

**Aus dem Institut für Betriebswirtschaft, Agrarstruktur  
und ländliche Räume**

**Angela Bergschmidt  
Heike Nitsch  
Bernhard Osterburg (Eds.)**

**Good farming practice - definitions, implementation,  
experiences :**

Report on the results of work package 2 within the EU concerted action "Developing cross-compliance in the EU - background, lessons and opportunities", including an European seminar 2-3 June 2003, Braunschweig, Germany

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Institute of Farm Economics  
and Rural Studies



Federal Agricultural Research Centre (FAL)  
Braunschweig, Germany

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– definitions, implementation, experiences**

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**Angela Bergschmidt, Heike Nitsch, Bernhard Osterburg  
(editors)**

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*Angela Bergschmidt, Heike Nitsch, Bernhard Osterburg, FAL Braunschweig*

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*Heike Nitsch, FAL Braunschweig*

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*Heike Nitsch, FAL Braunschweig*

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*Jaroslav Prazan, IEEP Praha*

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#### **Part A**

*Lone Kristensen, The Royal Veterinary and Agricultural University*

#### **Part B**

*Hanne Jacobsen, The Danish Ministry of Food, Agriculture and Fisheries, Copenhagen,*

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*Rosy Eaton and Vicki Swales, IEEP London*

#### **Excursus: Verifiable standards of Good Farming Practice in the UK**

*Heike Nitsch, FAL Braunschweig*

#### **Contributed Papers**

Good Farming Practice – Regional perspective of the administration in Northern Ireland, UK

*Dr Carol Millsopp, Countryside Management, Department of Agriculture and Rural Development, Northern Ireland*

### **Annex II F: Country Report Estonia**

*Heike Nitsch, FAL Braunschweig 2003*

## **Annex II G: Germany; Country Report and Contributed Papers**

### **Country Report Germany**

*Angela Bergschmidt, FAL Braunschweig*

### **Contributed Papers**

Assessment of Impacts of Selected Environmental Standards on Production Cost and Farm Profitability

*Jesko Hirschfeld, Institute for Ecological Economy Research (IÖW) Berlin*

National administration's view: Co-ordination of the Länder in achieving the requirements of Reg. (EC) 1259/99 and Reg. (EC) 1257/99 in defining and controlling good farming practice (GFP)

*Dr. Carlo Prinz, Federal Ministry of Consumer Protection, Food and Agriculture*

Control of environmental law in general and in the framework of Reg. (EC) 1257/99: Procedures, Problems and perspectives

*Dr. J.-A. Eisele, Ministry of the Environment, Conservation, Agriculture and Consumer Protection Northrhine-Westfalia*

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*Heike Nitsch, FAL Braunschweig 2003*

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*Heike Nitsch, FAL Braunschweig 2003*

## Abbreviations

AAPS – Arable Area Payments Scheme

AEP Agri-environmental programme(s)

CAP Common Agricultural Policies (of the EU)

Defra – Department for Environment, Food and Rural Affairs

EA – Environment Agency

EHS Environment and Heritage Service

ERDP England Rural Development Programme

ESAs Environmentally Sensitive Areas

FAL Federal Agricultural Research Centre, Germany

FEPA – Food and Environment Protection Act 1985

GFP Good Farming Practice

HFA Hill Farm Allowance

IACS Integrated Administration and Control System

IEEP Institute for European Environmental Policy, London

LFA Less Favoured Area(s)

LU Livestock unit

N./A. not available

NRA – National Rivers Authority

NVZs – Nitrate Vulnerable Zones

PPC – Pollution Prevention and Control Regulations 2000

ppp's Plant protection products

RDP Rural Development Programme

RDR Rural Development Regulation (Regulation (EC) 1257/1999)

RPA Rural Payments Agency

RPA Rural Payments Agency

SSSI – Site of Special Scientific Interest

UAA Utilised Agricultural Area

# Good Farming Practice – definitions, implementation, experiences

*Angela Bergschmidt, Heike Nitsch, Bernhard Osterburg, FAL Braunschweig*

## 1 Introduction

In this document, results of a seminar held at 2<sup>nd</sup> and 3<sup>rd</sup> of June 2003 in Braunschweig, Germany, within the framework of an EU Concerted Action on cross-compliance are presented. The report is complemented with information compiled before and after the seminar. The seminar aimed at providing information on definition, control and enforcement of codes of “Good Farming Practice”<sup>1</sup> (GFP) in EU Member States and Accession Countries. Although in the Community Regulation (EC) 1257/1999, “codes of GFP” refer exclusively to rural development policy (2nd pillar) and according to Regulation (EC) 1259/1999 “environmental requirement” is the term used in the case of cross-compliance in the context of market policy (1st pillar), in this report GFP is used as a general term for environmental standards in agriculture (see chapters 2 and 3).

Codes of GFP constitute minimum standards for farm management and may serve as a precondition for payments to farmers in the context of market policy as well as rural development policy. Although GFP definitions may comprise a broad spectrum of aspects such as protection of natural resources, landscape, historic and archaeological features, labour safety, animal health and welfare, food safety and public health, the main emphasis of the seminar was on environmental aspects of GFP, and on standards binding at farm level.

