

EUFJE Conference 2019

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The role of science in environmental adjudication

Questionnaire: answers from the UK

1) Mandate of the court to review techno-scientific matters

In addressing these questions, it is important, from a UK perspective, to distinguish between the public law jurisdiction and other jurisdictions (e.g. criminal law regulation and private nuisance claims). In regulatory criminal cases and private nuisance cases, scientific evidence is obtained from expert witnesses; in private nuisance cases Civil Procedure Rules govern the permission to obtain expert evidence, and the court can mandate the appointment of a joint expert by both parties. In public law cases the decision-taking body will rely upon the scientific evidence accompanying any application and may, if it considers it necessary, obtain its own expert advice. The public law court reviewing the grant of any authorisation or permission will exercise an error of law jurisdiction which will not generally intervene in the conclusions reached on the scientific materials. Apart from one type of appeal in the criminal regulatory jurisdiction which takes place on the merits (an appeal to the Crown Court from the Magistrates Court) all other appellate jurisdictions will not re-investigate scientific questions or review the scientific findings of the lower court unless they consider they were irrational. Evidence from aerial photography and alike is regularly used in regulatory enforcement cases, whether in the criminal law context or in relation to the enforcement of the control of development by local planning authorities and on appeal from them, to specialist Inspectors of the Planning Inspectorate.

2) When do you gather expert evidence?

In cases where, for instance, measurement and analysis are required in order to establish whether or not conditions on a permit or other authorisation are being complied with it would be mandatory to gather scientific evidence to demonstrate any exceedances or other respects in which the permit or authorisation was not being complied with. These investigations would be undertaken by the body with responsibility for regulatory enforcement. Judges would not be permitted to investigate the scientific dimensions of the cases *ex officio*: the scientific dimension of such cases would be an aspect of the evidence which it would be necessary for the parties to adduce before the court.

3) Rules of expert appointments

Experts are selected and appointed by the parties, even in the case of a joint expert who will be appointed pursuant to a direction from the court and as an expert agreed by both parties as appropriate to give evidence. On the basis of this procedure the question of challenge to the appointment of an expert does not arise. The scope and focus of the expert's evidence will often be settled by the court directing that there be a meeting between experts to identify

areas of agreement and areas of disagreement and by the court, in conjunction with the parties, settling a list of questions for the expert or experts to address.

4) Evidentiary issues: standard and burden of proof

In criminal cases the burden of proof rests of the prosecution and they must prove the case so that the tribunal is sure. In private law cases the facts must be established on the balance of probabilities (i.e. that it is more likely than not). These standards of proof do not change and are set in law.

5) Rules of evaluating expert evidence: standard (intensity) of review

The evaluation of expert evidence is undertaken bearing in mind matters such as the qualifications and expertise of the expert, the extent and quality of the data which the expert has used including its reliability, and the extent to which the conclusions that the expert has reached apply scientific methods of evaluation which command a consensus within the relevant scientific community. These and other aspects of the expert's opinion would be scrutinised through cross examination by the opposing party. It is not the role of a court undertaking a public law review of a permit of authorisation granted by a local authority decision-taker to retake the decisions in relation to the evaluation of scientific evidence. If the conclusion reached by the domestic authority was irrational or perverse then the court would interfere to quash the decision and require it to be retaken.

6) The role of science and technology in the courtroom- an overall assessment

The issues in relation to evaluating scientific opinion in court tasked with that responsibility are no different in environmental cases to other cases involving such evidence (for example, cases involving the structural integrity of civil engineering projects or the reconstruction of road traffic accidents). In the UK's adversarial system the process is strengthened by the opposing parties testing each other's cases thereby providing the tribunal with alternative perspectives on the appropriate scientific conclusions. There are therefore procedural safeguards for promoting the upholding of the law, including EU law. Certainly, the process needs to be accompanied by a suitably expert tribunal, and training and experience in the scientific areas concerned with environmental law is essential for robust decision-making.

7) Case study

(a) The scientific/ technical questions which this case raises relate to the reliability of the ground water modelling (including such questions as the authenticity of the data used to input into the model, the accuracy of the model and the extent to which it conforms with best scientific practice, and the parameters of its reliability as a tool to predict which would in reality would occur, or its margins for error across the area being modelled).

The legal questions raised are the appropriate test to be applied to determine whether or not it is permissible to allow the project to proceed. This question includes the necessity to remove all scientific uncertainty in relation to any likely significant effects upon the habitat, and the application of the precautionary principle in undertaking that examination. The legal

questions might also include the adequacy of the reasons provide by the administrative authority to substantiate their conclusion that the permit should be granted.