

**STUDY CONTRACT**

**CONTRACT No. XXXX/BXXXX.EEA.XXXXX**

The European Environment Agency, hereinafter called “the Agency”,  
Whose official address and contact person are:

- Kongens Nytorv 6 ,DK-1050 Copenhagen K, Denmark,
- Mr. Ybele Hoogeveen

Which, for the purpose of the signature of this contract, is represented by Mr Gordon  
McInnes, Interim Executive Director of the Agency,

Of the one part,

And ..... [Name of the contractor]

Hereinafter referred to as “the contractor”

Whose official address is: .....

Whose bank account no is: .....

With ..... [Name of establishment, city, bank identification code]

VAT registration number:.....

Represented by: ..... [Name of the signatory] , .....  
..... [Position of the signatory],

Of the other part,

Have agreed as follows:

Article 1 – Subject

In the framework of this contract, the contractor hereby undertakes, subject to the conditions  
laid down in this contract and the annexes thereto, which form an integral part thereof, to  
perform the following tasks:

1. ....
2. ....
3. ....

[To be completed].

The description of work is set out in Annex I.

#### Article 2 – Duration

1. This contract shall enter into force from the date on which it has been signed by the contracting parties [and shall start to be carried out ..... days after its date of entry into force] .
2. This contract is awarded for a period of 11 months.

#### Article 3 - Financial provisions

1. In consideration of the services performed under this contract, the Agency shall pay to the contractor a sum of up to a maximum of EURO .....[Amount in figures] ([Amount in words] ..... ) (VAT [Included] [or] [Excluded) covering all expenses incurred in the course of execution of this contract, including all travel expenses.
2. Subject to the condition that they would not lead to exceed the maximum amount of the contract as mentioned above, unforeseen travel and subsistence expenses in connection with missions carried out at the specific request and with the prior written authorisation of the Agency shall be reimbursed to the contractor.
3. Payments shall be made as follows:
  - a) Concerning the sums agreed in paragraph 1;  
  
EURO .....[Amount in figures], payable within 60 days upon receipt by the Agency of an invoice, following the signature of the contract (30 %),  
  
EURO .....[Amount in figures], payable within 60 days upon receipt by the Agency of an invoice following approval of the interim report (40%),  
  
And EURO .....[Amount in figures] payable within 60 days upon receipt by the Agency of an invoice following approval of the final report (30 %).
  - b) Invoices shall indicate the contract number and shall be sent to the Agency at the address and to the contact person as referred above.
4. Payments shall be made to the contractor into the bank account mentioned above.

#### Article 4 – General conditions

This contract shall be governed by the General terms and conditions applicable to contracts awarded by the European Environment Agency as laid down in Annex II to this contract.

#### Article 5 – Administrative provisions

All communications, reports, and complaints concerning the performance of this contract shall be in written form and indicate its number as well as its subject, and shall be sent to the address of the interested contracting party and, where appropriate, to the contact person as mentioned above.

Article 6 – Taxation

1. The contractor shall have sole responsibility for compliance with the tax laws which apply to him.
2. The Agency is exempt from duties, levies and taxes, including value added tax, pursuant to Article 3 and 4 of the Protocol on the Privileges and Immunities of the European Communities and the Headquarters Agreement between the Agency and the Government of Denmark of 17 August 1995. The contractor shall accordingly complete the necessary formalities with the relevant authorities to ensure that the goods and services required for the performance of the contract are exempt from tax and customs charges, including VAT.
3. The VAT number of the Agency is: DK 18 13 98 39.

Article 7 – Annexes

1. The following are annexes to this contract:
  - Annex I Description of work
  - Annex II General terms and conditions applicable to contracts awarded by the Agency
  - Annex ... VAT exemption form
  - Annex ... Reimbursement of travel expenses
  - Annex ... Budget.....
  - Annex... ..
2. In case of conflict between provisions of the contract and those of the annexes, the provisions of the contract shall take precedence. In case of conflict between provisions of Annex II and the provisions of other annexes, those of Annex II shall take precedence.

[Optional] Article 8 - .....

For the contractor:

[.....]

Signed in duplicate in English  
in ..... on .....[Date]

For the Agency:

[Gordon McInnes  
Interim Executive Director]

Signed in duplicate in English  
in Copenhagen on .....[Date]

**GENERAL TERMS & CONDITIONS APPLICABLE TO CONTRACTS AWARDED  
BY THE EUROPEAN ENVIRONMENT AGENCY (Hereinafter “the Agency”)**

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**Article 1 - Performance of the contract**

- (1) The contract shall be performed in such a way as to exclude the possibility of the Contractor or his staff undertaking tasks under conditions identical to those governing the tasks entrusted to a member of the Agency’s staff. The Contractor and his staff may not be members of the Agency’s administrative structure.
- (2) If the Contractor is a natural person, he shall be required to provide proof of his status either as a self-employed person or an employee for the duration of the contract. To this end, he shall provide the Agency with information about his occupation, in particular with regard to social security and VAT.

**Article 2 - Secondary obligations of the Contractors**

- (1) The contractor shall perform the contract according to the highest professional standards and in accordance with the principles of sound financial management. In performance of the contract, the Contractor is required, depending on the circumstances, to use only his own highly qualified, professional staff.
- (2) The Contractor undertakes to provide the Agency with any information it may request for the management of the contract.
- (3) In the event of termination of the contract for one of the reasons referred to in Article 7 of these terms and conditions, the Contractor shall undertake to send the Agency all information and documents in his possession concerning the tasks assigned to him.

**Article 3 - Confidentiality**

- (1) The Contractor undertakes not to make use of and not to divulge to third parties any facts, information, knowledge, documents or other matters communicated to him or brought to his attention during the performance of the contract or any matter arising therefrom. He shall continue to be bound by this undertaking after the expiry of the contract.
- (2) If the Contractor uses his own staff in the performance of the contract, he shall obtain from each staff member a written undertaking that they will respect the confidentiality of any information brought to their attention during the performance of the work and that they will not divulge to third parties or use for their own benefit or that of any third party any document or information not available publicly, even after completion of their assignment. A copy of the undertaking shall be sent to the Agency.
- (3) If the Contractor’s staff are working at Agency premises, the contractor shall replace, immediately, at the Agency’s request and without compensation any person considered undesirable by the latter.

#### **Article 4 - Permits and licences**

The Contractor shall be solely responsible for taking the necessary steps to obtain any permit or licence required for the performance of the contract under the laws and regulations in force at the place where the tasks assigned to the Contractor are to be performed.

#### **Article 5 - Spread of risk**

The Contractor shall not be entitled to payment if he is prevented by force majeure from performing the tasks assigned to him. Part performance only of any such task shall result in part payment. Provided it is specified in the contract, the above provisions shall not affect the Contractor's entitlement to reimbursement of travel and subsistence expenses and of costs for the shipment of equipment incurred in the performance of the contract.