The objective of the Concerted Action “EU Cross-Compliance” as a whole is to provide institutions and stakeholders in Europe with up to date information on cross-compliance and thereby contribute to realising the full potential of cross-compliance for the benefit of the public. Cross-compliance is the attachment of environmental conditions to agricultural support payments (Baldock and Mitchell, 1995). Outputs will provide:

- ideas, models, lessons and best practice principles to inform the view of relevant stakeholders and
- expertise, information and insights to policy makers in the European Commission, Member State and Candidate Country administrations.

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<sup>1</sup> „Good Farming Practice“ (GFP) and „Good Agricultural Practice“ (GAP) are understood as synonymous terms in this document.



The implementation of cross-compliance with environmental requirements being linked to direct payments of the EU market regimes has been up to now optional for EU Member States. Against the background of the Mid Term Review negotiations, the seminar should provide insights into the ongoing debate and give space for a discussion of future prospects. According to the recent CAP reform decisions agreed by the Council at the end of June 2003 in Luxembourg, cross-compliance will be an obligatory element of the future Common Agricultural Policy (CAP). It will be linked to the single farm payment, which will be independent from production and shall enter into force in 2005 or 2007 at the latest (Commission of the European Communities, 2003a). GFP definitions for cross-compliance shall include of aspects such as public, animal and plant health, the environment, and animal welfare. For the implementation of cross-compliance, analysis and exchange of experiences in this field can help to provide a basis for decisions.

Cross-compliance conditions are based on well-defined standards, and appropriate indicators are required for implementation and control. With the commencement of Agenda 2000, GFP has had an increasing importance as a precondition for support in the area of rural development and, according to the “Horizontal Regulation” establishing common rules for direct support schemes, mandatory environmental requirements constitute an instrument for the integration of environmental objectives into the CAP. Experiences with such an integration of GFP definitions and implementation into agricultural support measures in the EU Member States could serve as an example for the future development of cross-compliance, with respect to which potential benefits can be achieved and which problems and shortcomings have to be taken into consideration. The seminar on GFP aimed to provide a platform for the exchange and analysis of such experiences.

Effectiveness and efficiency of mandatory measures depend highly on implementation and enforcement of standards. Aspects of administrative implementation such as operational procedures, appropriate verifiable indicators for detection of compliance, and selection of farms to be inspected are crucial for understanding whether standards have an effect in practice. Therefore, administrative procedures and experiences with control and enforcement have been key issues for the seminar.

Since information on administrative implementation of GFP is scarce, often neither systematically monitored nor published nor available to the public, the compilation of basic information throughout EU Member States for the preparation of the seminar resulted in a disappointing exercise. However, through the help of national experts who participated in the seminar, many of the remaining gaps could be filled. This seminar report contains a theoretical analysis of GFP, a review of relevant EU legislation, a comparative analysis among countries, and a summary of results and open questions. Furthermore, the annex contains fact sheets on GFP for different countries. Additional country reports and paper versions of several presentations are available as separate documents on the homepage of the project. The authors are grateful to be allowed to publish these country reports and papers, contributed by different authors, and we express our gratitude to all who helped to improve and complete this report. However, any

remaining errors or shortcoming of presentation in the first section of the report remain the responsibility of the authors.

The seminar background, programme and handouts of the presentations can be downloaded in an additional document at the FAL homepage:

<http://www.bal.fal.de/en/default.htm>

publications – downloads – Seminar 1: Good Farming Practice. Seminar background, programme and handouts of the presentations.

The seminar was the first of a series of five seminars within the framework of the Concerted Action, which is co-ordinated by the Institute for European Environmental Policy (IEEP), London. For more information on the Concerted Action please visit the project homepage:

<http://www.ieep.org.uk/research/Cross%20Compliance/Welcome%20Page.htm>

The editors hope to have provided a useful basis for further steps in the Concerted Action. Last, but not least we wish to thank the European Commission for the funding of the Concerted Action “Developing cross-compliance in the EU – background, lessons and opportunities” (project reference QLK5-CT-2002-02640).

## 2 Concepts and definitions of “Good Farming Practice”

Codes of “Good Farming Practice” (GFP) represent minimum standards required at the farm level. Standards of GFP can either be legally binding or formulated as recommendations for technical advice. Codes are set up by the state or its agencies, as well as by advisory services, research agencies, farmers or the environmental NGOs. GFP requirements for farms may be defined at national or local level, for particular sectors such as fruit and vegetables or livestock, for methods of production (e. g. Integrated Crop Management) or for specific management activities like the use of pesticides.

GFP is an important tool of agri-environmental policy. At European level it is used for the correct and complete implementation of Community environmental legislation, e. g. Natura 2000 Directives, the Water Framework and other water Directives, Nitrates and pesticides Directives, and soil protection initiatives (see next chapter on EU legislation). At the same time, GFP is relevant for the competitiveness of, and within, the agricultural sector of the EU.

In practice, many definitions of GFP established by governments or agricultural administrations are based on requirements defined by national or local legislation. On the other hand, the codes may also encompass additional, non-statutory requirements. While all legally binding criteria can be subject to control and punishment, those standards beyond legislation may either be voluntary (e. g. promoted by advisory services), or mandatory (i. e. in the framework of support programmes). The following table shows the different regional administrative levels and legal sources of GFP definitions.

