

[21] See Black (2008a, page 24).

[22] IOPS (2022a), Report on learnings from the design, implementation, use and review of risk based supervision by pension supervisory authorities, IOPS Working Paper No 38.

Example: Germany

In Germany, BaFin undertakes several activities to support consistency in supervision.

Firstly, the “**Quality**” dimension performed by specialists, is supported by cross-checking examinations with colleagues within the section and within the department by an interview panel on the basis of peer discussions. E.g. complaints on undertakings received, and market sentiment.

The results of the examination of the “**Impact**” dimension are provided by a specialised section within BaFin for all supervised entities.

A “small validation” (plausibility check) and a “big validation” (validation of all indicators, weights and thresholds) are conducted on a regular basis, whereas under specific circumstances an extraordinary validation can be executed. Depending upon the result of the validation, it might be necessary to change the risk classification process and to customise it to the result of the validation. Trigger for validations could be external, e.g. changes in legislation or internal factors like the introduction of a completely new rating system. Results of the validation are documented.

SECTION 3: COMMUNICATION TO INSTITUTIONS

A risk-based approach to supervision involves different dynamics in terms of communication between the supervisory authority and the supervised entity. The greater application of supervisory judgement under risk-based supervision creates various communication challenges. Since the risk assessments, even with the best analytical tools, typically incorporate considerable judgement, the ability to act on the basis of these assessments may not be as clear-cut as dealing with an issue of legal non-compliance. Supervisors must be able to explain their assessments and communicate their most significant concerns to the financial institutions, both verbally and in writing.

The supervisor, perhaps in consultation with the industry, will need to determine an appropriate level of detail for reporting the results of its assessments to each supervised entity. While transparency is important, excessively detailed reports could result in unproductive arguments about minor details, taking the focus away from the most important issues. For example, once a risk analysis has been undertaken for a supervised entity, and in many cases a risk-score derived (as described in Module 4), the actions required by the supervisor need to be communicated to the supervised entity. Many factors are considered in the risk analysis, and supervisory concerns might, for example, relate to weaknesses in risk management practices. The supervisor must be able to explain such concerns in a credible manner and require appropriate action by the institution, which might not involve a single "best answer". If necessary, the supervisory authority requires the pension fund to develop an acceptable plan for the correction of problems and checks for compliance with corrective actions and remedial measures.

A. Disclosure of Risk-Score to Entity

Whether to disclose the actual risk-score to a supervised entity remains a matter of debate. Some authorities may not share their risk rating with the institution itself – particularly in the first phases of designing and implementing their risk-based frameworks, where supervisors may focus on internal issues. For example, the Financial Services Board (FSB) in South Africa only alerts an institution if it falls within a high risk category – if the others enquire they are told that they are not in this group (however the FSB does give funds the opportunity to respond to their interim rating). The Australian Prudential Regulation Authority (APRA) does not inform institutions of their risk rating but does inform them of their 'SRI Stage[23,] which is the outcome of the ratings in the risk assessment and impacts of the supervision strategies and actions. Institutions are also informed of the key risks and issues driving the risk assessment and resulting stage.

On the other hand, it may be the case that where institutions are not informed they may not understand the results of their risk assessment or the implications for their relationship with the regulator[24]. It may at least be considered good practice that entities should be provided with the opportunity to respond to the supervisory authority's findings.

[23] https://www.apra.gov.au/supervision-risk-and-intensity-sri-model

[24] As noted in Black (2008a).

The RBS Learnings project[25] found that amongst a variety of approaches taken the most often supervisors communicated the:

- Overall assessment outcome;
- Specific areas of concern, though not necessarily the risk rating given for a particular risk; and
- The actions to be taken because of the assessment (e.g. what steps the entity is required to take and/or what implication the assessment would have on the supervisory actions).

In addition, Chile also noted that it had recently commenced sharing a comparative analysis of the results of the assessment that set out where the company was in comparison with other players.

B. Public Disclosure of Risk Score

Conditions under which public disclosure of risk assessments might be appropriate must also be considered. When using disclosure, the supervisory authority needs to distinguish between the conduct of business supervision (where information is published in order to act as a deterrent) and prudential supervision (where information may need to be kept confidential in order to prevent a panic reaction to a particular institution or loss of confidence in the integrity of the system as a whole).

Financial regulators generally do not publish risk assessments of individual entities, largely out of concern that they will be misunderstood by the public and damage market confidence (unlike the authorities in some other sectors). A “run on the bank” phenomenon is less likely in a pension plan or fund than in other financial institutions. In addition, one of the main elements of risk assessment, the solvency and/or funded ratio for defined benefit plans or funds, may already be known to the plan or fund members, at least in jurisdictions where either the report or an extract thereof, is freely available to plan members, if not publicly available in some cases. APRA in Australia, for example, do not allow funds to release their SRI stage publicly so that this cannot be used as a marketing device or be seen as some sort of recommendation by the supervisory authority.

C. Disclosure of Supervisory Methodology and Outcomes

In order to make the supervisory process as transparent as possible, the broad outline of any escalating supervisory response used by the supervisory authority should be made public, in order to help supervised entities understand what is expected of them, and what will happen in cases of escalating risks and/or non-compliance. Sharing with the industry an outline of what broad supervisory response can be expected in certain circumstances may strengthen the credibility of the authority, clarifies what is expected of supervised entities and consequently may help them stay in compliance with regulations and supervisory expectations. Such supervisory response matrices could therefore be seen as useful planning tools for the industry as much as the supervisory authorities themselves.

However, it needs to be made clear that these models are plans or frameworks for supervisory action and do not constrain the supervisory authority to adapt its response when appropriate. Communication is vital both within the organisation, with politicians, with firms, and with the public as to what the process is, what the risk scores mean, and how the framework may need to be adjusted. In

[25] IOPS (2022a), Report on learnings from the design, implementation, use and review of risk based supervision by pension supervisory authorities, IOPS Working Paper No 38.

particular, openness with the industry as to the fact that it is being rated, what the rating means, and that the rating they get will have an influence on how the supervisor interacts with them is vital. [26]

The RBS Learnings project[27] observed supervisors made use of the following communication channels to communicate with stakeholders regarding supervisory processes and outcomes:

- Annual report;
- Industry forums;
- Industry presentations and events;
- Website;
- Formal communications such as letters to industry.

The annual report was the most common periodic communication tool used to communicate both supervisory processes and outcomes. Industry forums were utilised by the Republic of Ireland, Guernsey and Canada to update stakeholders on key matters and/or to communicate the outcomes of supervisory engagements. Poland also posts information about the assessment process, including the methodology of evaluation on its website annually.

[26] See Black (2008a, page 44).

[27] IOPS (2022a), Report on learnings from the design, implementation, use and review of risk based supervision by pension supervisory authorities, IOPS Working Paper No 38.

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