

PENGURUSAN RISIKO DI KWSP

RISK MANAGEMENT IN EPF



GAMBARAN UMUM

Dalam menetapkan matlamat untuk merealisasikan Visi dan Misinya, KWSP perlu memastikan bahawa segala unsur yang berkaitan adalah tersedia bagi mengurus pelbagai risiko yang timbul daripada persekitaran perniagaan yang sentiasa berubah. Sama ada ianya risiko strategik, kredit, pasaran, kecairan atau operasi, KWSP sentiasa melaksanakan usaha yang berterusan dalam mengekalkan budaya pengurusan risiko yang teguh dan rangka kerja pengurusan risiko yang bersepadu untuk merebut semua peluang dan menangani semua ancaman.

Dalam tahun 2010, KWSP meneruskan pelaksanaan pelbagai inisiatif bertujuan untuk menerap budaya pengurusan risiko di setiap peringkat dalam organisasi. Inisiatif-inisiatif ini termasuk latihan dan pembangunan sumber manusia secara berterusan, pelaksanaan dasar yang komprehensif dan struktur organisasi yang sesuai, serta peranan dan tanggungjawab yang ditakrifkan dengan jelas.

OVERVIEW

As the EPF sets its sights on realising its Vision and Mission, it needs to ensure that necessary elements are put in place to better manage the various risks posed by the ever changing business environment. Whether it is strategic, credit, market, liquidity or operational risk, the EPF continues to leverage on its robust risk management culture and integrated risk management framework to take advantage of potential opportunities and counter all possible threats.

In 2010, the EPF continued to implement various initiatives aimed at embedding a strong risk management culture within every level of the organisation. These initiatives included continuous staff trainings and development, the implementation of comprehensive policies and an appropriate organisational structure, as well as clearly defined roles and responsibilities.



STRUKTUR PENGURUSAN RISIKO/
RISK MANAGEMENT STRUCTURE



Struktur pengurusan risiko KWSP menyediakan tanggungjawab dan kebertanggungjawaban yang jelas berkenaan proses pengurusan risiko serta menggariskan tanggungjawab utama dalam pengurusan dan kawalan risiko:

1. Kementerian Kewangan

Menteri Kewangan melantik ahli-ahli Lembaga dan Panel Pelaburan KWSP.

2. Lembaga dan Panel Pelaburan KWSP:

- **Lembaga KWSP** (Lembaga) bertanggungjawab terhadap keseluruhan pengurusan risiko yang mengkehendaki mereka mengenal pasti risiko-risiko utama dan memastikan pelaksanaan sistem yang sesuai untuk mengurus risiko tersebut kecuali aktiviti-aktiviti berkaitan membuat keputusan pelaburan; manakala

The EPF's risk management structure provides clear lines of responsibility and accountability for the risk management process as well as outlines the principal risk management and control responsibilities:

1. The Ministry of Finance

The Minister of Finance appoints the members of the Board and the Investment Panel of EPF.

2. The Board and the Investment Panel:

- **The Board of EPF** (Board) is responsible for overall risk management, which requires the Board to identify principal risks and ensure the implementation of appropriate systems to manage these risks except for activities in making investment decisions; whereas

