Answers to the Avosetta questionnaire on risk-benefit-alternatives weighing German report

(3 June 2010)

Gerd Winter

I. German legislation requiring the weighing of risks and benefits of alternatives

1. Landuse planning and public infrastructure projects

As a general rule, wherever an environmental protection law provides an authority with discretion to decide a matter the authority is free to take non-environmental criteria into account and consider alternatives in order to identify better balances of risks and benefits. Discretionary powers are frequent in the areas of land-use planning (powers of the local council) and of authorizing large infrastructure projects (powers of the competent administrative agency). One speaks here of planning discretion (planerisches Ermessen). Court case law has gradually developed concepts structuring the use of such discretion.[1] This structure has then in more or less detailed ways been written into the relevant laws. The structure for land-use plans and infrastructure authorisations is this: Authorities must when implementing their planning discretion

- consider if there is a public interest in the project
- fairly weigh all affected interests which means, more specifically:
  - (1) identify all affected interests[2]
  - (2) consider the specific weight of the affected interests
  - (3) balance the interests according to their weight against each other
  - (4) reiterate (1) – (3) for those alternatives which "impose themselves (sich aufdrängen)"
- fully respect all conclusive legal requirements that may be laid down in sectoral laws, such as eg nature protection and air and noise pollution standards.

In short, a broad array of interests, public and private, are to be balanced with regard to the proposed project and alternative solutions.

2. Nature protection

a) The so-called encroachment rule (Eingriffsregelung)
According to § 15 Federal Nature Protection Act (Bundesnatuschutzgesetz – BNatSchG) any encroachment on nature and landscape (Eingriff in Natur und Landschaft) is subject to the following conditions:

- avoidable adverse effects on natural sites are prohibited (this implies the consideration of alternatives)
- unavoidable adverse effects must be compensated by either the reconstruction of the site in the neighbourhood or the replacement of the lost site by other measures
- if compensation measures are not possible the interest in the lost nature must be weighed against the project goals
- if the balance weighs in favour of the project a compensatory payment is due

[1] See the landmark judgements BVerwGE 34, 309 and 45, 309 for land-use plans and BverwGE 48, 56 for infrastructure projects.
[2] For land-use planning the Baugesetzbuch (§ 1 VI) provides a long but not exhaustive list of interests that must be considered.

b) Natura 2000 sites
§ 34 BNatSchG transposes Art. 6 IV of the Habitat Directive. Most of the phrasing of the Directive was duely transferred but two points deserve attention:

- specifying the term "absence of alternative solutions" (Art. 6 IV subpara 1) the law speaks of "acceptable alternatives to reach the objective of the project at another location" ("zumutbare Alternativen, den mit dem Projekt verfolgten Zweck an anderer Stelle […] zu erreichen")
- specifying the term "other imperative reasons of overriding public interest" (Art. 6 IV subpara 2) the law expressly includes public interests of a social or economic nature

It appears that the reduction of alternatives to geographical variations and thus exclusion of other modalities including also the zero alternative is not compatible with the notion "alternative solutions". As to the inclusion of social and economic interests Commission practice has approved this reading although there are reasons to defend another understanding.

3. Water Management

According to § 12 Water Management Act the authority has discretion to decide about uses of waters. This implies that different uses can be weighed according to their comparative importance. However, the discretion is strictly limited in regard to water pollution. If a use causes adverse effects on the water and the effects cannot be remediated it is not permissible.

4. Pesticides

§ 15 Plant Protection Act (Pflanzenschutzgesetz, PflSchG) requires for the authorisation of pesticides that the pesticide is

a) sufficiently effective
[…]
e) does not cause unacceptable effects in particular on nature (Naturhaushalt) […]

The notion "unacceptable effects on nature" was interpreted by the Federal Administrative Court in a case where the manufacturer of a pesticide based on the agent substance Paraquat challenged a decision rejecting an application for prolongation of the permit.[3] The court said that the notion entails a balancing of considerations including

- the likelihood that the unavoidable effects on nature will be adverse (nachteilig),
- the importance (Gewicht) of this adverse effect (Nachteil),
- the advantage of the use of the pesticide for the cultivation of plants at stake
- the possibility of replacing this kind of cultivation.