**Table 2.1: Definition of GFP**

<b>Level</b>	<b>Legal basis of GFP</b>		<b>Additional criteria of “Usual” GFP (beyond legislation)</b>
EU	EU environmental legislation		
National	National implementation of EU environmental legislation	Additional national environmental legislation	Catalogue of criteria (usual management; criteria for technical advice)
Regional	Additional regional legislation	Additional regional legislation	Regional definitions
Local	Additional local legislation (e.g. in protected areas)		Local definitions

Table 2.1 illustrates that GFP standards can be defined either for all farmers in an horizontal approach, or they can be binding only for specific farms. GFP requirements often are determined for specific areas (e.g. protected areas, nitrate vulnerable zones according to the Nitrates Directive 91/676/EEC) and thus do not regulate the management in every farm.

Another differentiation takes place when GFP is defined for a specific group of farms (e.g. as a precondition of support for beneficiaries of certain rural development measures). Although GFP in this case is defined especially for beneficiaries of support programmes, the criteria based on legislation are binding for all farms. Only GFP standards going beyond legislation constitute a new requirement to be met exclusively by beneficiaries. Through information, control and punishment procedures, such linkages to support policies can strengthen the enforcement of existing codes within the group of beneficiaries.

Legal definitions of GFP can serve

- as standards for farm management that provide a point of reference for farmers,
- as criteria for control and punishment in order to enforce environmental law,
- as a baseline for incentive oriented agri-environmental measures, which involve requirements beyond GFP, and
- as a precondition for public payments to farmers.

Farm payments linked to GFP can be direct payments in the framework of the EU common market organisations, that means within the “1<sup>st</sup> pillar” of the CAP, or support according to Regulation (EC) 1257/1999 for rural development, the “2<sup>nd</sup> pillar” of CAP.

In this seminar and the Concerted Action, the focus is on

- GFP definitions binding at the farm level,
- environmental requirements,
- mandatory standards or standards as a condition for farm support,
- verifiable standards, i. e. with appropriate indicators for control of compliance.

## 3 Environmental Legislation and GFP in the EU

### 3.1 Environmental Legislation

In the European Union, a wide range of environmental legislation is in force, some of which is of relevance for the agricultural sector, or contains specific requirements for agriculture. In the "Proposal for a council regulation establishing common rules for direct support schemes under the common agricultural policy and establishing support schemes for producers of certain crops" (Commission of the European Communities 2003a), relevant environmental legislation for the definition of GFP to be used for cross-compliance is listed in Annex III and outlined in the table below.

**Table 3.1: Environmental Legislation at EU level relevant for Cross Compliance**

Directive 75/442/EEC on waste (OJ L 194, 25.7.1975, p. 39)	Articles 8, 9 and 14
Directive 76/464/EEC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (OJ L 129, 18.5.76, p. 23)	Article 3
Directive 79/409/EEC on the conservation of wild birds (OJ L 103, 25.4.1979, p. 1)	Articles 3, 4, 5 and 9
Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances (OJ L 20, 26.1.1980, p. 43)	Articles 4 and 5
Directive 86/278/EEC on the protection of the environment, an in particular of the soil, when sewage sludge is used in agriculture (OJ L 181, 4.7.1986, p. 6)	Article 3
Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources (OJ L 375, 31.12.1991, p. 1)	Articles 4 and 5
Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna (OJ L 206, 22.7.1992, p. 7)	Articles 6, 12 and 16
Directive 91/414/EEC concerning the placing of plant protection products on the market	Article 3

According to the recent reform decisions for the Agenda 2000 mid term review, (Council of the European Union 2003), the list for cross-compliance requirements has been reduced.

In most cases, EU legislation sets up a broad framework for the implementation at Member State level, and defines goals rather than the particular policy instruments to be applied. Member States have implemented the environmental directives by transposing them in new national legislation or revising existing legislation. On the other hand, national environmental legislation in the Member States sometimes covers environmental aspects which are not yet the subject of any European Directive, e. g. in the area of soil protection.

The EU Nitrates Directive constitutes the most prominent example where the common legislation requires not only the definition of codes of GFP, but defines detailed GFP criteria to be included in the national implementation (see box 1). Nevertheless, only Austria, Denmark, Finland, Germany and the Netherlands designated their whole territory as a nitrate vulnerable zone (NVZ) in which GFP standards are binding. In other Member States the extent of NVZ differs, so that in 2001, about 37 % of the total EU surface is an existing or proposed NVZ.

### **Box 1: EU Nitrates Directive**

**Council Directive 91/676/EEC** of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources

Article 4

1. (...) Member States shall, within a two-year period following the notification of this Directive:

(a) establish a **code or codes of good agricultural practice**, to be implemented by farmers on a voluntary basis, which should contain provisions covering at least the items mentioned in Annex II A.

#### **ANNEX II CODE(S) OF GOOD AGRICULTURAL PRACTICE**

A. A **code or codes of good agricultural practice** with the objective of reducing pollution by nitrates and taking account of conditions in the different regions of the Community should contain provisions covering the following items, in so far as they are relevant:

1. periods when the application of fertilizer is inappropriate;
2. the land application of fertilizer to steeply sloping ground;
3. the land application of fertilizer to water-saturated, flooded, frozen or snow-covered ground;
4. the conditions for land application of fertilizer near water courses;
5. the capacity and construction of storage vessels for livestock manures, including measures to prevent water pollution by run-off and seepage into the groundwater and surface water of liquids containing livestock manures and effluents from stored plant materials such as silage;
6. procedures for the land application, including rate and uniformity of spreading, of both chemical fertilizer and livestock manure, that will maintain nutrient losses to water at an acceptable level.