- **Panel Pelaburan KWSP** bertanggungjawab terhadap risiko dalam membuat keputusan pelaburan.
3. **Jawatankuasa Pengurusan Risiko Lembaga dan Jawatankuasa Risiko Panel Pelaburan:**
- **Jawatankuasa Pengurusan Risiko** bertanggungjawab membantu Lembaga mengawasi semua aktiviti pengurusan risiko kecuali aktiviti-aktiviti dalam membuat keputusan pelaburan; mengkaji semula risiko utama yang wujud dalam organisasi dan sistem kawalan dalaman yang perlu ada untuk menguruskannya; dan melaporkan kepada Lembaga.
 - **Jawatankuasa Risiko Panel Pelaburan** bertanggungjawab mengawasi risiko pelaburan, termasuk memperakukan tahap risiko agregat untuk kelulusan Panel Pelaburan, meluluskan polisi dan had risiko, mengkaji pendedahan risiko dan memberikan panduan ke arah penerapan budaya amalan pengurusan risiko dalam fungsi pelaburan.
4. **Jawatankuasa Khusus:**
- **Jawatankuasa Pengurusan Risiko Operasi** adalah jawatankuasa peringkat pengurusan yang dibentuk oleh pihak Pengurusan untuk mengawasi proses Pengurusan Risiko Operasi KWSP. Ahli-ahlinya terdiri daripada Ketua Pegawai Eksekutif (KPE), Timbalan KPE, Ketua Jabatan Pengurusan Risiko, dan Ketua-ketua Jabatan yang berkaitan.
 - **Jawatankuasa Risiko Pengurusan** adalah jawatankuasa peringkat pengurusan yang bertanggungjawab merangka polisi dan had risiko yang sesuai untuk menguruskan risiko pelaburan KWSP. Ahli-ahlinya terdiri daripada KPE, Timbalan KPE, Ketua Jabatan Pengurusan Risiko, Ketua Jabatan Penjelasan & Pematuhan Pelaburan, Ketua Jabatan Kuantitatif dan Analisa Prestasi dan Ketua-ketua Jabatan yang berkaitan.
 - **Jawatankuasa Pengurusan Pelaburan** adalah jawatankuasa peringkat pengurusan yang bertanggungjawab menilai prestasi pelaburan mengikut kelas aset serta mencadangkan strategi dan peluang pelaburan kepada Panel Pelaburan.
5. Fungsi pengurusan risiko dan pematuhan yang khusus dan berkecuali dilaksanakan oleh **Jabatan Pengurusan Risiko** dan **Jabatan Penjelasan & Pematuhan Pelaburan** yang bertanggungjawab memastikan polisi risiko dilaksanakan dan dipatuhi.
- ***The Investment Panel** is responsible for the risks related to making investment decisions.*
3. **The Board Risk Management Committee and Investment Panel Risk Committee:**
- ***The Board Risk Management Committee** is responsible for assisting the Board to oversee all risk management activities except for activities in making investment decisions, reviewing the key risks inherent in the organisation and the system of internal control necessary to manage them and reporting its findings to the Board.*
 - ***The Investment Panel Risk Committee** is responsible for investment risk oversight, which includes recommending the aggregate risk appetite for Investment Panel sign-off, approving risk management policies and limits, reviewing risk exposures and providing direction in relation to risk management practices within the investment function.*
4. **Dedicated Committees:**
- ***The Management Operations Risk Committee (MORC)** is a management-level committee set up by Management to oversee the Operational Risk Management (ORM) process of EPF. Its members consist of the CEO, Deputy CEOs, Head of Risk Management, and relevant Heads of Department.*
 - ***Management Risk Committee (MRC)** is a management-level committee responsible for developing the risk policy and limit appropriate in managing the investment risk of EPF. Its members consist of the CEO, Deputy CEOs, Head of Risk Management, Head of Compliance and Settlement, Head of Quantitative and Performance Analysis and relevant Heads of Department.*
 - ***Management Investment Committee (MIC)** is a management-level committee responsible for evaluating the performance of investment according to asset classes and recommending investment strategies and proposals to the Investment Panel.*
5. *The dedicated independent risk management and compliance functions, namely, **Risk Management Department** and the **Investment Compliance and Settlement Department**, are responsible for ensuring the implementation of and compliance with risk policies.*

6. **Unit-unit Risiko Perniagaan**, sebagai barisan pertahanan hadapan, bertanggungjawab mengenal pasti dan menguruskan risiko berkaitan tugas mereka. Mereka bertanggungjawab memastikan supaya tugas-tugas harian yang dilaksanakan mematuhi polisi, prosedur dan had yang ditetapkan.
7. **Jawatankuasa Audit Lembaga**, dibantu oleh Jabatan Audit Dalam, bertanggungjawab melaksanakan penilaian bebas terhadap kecukupan dan keberkesanan sistem kawalan dalaman, serta pematuhan kepada polisi dan prosedur.

6. **The Business Risk Units**, being the first line of defence against risks, are responsible for identifying, mitigating and managing risks within their lines of business. They are to ensure that their day-to-day business activities are carried out within the established risk policies, procedures and limits.
7. **The Board Audit Committee**, supported by the Internal Audit Department, is responsible for providing an independent assessment of the adequacy and reliability of the system of internal controls, as well as compliance with policies and procedures.

PENGURUSAN RISIKO PELABURAN

RANGKA KERJA

Rangka kerja Pengurusan Risiko Pelaburan adalah untuk membantu proses Pelaburan di KWSP dan memastikan tadbir urus yang sesuai dipraktikkan dalam membuat keputusan pelaburan.

Rangka kerja ini memberikan gambaran yang menyeluruh berkenaan dengan profil risiko portfolio pelaburan KWSP. Ia membolehkan KWSP menggunakan pendekatan yang sama untuk mengenal pasti, mengukur, memantau dan menguruskan risiko portfolionya. Dengan ini, KWSP dapat memastikan pulangan yang optimum daripada aktiviti pelaburannya setelah mengambil kira lengkungan tahap risiko.

Rangka kerja tadbir urus risiko digambarkan dalam carta berikut.

