

NHS Purchasing and Supply Agency

Green risk methodology for the NHS

1. Summary

The green risk methodology was developed as a simple tool by Belfast City Council, for prioritising environmental purchasing activity and for identifying in a systematic manner, the interventions appropriate for managing the green risks associated with each contract. The methodology is described in the publication *Environmental purchasing in practice – guidance for organisations* commissioned jointly by the NHS Purchasing and Supply Agency (the Agency), the Chartered Institute of Purchasing and Supply (CIPS) and the Institute of Environmental Management and Assessment (IEMA). This guide is free to the NHS and is available on the Agency's website or in hard copy.

The methodology is covered in the one-day environmental purchasing workshops being run by the Agency. However, as not all purchasing and supply professionals in the NHS have been able to attend these workshops, this written guidance is offered. All purchasing sections within the Agency will be applying the green risk methodology to their contract portfolios in the first quarter of the financial year 2003/4.

2. Introduction

Green risk is defined as a combination of the environmental risk and the profile risk associated with any contract.

Environmental risk is essentially the risk of causing harm to the environment, through execution of the contract, e.g. utilising a service or using an item of equipment.

Profile risk is essentially the risk of damaging the organisation's reputation, through execution of the contract. This could be attributable to any environmental damage caused or likely to be caused through contract execution throughout the supply-chain, or to the reputation of the supplier delivering the contract.

All categories of risk should be assessed on the basis of the risks inherent in the contract – i.e. regardless of any measures currently employed to mitigate the risk.

3. Scope

The methodology is applicable to all areas of purchasing activity within the Agency and NHS.

4. Application

Within a purchasing section, the methodology should be applied to each market area on the assumption that one market area represents a grouping of products/services that display broadly the same supplier/user base and have similar characteristics. Identification of a market area should not be so generalised as to obscure specific environmental or profile risks associated with individual contracts. If considered appropriate, the tool should be applied at the level of an individual contract to accurately assess green risk.

Initially, the methodology should be applied to all market areas managed by a purchasing section at a given point in time. It is important to include all market areas as an overall risk profile for the section needs to be developed, i.e. where the risk associated with any one market area is assessed relative

to the risk associated with other market areas in the section's portfolio. Application of the methodology at this level will identify priority areas for action within the section.

Once the initial assessment has been completed, the methodology can usefully be applied to all new market areas / contracts identified in annual work plans as there is considerable opportunity to address green risk during the tendering process, e.g. environmental clauses, green specifications and environmental award criteria.

4.1 Risk assessment

The original methodology recommends a simple high/low metric for assessing the scale of environmental and profile risk, without offering much detail on how to determine whether the risk is high or low.

The Agency has devised three options (No.'s 1, 2 and 3) to help in the process of assessing risk. These options are outlined in Annexes A, B and C. Each option is equally valid, and it is therefore up to each purchasing section to choose the option that gives them the greatest degree of comfort and understanding in the risk assessment process, and is most appropriate to their contract portfolio. However, it is recommended that the same option is applied to all market areas within a section. The use of different options for different market areas within a section is likely to cause confusion, may lead to conflicting priorities, and will generate a less credible audit trail of risk assessment. Documentary or electronic records should be retained detailing the application and outcomes of whichever approach is chosen.

