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

## A. Preliminary note

The following statement refers only to the legal situation in environmental administrative procedures regulated in the German „Verwaltungsgerichtsordnung“ - VwGO - (Code of Administrative Court Procedure).

As a starting point, the guarantee of effective legal protection (Art. 19 para 4 GG [= German Constitution[1]]) basically entails the duty of the courts to verify in full and in law the contested administrative acts[2]. Even if the underlying legal regulation requires extrajudicial professional assessments, the Administrative Court generally checks the legal decision completely for its legality. If there are no normative concretizations for the professional assessment of such legal criteria below the legal requirement, the authority and the court have to make use of the findings of the specialist science and practice in order to elucidate these characteristics[3].

According to § 86 para 1 sent. 1 VwGO the responsibility of investigating the relevant facts for the holding lies with the court (principle of ex officio investigation). It therefore generally spoken must do its own research and investigate the relevant facts for the holding independently from the submission of the concerned parties. All reasonably available options for solving the essential issue must be exhausted till the unreasonableness of enlightenment is reached. This way the principle of ex officio investigation facilitates a greater freedom to the court, compared to the principle of negotiation of the civil litigation. The administrative law judge can therefore only base his decision on those circumstances of whose presence he has convinced himself of. § 86 para 1 sent. 1 VwGO aims to minimalize the risk of substantive untrue judicial decisions.

The principle of ex officio investigation, that controls the collecting of the body of facts, doesn’t touch the permission of the involved to dispose about the procedural law relationship through preamble, determination of the cause of the lawsuit (compare § 88 VwGO) and early termination (trough abandonment of action, settlement deal, completion declaration). A corresponding freedom of disposition concerning the collection of facts is though not held by the involved parties, since the court’s power of investigation is not constrained by indisputable pleas, confessions and requests of the parties to take evidence (§ 86 para 1 sent. 2 VwGO).

However, the obligation to inform finds its boundaries in the duty of collaborating of the involved parties in the investigation of the relevant set of facts. That way there is no obligation for the courts to (further) clarify the facts, where a lawsuit does not provide a valid reason for more clarification, where therefore the duty of collaborating of the involved parties starts. The need for a corresponding pleading is always given (§ 86 para 4 VwGO). Therefore the involved are bound to present any known

[1] Find wording of all quoted rules in the annex.
[2] see BVerfG, Beschluss vom 31. Mai 2011 - 1 BvR 857/08 - BVerfGE 129, 1 [20] m.w.N.
[3] see BVerfG, Beschluss vom 23. Oktober 2018 - 1 BvR 2523/13, 1 BvR 595/14 - NJW 2019, 141

fact truthfully, that they use to justify their forms of order sought. If they fail to do so and if there is no justified reason for the court to give further clarification of the facts, the court has no duties on further doing so. The arising consequences have to be borne by the "guilty" party. Consequently the court is not obliged to enter any investigations, which weren't initiated by a corresponding plea or any other concrete indications, about there maybe being another, until now not detected circumstance that could be of influence to the legitimacy of the administrative action. The court though has to take them into account if such circumstances happen to come to its notice or if they can already be found in the cause of litigation. Furthermore the judge does not have to collect any pieces of evidence outside of the trial records; however he has to deal with the given documents even if they weren't of the parties' submission but from publicly accessible sources. Own investigations are required if new clues that are exposed during presentations force it upon the court.

The exploration of the cause of action regularly takes place by consulting the records of the administrative authorities (§ 99 para. 1 VwGO), by considering the pleas of the involved parties as well as by the taking of evidence (§§ 96 – 98 VwGO in combination with § 108 para. 1 VwGO: free consideration of evidence). Normative for the question, which facts the trail judge has to elucidate and what measures he has to take, is always the judge's own substantive perception, which builds the basis for his decision.

## B. Questions

### 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?*

According to § 98 VwGO the following pieces of evidence come into consideration:

- **visual inspection**: Object of the visual inspection are all things or persons, of whose consistency the court can gain a direct, sensual impression. A date at a location, which is set to establish the local conditions, is the typical example of a visual inspection.
- **Witnesses**.
- **Experts**; that could be expert witnesses, party-appointed experts or publicly-appointed experts.
- **Certificates**: note, that foreign certificates have the same validity as German certificates.
- **Interrogation of the involved**.

In relation to techno-scientific matters there are no special features, especially there are - as a rule - no in-house experts or expert judges in Germany.

*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.)?*

See above a)

*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?*

According to the Code of Administrative Court Procedure the court of appeal as second instance is authorized to review the scientific findings of the first instance. The court can take evidence the same way the first instance is allowed to. That also applies to investigate scientific questions.

The Federal Administrative Court as third instance doesn't have such a competence. Is the court convinced that it is necessary to investigate scientific questions further more than the lower court did, he will overrule the verdict and give back the case to the lower instance to clarify the questions.