INVESTMENT RISK MANAGEMENT

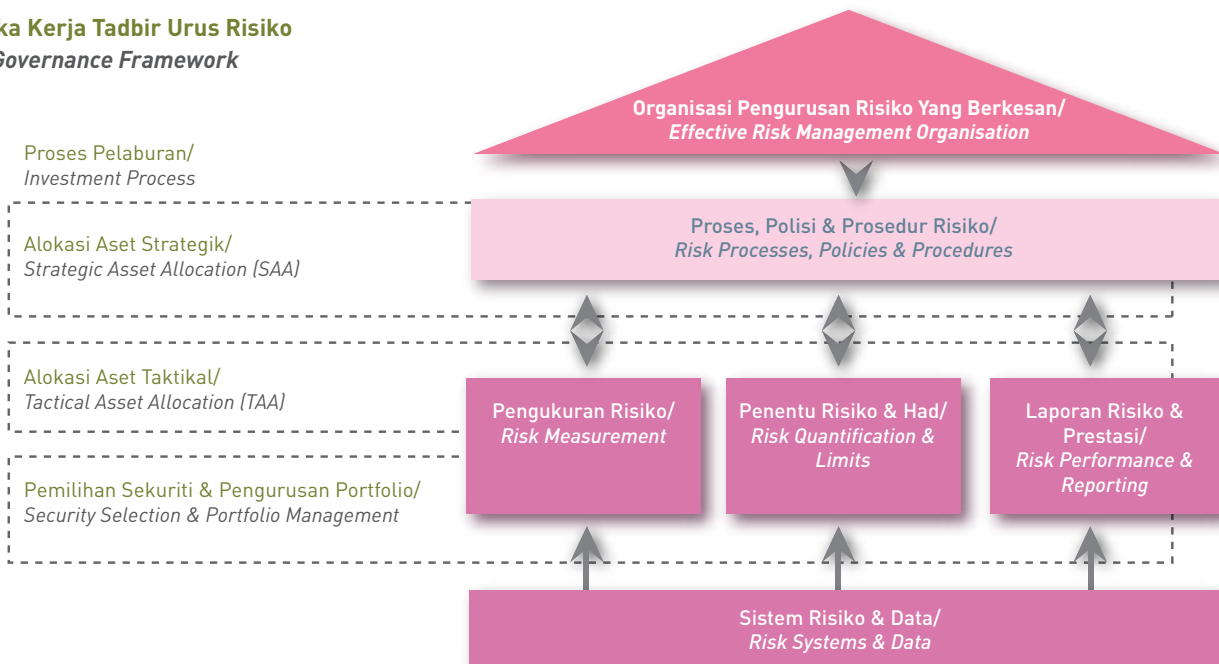
FRAMEWORK

The Investment Risk Management Framework is to support the investment processes of the EPF and to ensure that proper risk governance is in place with regards to investment decisions making.

The framework provides a holistic view of the risk profile of EPF's investment portfolio. It enables EPF to have a common approach to identify, measure, monitor and manage our portfolio risks. This will ensure the EPF optimises return on risk taking activities within its risk tolerance levels.

The risk governance framework is illustrated in the following chart.

Rangka Kerja Tadbir Urus Risiko Risk Governance Framework



KAEDAH DAN PROSES PENGURUSAN RISIKO PELABURAN PENGURUSAN RISIKO PASARAN

Risiko pasaran adalah risiko kerugian daripada perubahan dalam nilai portfolio dan instrumen kewangan disebabkan oleh pergerakan harga pasaran sama ada berkaitan kadar faedah, tukaran wang asing dan harga ekuiti.

Objektif utama pengurusan risiko pasaran adalah untuk memastikan agar kerugian daripada risiko pasaran dapat dikawal dengan segera, dan pendedahan berisiko mempunyai kecairan yang mencukupi bagi membolehkan KWSP mengurangkan pendedahan tersebut tanpa menanggung kerugian yang melebihi tahap risiko KWSP.

KWSP mengguna pakai pendekatan berikut untuk menguruskan risiko pasaran:

- Nilai berisiko ("VaR") – anggaran jumlah nilai pasaran yang boleh ditanggung kerugiannya oleh sesuatu portfolio dalam tempoh masa tertentu pada tahap kebarangkalian yang telah ditetapkan. Simulasi Monte Carlo digunakan untuk mengira VaR bagi mengukur tahap risiko portfolio.
- Tempoh masa – ukuran linear risiko bagi sesuatu bon untuk mentakrif peratusan kenaikan (atau penurunan) terhadap nilai bon tersebut bagi kejatuhan (atau kenaikan) 1% bagi hasil yang diperoleh daripada bon tersebut.
- 'Tracking Error' – merujuk kepada sisihan piawai bagi lebihan pulangan portfolio berbanding penanda aras.
- Analisis simulasi, termasuk ujian tekanan adalah satu lagi kaedah menguji risiko portfolio dalam keadaan yang sukar. Ujian tekanan melibatkan penetapan parameter seperti korelasi, volatiliti dan pulangan pada nilai-nilai yang bertlainan dan menilai bagaimana risiko sesuatu portfolio akan berubah.
- Pengukuran beta – digunakan untuk mengukur sensitiviti harga sesuatu ekuiti berbanding penanda aras.

