**Cranfield University (CERF) risk assessment method for horizon scanning outputs**

This was done in 2 ways:

**Importance of trends – Annual Key Factors report 2013**

Expert elicitation is used to give trends under each key factor an importance score. This serves as an indicator of the likely level of risk and/or opportunity associated with each. A semi-quantitative assessment (adapted from the World Economic Forum ‘Global Risks 2013’) was conducted by a range of experts, strategists and analysts from government and academia. Each participant assigned the trend a nominal score between one and five to indicate importance for the UK environment, including marine, terrestrial and food systems (5 high importance, 1 low importance). The importance score considered both negative and positive impacts (i.e. the trend could have presented a risk or opportunity or elements of both). Participants were also asked to select the time horizon in which they felt the main impacts of the trend will be felt in the UK (1-3 years, 4-10 years or 10+ years). These scores are subjective and intended only to distinguish between issues identified in a relative sense.

**Risk prioritisation & Time Horizon – bespoke scanning**

The risk prioritisation step used the expertise of the CERF team and Natural England staff to assign a risk prioritisation score to each insight. The **likelihood** was taken to mean the chance of the insight occurring in the UK (1 = Not likely; 2 = Moderately likely; 3 = Very likely) while the **potential environmental, social and economic impacts** (1 = Low impact; 2 = Moderate impact; 3 = High impact) were assessed relative to the UK as a whole, rather than just the location/industry concerned.

The resulting ‘Total’ risk prioritisation score is the mathematical product of the likelihood score and the average impact score, and thus has a range of 1 to 9. The total is derived by adding up the economic, social and environmental scores and then dividing that by three (to get an average ‘impact’ score), and then multiplying by the likelihood.

The time horizon refers to the likely timing of the impacts (1 = 1-3 years; 2 = 3-10 years; 3 = 10+ years).

For example – insight on novel ecosystems here to stay, importance of 5, divided by 3 for average x3 likelihood = total 5.

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| **Time Horizon** | **Importance** | **Likelihood** |
| **Total** | **Economic** | **Environmental** | **Social** |
| **1** | 5 | 1 | 3 | 1 | 3 |