*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?*

Evidence derived from geospatial (GIS) technologies, such as satellite images, can be used by the court. Often they replace visual inspections.

## 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?*

That depends on the individual case and cannot be answered in an abstract way.

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

No. Not in the Code of Administrative Court Procedure or any other environmental administrative law.

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

See the preliminary note.

## 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.)?*

The most important criterion is the knowhow of an expert, further on if he is an officially appointed expert and if he is independent from the parties.

In Germany there are no government-issued lists about experts but comparable lists exist and are hold by various organisations, e.g. the Chambers of Industry and Commerce.

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

There is no possibility to change the appointment of a party appointed expert.

A court-appointed expert can be changed only in case of conflict of interest.

In Germany there are no in-house experts in environmental administrative procedures.

*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)?*

First of all it is very important to describe clearly the evidence topic so the expert knows exactly what he has to do, what he is demanded. During the work of the expert there is no court control. If the expert report is available, the court will check if the expert has given an answer to the evidence topic; if not, he has to improve his report. Otherwise the court will proof if the expert opinion is sufficient to come to a decision in the case; if not the court will repeat the procedure, perhaps by instructing another expert.

## 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?*

See the preliminary note. There is no difference for environmental cases in administrative law.

*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)?*

Caused by the principle of ex officio investigation, a claim- and argumentation burden, similar to the one from the civil procedure law (so called formal burden of proof), cannot be found in the administrative process law. Apart from the problems that are caused by the formal burden of proof, the question arises what consequences insufficient detectability of the relevant facts can have (so called material burden of proof). Who bears the material burden of proof is determined by material law and the applicable norm of the individual case; if no special provision can be found, the general legal principle will step in, which states that the impossibility to clear up the facts, what from the party deduces their beneficial legal consequences, is at their charge.

Example: A landowner bears the material burden of proof that his house has been approved. It will be to the disadvantage of the owner if it turns out to be unsolvable (e.g. because a building permit cannot be found anymore) if a house was under protection because of reasons of earlier (formal or material) legality.

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

*a) How do you choose between two competing or conflicting pieces of expert evidence?*

Due to § 108 para 1 sent. 1 VwGO the court shall rule in accordance with its free conviction gained from the overall outcome of the proceedings. Therefore the court has to decide which expert opinion is more convincing.

*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?*

Due to Art. 19 para 4 GG the courts are obliged to review the scientific assessments and justifications made by a competent domestic authority (see additional in the preliminary note).

But there are exceptions to this principle, especially in environmental law. In absence of relevant professional circles and the relevant science on generally accepted standards and methods for the professional assessment, the judicial review of the official decision result may encounter objective limits due to lack of better knowledge of the courts. As far as an extra-legal question has not yet been clearly answered by experts and academia, it is not possible to determine objectively whether the official answer to this technical question is right or wrong. The court is not required by Art. 19 para 4 sent. 1 GG to dissolve the non-statutory factual lack of knowledge. Courts are not in a position to independently fill scientific gaps in their knowledge, nor are they obliged to commission research beyond the scope of scientific research. Although it is not excluded in this case that the court could actually make a self-assessment in a similar manner as the authority, despite the insufficient level of knowledge on the nature conservation issue. It must, if required by law, make a decision under the same conditions. According to the meaning and purpose of the constitutional legal protection guarantee, however, beyond the possible verification of the justifiability of the official assumptions within the framework of existing findings, no further independent as-

sessment by the court, which is independent of the official decision, is required. On the contrary, the court can base its decision on the assessment of the authority, which is also plausible from its point of view[4].

If the administrative court comes to the objective limits of the findings of ecological science and practice in the control of environmental decisions, the limited control measure follows from the fact that it lacks the yardstick for a reliable distinction between right and wrong. This is not a deliberate shift of decision-making authority from the court to the authority, but a de facto limit of administrative judicial control depending on the duration and extent of the respective ecological level of knowledge[5].

Note: Even if there is a lack of generally accepted standards and methods among experts in the professional and scientific community, the level of judicial review is not fundamentally different from the usual judicial review. The decision of the authorities must be judicially controlled as far as possible before the administrative court can refrain from further clarification because of the objective limits of the scientific knowledge, and can rely on the plausibility of the administrative decision[6].

*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)?*

Complete review. See additional in the preliminary note and above 5 b).

## 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?*

The difficulty is - in my opinion - that a judgment in an environmental case in the end depends on a convincing expert opinion and less in the use of law.

*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?*

Due to the principle of ex officio investigation and the obligation of the courts to verify in full and in law the contested administrative acts the rules of expert involvement in Germany are absolutely sufficient.