METHODOLOGY AND PROCESS OF THE INVESTMENT RISK MANAGEMENT

MARKET RISK MANAGEMENT

Market risk is the risk of loss from changes in the value of portfolios and financial instruments due to the movements in interest rates, foreign exchange and equity prices.

The primary objective of market risk management is to ensure that losses from market risk can be promptly mitigated, and risk positions are sufficiently liquid, to enable the EPF to reduce its position without incurring potential loss that is beyond the EPF's risk appetite.

EPF adopts the following tools to manage market risk:

- *Value at Risk (VaR) – an estimation of the amount of market value that a portfolio can lose over a certain time horizon with a given probability. The Monte Carlo Simulation is used to compute VaR to measure the riskiness of the portfolios.*
- *Duration – a linear measure of risk for a bond to define the percentage increase (decrease) in the bond's value for a 1% fall (rise) in the bond's yield.*
- *Tracking error – refers to the standard deviation of the portfolio's excess returns relative to a benchmark.*
- *Simulation analysis, including stress testing is another method of examining portfolio risk in extreme situations. Stress testing involves setting parameters such as correlation, volatility and returns at different values as well as assessing how a portfolio's risk may change.*
- *Beta measurement – used for the purpose of gauging the equity's price sensitivities against benchmark.*



PENGURUSAN RISIKO KREDIT

Risiko kredit adalah risiko kerugian disebabkan oleh ketidakmampuan atau keengganan peminjam/pihak ketiga dalam memenuhi tanggungjawab kewangannya. Pendedahan kepada risiko kredit wujud daripada aktiviti pinjaman, lindung nilai, dagangan dan pelaburan.

Objektif utama pengurusan risiko kredit adalah untuk memastikan pendedahan KWSP terhadap risiko kredit sentiasa berada dalam lingkungan kemampuan dan kapasiti kewangannya untuk menghadapi kemungkinan kerugian di masa depan.

KWSP menilai pendedahan kreditnya melalui pelbagai pendekatan seperti:

- Model Portfolio Kredit – digunakan untuk mengira VaR Kredit bagi menilai pendedahan risiko kredit dan KWSP sedang mempertingkatkan keupayaan pendekatan ini pada tahun 2011.
- Penarafan Korporat – menyediakan kadaran risiko dalaman berasaskan statistik untuk peminjam korporat dan konsisten dengan amalan terbaik yang digunapakai oleh institusi kewangan.

PENGURUSAN RISIKO KECAIRAN

Risiko kecairan merujuk kepada ketidakmampuan dalam memenuhi komitmen dan obligasi kewangan apabila sampai tempoh. KWSP sentiasa mengekalkan tahap kecairan aset yang secukupnya dalam bentuk tunai dan deposit dalam institusi kewangan bagi memenuhi pengeluaran ahli dan komitmen serta obligasi kewangan yang lain.

PEMANTAUAN DAN KAJIAN SEMULA PENGURUSAN RISIKO PELABURAN

Panel Pelaburan, melalui Pernyataan Tahap Risiko, menetapkan tahap risiko yang boleh diambil oleh KWSP dan menjadi asas bagi peruntukan dana pelaburan. Jawatankuasa Risiko Panel Pelaburan mengawasi pengurusan risiko pelaburan dan mengkaji semula risiko dalam portfolio pelaburan KWSP.

Jawatankuasa Risiko Pengurusan dalam mesyuaratnya, mengkaji laporan risiko portfolio untuk mengenal pasti sumber risiko utama bagi seluruh kelas aset. Berdasarkan laporan tersebut, jawatankuasa ini memantau penumpuan risiko yang besar dan menentukan tindakan sewajarnya yang perlu diambil. Jawatankuasa ini turut menilai keputusan ujian tekanan dan analisis senario.

Rangka kerja, polisi, dan metodologi pengurusan risiko Pelaburan sentiasa dikaji semula dan dipertingkatkan dari semasa ke semasa untuk memastikan keberkesanan yang berterusan.

CREDIT RISK MANAGEMENT

Credit risk is the risk of loss due to the inability or unwillingness of a borrower/counterparty to meet its payment obligations. Exposure to credit risk arises through lending, hedging, trading and investing activities.

The primary objective of credit risk management is to ensure that the EPF's exposure to credit risk is always within its capability and financial capacity to withstand potential future losses.

The EPF assessed its credit exposures through various tools such as:

- *Credit Portfolio Modelling – used to compute Credit VaR for the purpose of gauging the credit risk exposure.*
- *Corporate Rating Template – provides a statistically based internal risk rating for corporate borrowers and is consistent with best practice rating models of financial institutions.*

LIQUIDITY RISK MANAGEMENT

Liquidity risk relates to the inability to meet its financial commitments and obligations when they fall due. The EPF maintains adequate levels of liquid assets in the form of cash and placements in financial institutions in order to meet members' withdrawals and other financial commitments and obligations.