B. Member States may also include in their **code(s) of good agricultural practices** the following items:

7. land use management, including the use of crop rotation systems and the proportion of the land area devoted to permanent crops relative to annual tillage crops;
8. the maintenance of a minimum quantity of vegetation cover during (rainy) periods that will take up the nitrogen from the soil that could otherwise cause nitrate pollution of water;
9. the establishment of fertilizer plans on a farm-by-farm basis and the keeping of records on fertilizer use;
10. the prevention of water pollution from run-off and the downward water movement beyond the reach of crop roots in irrigation systems.

Another aspect is that the Nitrates Directive is one of the EU's environmental legislative acts least well complied with by the Member States. In 2001, all EU Member States except Denmark and Sweden were subject to infringement procedures, and in April 2000 9 countries were facing charges before the European Court of Justice due to incomplete implementation of the Nitrate Directive (DeClercq et al. 2001). Thus, differing strategies and states of implementation of the EU regulation in the Member States lead to a high

variance in GFP definitions throughout the EU even in the area covered by the Nitrate Directive. In other water-related EU directives, no particular standards for agriculture or requirements for the definition of GFP are established. Agriculture is simply subject to the general requirements of these directives, like any other sector.

For plant protection, EU requirements for GFP (“good plant protection practice”) are much less detailed compared to the Nitrates Directive (see box 2). Standards at the farm level are referring e. g. to time and rates of application, which are connected to the authorisation of plant protection agents.

## **Box 2: EU Plant Protection Directives**

**Council Directive 91/414/EEC** of 15 July 1991 concerning the placing of plant protection products on the market

Article 3 (3): Member States shall prescribe that plant protection products must be used properly. Proper use shall include compliance with the conditions established in accordance with Article 4 and specified on the labelling, and the application of the principles of **good plant protection practice** as well as, whenever possible, the principles of integrated control.

**Council Directive 97/41/EC** of 25 June 1997 amending Directives 76/895/EEC, 86/362/EEC, 86/363/EEC and 90/642/EEC relating to the fixing of maximum levels for pesticide residues in and on, respectively, fruit and vegetables, cereals, foodstuffs of animal origin, and certain products of plant origin, including fruit and vegetables

5. the following Article shall be inserted: Article 5a (...)

2. Member States shall introduce arrangements for establishing maximum residue levels, whether permanent or temporary, for products referred to in Article 1 (1) and (2), brought into their territories from a Member State of origin, taking into account **good agricultural practice** in the Member State of origin,

and without prejudice to conditions necessary to protect the health of consumers, in cases where no maximum residue levels have been established for these products in accordance with Article 5. (...)

3. (...)

In its proposal, the Commission shall take account of existing technical and scientific knowledge on the matter and in particular data submitted by the Member States with an interest, especially the toxicological assessment and estimated ADI, **good agricultural practice** and the trial data which the Member State of origin used to establish the maximum residue level, together with the reasons given by the Member State of destination for deciding on the measures in question.

The Directive 75/442/EEC on waste excludes animal faeces and other substances used at the farm level, and thus does not contain additional, particular restrictions for agriculture. In contrast to this, for the use of sewage sludge in agriculture, specific EU requirements are described in Directive 86/278/EEC. For the implementation of Directive 96/61/EC concerning integrated pollution prevention and control, and Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants, bigger animal holdings are subject to emission control policies depending on the number of animals per holding. The same applies to the Environmental Impact Assessment Directive 85/37/EEC which requires authorisation procedures for bigger animal holdings. Standards connected with the implementation of these directives can be understood as GFP defined for specific farms.

Regarding other directives like the Birds Directive 79/409/EEC, the Habitat Directive 92/43/EEC, and Water Framework Directive 2000/60/EG, neither GFP definitions are prescribed nor are Member States obliged to define their own standards for farming. Thus, Member States are free to use also other political instruments such as agri-environmental schemes to reach the goals set by these directives, and no harmonised GFP based on these directives can be expected in the EU Member States.

### **3.2 CAP and environmental requirements**

In the framework of the CAP two regulations referring to definitions, implementation and control of environmental standards of GFP, respectively:

The **”Common Rules Regulation” (Reg. (EC) 1259/1999)**, also referred to as the **“Horizontal Regulation”**, dealing with the direct payments of the CAP, provides for the integration of environmental objectives. According to the Horizontal Regulation, GFP standards have to be defined either as **“general mandatory environmental requirements”**, or as **“specific environmental requirements constituting a condition for direct payments”** (cross-compliance). However, up to now its implementation of such environment requirements has been optional for EU Member States. According to Reg. (EC) 963/2001, article 3 paragraph 1 on implementation of Reg. (EC) 1259/1999, the Member States have to deliver **“Annual Reports”** on the implementation of measures pursuant to the **”Common Rules Regulation”** (see box 3).

The **“Agriculture Council”**, in its conclusion of environmental integration and sustainable development in the CAP for the European Council at Goteborg, invited the Commission to submit a synthesis report in year 2003 on the measures carried out by MS in relation to measures referred in the Horizontal Regulation. This report of the Commission has not been available for the elaboration of this report.

