RISK MANAGEMENT TOPIC PAPER No. 4

RISK MAPPING – DILEMMAS AND SOLUTIONS

By Kelsey Beswick and Jane Bloodworth

INTRODUCTION

This paper considers the practical issues involved in mapping, assessing and documenting risks and actions. It also considers how failures in control can be used positively in the risk management process.

Housing Corporation guidance on risk has been around since 1997. But today many associations face common dilemmas. Having diligently compiled risk maps in line with the guidance, many have not taken the agreed risk management actions, because the risk maps were not linked to achievement of the organisation's objectives and included too many risks.

At the same time, housing associations have been struggling to develop risk strategies and define a risk appetite. What they need is a straightforward approach to risk mapping that links all the stages from setting the strategy, to mapping risks, assessing risks and reporting failures in control.

RISK STRATEGY

The organisation's view of risk is established in a risk strategy framework (as described in the second paper in this series). This framework usually includes the strategies and processes employed for managing risk, the risk appetite, management responsibilities and monitoring processes. In practice, the risk strategy framework is often easier to compile having undertaken some activities in the risk mapping and assessment process.

Risk appetite

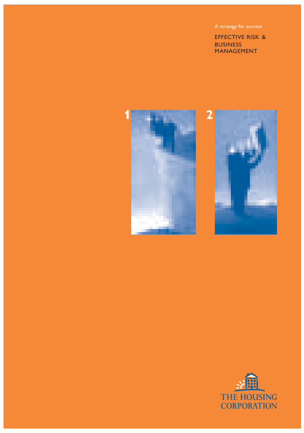
This broadly means an organisation's willingness and capacity to expose itself to risk. As recipients of public funding, housing associations tend to be more risk averse than, for example, media companies. Nevertheless, the sector faces many challenges such as competition, stock transfers, low demand and financial pressure (see the study *'Effective risk and business management'* published by the Housing Corporation).

Housing associations increasingly need to consider diversification as a means of retaining market share and to secure additional sources of income to fund the core business. This will lead to increased risk and a level needs to be set where the Board and management is comfortable with these decisions.

A housing association can define its risk appetite by determining the types and level of risk it wants to take. Activity limits, borrowing levels, performance targets and development subsidy levels refine these choices further.

Responsibility

It is important to clarify responsibility for each element of the risk management process and to note that responsibility will vary depending on organisational structures and culture.



EDITOR'S FOREWORD

This fourth paper on risk management is published as part of a short series sponsored by the Housing Corporation. The aim is to encourage development of best practice among housing associations. The papers follow on from previous publications that sought to introduce and develop effective risk management. In particular the publication in 2000 of Effective Risk and Business Management was designed to identify the elements of a risk management framework for housing associations.

The views expressed in these topic papers are those of their authors and not the Housing Corporation. It is hoped that they will stimulate discussion and the development of best practice in specific areas of risk management. Comments on the papers and suggestions for further topics would be welcomed. Roger Lustig

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Diagram 1
The classic risk map

RISK MAPPING

Risk mapping is the process of identifying, quantifying and prioritising risks relating to the achievement of business objectives. It should be linked with the business planning process.

Link to business planning

Business planning and risk assessment are complementary. It is vital to assess risks, which are events that may affect the organisation's ability to meet its key objectives either through things going wrong or missed opportunities. It is important that the objectives and risks are clear, current, appropriate and set at a strategic level with Board approval.

Every organisation needs to set itself goals and targets based on its mission. These are set out in the business plan that includes operational targets and financial plans to support them.

A properly constituted business plan validated by a risk assessment process represents a balanced position for an organisation which has weighed its activities against the risks they present.

These risks need to be prioritised and presented in a straightforward, readily understandable format that shows both the risks and how they are being managed. The organisation may also wish to improve its understanding of its capacity for taking on more risk.

Risk identification

At corporate level the objective should be to identify all key risks, say the top 20, to ensure adequate focus is given to important issues. These key risks are identified by senior management with the advice of Board members. A workshop with a professional facilitator is often helpful.

Identified risks should be related to the objectives of the organisation, as set out in the business plan, and both external and operational risks need to be considered. The facilitator should give guidance on whether risks are similar and can be considered together. Some risks may appear to be the same but are managed differently. In this case, it is important to consider not only how to describe the risks, but also what to do if they materialise. An example might be a risk called 'poor income management', which might be shorthand for both 'failure to invoice for all services provided' and 'failure to collect arrears'. The controls are different, so the risk needs to be split.

Focusing on the top 20 risks helps ensure only strategic risks are considered at corporate level. Departmental and subsidiary risks can be considered separately by those responsible for managing them.