MONITORING AND REVIEW OF INVESTMENT RISK MANAGEMENT

The Investment Panel through the Risk Appetite Statements defines the level of risks that the EPF is willing to tolerate which forms the basis of investment funds allocation. The Investment Panel Risk Committee (IPRC) provides oversight on the investment risk management and reviews risks in EPF's investment portfolio.

Management Risk Committee (MRC) in its meetings reviews portfolio risk reports to identify key sources of risk across all asset classes. Based on the risk reports, MRC monitors large risk concentrations and determines the appropriate action to be taken. The MRC also evaluates the results of stress testing and scenario analyses.

The Investment risk framework, policy and methodology are regularly reviewed and enhanced to ensure their continued effectiveness.

PENGURUSAN RISIKO OPERASI

Rangka Kerja

Risiko operasi adalah risiko kerugian akibat ketidakcukupan atau kegagalan proses dalaman, manusia atau sistem, atau peristiwa luaran.

Rangka kerja Pengurusan Risiko Operasi digunakan untuk menjajarkan strategi, polisi organisasi, teknologi dan pengetahuan dalam menilai dan mengurus ketidakpastian dan kesan negative risiko operasi.

Rangka kerja ini menerangkan metodologi yang digunakan oleh KWSP dan mentakrifkan proses-proses dalam menentukan konteks, menaksir, mengendali, memantau dan melaporkan risiko operasi utama.

KAEDAH DAN PROSES PENGURUSAN RISIKO OPERASI

Proses Pengurusan Risiko – Gambaran Umum

OPERATIONAL RISK MANAGEMENT

FRAMEWORK

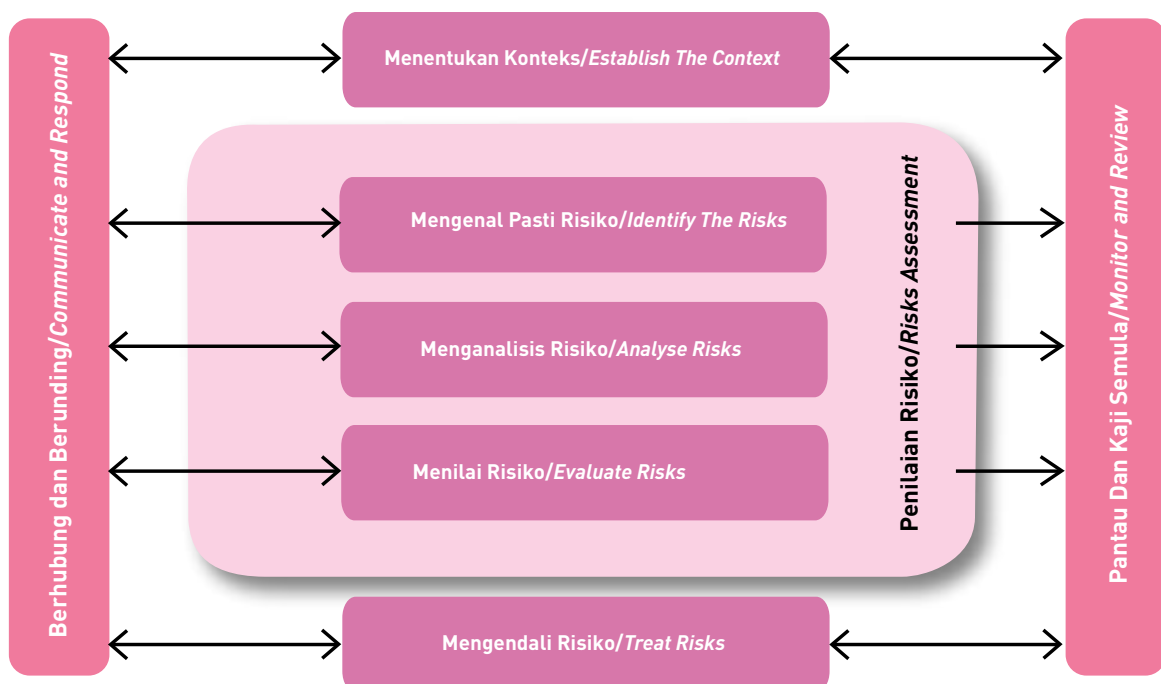
Operational risk is the risk of loss resulting from inadequate or failed internal processes, people or systems, or from external events.

The Operational Risk Management framework is adopted to align strategy, organisational policy, technology and knowledge in evaluating and managing the uncertainties and adverse effects of operational risks.

The framework explains the methodology adopted by the EPF and defines the processes in establishing the context, assessing, treating, monitoring, and reporting significant operational risks.

METHODOLOGY AND PROCESS OF THE OPERATIONAL RISK MANAGEMENT

Operational Risk Management Process – Overview



Kad Skor Risiko Korporat

Kaedah Kad Skor Risiko Korporat merupakan pendekatan pengurusan risiko yang konsisten dengan piawaian Australia/New Zealand yang diguna pakai dalam pelaksanaan pengurusan risiko operasi. Salah satu daripada ciri-ciri utama kaedah kad skor ini adalah ciri Penilaian Risiko dan Kawalan oleh Pengguna (Risk and Control Self-Assessment, RCSA) yang membolehkan anggota KWSP menilai sendiri dan mengemaskinikan profil-profil risiko mereka.