#### **Article 6 - Liability of the contracting parties**

- (1) The Agency may not under any circumstances or for any reason whatsoever be held liable for damage sustained by the Contractor himself or by his staff during the performance of the contract. The Agency shall not accept any claim for compensation or repairs in respect of such damage.
- (2) Except in case of force majeure, the Contractor shall be required to indemnify the Agency for any damage it may sustain during the performance, poor or otherwise, of the contract.

#### **Article 7 - Termination of contract**

- (1) Each contracting party may, of his own volition and without being required to pay compensation, terminate the contract by serving formal notice two months in advance. If the contract is terminated by the Agency, the Contractor shall be entitled to payment for the part performance of the contract only.
- (2) In the event of a serious failure by the Contractor to the Agency, duly noted by the Agency, to fulfil his obligations under the contract, the contract may be terminated at any time by registered letter without formal notice or payment of any compensation whatsoever by the Agency. This provision shall not affect the application of Article 6(2) of these General Terms & Conditions.
- (3) In the event of non performance of the contract by the contractor, except for reasonable and justifiable technical or economic reasons, of any of his obligations, and after having given notice by registered mail requiring performance of the obligations concerned, the Agency may terminate the contract if the contractor is still in breach of his obligations one month after receiving formal notice.
- (4) In the event of circumstances which are liable to prejudice or delay the performance of the contract, the contractor shall forthwith inform the Agency, with the relevant details. The parties shall agree together on the measures to be taken. If no agreement can be reached, the Agency may terminate the contract without recourse to any legal proceedings, where no action is taken by the contractor within one month of receiving formal notice by registered mail.
- (5) The Agency may terminate the contract without notice if the Contractor is unable, through his own fault, to obtain any permit or licence required for the performance of the contract as referred to in article 4 above.

- (6) Without prejudice to the termination referred to in paragraphs 3 and 4 above, the Agency may require reimbursement of all or part of the amounts paid, having regard to the nature and the scale of the work carried out, before the date of termination of the contract.

#### **Article 8 - Assignment and services to third parties**

- (1) The Contractor shall not, without the prior and written approval of the Agency, assign the rights and obligations arising out of the contract in whole or in part or sub-contract any part of the contract to third parties.
- (2) Even where the Agency authorises the Contractor to sub-contract part or all of the work to third parties, he shall nonetheless remain bound by his obligations to the Agency under the contract.
- (3) Save where the Agency expressly authorises an exception, the Contractor shall be required to include in any sub-contracts for all or part of the work such provisions as enable the Agency to enjoy the same rights and guarantees in relation to the sub-contractors as it enjoys in relation to the Contractor himself.

#### **Article 9 - Ownership**

- (1) Any result or patent obtained by the Contractor in the performance of the contract shall belong to the Agency which may use them as it sees fit.
- (2) Copyright and any other rights of ownership in respect of manuscripts or parts thereof shall belong exclusively to the Agency except where copyright or other property rights already exist.
- (3) On the date of acceptance of the manuscripts and subject solely to the exception referred to in paragraph (2) above, all rights in respect of manuscripts, including amongst others the right to use, print, publish and sell all or part thereof in any manner and in any language whatsoever, shall be acquired by the Agency which may transfer all or part of such rights to third parties on its own terms.
- (4) The Contractor shall specify any parts of manuscripts, including illustrations, maps and graphs, in which copyright or any other right of ownership already exists and hereby affirms that he has obtained permission to use such parts from the titular holder(s) of such rights or from his or their legal representatives. Any cost for which the Contractor may become liable for such permission shall be paid by him. Save as otherwise provided for in paragraph (2), the Contractor hereby affirms that he is entitled to transfer the copyright or other rights of ownership in respect of the subject matter of the manuscript.
- (5) The Agency shall not be required to publish manuscripts or documents supplied in the performance of the contract. If it is decided not to publish the manuscripts or documents supplied, the Contractor shall not have them published elsewhere without the written approval of the Agency.

#### **Article 10 – Payments**

- (1) Payments shall be made in euros (€).
- (2) At the request of the Contractor, the Agency may pay him an advance equal to 40% of the amount due on completion of the contract. Payment of the advance may be made

conditional upon the furnishing by the Contractor of proof that he has lodged a deposit with his bank equal to the amount of the advance. The advance shall be deducted from subsequent payments in such a manner that it is fully recovered on exhaustion of the funds provided for such payments.

- (3) In the event of termination of the contract under Article 7 of these General Terms & Conditions, no payment shall be due except for services actually rendered up to the date of termination. In such an event, the amount due shall be calculated after deducting any payments already made. If the payments made prior to termination exceed the sum finally due, the additional amount shall be repaid by the Contractor to the Agency within 60 days of receipt of a request for repayment. If payment is not made within this period, the sum owed by the Contractor shall start to bear interest at the euro rate applied by the European Central Bank on the last day of the period allowed for repayment, as published in the C series of the Official Journal.
- (4) Where appropriate, invoices shall be supported by original documents justifying the time spent by the contractor to perform the tasks under the contract.
- (5) Reimbursable travel and subsistence expenses shall be paid, where appropriate, on production of original supporting documents including receipts, used tickets and boarding pass.
- (6) Payments shall be made within 60 days of receipt of the invoice by the Agency and shall be deemed to have been made on the date on which the Agency's account is debited.
- (7) Upon expiry of the time limits set above, the contractor may, within two months of receiving the late payment, claim interest, applied by the European Central Bank to its operations in Euro, plus one and a half percentage points.
- (8) However, the Agency is not bound to comply with the 60 days payment period if the invoice has not been presented or sent to the correct address as required by the contract or if the contractor has not fulfilled his obligations so that the debt cannot be confirmed or quantified and is not due. The Agency shall inform without delay the contractor that he has failed to meet these requirements. A new 60 days payment period as stated above shall start to run again upon receipt by the Agency of a properly established payment request.
- (9) The Contractor, whose registered office or residence is situated within the territory of one of the Member States/countries of the Agency, shall indicate a banking institution on the territory of the country where his registered office or residence is situated for the payment of the sums due to him under the contract.

#### **Article 11 – Audits and controls**

The Agency and such persons who are authorised for this purpose by the Executive Director shall be entitled to carry out audits and controls, have access to all books, papers, records and files kept by the contractor relating to expenditure incurred in performing the contract during the contractual period and for a period of five years after such period.

### **Article 12 - Provisions relating to taxation**

- (1) The amount of VAT shall not be included in the sums due to the contractor except when the tasks envisaged with the present contract are not directly exonerated from VAT under the terms of the tax laws applicable to the contractor.
- (2) The Contractor shall be responsible for complying with the national tax laws applicable to him in respect of revenue received under the contract with the Agency.
- (3) The contractor shall, at the request of the Agency, make available to the latter all vouchers which it might require in order, where necessary, to apply for reimbursement by the fiscal authorities of levies and taxes which have been paid in execution of this contract, pursuant to Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Communities.