Risk prioritisation and scoring

After identifying the risks as above, they are recorded in the appropriate quadrant of a grid – see Diagram 1. In this paper it is described as the 'classic risk map'.

Our experience is that it is useful to allocate a score to each of the top 20 risks rather than just place them in the relevant quadrant of the grid. This shows the relative probability and impact of each risk. In this model the scores do not represent monetary value. Not all risks can be readily quantified in monetary terms. The aim of the process is to produce consensus on the levels of each risk.

This risk map model presents a 'snapshot' of the risk profile at one particular time. The model is set out at Diagram 2.

Plotting the risk map

Once the risks have been identified by the group of senior managers and board members they should then agree the risk scores. This approach reduces bias in the perception of risk because all parties must reach a consensus on the scores for both probability and impact and on the relative priority of various risks. Plotting the risk map helps management to allocate resources to target the most inherently risky or exposed areas of the business.

To help the process along, we use descriptive language to rank the risks. In the example (Diagram 2), impact has been ranked as 'Oh well', 'Oh dear', and 'Oh no!'. This works surprisingly well for 'taking the temperature' of the risk area.

Similarly for probability, participants readily assess on the basis of experience whether a risk has more or less than a 50% chance of materialising. This can be further refined to 'slight chance' and 'almost certain'.

This approach is readily understandable and employs accepted criteria. The result is a snapshot of the association's risk exposure at a particular time, taking into account the effectiveness of controls.

As risks may have the same score but different impact and probability, the risk map is coloured to show the relative importance of the risks – see Diagram 2.

The optimum risk position

Using the example in Diagram 2 we can calculate a total risk score, in this case 151. This is the current exposure level – a snapshot of the situation at that time.

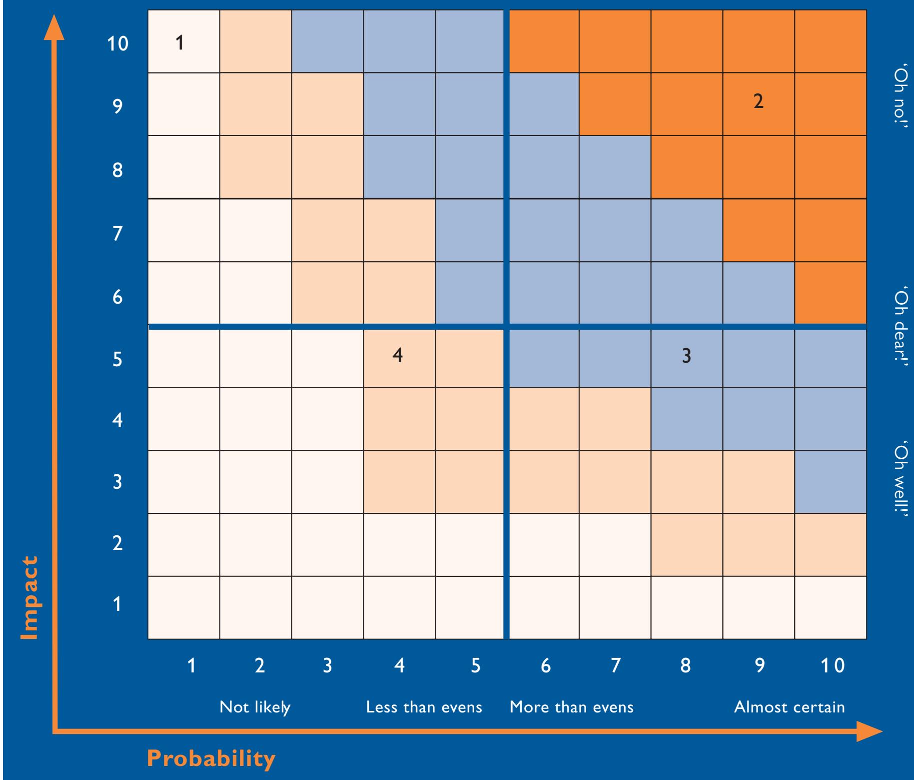
Housing associations may find it useful to work out their optimum risk position, where they have reduced all identified risks as far as possible, so they can determine their risk appetite and capacity. The optimum level will normally be lower than the current exposure to risk. It reflects the level to which the association believes risks can be reduced. Not all risks can be reduced to the 'low' category, nor should they.

Using current and optimum risk scores, a difference can be seen between the current risk exposure, at the date the risk mapping was done, and the optimum position. It shows where controls can be improved and risk scores reduced, improving the housing association's overall risk score, and possibly increasing its capacity to take on more risk. There will always remain a residual risk which the Board must accept, along with the actions identified by management to improve the risk scores to optimum position.

RISK ASSESSMENT

Through lateral thinking, a workshop environment produces a lot of good ideas about risks. The plotting process challenges the participants to identify the risks, their relative importance and the way they are described.