Risiko kasar diberi skor, menggunakan kaedah Kemungkinan dan Impak yang ditentukan terlebih dahulu. Kawalan sedia ada dan strategi pengurangan kemungkinan risiko berlaku dikenal pasti dan keberkesanannya dinilai untuk mendapatkan Kadaran Risiko Bersih. Kadaran Risiko Bersih ini dianalisis dan dibandingkan dengan Kadaran Sasaran Risiko untuk menentukan sama ada pelan tindakan perlu diwujudkan untuk menguruskan risiko tersebut.

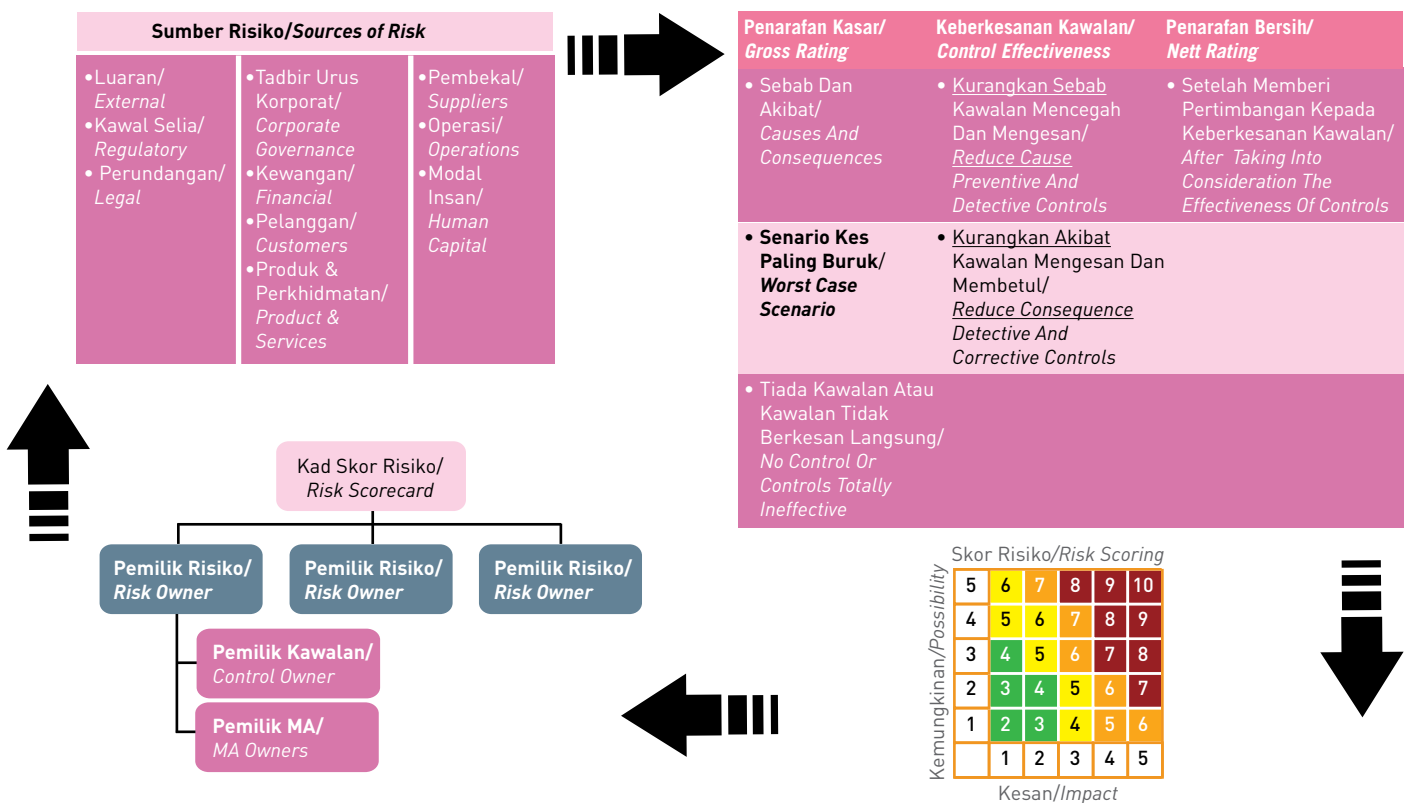
Semua pemilik kad skor risiko, kawalan risiko dan pelan tindakan di seluruh organisasi boleh mencapai sistem tersebut untuk membuat Penilaian Risiko dan Kawalan masing-masing. Pemilik boleh mencapai dan mengemaskinikan risiko, kawalan dan pelan tindakan mereka menerusi papan pemuka peribadi mereka. Terdapat 100 kad skor risiko dibangunkan untuk jabatan, seksyen dan cawangan.