### **Article 13 – Applicable Law and Jurisdiction**

- (1) This contract shall be subject to Danish law.
- (2) Any dispute between the Agency and the contractor or any claim by one party against the other which cannot be settled amicably shall be brought before the Copenhagen courts exclusively, at the initiative of either party.

### **Article 14 – Amendments**

Any amendment to this contract shall be the subject of an additional written agreement. Oral agreements shall not be binding on the contracting parties.

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**Call for tender EEA/EAS/003/02**

**IDENTIFICATION SHEET**

Company name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Director: \_\_\_\_\_

Consultant(s): \_\_\_\_\_

VAT No: \_\_\_\_\_

E-mail: \_\_\_\_\_

**Bank details:**

Bank: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Account No: \_\_\_\_\_

BIC code: \_\_\_\_\_

Signed by: \_\_\_\_\_

Company stamp:  
**(must be added)**

**T e d****REIMBURSEMENT OF TRAVEL EXPENSES**

The reimbursement of travel & daily allowance expenses incurred under this contract is paid in euro (EUR) at the rate of exchange in force against the euro (EUR) for the month in which the liquidation is effected (rate applied by the European Central Bank). All claims must be in the currency in which they were paid.

**a) Travel expenses**

by train: First class fare (used ticket with claim),  
 by air: Economy class where available (used ticket with claim),  
 by car: The equivalent of first class rail fare.

**b) Visas****c) Daily allowance**

The daily allowance is to include **all** expenses relating to:

- accommodation;
- meals;
- local transport including taxis.

**d) Transfer of professional materials or non-accompanied luggage**

Subject to prior approval by the Agency.

**NOTES:**

Taxis are not chargeable.

The daily allowances applicable for the whole duration of the contract are as follows (\*):

Austria	:	EUR	122	Belgium	:	EUR	150
Bulgaria	:	EUR	197	Cyprus	:	EUR	110
Czech Rep	:	EUR	193	Estonia	:	EUR	159
Denmark	:	EUR	179	Finland	:	EUR	156
France	:	EUR	130	Germany	:	EUR	127
Greece	:	EUR	113	Hungary	:	EUR	168
Iceland	:	EUR	199	Ireland	:	EUR	165
Italy	:	EUR	130	Latvia	:	EUR	244
Lithuania	:	EUR	179	Liechtenstein	:	EUR	150
Luxembourg	:	EUR	143	Malta	:	EUR	175
Netherlands	:	EUR	148	Norway	:	EUR	180
Poland	:	EUR	270	Portugal	:	EUR	143
Romania	:	EUR	230	Slovak Rep	:	EUR	144
Slovenia	:	EUR	170	Spain	:	EUR	141
Sweden	:	EUR	157	Turkey	:	EUR	136
United Kingdom:		EUR	199				

(\*) Rates are decreased with 25% when the mission exceeds 4 weeks.

Only 50% of the daily allowance is paid in case the night has not been spent at the place of mission.

**EUROPEAN COMMUNITY  
CERTIFICATE**

**Appendix V VAT and excise duty exemption  
VAT AND EXCISE DUTY EXEMPTION**

**(Directive 77/388/EEC - Article 15 (10) and  
Directive 92/12/EEC - Article 23 (1))**

Serial No. (optional)

**1. ELIGIBLE INSTITUTION/INDIVIDUAL**

Designation/name: **European Environment Agency**  
Street and No. **Kongens Nytorv 6**  
Postal code, place: **1050 Copenhagen K**  
(Host) Member State: **Denmark**

**2. COMPETENT AUTHORITY FOR ISSUING THE STAMP**  
(Name, address and telephone No.)

**Ministry of Foreign Affairs**  
**Protocol Department**  
**DK-1448 Copenhagen K**

**Tel.: +45 33 92 00 00**

**3. DECLARATION BY THE ELIGIBLE INSTITUTION OR PERSON**

The eligible institution hereby declares

(a) that the goods and/or services set out in box 5 are intended <sup>1</sup>

for the official use of

a foreign diplomatic mission

a foreign consular representation

an international organisation

an armed force of a State being a party to the  
North Atlantic Treaty (NATO)

for the personal use of

a member of a foreign diplomatic mission

a member of a foreign consular representation

a staff member of an international organisation

\_\_\_\_\_  
(designation of the institution (see box 4))

(b) that the goods and/or services described at box 5 comply with the conditions and limitations applicable to the exemption in the host Member State mentioned in box 1, and

(c) that the information above is furnished in good faith. The eligible institution or individual hereby undertakes to pay to the Member state from which the goods were dispatched or from which the goods and/or services were supplied, the VAT and/or excise duty which would be due if the goods and/or services did not comply with the conditions of exemption, or if the goods and/or services were not used in the manner intended.

**Copenhagen,**

\_\_\_\_\_  
Place, date

\_\_\_\_\_  
Name and status of signatory

\_\_\_\_\_  
Signature

**4. STAMP OF THE INSTITUTION (in case of exemption for personal use)**

\_\_\_\_\_  
Place, date

Stamp

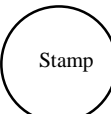
\_\_\_\_\_  
Name and status of signatory

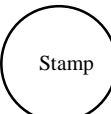
\_\_\_\_\_  
Signature

<sup>1</sup> Put a cross in the appropriate box

## Appendix V VAT and excise duty exemption

<b>5. DESCRIPTION OF THE GOODS AND/OR SERVICES, FOR WHICH THE EXEMPTION FROM VAT AND/OR EXCISE DUTY IS REQUESTED</b>				
<b>A. Information concerning the supplier/authorised warehouse keeper</b>				
(1) Name and address (2) Member State (3) VAT/excise number				
<b>B. Information concerning the goods and/or services</b>				
No.	Detailed description of goods and/or services <sup>2</sup> (or reference to the attached order form)	Quantity or Number	Value excluding VAT and/or excise duty	Currency
			Value per unit	Total value
Total amount				

<b>6. CERTIFICATION BY THE COMPENENT AUTHORITY OR AUTHORITIES OF THE HOST MEMBER STATE</b>		
The consignment/supply of goods and/or services described in box 5 meets		
<input type="checkbox"/> totally		
<input type="checkbox"/> up to a quantity of _____ (number) <sup>3</sup>		
the conditions for exemption from VAT and/or excise duty.		
_____ Place, date		_____ Name and status of signatory (ies)
		_____ Signature (s)

<b>7. PERMISSION TO DISPENSE WITH STAMP</b>		
By letter No _____ (reference to file)	of	_____ (date)
_____ designation of eligible institution	has been permitted by	
_____ (designation of the competent authority in the host Member State)	to dispense with the stamp under box 6.	
_____ Place, date		_____ Name and status of signatory
		_____ Signature

