

Annex A: Draft DWI Event Risk Index (ERI): Definition

“Better regulation” requires that companies are scrutinised on the basis of their risk of failing to meet the requirements of the Regulations. The Event Risk Index (ERI) is a measure designed to illustrate the risk arising from water quality events, and it aligns with the current risk based approach to regulation of water supplies used by the Inspectorate.

This is a new measure developed in consultation with water companies, and designed to operate alongside, and complement, the Compliance Risk Index (CRI). Some details are still to be finalised by the Inspectorate, but the following outlines the broad principles of the measure.

ERI includes elements relating to:

- the “seriousness” of each drinking water quality event (the Event Category score);
- a measure of the company performance in managing the event (the Assessment score); and
- a measure of the impact of each event

The formula for the calculation of the index is as follows:

$$\text{ERI} = \frac{\sum(\text{Seriousness} \cdot \text{Assessment} \cdot \text{Impact (population, time)})}{\text{population served by the company}}$$

i. Event seriousness score

This score (derived from the existing DWI event classification) assesses the relative seriousness of a particular event. The score used will be the highest scoring effect of a particular event

Score	Basis for score (examples)
5	<ul style="list-style-type: none"> • National media interest • Ministerial interest • Proven disease outbreak
4	<ul style="list-style-type: none"> • Suspected or proven serious contamination • Local media interest (Water Quality or sufficiency) • Issues likely to result in widespread rejection
3	<ul style="list-style-type: none"> • Suspected or proven contamination which would not constitute a serious risk to health • Treatment failure • Other local media interest • Consumer rejection
2	<ul style="list-style-type: none"> • Loss of supply • Non-health related PVC failure • Social media interest • Aeration (no rejection)
1	<ul style="list-style-type: none"> • Consumer contact for pressure
0	<ul style="list-style-type: none"> • Event reported but no effect on water quality, sufficiency or consumer confidence

ii. Assessment score

All reported events are assessed by DWI to ensure that the wellbeing and interests of consumers were protected by best practice in management of events (including mitigation of the impacts and recovery). Obviously, a well-managed event with appropriate and speedy mitigation action poses a lower risk to consumers. The DWI also considers the root cause of the event and whether the company's actions led to or increased the likelihood of the event, and whether further remedial action is necessary.

Therefore the DWI Inspector's assessment has been assigned a score for ERI shown below:

DWI Inspector assessment	Score
Prosecution	5
Caution/warning letter	5
Enforcement – legal instrument	5
Legal instrument in place	4
Prosecution considered	4
Recommendations made	3
Suggestions made	2
No recommendations or suggestions made	1

iii. Impact score

This will be based on a simple measure of the population affected and time (in hours).