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[4] see BVerfG, Beschluss vom 23. Oktober 2018 - 1 BvR 2523/13, 1 BvR 595/14 - NJW 2019, 141; BVerwG, Urteil vom 22. September 2016 - 4 C 2.16 - BVerwGE 156, 148

[5] see BVerfG, Beschluss vom 23. Oktober 2018 - 1 BvR 2523/13, 1 BvR 595/14 - NJW 2019, 141; BVerwG, Urteil vom 22. September 2016 - 4 C 2.16 - BVerwGE 156, 148

[6] see BVerfG, Beschluss vom 23. Oktober 2018 - 1 BvR 2523/13, 1 BvR 595/14 - NJW 2019, 141

*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?*

See above b)

*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.)?*

In my opinion it is not necessary to improve the scientific engagement of judges, because it could - according to the variety of scientific problems in environmental cases - only be patchwork.

**7) Case study - case a)**

The court will first await the statement of the defendant. Then the court will examine which scientific aspects have not been clarified by the administrative authority and whether there is a detailed justification directed to this, which makes it necessary to investigate the questions by way of ex officio investigation. If the NGO or the defendant submits private reports to this effect, the court will first examine whether they are sufficient for a decision on the claim. If this is not possible, the court will seek an expert opinion on the issues raised, on the basis of which - together with the opinions already available - a decision should be possible. If, however, scientific questions remain unsolved, in particular a threat to the Natura 2000 area cannot be ruled out, as the NGO claims, the court will overturn the permit. This follows from § 34 para. 1 and 2 BNatSchG (=Federal Nature Conservation Act). The court would not rule on the question of whether the artificial groundwater production plant can exceptionally be authorized (§ 34 Abs. 3 BNatSchG), because that question is not the subject of the claim.

Leipzig, den 30. Juli 2019

Dr. Andreas Decker
Federal Administrative Court Germany

Annex:

**Article 19 GG** [Restriction of basic rights – Legal remedies]

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(4) Should any person's rights be violated by public authority, he may have recourse to the courts. If no other jurisdiction has been established, recourse shall be to the ordinary courts. The second sentence of paragraph (2) of Article 10 shall not be affected by this paragraph.

**Section 86 VwGO**

(1) The court shall investigate the facts ex officio; those concerned shall be consulted in doing so. It shall not be bound to the submissions and to the motions for the taking of evidence of those concerned.

(2) A motion for the taking of evidence made in the oral hearing may only be rejected by a court order, which shall require to be reasoned.

(3) The presiding judge shall endeavour to ensure that formal errors are remedied, unclear requests explained, proper motions made, inadequate factual information supplemented, as well as all declarations submitted which are material to the establishment and judgment of the facts.

(4) Those concerned should submit written statements to prepare the oral hearing. The presiding judge can call on them to do so, setting a deadline. The written statements shall be communicated to those concerned ex officio.

(5) The originals or duplicates of the certificates or electronic documents to which reference is made shall be enclosed in full or in part with the written statements. If the certificates or electronic documents are already known to the opponent or are very extensive, the precise designation shall be sufficient, coupled with the offer to grant inspection in the court.

**Section 88 VwGO**

The court may not go beyond what is requested in the action, but is not bound by the version of the motions.
Section 96

(1) The court shall take evidence in the oral hearing. It may in particular inspect evidence and question witnesses, expert witnesses and those concerned, and consult certificates.

(2) In suitable cases, the court may already have evidence taken prior to the oral hearing by one of its members acting as a commissioned judge or, by designating the individual evidence questions, request another court to take evidence.

**Section 96 VwGO**

(1) The court shall take evidence in the oral hearing. It may in particular inspect evidence and question witnesses, expert witnesses and those concerned, and consult certificates.

(2) In suitable cases, the court may already have evidence taken prior to the oral hearing by one of its members acting as a commissioned judge or, by designating the individual evidence questions, request another court to take evidence.

**Section 97 VwGO**

Those concerned shall be informed of all evidence-taking dates and can attend the taking of evidence. They may address expedient questions to witnesses and to expert witnesses. If a question is objected to, the court shall decide.

**Section 98 VwGO**

Unless this Act contains any derogatory provisions, sections 358 to 444 and 450 to 494 the Code of Civil Procedure shall apply mutatis mutandis to the taking of evidence.

**Section 99 VwGO**

(1) Authorities shall be obliged to submit certificates or files, to transmit electronic documents and provide information. If the knowledge of the content of these certificates, files, electronic documents or this information would prove disadvantageous to the interests of the Federation or of a Land, or if the events must be kept strictly secret in accordance with a statute or due to their essence, the competent supreme supervisory authority may refuse the submission of certificates or files, the transmission of the electronic documents and the provision of information.

.....

**Section 108 VwGO**

(1) The court shall rule in accordance with its free conviction gained from the overall outcome of the proceedings. The judgment shall state the grounds which were decisive for the judicial conviction.

(2) The judgment may only be based on facts and results of evidence on which those concerned have been able to make a statement.