<sup>2</sup> Delete space not used: This obligation also applies if order forms are attached

<sup>3</sup> Goods and/or services not eligible should be deleted in box 5 or on the attached order form

## Appendix V VAT and excise duty exemption Explanatory notes

1. For the supplier and/or the authorised warehouse keeper, this certificate serves as a supporting document for the tax exemption of the supplies of goods and services or the consignments of goods to eligible institutions/individuals referred to in Article 15 (10) of Directive 77/388/EEC and Article 23 (1) of Directive 92/12/EEC. Accordingly, one certificate shall be drawn up for each supplier/warehouse keeper. Moreover, the supplier/warehouse keeper is required to keep this certificate as part of his records in accordance with the legal provisions applicable in his Member State. In case a Member State does not grant a direct exemption for the supply of services and, therefore, proceeds to exempt the supply by reimbursing the tax to the beneficiary specified in box 1, this certificate should be attached to the request for reimbursement.
2.
  - a) The general specification of the paper to be used is as laid down in the Official Journal of the European Communities No C 164 of 1.7. 1989, p. 3.

The paper is to be white for all copies and should be 210 millimetres by 297 millimetres with a maximum tolerance of 5 millimetres less or 8 millimetres more with regard to their length.

For an exemption from excise duty the exemption certificate shall be drawn up in duplicate:

    - one copy to be kept by the consignor
    - one copy to accompany the administrative accompanying document
  - b) Any unused space in box 5.B. is to be crossed out so that nothing can be added.
  - c) The document must be completed legibly and in a manner that makes entries indelible. No measures or overwriting are permitted. It shall be completed in a language recognised by the host Member State.
  - d) If the description of the goods and/or services (box 5.B. of the certificate) refers to a purchase order form drawn up in a language other than a language recognized by the host Member State, a translation must be attached by the eligible institution/individual.
  - e) On the other hand, if the certificate is drawn up in a language other than a language recognized by the Member State of the supplier/warehouse keeper, a translation of the information concerning the goods and services in box 5.B must be attached by the eligible institution/individual.
  - f) A recognized language means one of the languages officially in use in the Member State or any other official language of the Community which the Member State declares can be used for this purpose.
3. By its declaration in box 3 of the certificate, the eligible institution/individual provides the information necessary for the evaluation of the request for exemption in the host Member State.
4. By its declaration in box 4 of the certificate, the institution confirms the details in boxes 1 and 3(a) of the document and certifies that the eligible individual is a staff member of the institution.
5.
  - a) The reference to the purchase order form (box 5.B. of the certificate) must contain at least the date and order number. The order form should contain all the elements that figure at box 5 of the certificate. If the certificate has to be stamped by the by the competent authority of the host Member State, the order form shall also be stamped.
  - b) The indication of the excise No as defined in Article 15(a), paragraph 2 (a), of Directive 92/12/EEC of the authorised warehouse keeper is optional; the VAT identification No must be indicated.
  - c) The currencies should be indicated by means of a three-letter code in conformity with the international ISO 4217 standard established by the International Standards Organisation<sup>4</sup>.
6. The above mentioned declaration by the eligible institution/individual shall be authenticated at box 6 by the stamp(s) of the competent authorities of the host Member State. It is up to the competent tax authority to obtain such agreement.
7. To simplify the procedure, the competent authority can dispense with the obligation on the eligible institution to ask for the stamp in the case of exemption for official use. The eligible institution should mention this dispensation at box 7 of the certificate.

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<sup>4</sup> As an indication, some codes relating to currencies currently used: BEF (Belgian franc), DEM (German mark), DKK (Danish kroner), ESP (Spanish peseta), FRF (French franc), GBP (Pound sterling), GRD (Greek drachma), IEP (Irish pound), ITL (Italian lire), LUF (Luxembourg franc) NLG (Dutch guilder), PTE (Portuguese escudo), ATS (Austrian schilling), FIM (Finnish mark), SEK (Swedish kroner), USD (United States dollar).

# High Nature Value Farming Areas

Defining the concept and developing an agri-environmental indicator

Proceedings of an Expert Meeting  
21-22 February 2002,  
European Environment Agency, Copenhagen

Editors:

**Ybele Hoogeveen, Peder Gabrielsen & Jan-Erik Petersen**

**FINAL 25-04-2002**

- 1 Introduction**
- 2 Purpose of the meeting**
- 3 The concept of High Nature Value (HNV) farming areas**
  - 3.1 What are High Nature Value Farming Areas - *Davy McCracken (Scottish Agricultural College)*
  - 3.2 From semi-natural grassland mapping units to functional HNV Units – *Peter Veen (Royal Dutch Society for Nature Conservation)*
  - 3.3 Approaches to classifying farming systems – *Eric Bignal (EFNCP) & Berien Elbersen (Alterra)*
  - 3.4 Defining an indicator for High Nature Value farming areas – *parallel workshops*
    - 1.4.1 Aim of the workshops
    - 1.4.2 Results
- 4 Relevant European databases and ongoing initiatives**
  - 4.1 CORINE land cover – *Chris Steenmans (EEA)*
  - 4.2 LUCAS / Farm Structure Survey – *Gerd Eiden (LANDSIS)*
  - 4.3 ELPEN / Ecoland – *Berien Elbersen*
  - 4.4 Operationalisation of an HNV agri-environmental indicator - *Two parallel workshops on data availability and possible approaches.*
    - 4.4.1 Aim of the workshops
    - 4.4.2 Results
- 5 Conclusions**

**Appendix: List of participants**

## 1 Introduction

The European countryside is strongly influenced by human activities, and especially by agriculture. About half of the EU territory is managed by farmers. Varying farming traditions in conjunction with specific soil and climate conditions have resulted in diverse and highly characteristic agricultural landscapes. Apart from their aesthetic appeal and cultural heritage value extensively used agricultural areas also host a rich flora and fauna. In the 20<sup>th</sup> century, however, the biodiversity of Europe's farmland has declined sharply, mainly due to intensification of farming. Areas with extensive agricultural land use and corresponding species richness still exist, but farming in these areas is generally under strong economic pressure. Thus, it is essential to gear policy efforts towards maintenance of extensive farming systems in so-called 'High Nature Value farming areas'.

'High Nature Value areas'<sup>1</sup> are included as an indicator in Commission Communication COM (2001) 144. The concept has been part of the debate on the efficient targeting of agri-environment and other CAP policies in the EU for quite some time. However, since the mid-1990s, not much work has been done to further develop the definition of High Nature Value (HNV) farming systems and to come up with parameters that would allow their delimitation in space. At present consistent datasets on the intensity of farming and the associated biodiversity are largely lacking. We are in need of a proper conceptual framework and corresponding data in order to plan and evaluate policy measures. For these reasons, the EEA has decided to include the development of the HNV-concept in its 2002 work programme. This expert meeting is the first step in this process.