For the new Horizontal Regulation based on the Luxembourg decisions of the Council on a CAP reform, cross-compliance will be obligatory for the Member States. It will be based on **“statutory management requirements”**, defined in 18 EU Directives or Regulations in Annex III on the environment, public, animal and plant health and animal welfare. Furthermore, in Annex IV additional cross-compliance requirements beyond EU environmental legislation are defined as **“good agricultural and environmental conditions”**, regarding soil erosion, organic matter and structure as well as a minimum level of maintenance and avoiding the deterioration of habitats.



### Box 3: "Horizontal Regulation"

**COUNCIL REGULATION (EC) No 1259/1999** of 17 May 1999 establishing common rules for direct support schemes under the common agricultural policy

Article 3 Environmental protection requirements

1. (...) Member States shall take the environmental measures they consider to be appropriate in view of the situation of the agricultural land used or the production concerned and which reflect the potential environmental effects. These measures may include:

- support in return for agri-environmental commitments,
- **general mandatory environmental requirements,**
- **specific environmental requirements** constituting a condition for direct payments.

**COMMISSION REGULATION (EC) No 963/2001** of 17 May 2001 on detailed rules for the application of Council Regulation (EC) No 1259/1999 as regards the additional Community support and the transmission of information to the Commission

Article 3 Annual report

1. An annual progress report on the implementation of measures and penalties referred to in Article 2(1), (2) and (3), including an assessment of their effects, shall be submitted to the Commission by 30 April each year. The first progress report shall be submitted by 30 April 2002 and shall cover the measures and penalties implemented during the years 2000 and 2001.

Each progress report shall contain the following information:

- (a) a summary of available physical and financial data on the implementation of the measures and any penalties as referred to in Article 2(1), (2) and (3) followed by an analysis of this data including details of any major problems incurred;
- (b) an assessment of progress towards meeting the stated operational objectives, based on the information provided under point (a).

The “**Rural Development Regulation**” (**Reg. (EC) 1257/1999**) (**RDR**) requires farmers to comply with the rules of “usual GFP” to receive Less Favoured Area (LFA) allowances (Art. 14, 2). Codes of GFP are also the baseline requirement for farmers wishing to participate in Agri-Environmental Programmes (AEP) (Art. 23, 2). In contrast to the optional cross-compliance according to the Horizontal Regulation (EC) 1259/1999, compliance with defined codes of GFP is a precondition for receiving LFA allowances and agri-environmental payments in all Member States. The inclusion of such codes in rural development plans has been obligatory for Member States since Agenda 2000. According to Regulation (EC) 445/2002 for the implementation of the Rural Development Regulation, verifiable standards for control of compliance with GFP have to be established by the Member States in rural development plans. Standards shall represent at least compliance with general mandatory environmental requirements (see box 4).

**Box 4: “Rural Development Regulation”: Less Favoured Areas and Agri-Environmental Programmes**

**COUNCIL REGULATION (EC) No 1257/1999** of 17 May 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations

CHAPTER V LESS-FAVOURED AREAS AND AREAS WITH ENVIRONMENTAL RESTRICTIONS

Article 14, 2. Compensatory allowances shall be granted per hectare of areas used for agriculture to farmers who:

- apply **usual good farming practices** compatible with the need to safeguard the environment and maintain the countryside, in particular by sustainable farming.

CHAPTER VI AGRY-ENVIRONMENT

Article 23, 2. Agri-environmental commitments shall involve more than the application of **usual good farming practice**.

**COMMISSION REGULATION (EC) No 1750/1999** (rules for the application of Council Regulation (EC) No 1257/1999, repealed by: **COMMISSION REGULATION (EC) No 445/2002**)

Article 17 (Reg. (EC) 445/2002, Art. 18)

1. The reference level for calculating income forgone and additional costs resulting from the undertaking given shall be the **usual good farming practice** in the given area to which the measure applies.

Article 19 (Reg. (EC) 445/2002, Art. 20)

A farmer who gives an agri-environment commitment as to one part of a farm shall adhere to at least the standard of **usual good farming practice** throughout the farm.

Rules common to several measures

Article 28 (Reg. (EC) 445/2002, Art. 29)

For the purposes of Council Regulation (EC) No 1257/1999 and of this Regulation, ‘**usual good farming practice**’ is the standard of farming which a reasonable farmer would follow in the region concerned.

Member States shall set out **verifiable standards** in their rural development plans. In any case, these standards shall entail compliance with general mandatory environmental requirements.

**Box 5: “Rural Development Regulation”: Investment in agricultural holdings, setting of young farmers, and improving processing and marketing of agricultural products**

**COUNCIL REGULATION (EC) No 1257/1999** of 17 May 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations

**CHAPTER I INVESTMENT IN AGRICULTURAL HOLDINGS**

Article 5: Support for investment shall be granted to agricultural holdings: (...)

which comply with **minimum standards regarding the environment**, hygiene and animal welfare

**CHAPTER II SETTING UP OF YOUNG FARMERS**

Article 8, 1. Setting-up aid to facilitate the establishment of young farmers shall be granted under the following conditions: (...)

- as regards the holding: (...)

(ii) **minimum standards regarding the environment**, hygiene and animal welfare are complied with, (...)

**CHAPTER VII IMPROVING PROCESSING AND MARKETING OF AGRICULTURAL PRODUCTS**

Article 26, 1. Support shall be granted to those persons ultimately responsible for financing the investment in enterprises

- which comply with **minimum standards regarding the environment**, hygiene and animal welfare.