This means that the kind and importance of adverse environmental effects must be weighed against the economic advantage of using the pesticide, and that alternatives of cultivation must be considered. If there is an alternative (such as the mechanical removal of weed or another pesticide) with a better score of drawbacks and advantage the proposed pesticide cannot be authorised.

[3] BVerwG Case 3 C 19.87 of 10 November 1986, BVerwGE 81, 12-18.

5. GMOs

§ 16 Genetic Modification Act (Gentechnikgesetz, GenTG) requires for the authorisation of experimental release and placing on the market of GMOs that "it is not to be expected that adverse effects on the legally protected goods (Rechtsgüter) defined in § 1 No 1 are unacceptable in relation to the objective of the release [or placing on the market, resp.]. The legally protected goods defined in § 1 No 1 GenTG are human life and health, the environment, animals, plants and physical assets, and ethical values. There is no case law yet on what "unacceptable in relation to the objective" means because in all cases hitherto decided the courts were satisfied that no adverse effects were to be expected. However, predictably the courts will develop a formula akin to the one for pesticides should a case emerge where adverse effects are prognosticated.

In any case the question arises if the formula of § 16 GenTG is compatible with Art. 4 Directive 2001/18/EC which simply requires that adverse effects must be excluded. Some authors including myself have argued that given the novelty of GM technology adverse effects can never be excluded, and that the authorities tend to disguise this fact by calling the remaining risk "negligible". They say such residual risk should only be accepted if the GMO provides a provable advantage, such as, for instance, allowing the reduction of uses of chemicals.[4]

6. Cost-effectiveness and the principle of proportionality

The principle of proportionality requires that if a number of measures are capable of reaching a goal (such as to prevent environmental harm) that measure shall be preferred which least encroaches upon the interest of the polluter. In economists' language this is looking for cost-effectiveness of administrative action. It does not imply a balancing of risks and benefits because risk avoidance is constant in the calculus. By contrast, the second element of proportionality does lead to a kind of risk-benefit balancing: If the measure is extremely costly and the prevented risk is small the measure shall not be taken. It should be added that this consideration is only possible if the authority acts within a discretionary margin.

II. Case law

Most of the court judgements that deal with risk-benefit-alternative balancing are concerned with Natura 2000 issues. A number of cases decided by the Federal Administrative Court (BVerwG) are particularly important for the design of the risk-benefit-alternatices calculus. One significant judgement shall be reported in some details.[5]

[4] G. Winter, Nature Protection and the Introduction into the Environment of Genetically Modified Organisms: Risk Analysis in EC Multilevel Governance, in: RECIEL 17 (2) 2008, 205 - 220

[5] BVerwG 9 A 20.05 of 17 January 2007, BVerwGE 128, 1; see also BVerwG 9 A BVerwGE

The construction of a highway in the west of the city of Halle, numbered A 143 (see map, broken line), was authorised by a so-called planning permit (Planfeststellungsbeschluss, PFB). The road was designed to cross and dissect a Natura 2000 site of a prioritary nature. The PFB stated that (1) the project would not significantly adversely affect the site, (2) was in any case justifiable according to § 43 III and IV BNatSchG (=Art. 6 III and IV Dir 92/43). An NGO filed a complaint to the BVerwG which held that the PFB was unlawful. This means that the permit is not quashed but that the mistakes can be remedied by subsequent procedures. Meanwhile any project works had to be halted.

The court first of all found that the authority issuing the PFB failed to prove that no significant adverse effects on the site were to be expected, in particular effects of polluting traffic emissions and of the dissection of the site. Therefore, the court said, the project could only be authorised under the conditions of § 34 III and IV BNatSchG (= Art. 6 IV Dir 92/43). Checking imperative reasons of public interests the court held that the reduction of inner city air pollution achievable by constructing a bypass road could be considered as a human health protection interest in the sense of Art. 6 IV subpara 2, but that the summary assessment offered by the authority in that direction was not sufficient; the authority had to prove in some detail that the highway would redirect significant traffic from certain through-roads through the city and thus reduce the level of air and noise pollution.[6]