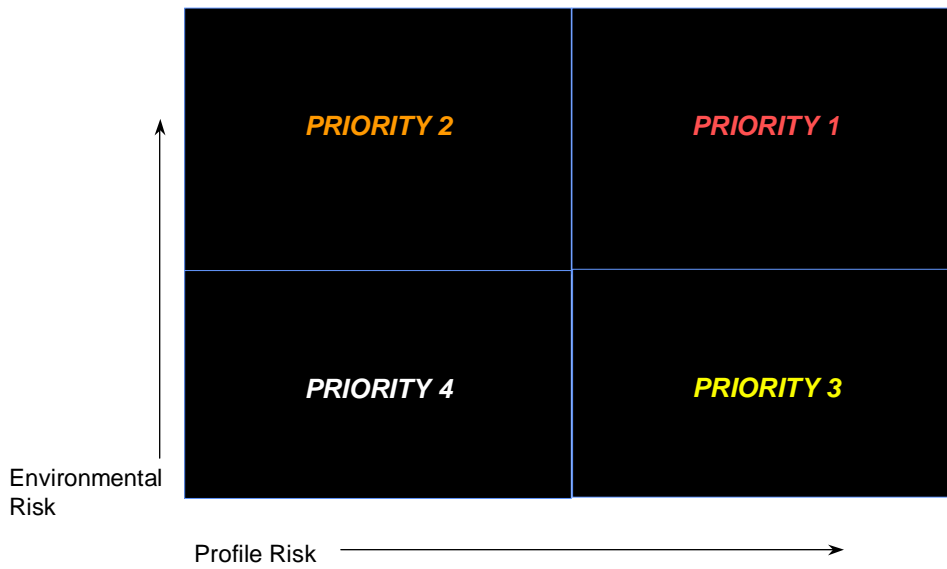
Regardless of the option chosen, the break-point for categorising market areas into high or low can be determined by a number of approaches. Either:

- 1) a pre-determined threshold, e.g. high equals any score of 4 or more
- 2) using the average score for the contract portfolio (see Annex D for details).