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<sup>1</sup> In COM144, the term 'High Nature Value areas' is used without an explicit reference to farming. Since COM144 deals with agri-environment indicators, it is clear that the term exclusively refers to farmed areas. It should be pointed out, that the term itself has remained rather loosely defined and is often confused with 'semi-natural grasslands'. In EEA terminology, the term 'High Nature Value farming areas' refers to areas under mostly extensive agricultural management with a high biodiversity value. These do not necessarily include a high share of grassland, although they are often pastoral in nature. Unutilized elements are only included in the concept, if they can be considered an integral part of the agricultural landscape. Thus small elements, such as hedges, ponds and thickets are included, whereas larger non-farmed habitats are not. Large-scale semi-natural systems, such as grazed moorland and uplands, are included in the concept, as long as farming is practised and considered necessary for maintenance of the specific nature value. In this approach, semi-natural grasslands are a sub-category of HNV farming areas.



## 2 Purpose of the meeting

The expert meeting aimed to lay the basis for developing the 'High Nature Value farming area' concept as an agri-environmental indicator in the light of available data at EU level. Three different objectives can be distinguished in this context:

- a) to arrive at a commonly agreed, clear and operational definition of HNV farming areas;
- b) to review the usefulness of existing data sets for defining HNV farming areas in space;
- c) to develop recommendations for promising approaches to developing additional data sets where required.

The conceptual framework (aspect a) was discussed during the first day of the meeting. The second day was dedicated to operationalization of the concept (aspects b and c).

The contributions and conclusions are summarized below in order of the expert meeting agenda.

### 3 The concept of High Nature Value (HNV) farming areas

#### 3.1 What are High Nature Value Farming Areas

*Davy McCracken (Scottish Agricultural College)*

Davy McCracken highlighted the broad ecological principles that underlie the high nature conservation value of extensively farmed semi-natural vegetations.

In general, there will be a greater range of organisms living within any one area when that area:

- a) Contains a greater range of different types and structures of niches;
- b) Is subject to medium levels of disturbance through climatic factors (e.g. flooding, exposure) or agricultural management (e.g. grazing, cutting);
- c) Is large enough to contain viable populations and to allow for habitat variation due to natural senescence/development of conditions in part of the area.

A wider range of species will be found in an area where there is heterogeneity both at the 'field' level (in terms of vegetation composition and structure) and in the wider landscape (in terms of greater mixture of different habitat types - grassland, woodland, wetlands etc).

Extensive pastoral systems are particularly valuable in this context. They occur at a large scale under ecological and topographic constraints that limit intensification of management. Typically parts of the area are inaccessible or can be used on a seasonal basis only. Hence the semi-natural vegetation is generally found within a mix of more natural habitats and features. The low nutritional value of semi-natural vegetations prevents high stocking densities. Herd behaviour can introduce seasonal and cyclic pressures which are virtually impossible to produce in any other way - not only through grazing but also through trampling, dunging, resting and ruminating in favoured places and selecting foraging areas in relation to the seasonal availability of herbage. Thus, such pastoral systems are a key example of the complex ecological factors that define HNV farming areas.

#### 3.2 From semi-natural grassland mapping units to functional HNV Units

*Peter Veen (Royal Dutch Society for Nature Conservation)*

The approach by Peter Veen is based on a classification and evaluation of vegetation types. He focuses on semi-natural grasslands, a sub-category of HNV farming areas. Veen's method relies on grassland mapping. The plant alliances according to the Braun Blanquet phytosociological school are used as mapping units. They can be characterized by ecological profiles, with humidity, acidity and nutrients as differentiating factors. The criteria for distinguishing semi-natural grasslands are :

- Close similarity in species composition with selected reference alliances (to be identified on the basis of character species and differentiating species);



- Species composition reflects type of management and abiotic conditions, rather than climatic conditions on the locality;
- Vegetation is maintained by man and has long management history of mowing and/or grazing;
- Species diversity is typically high, but may vary considerably according to local abiotic conditions (< 20 taxa/m<sup>2</sup> in salt marshes to > 50 taxa/m<sup>2</sup> in dry festuca-Brometea vegetations);
- Input of nutrients is generally low (< 50kg/ha).

This method of delineating semi-natural vegetations is site-based, does not require very much external interpretation and yields easily replicable results. Veen presented the results of a survey of semi-natural grasslands in Central and Eastern European Countries (table 1).

*Table 1. Estimated distribution of agricultural area, permanent grassland and semi-natural grassland in Central and Eastern European Countries.*

Country	Total area (ha.)	Agricultural area (ha)	Permanent grassland (ha)	Alpine grassland (ha)	Semi-natural grassland (ha)	% Semi-natural grassland of total agricultural area
Bulgaria	11099400	6215700	1163500	332100	444400	7
Czech Republic	7886400	4258700	946400	1800	550000	13
Estonia	4510000	1533400	315700	0	73200	5
Hungary	9303200	6233100	1116400	0	850000	14
Latvia	6458900	2454400	775100	0	117900	5
Lithuania	6530000	3134400	848900	0	167900	5
Poland	31270000	18762000	4040400	413600	1955000	11
Romania	23750000	11846900	4987500	285000	2332700	20
Slovakia	4903600	2451800	833600	13100	294900	12
Slovenia	2025600	500400	495000	29800	268400	54
<b>CEEC total</b>	<b>107737100</b>	<b>57390800</b>	<b>15522500</b>	<b>1075400</b>	<b>7054400</b>	<b>12</b>

### 3.3 Approaches to classifying farming systems

*Eric Bignal (EFNCP)*

In contrast to Peter Veen, Eric Bignal tackles the problem of delineating High Nature Value farming systems by starting at the other end of the scale: farming inputs. He stresses the importance of internal logic and policy relatedness of the classification. The classification should be relevant and easily interpretable in view of EU agriculture policy. This policy is generally aimed at yields of particular products and corresponding farm types. Bignal therefore proposes a simple hierarchical system, where the first discriminating variables are a selection of relevant variables, such as crop types, livestock

types, livestock density per ha, fertilizer input, farm size etc. On the basis of these variables a coarse classification of farm systems should be made.

The nature value of the areas within these systems depends very much on detailed farming practices, such as cutting and burning regimes, rotation patterns etc. This category of variables follows very different regional patterns and is thus not useful for the overall classification at the European level. Instead they may be used for a regional breakdown of farming systems. Analysis of the relations between these regional farming practices and biodiversity is the final step to understand and predict changes in response to policy measures (see figure 1).

