Annex 6.6: Management of Risks

1. Risk management process is a prerequisite for the management of risks, and it involves the following five steps:

   (a) risk assessment;
   (b) examining the options for managing the risks;
   (c) selecting the best option(s);
   (d) implementing the selected option(s); and
   (e) monitoring.

A. Risk Assessment

Risk assessment involves the identification of any potential losses that may arise from the performance of the contract, and, subsequently, the analysis of the frequency and severity of these losses.

1. **Identifying** the sources of loss potential or exposures by conducting an examination of areas of the contractor's operations, and the contract work having the potential for loss (e.g., property; legal liability; and personnel exposures, especially loss of key personnel).

   Identification techniques to be used include: reviews of records and loss data; questionnaires; surveys and exploratory testing; and, flow charts. Flow charting is a particularly useful technique whereby a picture can be drawn of the various stages in the process of carrying out the contract and the need for key loss controls along the way can be identified, e.g., pick-up, transportation, delivery/ disposal of dangerous goods. Flow charting also helps identify critical interdependencies and bottlenecks as in multiple plant operations and sources of supply.

2. **Analysis** of the exposures identified should then target areas for loss control activities by providing a better understanding of the primary components of those losses or loss potentials, i.e., loss frequency and loss severity. Analytical techniques employed could include regression and simulation analysis.

B. Examining the options for managing the risks

Once the risks associated with the performance of the contract have been identified, risk control techniques are used to prevent or reduce losses. Risk financing techniques are used to finance any accidental losses the contractor could not prevent.

1. Risk Control

   While control of the risks being indemnified should be the primary focus of the risk management plan, it must also address the other risks of accidental loss associated with the performance of the contract. There are four primary means of risk control, i.e., avoidance, loss prevention, loss reduction, and contractual transfer. The risk management plan should show the loss control options that the contractor has considered.

   (a) **Avoidance** can be on a planned basis before a loss occurs, e.g. by taking a different route or means of accomplishing an objective or cancellation of the activity. It can also refer to abandonment of an activity giving rise to the loss - permanently, or pending re-design, e.g., new packaging to prevent tampering with a drug.

   (b) **Loss prevention** is generally favoured in cases of high frequency losses, probably of low magnitude, e.g., fender benders, where risk control can be effectively brought to bear on preventative measures, e.g. training.

   (c) **Loss reduction** relates to high severity (magnitude) losses, e.g., natural disasters and liability exposures, probably of low frequency but where the primary effort is directed to containing the magnitude, e.g., by fast action on a liability claim, development and rehearsal of disaster management plans.

(d) **Contractual transfer for control purposes** which, by way of contract or other means, shifts the legal responsibility for a loss.

2. Risk Financing

Self-underwriting option of the government applies to those risks to which the government alone is exposed and over which it generally has control.

For risks under the contractor's control, provision will still have to be made by the contractor to finance any losses as they occur. Options are risk retention, risk sharing and risk transfer. Generally the preferred financing option or a combination of options will tend to be a reflection of the frequency/severity characteristics of the loss or loss potential.

(a) **Risk retention** may generally apply more to small, frequent loss events, or predictable loss events where, related to the cost of other options and the contractor's financial capability, the contractor may elect to absorb such losses without benefit of other financing. Because of the federal government's virtually unlimited underwriting capacity through spreading the risks across the tax base, in the same way as an insurer spreads the risk across the insured, risk retention or self-underwriting is the government's selected risk financing option for its own risks.

(b) **Risk sharing** is in the middle of the risk financing continuum. Options include deductible plans with insurers, pooling mechanisms, captives, or being a member of a risk retention group - usually all from the same industry.

(c) **Risk transfer for risk financing purposes** is done primarily through the purchase of insurance. Contractual transfer of financial responsibility is also an option.

C. Selection, implementation and monitoring of the best option to manage the risks:

Selecting the best option(s), implementing the selected option(s), and monitoring are the remaining steps of the risk management decision making process. These steps should be addressed by the contracting officer or the contractor by taking into consideration the following main factors: (a) the contract's value, type, and complexity; (b) the cost-benefit analysis; (c) the experience of the contractor in managing similar risks; and, (d) legislation considerations.