**COMMISSION REGULATION (EC) No 1750/1999** (rules for the application of Council Regulation (EC) No 1257/1999, actually: **COMMISSION REGULATION (EC) No 445/2002**)

**Section 1 Investment in agricultural holdings**

Article 2 (Reg. (EC) 445/2002, Art. 1)

However, where investments are made in order to comply with **newly introduced minimum standards regarding the environment**, hygiene, and animal welfare, support may be (EC) granted in order to reach these new standards. In this case, a time period may be provided for the fulfilment of these minimum standards, where such a period is necessary to solve mission the specific problems in reaching such standards and where this period is in accordance with the specific legislation concerned.

**SECTION 2 Setting-up of young farmers**

Article 5 (Reg. (EC) 445/2002, Art. 4)

However, as far as occupational skill and competence, economic viability and **minimum standards regarding the environment**, hygiene and animal welfare are concerned, a time period not exceeding three years after setting-up may be foreseen for the fulfilment of these conditions, insofar as an adaptation period is necessary to facilitate the establishment of the young farmer or the structural adjustment of his holding.

For other measures within the RDR - investment in agricultural holdings, setting of young farmers, processing and marketing - compliance with minimum standards regarding the environment as a pre-condition for support (see box 5). However, only few farms per year receive support according to these measures. For example, per year less than 1 % of all farms in Germany receive investment aid. As defined in the implementation regulation for investment aid and young farmers schemes, compliance with newly introduced minimum standards can also be reached after a period of time. Minimum standards defined for these other measures and their control have not been further analysed for this report, as their

overall impact on compliance with environmental standards can be assumed to be rather limited, compared to support for LFA and AEP.

Table 3.2 shows the different definitions of environmental standards and the variety of terms used in this field. In many Member States GFP is a term used for statutory requirements based on legislation. As a voluntary, advice-oriented concept, GFP can go beyond this legal baseline, but compliance with non-statutory standards is voluntary (see chapter 2).

**Table 3.2: Definitions of environmental standards and their legal basis**

EU environmental legislation and its implementation in the Member States	Additional national, regional and local environmental legislation	Additional criteria beyond legislation
Environmental Legislation defining <b>environmental standards</b> or <b>Codes of GFP</b>		
<b>Codes of GFP</b> for technical advice		
<b>Environmental requirements within the EU Common Agricultural Policy: Agenda 2000</b>		
Agenda 2000: Regulation (EC) 1259/1999, Article 3: <b>“general mandatory environmental requirements”</b>		
Agenda 2000: Regulation (EC) 1259/1999, Article 3: <b>“specific environmental requirements constituting a condition for direct payments”</b> (cross-compliance)		
Agenda 2000: Regulation (EC) 1257/1999, Chapter V, VI: LFA and AEP: <b>“usual good farming practices”</b>		
Agenda 2000: Regulation (EC) 1257/1999, Chapter I, II, VII: (investment, young farmers, processing and marketing): <b>“minimum standards regarding the environment”</b>		?
<b>Luxembourg CAP reform decisions: Cross Compliance within the new Horizontal Regulation</b>		
Annex III: <b>“statutory management requirements – environment”</b> (obligatory)	Additional <b>“statutory management requirements”</b> , optional for Member States	
	<b>“Good agricultural and environmental conditions”</b> partially covered by legislation of Member States	Annex IV <b>“Good agricultural and environmental conditions”</b> for cross-compliance (obligatory)

In the framework of the CAP, there exist different definitions for environmental standards. The optional cross-compliance of the Agenda 2000 reform allows for the definition of specific environmental requirements beyond legislation, while the option “general mandatory environmental requirements” is exclusively based on legislation. Within the RDR, the concept of GFP for LFAs and AEPs can include both statutory requirements and standards beyond legislation. Minimum standards regarding the environment for other RDR measures are normally based on statutory requirements. The implementation of GFP and minimum standards is obligatory for the Member States.

The obligatory cross-compliance decided in Luxembourg refers to EU legislation and its implementation on Member State or regional level (Annex III of the new Horizontal Regulation). Furthermore, good agricultural and environmental conditions pursuant to Annex IV have to be defined regarding requirements beyond EU legislation. Partially, these requirements may be already laid down in the existing national or regional legislation.

Like in many Member States and in the EU environmental legislation (e. g. Nitrate Directive), in this report GFP is understood as a general term for environmental standards (for every farmer), and not exclusively as a standard according to Regulation (EC) 1257/1999, Chapter V and VI (for LFA and AEP beneficiaries). However, the variety of terms and definitions (GFP, minimum standards, general mandatory environmental requirements, specific environmental requirements statutory management requirements, good agricultural and environmental conditions), and the different understanding of GFP in Member States and within the EU legislation have to be taken into consideration. In the discussion about GFP and environmental standards clear definitions should be given for particular standards and their relationship to legislation and agricultural support.

### **3.3 Assessment of the regional importance of LFA allowances and AEP payments**

For the LFA allowances and AEP payments, control of GFP and punishment procedures have to be carried out according to the Integrated Administration and Control System (IACS) for EU area- based payments. This means that control procedures have to follow standardised guidelines, and on the spot controls have to be performed in 5 % of farms participating in AEPs or receiving LFA support. The control of 5 % of beneficiaries applies to each agri-environmental measure.