Corporate Risk Scorecard (CRS)

The Corporate Risk Scorecard (CRS) methodology, a risk management approach consistent with the Australian/New Zealand Standard on Risk Management has been adopted in the implementation of operational risk management. One of the key elements in the CRS methodology is the Risk and Control Self-Assessment (RCSA) which allows our staff to self-assess and update their risk profile.

Gross risks are assigned numerical values, using predetermined Possibility and Impact Rating parameters. Existing controls and mitigating strategies are identified and their effectiveness is evaluated to derive the Nett Risk Rating. The Nett Risk rating is analyzed against the Target Risk rating to determine whether action plans are needed to mitigate the risks.

Access to the operational risk management system is provided on the enterprise-wide basis to all risk scorecards, risk, controls and action plans owners to assist them in undertaking the Risk-Control Self Assessment (RCSA) activities. A total of 100 risk scorecards are established for all departments, sections and branches.



PENGURUSAN KESINAMBUNGAN PERNIAGAAN

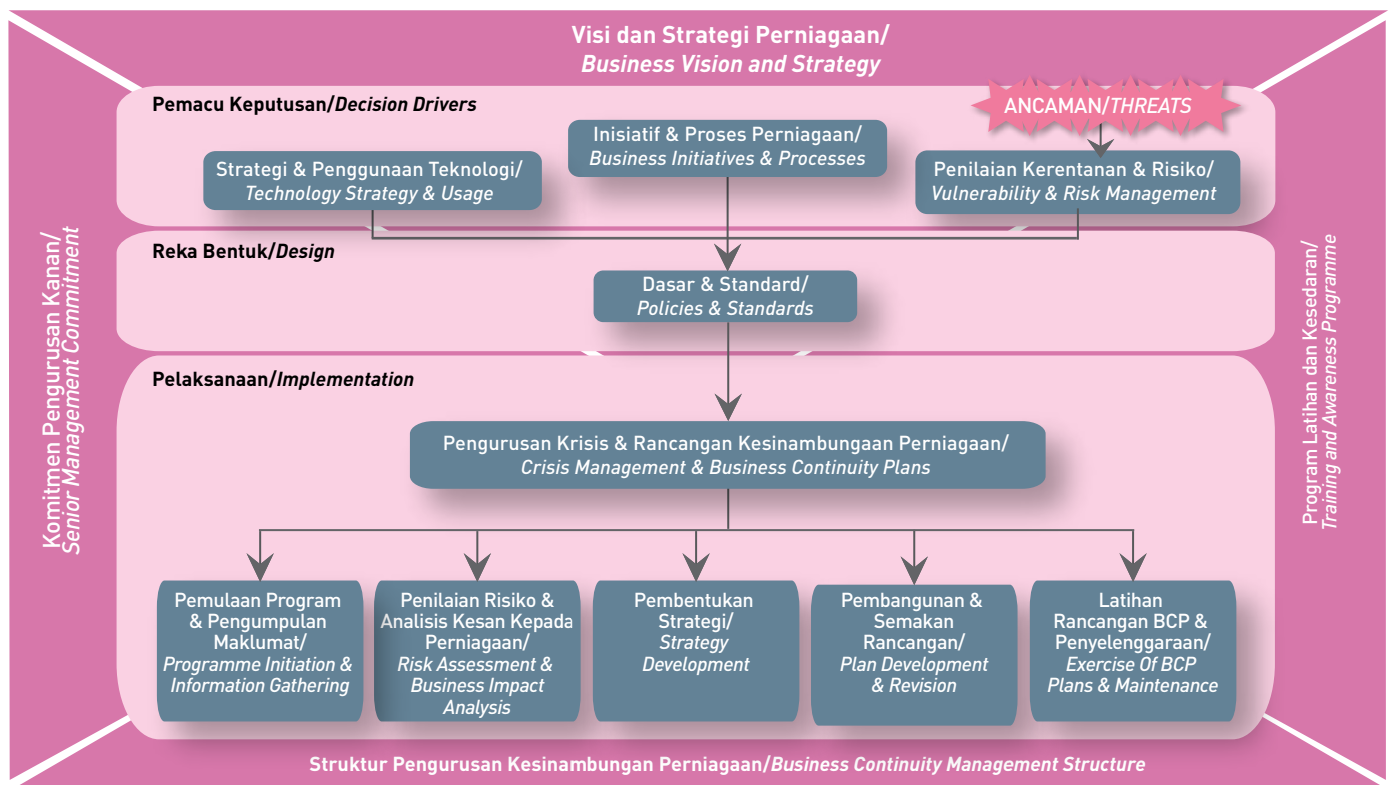
Program Pengurusan Kesinambungan Perniagaan KWSP ditanda aras berdasarkan piawaian dan garis panduan Pengurusan Kesinambungan Perniagaan yang kukuh sebagai asas untuk memahami, membangun dan melaksanakan kesinambungan perniagaan. Ia turut membolehkan keberkesanan program Pengurusan Kesinambungan Perniagaan dinilai secara konsisten dan dipraktikkan.