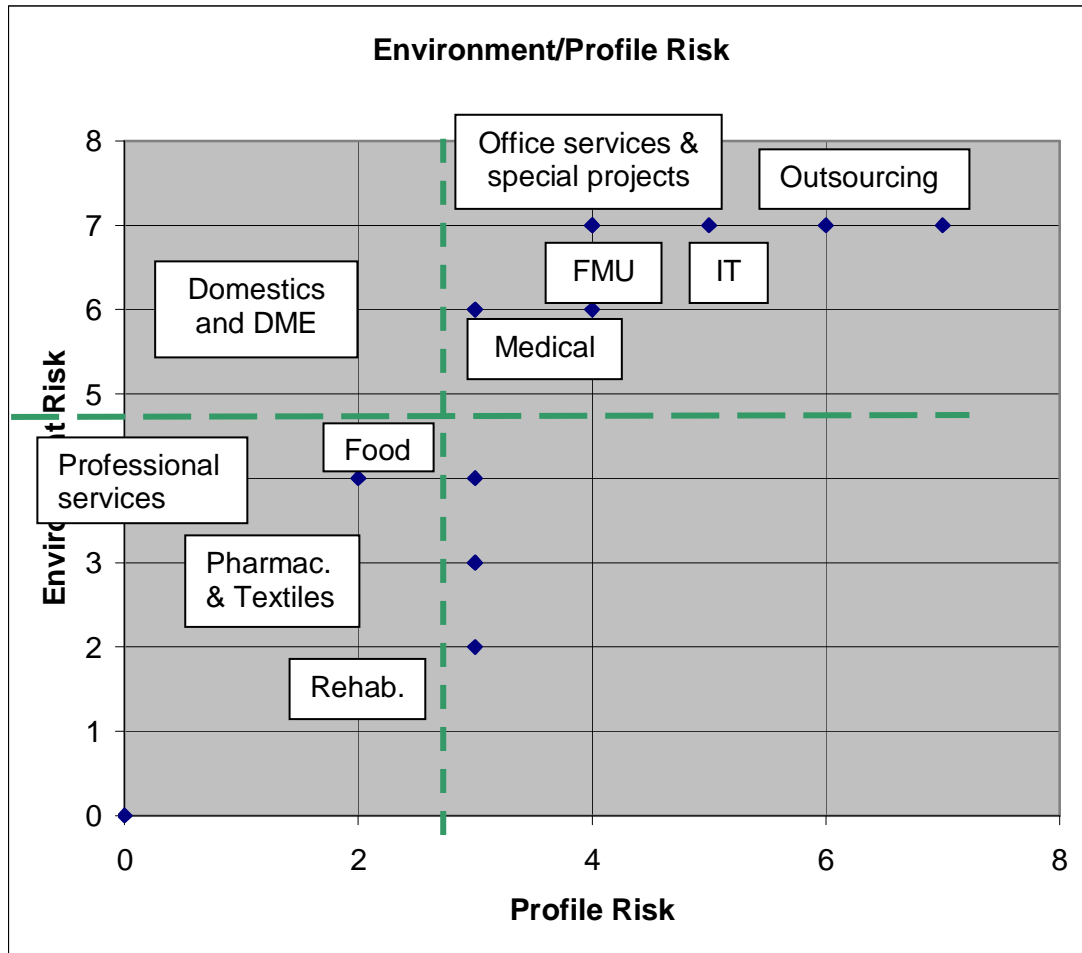
4.2 Risk management

Once the green risk associated with each market area has been assessed, the market areas can be mapped onto a matrix of environmental risk versus profile risk, and prioritised for attention.

Thus those market areas assessed as being high risk for environment and profile would be targeted first, followed by those assessed as being high environmental risk and low profile risk, etc.



For illustrative purposes and by way of example only, an assessment has been conducted of the Agency’s purchasing sections at the highest level. The risk assessment was conducted using option 1 (see Annex A). The outcome of this assessment is shown below and the table of scored responses attached as Annex D.



Once market areas have been mapped, it is then possible to determine the appropriate interventions, i.e. how much time and resource to dedicate on managing the risks associated with each market area.

Suggested interventions are shown below, in the matrix and in table format. Thus for those market areas assessed to pose a high environmental and profile risk, the full range of interventions is recommended (in compliance with EU rules). Those market areas assessed to pose a low environmental and profile risk, need only to incorporate the minimum intervention of the standard environmental clause (as per Trust Operating Purchasing and Procedures Manual).

<p style="text-align: center;">PRIORITY 2</p> <ul style="list-style-type: none"> •Avoid use/reduce consumption •Check policy compliance •Green specification and award criteria •Use variants •Green supplier appraisal •Quality/price tender evaluation on basis of WLC •Gain commitment for future action •On-going programme of supplier audits 	<p style="text-align: center;">PRIORITY 1</p> <ul style="list-style-type: none"> •Avoid use/reduce consumption •More research/supplier audits •Engage stakeholders •Check policy compliance •Prepare press release? •Green specification and award criteria •Use variants •Green supplier appraisal •Quality/price tender evaluation on basis of WLC •Gain commitment for future action •On-going programme of supplier audits
<p style="text-align: center;">PRIORITY 4</p> <ul style="list-style-type: none"> •Check policy compliance •Raise awareness through use of standard clause 	<p style="text-align: center;">PRIORITY 3</p> <ul style="list-style-type: none"> •Avoid use/reduce consumption •Engage stakeholders •Check policy compliance •Prepare press release? •Green specification and award criteria •Use variants •Quality/price tender evaluation on basis of WLC •Raise awareness through use of standard clause

Intervention	Priority 1	Priority 2	Priority 3	Priority 4
avoid use/reduce consumption e.g. through seeking alternatives	yes	yes	yes	no
do more research and verify information through supplier audits	yes	possibly	no	no
engage stakeholders	yes	no	yes	no
check policy compliance	yes	yes	yes	yes
prepare press release?	yes	no	yes	no
green specification and award criteria	yes	yes	possibly	no
use variants	yes	yes	yes	no
green supplier appraisal	yes	yes	no	no
quality/price tender evaluation on basis of whole-life costs	yes	yes	yes	no
gain commitment to future action and on-going programme of supplier audits	yes	yes	no	no
awareness raising/standard clause	no	no	yes	yes

Annex A

Risk assessment – option 1

This approach to assessing risk involves answering “yes” or “no” to the following series of questions:

Environmental risk

Does the market area involve:

1. the use of toxic or hazardous substances at any time during the life-cycle of the product or service contract?
2. air or aqueous emissions on NHS premises?
3. potential to affect quality of NHS working environment (e.g. noise, odour, dust)?
4. energy or water consumption on NHS premises?
5. ongoing use of transport and travel (e.g. repeat deliveries) to NHS premises?
6. other sources of greenhouse gas emissions or ozone depleting substances during use?
7. the use of consumables that end up as waste or generation of packaging waste on NHS premises?