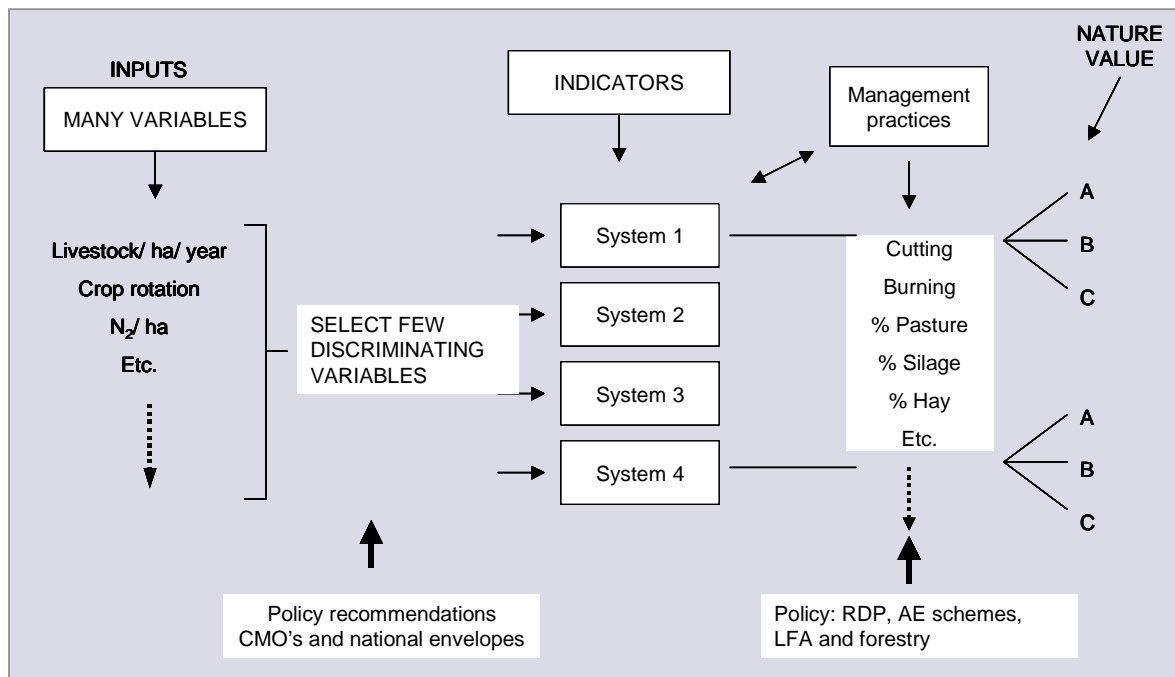


Fig 1. Dualistic approach to HNV farming classification as proposed by Bignal

### 3.4. Defining an indicator for High Nature Value farming areas

#### *Two parallel workshops*

#### 3.4.1 Aim of the workshops

There are in principle two alternative and potentially complementary ways of identifying High Nature Value farming areas:

*Nature quality approach:* This approach takes species and habitat distribution patterns as the basis for arriving at a (geographical) definition of HNV farming areas.

*Input / farming systems approach:* This approach uses farm systems characteristics as proxy indicators for nature quality. These can include stocking densities, levels of fertiliser use, the proportion of semi-natural habitats in the farming system; livestock management patterns (e.g. stabled or outdoor grazing), crop rotation cycles etc.



The workshop participants were asked to discuss the pros and cons of the two approaches and the possibility of combining them. They were also asked to propose parameters that could be used in practice for delineating HNV farming areas. The total area of HNV farming would then be the overall indicator, based on a limited number of underlying parameters.

It was stressed that the indicator concept should meet the general criteria as given in the Commission Communication on agri-environmental indicators (COM (2001) 144 final).

- *policy-relevance* – address the key environmental issues;
- *responsiveness* – change sufficiently quickly in response to action;
- *analytical soundness* – based on sound science;
- *measurability* – feasible in terms of current or planned data availability ;
- *ease of interpretation* – communicate essential information in a way that is unambiguous and easy to understand;
- *cost effectiveness* – costs in proportion to the value of information derived.

### 3.4.2 Results

The two separate workshops yielded similar results. There was a preference for the nature quality based approach (see table 2), but farm characteristics were considered as valuable additional parameters. Most speakers recommend a combination of input/farming system parameters with nature quality indicators. The second can complement and refine the first. The preferred concept would thus be a mixture of elements of both approaches.

*Table 2. Relative scores for alternative approaches to HNV definition. Criteria derived from COM (2001) 144 final.*

Criterion	HNV indicator definition approach	
	Farming systems/ input based	Nature quality based
Policy relevance	+	+
Responsiveness	+	+
Analytical soundness	+/-	++
Measurability	+/-	+/-
Ease of interpretation	+	++
Cost effectiveness	+/-	+/-

It appeared very difficult to find HNV farming parameters that are suitable across Europe. Thus, the preferred solution was to identify a common methodology and to select HNV parameters according to regional farming systems and nature characteristics. In addition to the schematic representation of such a dualistic approach by Bigal (see fig. 1), several concepts were broadly outlined.

Jones proposed a system, in which HNV farming areas would be characterized in a two-dimensional matrix, with two variables along the axes:

- a) the degree of integration in farming systems , and
- b) the dependence on farming for maintenance (see fig. 2)

Typical HNV farming areas, such as semi-natural grasslands, are highly dependent on agriculture and highly integrated in the farming system.

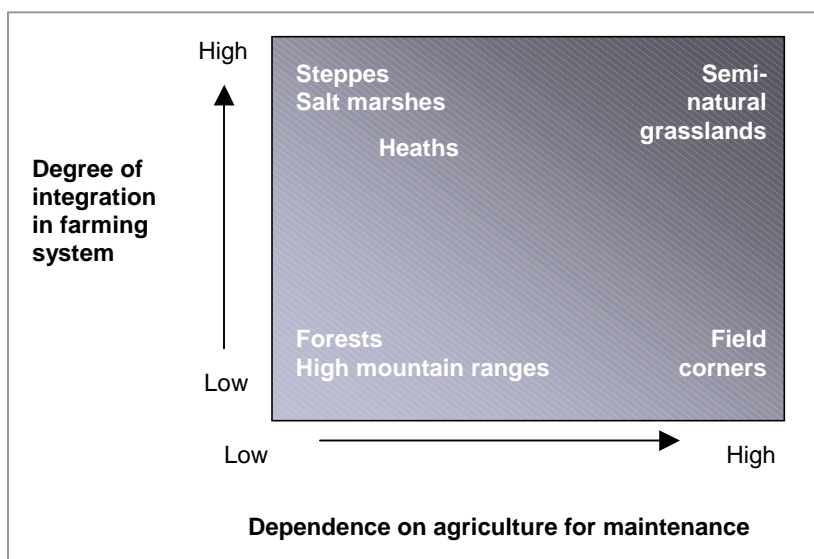


Fig. 2. HNV farming areas characterized in a two-dimensional matrix proposed by Jones.