Ilustrasi di bawah menunjukkan komponen Rangka Kerja Program Pengurusan Kesinambungan Perniagaan KWSP.

BUSINESS CONTINUITY MANAGEMENT (BCM)

The EPF's Business Continuity Management (BCM) programme is benchmarked against sound BCM standards and guidelines as a basis for understanding, developing and implementing business continuity. This benchmarking also enables us to measure the EPF's BCM programme capability in a consistent and recognised manner.

The illustration below shows the components of EPF's BCM Program Framework.



Program Pengurusan Kesinambungan Perniagaan akan memastikan KWSP kembali menjalankan operasi penting dalam tempoh masa yang ditetapkan dan meminimumkan kos kerosakan dan gangguan akibat bencana. Pada tahun 2010, KWSP menjalankan kajian semula program Pengurusan Kesinambungan Perniagaan di seluruh organisasi dan melaksanakan latihan simulasi krisis bagi cawangan Petaling Jaya. Wakil-wakil daripada cawangan lain turut terlibat dalam latihan tersebut.

The BCM programme will ensure the EPF resumes essential operations within the required timeframes and minimize the cost of damages and interruptions due to disasters. In 2010, we carried out an annual review of the enterprise-wide BCM programme and successfully conducted a crisis simulation exercise on our Petaling Jaya spoke. Representatives from other branches also participated in this exercise.

PEMANTAUAN DAN KAJIAN SEMULA PENGURUSAN RISIKO OPERASI

Lembaga KWSP memantau dan mengkaji semula pelaksanaan program pengurusan risiko melalui Jawatankuasa Pengurusan Risiko Lembaga.

Pengurusan Risiko Operasi adalah sebahagian daripada proses pengurusan strategik dan risiko utama operasi diurus sebagai sebahagian daripada operasi harian. Semua risiko dikaji semula menerusi proses yang teratur dan diselaraskan oleh Jabatan Pengurusan Risiko.

Pengurus unit-unit perniagaan memiliki risiko mereka bagi memastikan komitmen mereka dalam memberi jaminan kepada Lembaga sebagai sebahagian daripada langkah-langkah kebertanggungjawaban dan ketelusan yang tersedia di KWSP. Enam jaminan digital dilaksanakan setiap tahun bagi memastikan keberkesanan pelaksanaan kaedah Pengurusan Risiko Operasi.

Metodologi penyatuan dan penskoran dilaksanakan untuk memberi gambaran menyeluruh terhadap risiko utama yang dihadapi oleh KWSP. Dalam usaha untuk mempertingkatkan proses pengukuran dan pemantauan risiko, Petunjuk Risiko Utama telah dikenal pasti secara berperingkat, sebagai isyarat awal untuk mengesan dan memberi amaran berkenaan kejadian risiko dan kewujudan risiko baru serta sebarang kelemahan dalam kawalan operasi. Penilaian risiko juga dijalankan terhadap projek yang berpotensi, di mana risiko dan isu-isu kritikal dikenal pasti dan dinilai oleh pakar yang berkecuali yang bukan pemilik projek.

PENAMBAHBAIKAN BERTERUSAN

Rangka kerja, metodologi, proses dan pendekatan pengurusan risiko yang berkaitan dengan risiko pasaran, risiko kredit, risiko kecairan dan risiko operasi sentiasa dikaji semula untuk memastikan keberkesanan yang berterusan.

MONITORING AND REVIEW OF OPERATIONAL RISK MANAGEMENT

The Board monitors and reviews the implementation of the risk management framework through the Board Risk Management Committee (BRMC).

The ORM is considered part of the strategic management process and key operational risks are managed as part of day-to-day operations. All risks are reviewed in a formal process and coordinated by the Risk Management Department.

Line managers own their risks to ensure their commitment in providing upwards assurance as part of accountability and transparency measures in place throughout the EPF. Six digital assurance exercises are conducted annually to ensure the effective implementation of the ORM methodology.

A consolidated and scoring analysis is conducted to provide a consolidated view of key risks faced by EPF. In enhancing our risk measurement and monitoring process, relevant Key Risk Indicators have been identified in stages, as an early warning signal to detect and highlight risk events and new risk concerns as well as potential areas of weaknesses in operational controls. Assessment of risk is also conducted on key project, whereby critical risks and issues are identified and assessed by the relevant subject matter experts, independent from the project owner.

CONTINUOUS IMPROVEMENT

The risk management framework, methodologies, processes and tools with regards to the market risk, credit risk, liquidity risk and operational risk are regularly reviewed to ensure their continued effectiveness.