The court held further: social and economic public interests qualify as other interests justifying encroachments on prioritary habitats and species under Art. 6 IV subpara 2, and traffic demand (Verkehrsbedarf) counts among them. Any prognosticated demand beyond 25.000 automobiles per day indicate an imperative reason of public interest. This however does not imply that the traffic demand must in all cases prevail over the nature protection interests. This depends on the precise amount of traffic demand on the one side and the value of the habitats or species on the other. In the case the court held that the planning authority failed to prove that the traffic demand was beyond the threshold. It however conceded that the

6 According to another judgement of the BVerwG an overall assessment is sufficient if the project ie (once more the construction of a highway – A 44)) concerns non-prioritary habitats or species: In such cases it is sufficient that "the positive effects of the project are supported by practical knowledge (Erfahrungswissen). This is here the case. Even without detailed evidence on present accident figures […] the conclusion is justified that the on the whole the A 44 will divert traffic from through-roads crossing cities and thus mitigate the danger of accidents. Likewise, redirecting traffic from through-roads to the highway will significantly reduce air pollution for residental areas, and the new line for heavy trucks traffic which cuts 70 km short will reduce emission of noxious substances.

authority corrects its mistake by submitting better proof in a subsequent proceeding – which the authority did later on.

I submit that this court – and the courts in Natura 2000 cases concerned with road construction in general – too easily accept the satisfaction of traffic demand as a public interest. The total amount of individual motorised traffic (IMT) has in highly developed states become a nuisance, in terms of air pollution, of intrusion in personal mobility of children and the elderly, of climate gas emissions, and of dissections of nature areas. IMT must therefore be reduced rather than be given more space to increase. Therefore, IMT demand as such should not be regarded as a public interest anymore. Only if the satisfaction of additional traffic demand serves other goals it should be accepted as public interest.

Concerning alternatives the court opined that if a sufficient future traffic demand can be proven the zero alternative is excluded from further consideration. This implies that the court does not believe in the possible inner motivation of drivers to choose other means of transportation, or the possibility of introducing incentives and disincenties, maybe even such nasty things as traffic jams. I believe the court's opinion is very short-sighted.

Furtheron the court considered alternative traces of the highway. The plaintiff had proposed a new line connecting highways 38 and 14 in the South-East of Halle (see map). The court formulated as a principle:

> "One cannot speak of an acceptable alternative if the planned variant results in a different project because the objectives legitimately persued by the project developer cannot be reached any more. It is only acceptable to suffer reductions in the degree of fulfilling the objectives. A planned variant which cannot be realised without self-standing partial objectives having to be abandoned must however not be taken into consideration."

The court regarded as a self-standing partial objective the possibility of those who live in the western areas of Halle to easily reach a highway. This, it held, could not be ensured with a highway surrounding Halle in the South-East of the city. Such location would constitute a different project.

I have a concern here. The court rightly looks at the planning goal as a criterion to determine the scope of alternatives. But it incorrectly equates the developer's project objective with the public interest. I believe the goal determining the scope of alternatives should be the public interest, not the objective persued by the developer.

Even if we suppose (against what was said earlier) that the satisfaction of traffic demand can be in the public interest, it is only one among other means to solve a more complex problem which alone can be called a public interest in the sense of Art. 6 IV Dir 92/43. This problem is in our case the overall traffic situation in and around the city of Halle. The court did not embark on identifying this problem in any detail. We can suppose that it consists in air and noise pollution in Halle, time loss due to traffic jams in Halle and on the existing highways around Halle, and accidents through dense traffic. If we define the problem in such more complex terms many more solutions can be imagined than just the construction of a new road. For instance, strategies of reducing IMT would come into play, including toll-schemes, exclusive lines for public transportation in the city, speed reduction preventing accidents, etc. In instrumental terms, it is a pity that Art. 6 IV Dir 92/43 does not require that additional roads for IMT can only be authorised if based on a traffic master plan that considers pros and

cons of different solutions. In this perspective, the developer is only one among other candidates who are qualified to serve the public interest. Therefore, his determination of a project goal is not more than a suggestion to satisfy the public interest. But it is not binding in the sense that any other alternative must be realisable by him or her.