In spite of the difficulty of going into detail, some general parameters, that would be relevant in any HNV concept, could be defined (see table 3). The analysis of data availability on the subsequent day was based on these.

Table 3. Proposed general HNV parameters.

<b>Farming systems / input based approach</b>	<b>Nature quality based approach</b>
Input use (fertilizer/pesticide/fodder import)	Landscape parameters
Management practices (crop rotation)	Share of semi-natural habitats
Livestock density	Presence of key species
Biomass production/ ha of UAA	

## 4 Relevant European databases and ongoing initiatives

### 4.1 CORINE land cover *Chris Steenmans (EEA)*

Chris Steenmans presented the basic specifications and methodology in the Corine Land Cover Survey (CLC). The CLC is a geographic land cover/ land use database and with a minimum mapping area of 25 ha the CLC consists of 44 classes in a scale of 1:100,000. The first inventory was carried out in the early 1990s and by updating every 10 year new results should be in place by the end of 2003 (completion for 28 countries). During the presentation Steenmans emphasized that CLC is a mapping tool, not a statistical land cover tool. Various technical documents concerning CLC have been published by the EEA.

Some CLC classes correspond partly to HNV farming areas, e.g. the category 2.4.2 'Complex cultivation patterns' and 2.4.3 'Land principally occupied by agriculture with significant areas of natural vegetation'. These classes have a good overlap with preliminary HNV maps. On the other hand, CORINE allows no further breakdown of the broad category of grasslands, which is of particular relevance to the HNV discussion. Thus, no distinction can be made between intensively used grasslands with very little associated nature value on the one hand, and species rich extensive grasslands on the other.

The general conclusion should therefore be, that CORINE's potential for delineating HNV farming areas is limited, due to its low update frequency and the broad habitat classes. However, in the future it could provide more detailed data on the basis of modern high-resolution remote sensing techniques.

### 4.2 LUCAS / Farm Structure Survey *Gerd Eiden (LANDSIS)*

Gerd Eiden gave an overview of the Farm Structure Survey (FSS) and the LUCAS survey. FSS is one of the main EU data sources for agriculture in general. It aims at the compilation of objective, reliable and comparable information on the structure of the agricultural holdings at EU level in order to track their current state and changes. It is based on a questionnaire. Data on holding characteristics, land use, livestock and labour force are gathered at NUTS 2 or 3 levels. Since 1966/67 a sample-based survey is carried out every 2-3 years, a full census every 10 years. The 2003 survey will be adapted to new data requests and will provide additional environmental information that may serve as a basis for HNV proxy indicators.

The LUCAS survey investigates land cover and use in a systematic sample of points across Europe, and monitors various environmental characteristics (soil erosion, noise and different landscape features) related to these points. In 2001, the LUCAS pilot survey started. Observations were made for a total of 86,384 points in an area frame

covering 3,240,190 km<sup>2</sup> based on a 18 x 18 km grid. The survey consists of two phases, namely a field survey and interviews carried out at farm level. These interviews partly overlap with the FSS survey.

LUCAS nomenclature is similar to CLC classification, but the methodological approach is different. LUCAS distinguishes between land use and land cover and relies on direct observation, which is more powerful than interpretation of satellite images.

The LUCAS pilot survey does not yet provide the information that would be needed for delineating HNV farming areas. Land cover classes are too broadly defined. Extensively used species rich grasslands, for example, are not discerned. The density of sampling plots is too low for accurate delineation, and rare farming systems are not sufficiently represented in the total sample to yield statistically significant results.

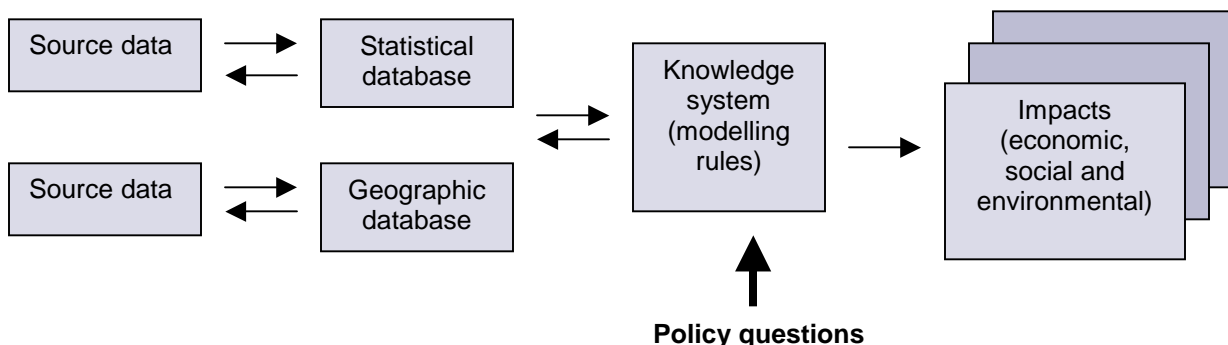
The general LUCAS methodology, however, is potentially very powerful. It builds on a harmonised classification system with specifically trained surveyors, which minimizes noise in the data. Further breakdown of land cover categories is possible, but requires special survey skills. Concerning the LUCAS farm level interview, the questionnaire still needs integration of issues related to HNV farming areas.

#### 4.3 ELPEN / Ecoland *Berien Elbersen*

Berien Elbersen presented the European Livestock Policy Evaluation Network (ELPEN). This project delivers an innovative tool, which will enable EU and national policy makers to assess the economic, environmental and social impacts of livestock related policy measures on a regional basis.

The ELPEN decision support system consists of four components:

1. *Statistical data*: These data describe the characteristics of livestock systems, livestock farms and EU regions.
2. *Geographical data*: These are site-specific biophysical data, including soil, landscape, land cover and climate.
3. *Policy measures*: These come from politicians and officials who indicate what policy measures or changes need to be assessed for impacts.
4. *Knowledge system*: In this component the knowledge, which is necessary to assess the economic, environmental and social impacts of policy changes, is stored.





In principle ELPEN is a very powerful tool for analyzing environmental impacts of agricultural policy. The missing link, however, is the relation between farming system and nature value. With this information added to the 'knowledge system', ELPEN will enable structured, policy related quantitative and qualitative assessments with regard to the environmental impact of selected European livestock farming systems. The necessary additional data will be obtained from a number of reference farms, representative for the ELPEN farm types.

#### **4.4 Operationalization of an HNV agri-environmental indicator** *Two parallel workshops on data availability and possible approaches.*

##### **4.4.1 Aim of the workshops**

The workshops focused on the following questions:

- a) How can the initial set of parameters (as presented in table 3) be assessed using the statistical databases and land use surveys discussed in the previous sessions.
- b) Which parameters are most easily developed in sufficient detail at European level?
- c) What is the time frame for development?
- d) Which follow up is recommended for further elaboration of the concept? (e.g. Commission task force; further expert seminars; new technological tools?)

