

iformity, the assessment of impacts is addressed in a standard manner so that a wide range of impacts can be compared. For this reason a clearly defined significance rating scale is provided to assess the significance (importance) of impacts. The scale embraces the notion of extent and magnitude, but does not always clearly define the boundaries between the rating scale is very relative. For example, the magnitude (i.e. the size) of an impact on grassland (1000 km²) but the significance of this effect is dependent on the concentration or level of pollution. If the impact were to affect a large area the significance would be HIGH or VERY HIGH, but if it were dilute it would be LOW or VERY LOW. If the impact were to destroy grassland the impact would be VERY HIGH if only 100 ha of that grassland type was known to exist, but VERY LOW if the grassland type were common.

The significance of every environmental impact identified is determined by using a ranking scale, based on the guidelines extracted from the DEAT guideline document on EIA Regulations, April 1998):

Probability of occurrence (how likely is it that the impact may occur?), and
Duration of occurrence (how long may it last?)

Magnitude (severity) of impact (will the impact be of high, moderate or low severity?), and
Scale/extent of impact (will the impact affect the national, regional or local environment, or only that of the site?)

To assess each of these factors for each impact, the following ranking scales were used:

Don't know	Duration:
Probable	5 – Permanent
Probable	4 - Long-term (ceases with the operational life)
Probable	3 - Medium-term (5-15 years)
Probable	2 - Short-term (0-5 years)
Probable	1 – Immediate

National	Magnitude:
>5km)	10 - Very high/don't know
5-10km)	8 – High
	6 – Moderate
	4 – Low
	2 – Minor

Once the above factors had been ranked for each impact, the environmental significance of each was assessed using the following formula:

$$SP = (\text{magnitude} + \text{duration} + \text{scale}) \times \text{probability}$$

where SP is 100 significance points (SP). Environmental effects were rated as either of high, moderate or low significance. The significance is:

More than 60 significance points indicated high environmental significance.

Between 30 and 60 significance points indicated moderate environmental significance.

Less than 30 significance points indicated low environmental significance.

High = H	Moderate = M	Low = L
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That only negative impact will be ranked

The level of certainty of the assessment was judged on the following criteria:

Definite:	More than 90% sure of a particular fact.
Probable:	Between 70 and 90% sure of a particular fact, or of the likelihood of that impact occurring.
Possible:	Between 40 and 70% sure of a particular fact or of the likelihood of an impact occurring.
Unsure:	Less than 40% sure of a particular fact or the likelihood of an impact occurring.