Diagram 2
The risk map model



Risk No.	Description	Type of risk	Probability	Impact	Score
1	Significant change in funding for key business area	EXTERNAL	1	10	10
2	Failing high profile venture	REPUTATIONAL & FINANCIAL	9	9	81
3	Keying errors	OPERATIONAL	8	5	40
4	Repairs targets too low	OPPORTUNITY	4	5	20
				TOTAL SCORE	151

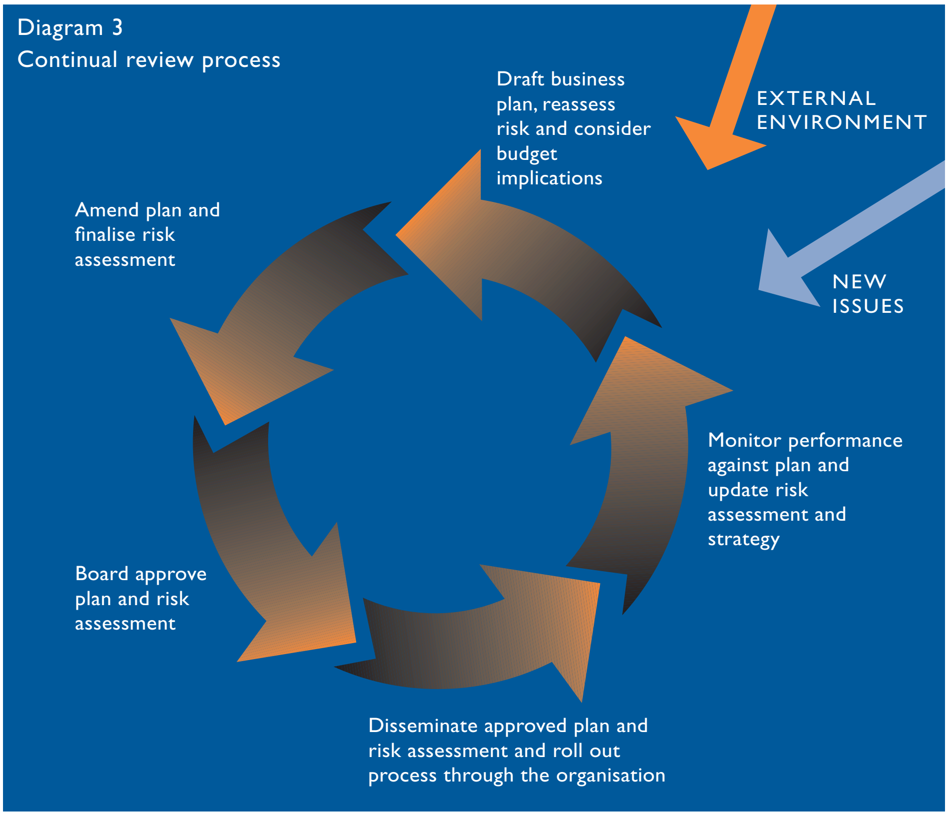
CRITICAL	60+	HIGH	30 - 59	MEDIUM	16 - 29	LOW	1 - 15

It is not sufficient simply to identify the risks if the output from the process is to contribute to control assurance. The actions to be taken in mitigation of the risks must also be recorded and implemented. This requires a rigorous approach by management and is often more challenging than risk identification.

Risk management options

Generally, most risks will need to be controlled at some level and various management techniques are available. None can provide absolute assurance, only reasonable assurance. The most common approach is to consider the following alternatives to control:

Diagram 3
Continual review process



- To accept the risk
- To transfer it
- To modify it (take more or less risk) or
- To eliminate it altogether.

The concepts of accepting risk and insuring against it or planning recovery – i.e. making contingency plans – are readily understood. Modifying or eliminating a risk needs more thought, as described below.

In practice it can be helpful to conduct risk assessments before and after the business planning process; this works out at a review of risks about every six months. Good practice certainly suggests that risk assessment should take place more than once a year. Regular monitoring of the actions completed should take place more frequently. Risk assessment and management should be a continuous process and additional reviews should be conducted as circumstances change.
A further risk assessment against the draft business plan will assist in validating the assumptions and workability of the proposals. Conducting the risk assessment before preparing the business plan may lead to adjusting the plan to modify or eliminate the risks identified.

The business plan/budget/risk assessment timetable could be scheduled as in the example at Diagram 3.