Profile risk

Does the market area involve:

(Government policy)

1. the use of timber or related products; food
2. the potential for energy efficient equipment, renewable energy, alternative fuels
3. the potential for the use of recycled products/materials

(human health)

4. use of hazardous/toxic substances anywhere in the supply-chain
5. air emissions adversely affecting air quality (e.g. vehicle emissions) anywhere in the supply-chain

(emotive issues)

6. suppliers the subject of NGO campaigns and/or consumer boycotts
7. the displacement of a local workforce or questionable labour standards anywhere in the supply-chain (for example, poor health and safety management, exploitative practices).

All available sources of information should be used to answer the questions. However, in the event that insufficient information is readily available to answer a particular question, the worst-case scenario should be assumed, i.e. that the answer is “yes”. Remember that both categories of risk should be assessed on the basis of the risks *inherent* in the market area – i.e. regardless of any measures currently employed to mitigate the risk.

Each “yes” answer is given a score of 1. Answering each question then provides a score out of seven for each market area, with correlation between the score and the risk (i.e. the higher the score, the higher the risk).

By using this methodology, a score for environmental risk and profile risk can be obtained, and these can then be mapped onto a matrix.

Annex B
Risk assessment – option 2

An alternative method of assessing risks is based upon standard risk assessment. For each market area, you score each of the identified risks (see list in table below e.g. ER1/PR1) according to likelihood of occurrence and impact if it does occur.

Risk is assessed for likelihood and impact on a scale of 1-3, one being the lowest likelihood/impact, and three being the highest. A row by row risk score is obtained by multiplying each likelihood score with the corresponding impact score.

An overall risk score for environmental and profile is obtained by summing the row by row risk scores. These scores can then be mapped onto a matrix.

All available sources of information should be used to score each identified risk. However, in the event that insufficient information is readily available to score a risk, the worst-case scenario should be assumed, i.e. that the score is 3.

For guidance, suggested environmental and profile impact scores for some risks have been included in the tables below.

Env. Risk Score	Likelihood	Impact
1	Unlikely	Negligible
2	Probable	Adversely affecting the achievement of trust environmental objectives
3	Almost definitely	Causing harm to human health or a breach of environmental legislation

Profile Risk Score	Likelihood	Impact
1	Unlikely	Localised staff complaint/adverse publicity in internal communications/board intervention
2	Probable	Community complaint/adverse publicity in the local press/StHA intervention
3	Almost definitely	National complaint/adverse publicity in the national press/DH intervention

	Description of environmental risk - <i>through execution of the contracts covered by the market area, the following occurs on NHS premises:</i>	Likelihood	Impact	Risk Score
ER1	Toxic or hazardous substances are used		3	0
ER2	Land is contaminated		3	0
ER3	Effluent discharges			0
ER4	The quality of the working environment is adversely affected.		3	0
ER5	Energy is consumed.			0
ER6	Water is consumed.			0
ER7	Daily road transport to and from the site(s)			0
ER8	The release of greenhouse gases.			0
ER9	The release of ozone depleting substances.			0
ER10	The generation of waste that is not recycled.			0
ER11	A pollution incident.		3	0
	<i>Insert other trust specific environmental objectives</i>			
	Total environmental risk score			0

