

Ksenija Dimec, judge  
County Court of Rijeka, Croatia

**EUJJE Conference 2019**  
**Helsinki, 13-14 September 2019**  
**The role of science in environmental adjudication**  
**Questionnaire**

1) Mandate of the court to review techno-scientific matters a) In what forms do judges gather scientific advice (e.g. party-appointed experts, court-appointed experts, in-house experts, expert judges (legal adjudicators having a formal training in a certain scientific field), and/or expert assessors (scientific experts sitting with judges during the deliberation without the right to vote)? What is the task of these actors?

Judges in Croatia gather scientific advices by court-appointed experts. There is a list of court experts in various fields and a judge usually selects expert(s) from that list. If there is no expert on the list for particular field, there is a possibility to appoint an *ad hoc* expert (usually expert in the specific field, but not on the list of court experts).

b) What forms of scientific references are acceptable as bases for making persuasive scientific findings (E.g. expert evidence, standards issued by competent international or national organizations, regulatory trends of other states, etc.)?

Usually standards issued by competent international or national organizations.

c) Can a higher court (e.g. appeal court, supreme court) in your jurisdiction investigate scientific questions, and/or review the scientific findings of lower courts? If so, to what extent?

Supreme Court is forbidden to investigate facts. It only deals with application of substantive law. Appeal courts, on the other hand, have possibility to investigate facts, but in reality they rarely do it. So, if appeal court has some doubts concerning scientific findings/questions, it will usually quash first instance court judgment and point out which scientific findings/questions should be assessed and how in the proceedings before the first instant court.

d) How would you handle evidence derived from geospatial (GIS) technologies (such as satellite images, aerial photography, drones, etc.) (see for instance the use of geospatial intelligence in the Bialowieza case, C-441/17 R)? In what type of cases and in what ways do you utilize them? How can they promote compliance monitoring and a more effective enforcement?

So far we only used aerial photography as an evidence in cases where claimant wanted to prove changes in the particular spot of land, esp. in cases concerning waste landfills. We utilized them in order to compare perspective of particular spot of land in different periods of time (before and after).

2) When do you gather expert advice? a) How do you distinguish between technical/scientific questions and legal questions in fact-intensive disputes, where science and law are closely interlinked in the underlying legal rules and concepts?

I gather expert advice when specific scientific knowledge is needed in order to establish relevant facts of the case. Scientific expertise is always one of the evidence(s) and there is no problem in making distinction between scientific questions and legal questions.

b) Are there any types of cases and/or questions where gathering scientific evidence is mandatory under domestic law?

No, there does not exist any mandatory gathering of (scientific) evidence(s) under domestic law.

c) To what extent are judges allowed to investigate the scientific dimensions of cases *ex officio*?

I am a civil judge and we do not have *ex officio* cases in environmental law. Claimant is the one who prepares the case. But, although we do not have *ex officio* cases, judge should put questions which are to be answered by an expert and later on, during a hearing, judge is the one who first puts questions to an expert in order to clarify expertise.

3) Rules of expert appointment a) What are the selection criteria of experts in your jurisdiction (e.g. having requisite training, being impartial, independent from the party, being enrolled on government-issued lists, etc.)?

In order to become a court expert, an expert should apply for that, then have a training which is focused on judicial procedure and duties of court experts and finally has to pass exam and then he/she is out on the list of court experts for a period of 4 years. If he/she wants to extend it for a period of another 4 years, he/she should apply again, but then there are no trainings and exams and if there were no complaints about respective court expert, he/she will be on the list again for the next period of 4 years.

b) Whether and on what basis can a party challenge the appointment of a party appointed/court-appointed/in-house expert?

As we have a system of court-appointed experts (from the list), a party does not have wide field of objections. Party can only challenge the appointment if there exist reasons for exemption (for example, if court-expert is relative of other party, or good friend...), but it will be very rare because an court expert himself has a duty to ask for exemption if there exist reasons.

c) To what extent and in what ways do judges in your jurisdiction exercise control over the scientific fact-finding process (e.g. by defining precisely the scope of factual controversy needed to be addressed by experts)?

When a judge decides for an expertise, he/she writes decision in which appoints court-expert and gives task to him/her by putting questions which have to be answered by expertise.

4) Evidentiary issues: standard and burden of proof a) What is the applicable standard of proof for environmental cases in administrative, civil and criminal law (e.g. preponderance of the evidence, beyond reasonable doubt, etc.)? Is it set in domestic law, or are judges free to adjust the standard as they deem fit?

Preponderance of the evidence.

b) What are the rules of allocating the burden of proof in science-intensive cases (maybe give one or two examples to indicate what is meant by science intensive cases)?

There is no difference between science-intensive cases and other cases, so burden of proof is always allocated to the party who alleges certain facts (to prove them).

5) Rules of evaluating expert evidence: standard (intensity) of review a) How do you choose between two competing or conflicting pieces of expert evidence?

It is always great problem and, unfortunately, there is no universal rule because every case is different and every “conflict” is different.

b) Could you review the scientific assessments and justifications made by a competent domestic authority (by conducting a de novo review of the evidence)? Or is your judicial review deferential towards the scientific claims of domestic authorities?

It also depends on the facts of the respective case (for example, which is “competent domestic authority”). But, if there is a party (claimant/defendant) who challenges scientific assessment made by competent domestic authority and propose another expertise (for example, by faculty), it is possible to review it by another expertise.

c) What is the applicable standard of review to scrutinize the scientific assessments of domestic authorities (e.g. scrutinizing ‘manifest errors’, or the reasonableness/consistency/coherence of their scientific conclusions, or interrogating the scientific validity and factual correctness of the evidence, or reviewing the procedural aspects of science-based decision-making process at hand)?

Scrutinizing reasonableness/consistency/coherence of their scientific conclusions

6) The role of science and technology in the courtroom – an overall assessment a) To what extent do you consider the difficulties of scientific fact-finding to be a defining challenge in environmental adjudication compared to other difficulties?

In environmental adjudication the biggest problem is to find proper expert-expert in some very specific field(s) and to get from him/her proper expertise. One example...NGO alleges that by some construction works near the sea, certain sea flora and fauna disappeared because were destroyed. In order to prove this, there should be an expert with knowledge about specific sea flora and fauna and able to dive because it could be proved only if he/she dives in the sea in order to investigate seafloor.

b) Do you consider the domestic rules of expert involvement to be appropriate to secure judicial control/monopoly over deciding environmental disputes? Or do you think judges should exercise greater control over the scientific fact-finding process?

I think that the domestic rules of expert involvement are appropriate to secure judicial control/monopoly over deciding environmental disputes because judge is the one who gives task to an expert asking answers to questions. And, if there some doubts and additional questions, judge is the one who is running the hearings, asking expert to clarify expertise....

c) Do you consider the limits of curial supervision of fact-intensive cases are appropriate for providing effective judicial protection and promoting uniform application of EU law?

Yes, I do not see any problem or obstacle.

d) Do you think it is necessary and if so, in what ways, to improve the scientific engagement of judges (E.g. would you improve the procedural rules of scientific fact-finding, enhance the scientific competence of the judges through training and capacity building, or develop new legal tests to review contradicting scientific evidence, etc.)?

I do not think that it is necessary to improve scientific engagement of judges, because for all scientific doubts, we have experts. Of course, each judge needs to be engaged in the scientific problem at least in a way to put adequate task to an expert in order to get expertise which could help resolving the case.