##### **4.4.2 Results**

The remarks on data availability (aspects a and b) for each of the selected HNV parameters are summarized in table 4.

The time frame for development was not discussed in detail given the uncertainties and conceptual issues to be solved. The recommended follow-up was a second expert meeting on the basis of a further developed HNV concept. This concept should allow for regional differentiation (regionally differing sets of discriminating parameters) and give further guidance on delineating semi-natural habitats. Some of the possible approaches for identifying HNV farming areas should be tested in practice before arranging a second expert discussion.

*Table 4. Potential datasources for the identified HNV parameters.*

<b>Farming systems / input based approach</b>	<b>Nature quality based approach</b>
<b>Input use (fertilizer/pesticide/fodder import)</b> <ul style="list-style-type: none"> <li>○ Economic data could be derived from FADN, but representativeness is a problem. Small farms are not included.</li> <li>○ More information from reference farms is needed.</li> </ul>	<b>Landscape parameters</b> <ul style="list-style-type: none"> <li>○ Some targeted national surveys exist (e.g. british Countryside Survey) and will possibly be integrated in the international ECOLAND initiative</li> <li>○ LUCAS is a possible source, provided that the relevant parameters will be incorporated in the survey</li> <li>○ Remote sensing data from CLC are available, but need refined (grassland) detection</li> </ul>
<b>Management practices (crop rotation)</b> <ul style="list-style-type: none"> <li>○ Very important, but no data available yet.</li> <li>○ Very region specific; requires differentiated approach</li> <li>○ LUCAS may provide useful data on cropping patterns</li> </ul>	<b>Share of semi-natural habitats</b> <ul style="list-style-type: none"> <li>○ Data available for some regions, but work on common definition beyond semi-natural grasslands is still required.</li> <li>○ Feasible, but needs expert knowledge</li> </ul>
<b>Livestock density</b> <ul style="list-style-type: none"> <li>○ FSS provides data on livestock numbers. Combination with data on UAA and farm size may provide a more detailed info on geographical distribution</li> <li>○ ELPEN is a promising tool for analysis of statistical data</li> </ul>	<b>Presence of key species</b> <ul style="list-style-type: none"> <li>○ Several possible datasources</li> <li>○ Commonly agreed selection of key species is needed</li> </ul>
<b>Biomass production/ha of UAA</b> <ul style="list-style-type: none"> <li>○ Different datasources are available, for example on cereal yields.</li> <li>○ Agricultural models, such as MARS and CAPRI, may provide adequate information.</li> </ul>	

## 5 Conclusions

### *Definition of HNV farming areas*

- The discussions and workshops at the expert meeting showed that it is an ambitious task to define a common indicator for HNV farming areas at European level. However, a Europe-wide comparable data set is a necessity if one wants to use the HNV farming area concept for policy assessment, such as an analysis of agriculture policy spending or agri-environment scheme targeting in comparison to the distribution HNV farming areas.
- Given the difficulty of finding HNV farming indicators that are suitable across Europe, the preferred solution was to identify a common methodology and to select HNV farming indicators according to regional systems and nature characteristics. Most speakers recommend a combination of input/ farming system parameters with nature quality indicators. The second can complement and refine the first.
- Developing a farming system typology appears very helpful in understanding how farming interacts with the environment and thus also the nature value of farmland. This needs to be complemented by an analysis of management practices that are a key influence on species and habitats. We need to be able to link these farm management practices to specific farming systems to use them as proxy indicators for HNV farming areas.
- The development of an indicator for HNV farming areas needs to take full account of the criteria set out in Commission Communication (COM(2001) 144 final): policy-relevance, responsiveness, analytical soundness, measurability, ease of interpretation, and cost effectiveness.
- The parameters defined in table 3 are likely to be useful for defining HNV farming areas in Europe.

### *Analysis of available datasets*

- The usefulness of existing data sets in the context of defining HNV farming areas has not yet been fully explored. The expert meeting could only make a limited contribution to this task. The approach utilised in the ELPEN project gives a positive example for possible ways forward in this regard.
- Promising data sets, such as semi-natural grassland distribution maps, need to be completed. It is also very necessary to explore possibilities for combining data sets from different domains, such as Farm Structure Survey data with administrative data or satellite based land cover information.

### *Recommendations*

- Further research is required to better understand the link between farm management and farmland biodiversity and to validate our assumptions on the effect of certain farming systems on nature value/biodiversity.
- The feasibility of different approaches as well as the usefulness of individual parameters for identifying HNV farming areas need to be tested out in real-life pilot studies at European level. Only such practical experience will reveal whether a common indicator for HNV farming areas in Europe can be developed.

## Appendix: List of participants

### *Invited participants*

- Erling Andersen - Danish Forest and Landscape Research Institute (FSL), Denmark
- Guy Beaufoy - Instituto de Desarrollo Rural Sostenible (IDRISI), Spain
- Eric Bignal - European Forum for Nature Conservation and Pastoralism (EFNCP), Scotland
- Sophie Condé - European Topic Centre on Nature Protection and Biodiversity, France
- Teresa Pinto Correia - University of Evora, Portugal
- Dimitrios Dimopoulos University of Thessaloniki, Greece
- Dobromira Dimova - Vitosha Natural Park, Bulgaria
- Gerd Eiden - LANDSIS, Luxembourg
- Berien Elbersen - Wageningen University and Research Centre, The Netherlands
- Sten Folving - JRC, Italy
- Marco Genghini - National Institute of Wild Fauna, Italy
- Frans Godeschalk - Wageningen University and Research Centre, The Netherlands
- Ivan Hristov Vitosha National Park, Bulgaria
- Gwyn Jones - Scottish Agricultural College, Scotland
- Antoni Kuzniar - Institute for Land Reclamation and Grassland Farming, Poland
- Ferenc Markus - WWF, Hungary
- Davy McCracken - Scottish Agricultural College, Scotland
- Merit Mikk - Centre for Ecological Engineering Tartu, Estonia
- Andre Pflimlin - CEMAGREF, France
- Ferenc Tar - IEEP, UK
- Peter Veen - Veen Ecology, The Netherlands
- Claude Vidal - Eurostat, Luxembourg
- Thomas Walter - Swiss Federal Research Station for Agro-ecology and Agriculture, Switzerland

### *EEA participants*

- Jan-Erik Petersen - Project manager, agriculture and environment
- Ybele Hoogeveen - Project manager, agriculture and biodiversity
- Peder Gabrielsen - Visiting scientist, agriculture and environment
- Ulla Pinborg - Project manager, biodiversity, nature and forest
- Chris Steenmans - Project manager, land and remote sensing
- Niels Thyssen - Programme manager, environmental assessment