	Description of profile risk - <i>the market area involves the use of the following:</i>	Likelihood	Impact	Risk Score
PR1	Timber and related products that are not from sustainable and legal sources, with independent evidence		3	0
PR2	The use of greenhouse gases		3	0
PR3	The use of ozone-depleting substances.		3	0
PR4	Non-organic food.		2	0
PR5	Inefficient electrical equipment.		3	0
PR6	Consumption of non-renewable sources of energy.		3	0
PR7	Hazardous or toxic substances in the supply-chain.		3	0
PR8	Emissions to air contributing to poor air quality.		2	0
PR9	A supplier that is subject to a consumer boycott or an NGO campaign.		3	0
PR10	Questionable labour standards in the supply-chain.		3	0
PR11	Displacement of jobs in the local economy.		2	0
	Total profile risk score			0

Annex C

Risk assessment – option 3

Option 3 is the least prescriptive. Rather than adopting a systematic approach to the assessment of environmental and profile risk, this approach is subjective.

A subjective approach may afford greater freedom to an individual purchasing section to consider the environmental and profile risks that are most pertinent to their contract portfolio. To do this, a more in-depth knowledge of the market place in which suppliers operate is likely to be required, together with a greater awareness and understanding of existing, and potential future, environmental issues.

However, care should be taken to ensure that by taking a subjective approach, the outcome of the risk assessment is still credible and does not expose the trust to unnecessary risk. For example, it would not be acceptable to only work with those suppliers that are quick and easy wins, where there may already be a good working relationship between the trust and the supplier. A subjective risk assessment still needs to consider all market areas in a contract portfolio.

A generalised, more subjective assessment of high and low risk could involve consideration of the following in relation to market areas within a contract portfolio:

- significant environmental issues/impacts associated with manufacture/use/disposal
- current and anticipated levels of stakeholder/media interest
- potential for adverse publicity
- incidences of supplier non-compliance with legislation.

This is not an exhaustive list.

Option 3 might be called the gut feel approach, as it does not rely on a systematic assessment of risk. However, this does not mean that decisions should be taken on a whim, with little thought or consideration, and without justification. If this option is chosen, there should still be a transparent audit trail and documentary or electronic records should be retained by the purchasing section.

Annex D

Working example of option 1 (see Annex A for further details)

Environmental risk	Pharma.	DME	FMU	Rehab.	Prof. Serv.	Leasing	IT	Outsourcing	Special Projects	Medical consumables	Office Services	Food	Textiles	Cleaning products
hazardous substances	1	1	1	0	0		1	1	1	1	1	0	0	1
pollution	1	1	1	0	0		1	1	1	1	1	1	0	1
working environment	0	1	1	0	1		1	1	1	1	1	0	0	1
energy/water consumption	0	1	1	0	1		1	1	1	1	1	0	0	1
transport/travel	0	1	1	1	1		1	1	1	1	1	1	1	1
greenhouse gases	0	0	1	0	0		1	1	1	0	1	1	1	0
waste	1	1	1	1	1		1	1	1	1	1	1	1	1
No. of +ve responses	3	6	7	2	4	0	7	7	7	6	7	4	3	6

Profile risk														
timber	0	0	1	1	0		0	1	0	0	1	0	0	0
energy efficient equipment	0	1	0	0	0		1	1	1	0	0	0	0	0
recyclables	0	0	1	1	0		1	1	1	1	1	0	1	0
hazardous	1	1	1	0	0	0	1	1	1	1	1	0	0	1
air quality	1	1	1	1	1		1	1	1	1	1	1	1	1
consumer boycotts	1	0	1	0	0		1	1	0	1	0	1	1	1
local community	0	0	0	0	1		1	1	0	0	0	1	0	0
No. of +ve responses	3	3	5	3	2	0	6	7	4	4	4	3	3	3

Annex D
Working example of option 1 (cont'd)

	Profile	Env.
	No. +ve responses	
Leasing	0	0
Professional	2	4
Rehabilitation	3	2
Pharmaceuticals	3	3
Textiles	3	3
Food	3	4
DME	3	6
Cleaning Products	3	6
Medical	4	6
Special Projects	4	7
Office Services	4	7
FMU	5	7
IT	6	7
Outsourcing	7	7
Average score	3.57143	4.93