

Impact Significance Rating Methodology

The significance of the project's impacts will be assessed and rated based on the methodology¹ and rating criteria outlined in this section.

The **significance** of an impact is defined as a combination of the **consequence** of the impact occurring and the **probability** that the impact will occur. The criteria used to determine impact consequence are presented in [Table 1](#) below.

Table 1: Criteria used to determine the Consequence of the potential impact

Rating	Definition of Rating	Score
A. Extent – <i>the area over which the impact will be experienced</i>		
None	No impact.	0
Local	Confined to project or study area or part thereof (e.g. site)	1
Regional	The region, which may be defined in various ways, e.g. cadastral, catchment, topographic	2
(Inter) national	Nationally or beyond	3
B. Intensity – <i>the magnitude of the impact in relation to the sensitivity of the receiving environment</i>		
None	No impact	0
Low	Natural and/or social functions and processes are negligibly altered	1
Medium	Natural and/or social functions and processes continue albeit in a modified way	2
High	Natural and/or social functions or processes are severely altered	3
C. Duration – <i>the time frame for which the impact will be experienced</i>		
None	No impact	0
Short-term	Up to 2 years	1
Medium-term	2 to 15 years	2
Long-term	More than 15 years	3

The combined score of these three criteria corresponds to a **Consequence Rating**, as set out in [Table 2](#):

Table 2: Method used to determine the Consequence Score

Combined Score (A+B+C)	0 – 2	3 – 4	5	6	7	8 – 9
Consequence Rating	Not significant	Very low	Low	Medium	High	Very high

¹ Note that the author wishes to acknowledge SRK Consulting who developed this methodology.

Once the consequence is derived, the probability of the impact occurring will be considered, using the probability classifications presented in [Table 3](#).

Table 3: Probability Classification

Probability of impact – the likelihood of the impact occurring	
Improbable	< 40% chance of occurring
Probable	40% - 70% chance of occurring
Highly probable	> 70% - 90% chance of occurring
Definite	> 90% chance of occurring

The overall **significance** of impacts will be determined by considering consequence and probability using the rating system prescribed in [Table 4](#).

Table 4: Impact Significance Ratings

Significance Rating	Consequence		Probability
Insignificant	Very Low	&	Improbable
	Very Low	&	Possible
Very Low	Very Low	&	Probable
	Very Low	&	Definite
	Low	&	Improbable
	Low	&	Possible
Low	Low	&	Probable
	Low	&	Definite
	Medium	&	Improbable
	Medium	&	Possible
Medium	Medium	&	Probable
	Medium	&	Definite
	High	&	Improbable
	High	&	Possible
High	High	&	Probable
	High	&	Definite
	Very High	&	Improbable
	Very High	&	Possible
Very High	Very High	&	Probable
	Very High	&	Definite

Finally the impacts will also be considered in terms of their status (positive or negative impact) and the confidence in the ascribed impact significance rating. The prescribed system for considering impacts status and confidence (in assessment) is laid out in [Table 5](#).

Table 5: Impact status and confidence classification

Status of impact	
Indication whether the impact is adverse (negative) or beneficial (positive).	+ ve (positive – a ‘benefit’)
	– ve (negative – a ‘cost’)
	Neutral
Confidence of assessment	
The degree of confidence in predictions based on available information, judgment of the EAP and/or specialist knowledge.	Low
	Medium
	High

The impact significance rating should be considered by DEA&DP in their decision-making process based on the implications of ratings described below:

- **Insignificant:** the potential impact is negligible and **will not** have an influence on the decision regarding the proposed activity/development.
- **Very Low:** the potential impact **should not** have any meaningful influence on the decision regarding the proposed activity/development.
- **Low:** the potential impact **may not** have any meaningful influence on the decision regarding the proposed activity/development.
- **Medium:** the potential impact **should** influence the decision regarding the proposed activity/development.
- **High:** the potential impact **will** affect the decision regarding the proposed activity/development.
- **Very High:** The proposed activity should **only** be approved under special circumstances.

In the EIA practicable mitigation measures will be recommended and impacts rated in the prescribed way both without and with the assumed effective implementation of mitigation measures. Mitigation measures are either:

- **Essential:** must be implemented and are non-negotiable; and
- **Optional:** must be shown to have been considered and sound reasons provided by the proponent if not implemented.