WG 6: Approaches to assessing and permitting plans and projects (Article 6.3)

Objectives
1: To understand which types of plans and projects are considered and the reasons why they are dealt with in Habitats Directive assessments in each country;
2: To understand the test on likely significant effects;
3: What criteria are applied to decide about adverse effects (threshold)?
4: How are in combination effects considered in each country?
Approaches to assessing and permitting plans and projects (where they are sources of air pollution) for Article 6.3 assessments

Key questions - General setting

- What types of projects and plans are considered?
- Is there a uniform approach?
- Is the concept of critical loads accepted for the purpose of appropriate assessments?
- How do the political landscape, court rulings and the detailed scrutiny of plans and projects by non-governmental organisations (NGO) influence these assessments?
Approaches to assessing and permitting plans and projects (where they are sources of air pollution) for Article 6.3 assessments

Key questions – Test on likely significant effects

- Relevance screening: Which relevance criteria are applied (single project threshold, buffer zones)?
- Likely significant effect: Are in-combination effects considered at this stage?
- Background deposition: How is it accounted for at this stage?
Approaches to assessing and permitting plans and projects (where they are sources of air pollution) for Article 6.3 assessments

Key questions – adverse effects

- Adverse effects: Which threshold does apply?
- Adverse effects: How is background deposition determined?
- Adverse effects: How do current conservation status and background deposition matter?
- Adverse effects: How is sensitivity estimated (empirical, modelled critical loads, site specific)?
- Adverse effects: Which modifying / site or case specific factors may be taken into account?
Approaches to assessing and permitting plans and projects (where they are sources of air pollution) for Article 6.3 assessments

Key questions – in-combination effects

In-combination effects

- Which in-combination effects have to be considered?
- How are in-combination effects taken into account (including how does information flow between different issuing authorities)?
Evaluation of Nitrogen Deposition within Article 6.3 assessments in Germany

Dipl. Biol. Rudolf Uhl
FÖA Landschaftsplanung GmbH, Trier

Peterborough, 02.-04. Dec. 2013
Natura 2000:
SACs and SPAs cover 15.4% of terrestrial Germany
Conservation objectives:

Favourable status

Most of the habitats are sensitive to nitrogen deposition

SACs are not just in the highlands, they are close to urban areas as well.
And they cause a lot of trouble
Appropriate assessment:

- background deposition
- road increment
- total deposition rate
- sensitivity of habitats (Critical Loads)

Mitigation, risk management:
- N-withdrawal
- monitoring

Impact assessment:
(implications of effects, threshold of significance)
Assessment scheme

1) Site specific critical load value can be assigned (for eutrophication or acidification)
   - yes ➔ Single case evaluation
   - no ➔ no

2) Predicted Environmental Deposition exceeds critical loads (for eutrophication or acidification)
   - yes ➔ yes
   - no ➔ no

3) Designated habitat feature is affected by projection contributions of > 0.3 kg N/ha/a
   - yes ➔ no
   - no ➔ no

4) Designated habitat feature is affected by projection contributions of > 3% CL
   - yes ➔ yes
   - no ➔ no

5a) Area affected exceeds values for orientation (qaFqrF) of Lambrecht / Trautner considering gradual loss of functionality; dependant on endangerment by eutrophication or acidification and intensity of project contribution (Table 52/ 53)
   - yes ➔ no
   - no ➔ yes

5b) Indispensable zones of particular functional quality affected
   - no ➔ no
   - yes ➔ yes

As a rule adverse effects on the integrity of the site have to be assumed

Source: Balla et al. 2013

Rudolf Uhl Impact assessments for air pollution policy and nature conservation policy  02-04 Dec 2013  - 10 -
Test on likely significant effects

- In principle in combination effects have to be considered
- Total deposition may not be higher than critical load
- Otherwise only small project contributions may be accepted (legal principle of proportionality)
- Main criterion: De minimis value
Test on likely significant effects: De minimis value

Common approach in Germany:

- Project contributions up to 0.3 kg N/ha/y are considered irrelevant

Reasons:

- Not detectable (lack of sensitivity of measuring instruments)
  - This also means that calculations cannot be verified
- Particularly important if only in combination effects are stated
- Not detectable in the environment because of fluctuations
- No detectable harmful effects along roads several 100 m away
- Background deposition may still be lowered by other means

Approach in Northrhine-Westphalia (draft):

- Project contributions above 0.1 kg N/ha/y are considered
Adverse effects:

Common approach in Germany:

Project contributions (alone or in-combination) up to 3% CL are considered a bagatelle

Reasons:

- Not detectable in the environment because of fluctuations
- No detectable harmful effects along roads several 100 m away
- Background deposition may still be lowered by other means

Project contributions above 3% have to be compared to tolerable area loss (but only part of the function gets lost)
For each annex I habitat absolute values of acceptable area loss are given.

Value may be 0 (Class 1, e.g., 8160*, 8230).

Otherwise, value depends on the relative loss as compared to total size of the habitat within the site considered (3 levels).

Valid only if several conditions are fulfilled:
- no qualitative highlight,
- no cumulative adverse effects
- no further (cumulative) area losses
- no more than 1% of habitat lost

Concept may be expandable on partial function losses.
### Adverse effects: gradual function loss by nitrogen impacts

<table>
<thead>
<tr>
<th>Total project contribution compared to CL</th>
<th>Danger of deterioration*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Class 1 high danger of deterioration</td>
</tr>
<tr>
<td>&gt;40%</td>
<td>100</td>
</tr>
<tr>
<td>&gt; 20%</td>
<td>100</td>
</tr>
<tr>
<td>&gt;10%</td>
<td>100</td>
</tr>
<tr>
<td>&gt;5%</td>
<td>70</td>
</tr>
<tr>
<td>&gt;3%</td>
<td>40</td>
</tr>
</tbody>
</table>

**Gradual function loss %**

Source: Balla et al. 2013
Adverse effects: gradual function loss by nitrogen impacts

<table>
<thead>
<tr>
<th>Class</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>high danger of deterioration</td>
<td>CL(N) &lt; 15 kg N ha(^{-1})a(^{-1})</td>
</tr>
<tr>
<td></td>
<td>or</td>
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<tr>
<td></td>
<td>CL(N) &lt; 30 kg N ha(^{-1})a(^{-1}) with hydromorph soil with little</td>
</tr>
<tr>
<td></td>
<td>exchange of ground water</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>Total deposition &gt; CL(_{\text{max}})(N) (Danger of acidification)</td>
</tr>
<tr>
<td>danger of deterioration</td>
<td>CL &lt; 30 kg N ha(^{-1})a(^{-1})</td>
</tr>
<tr>
<td></td>
<td>but no reason for high danger (compare class 1),</td>
</tr>
<tr>
<td>modest danger of deterioration</td>
<td>CL(N) ≥ 30 kg N ha(^{-1})a(^{-1})</td>
</tr>
<tr>
<td></td>
<td>and</td>
</tr>
<tr>
<td></td>
<td>total deposition ≤ CL(_{\text{max}})(N) (no danger of acidification)</td>
</tr>
</tbody>
</table>

Source: Balla et al. 2013
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Thank you for your contributions to the discussion!

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Sources


FE-Vorhaben 84.0102.2009 der BAST:
„Untersuchung und Bewertung von straßenverkehrsbedingten Nährstoffeinträgen in empfindliche Biotope“

Bosch & Partner GmbH, Herne

FÖA Landschaftsplanung GmbH, Trier

Ingenieurbüro Lohmeyer, Dresden

ÖKO-DATA GmbH, Straßberg

FGSV-Arbeitskreis 2.12.2 „Stickstoff in der FFH-VP“
(Leitung: Frau Birgit Kocher)
Court decisions / Guidelines

• Any exceedance of critical loads may constitute an adverse effect to the integrity of a site. Exceptions to that rule must be based on functional reasons.

• Minimal impacts of low intensity and with (at the same time) small areas affected may be acceptable because of Art.5 par.3 EG (principle of proportionality)

• Project contributions of “not more than 3%” may be considered irrelevant