In order to estimate the impact of GFP controls according to LFA and AEP support throughout the EU, participation in these measures has been analysed. The number of farms with agri-environmental contracts and with LFA allowances should be contained in monitoring reports on implementation of the Rural Development Regulation. However, a simple analysis of the number of contracts under AEP and LFA programmes in the European regions does not necessarily reveal the number of farms to be controlled according to IACS. This is because contracts for different measures can be cumulated within one farm. In a region with 100 % of farms participating in AEPs and at the same time 100 % in LFA schemes, the control rate will probably be at 5 % of all farms (and not 10 %), because cumulation of measures is considered. This is true in case of the same GFP definitions for LFA and agri-environmental support. However, e. g. in Greece GFP definitions are different for LFA support and AEP. For the calculation of the minimum number of farms to be controlled, complete information on support and cumulation of measures within each farm is required. Hence this information is not available, the total

number of beneficiaries of all agri-environmental measures and of LFA support can be used as an approximation, of which at least 5 % have to be controlled.

For the year 2000/2001, a regional analysis of the European Farm Accounting Data Network (FADN) farm accounts on AEP and LFA related payments was conducted. Figures are weighted by the socio-economic representativeness of the respective FADN farm account. However, the data are not necessarily representative for the RDR support in the different EU regions, and for Ireland and Italy, figures for LFA support obviously are missing. In spite of these deficits, the analysis provides a rough picture about the coverage and importance of LFA and AEP support throughout the EU.

In the EU, on average 26 % of all farms and 38 % of total agricultural area is covered by LFA allowances and/or AEP payments. The percentage of supported area varies from 2 % in Greece, 17 % in Denmark and 21 % in Spain on the one side and 88 % in Sweden, 98 % in Finland and Luxembourg, and 100 % in Austria on the other. In addition, for Member States with different FADN regions, the range of percentage of total UAA is depicted. In Finland and Sweden, all regions show high participation in LFA and AEP schemes. On the other hand, in France, Germany, Italy, Portugal, Spain and the United Kingdom, the coverage of these measures differs between regions within a wide range.

**Table 3.3: Analysis of the number of farms with LFA and AEP support, their utilised agricultural area (UAA) and payments per hectare**

	number of farms	percentage of farms with RDR-payments	UAA in hectare	percentage of total UAA in farms with RDR-payments	Payments in EURO per hectare on the basis of total UAA		Payments in EURO per hectare in farms with payments for	
	total	AEP&LFA	total	AEP&LFA range	AEP	LFA	AEP	LFA
Austria	80.076	99 %	2.062.576	100 % .	239	74	242	111
Belgium	39.387	25 %	1.453.413	40 % .	5	11	29	36
Denmark	45.494	13 %	2.779.063	17 % .	11	0,1	65	.
Finland	46.466	95 %	1.903.439	99 % 98-100)	138	190	140	192
France	393.920	31 %	26.764.304	34 % (4-96)	9	15	38	56
Germany	253.202	53 %	15.529.021	54 % (6-98)	33	19	82	48
Greece	516.115	3 %	3.103.918	2 % (0-8)	0,2	2	.	86
Ireland	122.125	35 %	4.849.927	34 % .	43	0	127	.
Italy	925.516	19 %	10.862.696	29 % (8-81)	61	0	206	.
Luxembourg	1.864	97 %	129.085	98 % .	83	113	85	117
Portugal	292.112	39 %	3.839.367	64 % (15-88)	23	15	72	27
Spain	703.968	14 %	19.698.450	21 % (0-59)	1	2	29	12
Sweden	38.181	84 %	2.695.445	88 % (84-94)	77	1	88	67
The Netherlands	76.071	20 %	2.086.944	25 % .	23	0	93	.
United Kingdom	122.461	35 %	15.719.655	41 % (13-79)	7	14	33	59
Total	3.656.959	26 %	113.477.303	38 % .	26	14	95	59

Source: Own calculations on basis of EU-FADN data; INLB-EU-GD AGRI/A3

The amount of payments per hectare of total UAA illustrates the importance of these measures in each Member State. In contrast, the payments per hectare within the supported farms show the average importance of the payments for beneficiaries. While in

some Member States like Austria and Italy high AEP payments are dominant, in others the payments remain below 50 Euro per hectare. It can be assumed that in Member States with high payments per hectare of beneficiary farms compliance with GFP is more important, as higher payment reductions are possible.

The analysis of FADN data shows that the importance of LFA allowances and AEP payments differs a lot between Member States and regions. Control of compliance with GFP is highly relevant in those regions with high participation, while in others only negligible effects on farmers behaviour and the environment can be expected.

## **4 Theoretical considerations on implementation and enforcement**

Mandatory GFP standards are part of command and control instruments, which are an important instrument of environmental policy. Other political instruments are technical advice, and financial instruments like taxes, charges and incentives. The importance of mandatory standards depends on the policy mix applied in the respective countries and regions. Nevertheless, mandatory elements form a central part of most environmental policies. In this section, a brief analysis of the range for optimisation of mandatory instruments is presented, as well as some aspects specific to agriculture and the implementation of GFP within the EU.

The effectiveness of GFP standards depends on their realisation at farm level and the closeness of GFP indicators to the environmental problem addressed. Therefore, administrative implementation (information, advice) and enforcement (control, punishment) are crucial to achieving a positive effect of mandatory regulations on farmers' behaviour. At least in Germany, a "lack of implementation" of environmental law is discussed (Baedecker 1994; Bültmann and Wätzold 2002). But, from an economic point of view, there is an optimum relationship between the efforts (administrative cost) of enforcement and the compliance with the law. That means that a 100% compliance is not a reasonable goal, taking into consideration efficiency aspects, e. g. increasing administrative cost of better control and enforcement.