Control identification

Once the risk map has been plotted, establishing the relative priority of the risks and the methods of risk management, the housing association should consider what to do with the risks it has decided to control. A smaller group or risk panel may be better at identifying controls and actions than a full workshop group. Remember that in this model we are looking at risks that remain after existing controls have been applied, so it takes into account both inherent and managed risk. Broadly it looks at overall exposure to risk at a point in time.
For the housing association to successfully

Diagram 4
Example of expected risk controls

RISK	CONTROLS
Health and safety failure	Health and safety risk assessment programme
	Training programme for key staff
	Health and safety policy and procedures
	Annual report on compliance with legislation
	Accident report and evaluation process

control its risks, it needs to ask:

- What controls would be expected?
- Are they in place?
- Are they working properly?
- If not, what action will be taken?

Controls are individual actions, procedures or operations taken or set up by management to ensure that activities and systems achieve their objectives. We are dealing here with key controls that, if operating effectively, would give reasonable assurance that the identified risks are being properly managed. Diagram 4 sets out an example of the risk of health and safety failure and the controls expected.

Not every control has been identified; this is a top-level review. Management may wish to set up further workshops to evaluate a particular area of concern. The Housing Corporation study *'Effective Risk and Business Management'* gives some examples of this for managing 'lettings and group structure' risks. Other areas that might merit further consideration are fraud and legal compliance.

Control evaluation

Control evaluation is critical. The focus of the risk management process is to ensure risks are *effectively* managed. The risk score arrived at may have been based only on known controls; management may need help here, for example from internal audit, to identify other possible controls. Management must evaluate the controls they have identified as necessary to ensure they really are in place and working effectively. They must decide whether the controls in place are adequate or missing. They may ask internal audit to fill gaps in their knowledge by helping to evaluate controls. However, the process remains the responsibility of management.

There should be no halfway house – if management think the controls are not completely satisfactory they must take some action. An assessment such as 'ongoing' should not be permitted! This is because the Board needs to know if the control is in place or not as part of its evidence on the adequacy of the internal control system.

It is important to note that this risk assessment process is the responsibility of management. It forms a part of the controls assurance framework set out in the Housing Corporation circular on Internals Controls Assurance. It is a form of self-certification. Despite this being self-assessment, other assurance processes

Diagram 5
Control evaluation and action plan

RISK	CONTROLS	EVALUATION		ACTION	RESOURCE & TIME
		OK	NOT OK		
Health and safety failure	Health and safety risk assessment programme		X	Clear backlog of outstanding work	Sue Potts 1/9/03
	Training programme for key staff	✓			
	Health and safety policy and procedures	✓			
	Annual report on compliance with legislation		X	Implement annual report	Pete Ross 1/4/04
	Accident report and evaluation process	✓			

will test the validity of the controls evaluation. Internal audit will provide independent assurance that the controls can be relied upon and on the management assurances. In addition the risk management process itself will be subject to internal audit in the same way as any other process.

Action planning and resources

Control weaknesses that the control evaluation process has identified must be rectified. An action plan may be incorporated into the risk assessment document – using the health and safety example, it would look like Diagram 5. The completion of the risk assessment action plan can be reported alongside the business plan outturn reports to further embed risk management into the main business processes.

CONTROL FAILURE REPORTING

So far the approach outlined has tackled risk assessment and controls for the association's 'top 20' risks, using a top-down approach. To complete the picture of control effectiveness and the adequacy of risk management, management must also consider control failures – actual or 'near misses'.

Management need to know as soon as important controls have failed so that they can limit the damage or take remedial action. This is also necessary for accountability and for learning. It is useful to maintain a register of all failures of internal control in the same way as a fraud register is kept. This can supply evidence on internal controls for the Audit Committee to support their annual assessment of the adequacy of the system of internal control.

It is often difficult to admit to control failures, but it is necessary to have some way of recording both 'near misses' and actual failures of control. The organisation must first determine what it considers worthy of reporting – what is 'business critical'.

As with risk appetite, this is largely intuitive and hard to define. Each association needs to determine its own level of tolerance for control failures and reporting. Risk scores must be re-evaluated in the light of reported failures and new risks may also be identified.

SUMMARY

This paper sets out a practical approach to risk identification, mapping and control which will provide a housing association with clear, concise evidence to help its Board judge the adequacy of risk management and internal control systems. It is not the only source of assurance that the Board will draw on to meet the reporting requirements under the Internal Controls Assurance Circular, but it is a key part of the overall assurance framework. This approach can also provide reports, both for internal use – to help indicate effectiveness – and for external accountability. Further, it can be used at all levels, including individual project level, by presenting the output in a clear and readily understandable format.

The Authors

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Kelsey and Jane regularly speak at conferences for auditors and risk managers. They are directors of 'Just Assured', a joint venture between Hanover and Network providing risk management and assurance services. They have both been involved in developing risk management and risk assessment techniques, linking these to the Internal Audit planning process and the provision of internal controls assurance.

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April 2003