For an explanation of behaviour of norm addressees, American economists have developed economic theories. According to Becker (1968, cited in Bültmann and Wätzold 2002), individuals decide on compliance with norms to maximise their benefit. Elements of such benefit maximisation are:

- benefits of non-compliance (corresponding with the impact of compliance with legislation)
- probability of detection and punishment (dependent on control frequency and appropriateness of indicators used)
- amount of fine or impact of punishment

This rather mechanistic model implies that the control frequency and/or the fines can be raised to reach better compliance. In accordance with the environmental objective, and the cost of administrative control and punishment procedures, control frequency and fines can be optimised. Fines accomplish two functions, that are prevention and compensation of the damage caused by infringements. In modern constitutional states, fines have to be reasonable and proportional to the damage or economic loss to the public involved in an infringement, and also adequate compared to fines in other areas. Environmental legislation has to provide legal certainty and planning reliability for the affected



enterprises, and has to guarantee also proportionality of punishments. Thus, although high fines evolve a higher preventive impact and thereby help to save administrative cost, the principle of proportionality sets limits to an excessive increase of fines (Rapp 1998).

Another problem for the determination of fines is the difficulty of estimating the monetary equivalent of environmental damages, and the fact that the damage of non-compliance does not necessarily corresponds to the economic effects at enterprise level. In case of a low cost of compliance with environmental law at enterprise level, breaching can be minimised even with low fines. In this case, the incentive for breaching is already low. If compliance involves a high cost for enterprises, fines have to be higher even if the environmental damage is similar in both cases. Thus, the principle of proportionality has to be qualified, considering the economic incentives and disincentives at enterprise level.

In new publications, the theoretic approach of Becker has been modified (Bültmann and Wätzold 2002). New aspects are

- the self-interest of the administrator (e. g. political strategy, budget maximisation) influencing the setting and enforcement of standards,
- the importance of image and moral concepts for norm addressees, calling into question the assumption of rationality, and
- lack of information on standards as a reason for non-compliance.

New approaches focus on co-operative elements of implementation including the public and private sector, and on so called “self-reporting”. Self reporting means that enterprises themselves report on compliance with certain legislation. Legal compliance checks included in environmental audits constitute such a self-reporting approach. Because self-reporting helps to save administrative cost, incentives can be implemented to increase participation in audits. This could be e. g. a differentiated fine depending on whether an enterprise has reported properly, even on non-compliance, and the granting of a period of transition to reach compliance for enterprises co-operating with the administration. Aspects of co-operation between the private and the public sector will be the issue of another step in the Concerted Action.

Concerning the agricultural sector, specific problems of implementation of codes of GFP **between administration and farm level** arise:

- In agriculture, environmental impacts are caused mainly due to non-point sources of pollution and other diffuse ecological pressures.
- Environmental pressures are dependent on natural and management conditions highly variable in time and space.
- Asymmetric information between administration and farms is a major problem, as farmers do not reveal all information on farm management, and inspections can give only limited insights into farm management.
- Because the costs of control of direct environmental impacts are prohibitively high for diffuse pollution, and breach reports have to be legally defensible, indirect indicators are mainly used, e. g. record keeping.
- As non-compliance is difficult to detect, the fact that fines cannot be much increased because of proportionality constitutes an important limitation, especially in the agricultural sector.
- Informal co-operation between administration and enterprises on regional or local level could lead to less detection and/or punishment. This is more probable when advice and control is not clearly separated.

Problems of GFP implementation can also be described **within administration and between EU and Member States**:

- Capacity and education of administrative personnel is crucial for proper enforcement.
- The rising demand for administration of EU programmes forms a discrepancy with the (increasingly) limited administrative capacities at Member State level.
- Because administrative capacities are limited, strategies to reduce administrative burden due to control procedures can be assumed. This is applicable especially for EU programmes in which payments to farmers are, at least partially, covered by EU funds, while administrative cost is to be covered exclusively by Member States.
- While in environmental administration targeted inspections for specific reasons or due to suspicion prevail, the EU requires regular control procedures.

- Fragmentation of competencies between different departments and/or institutions is limiting the efficiency of administrative procedures. In agriculture, the separation between agricultural and environmental administration is a frequent phenomenon.
- Member States are facing a threat of
  - infringement procedures for non-implementation of EU legislation and
  - disallowances when GFP control is part of EU payments
 which leads to strategic behaviour and problems of asymmetric information between EU and Member States or regions regarding control and enforcement of standards based on EU law and programmes.

The mentioned points demonstrate that in the area of environmental standards for agriculture a central problem is the lack of information on compliance. While between administration and farms such a lack of transparency can certainly be expected, the different political and administrative levels within the EU agricultural and environmental policy and the different interests of the institutions involved cause similar information problems regarding administrative procedures.

## **5 Categories of GFP according to Regulation EC 1257/1999 and comparison between Member States**

The following comparison is mainly based on information extracted from Rural Development Plans, with a focus on verifiable standards. It has to be taken into consideration that information on GFP definitions is available, but no comprehensive or detailed data on GFP implementation, control and on the effects of GFP implementation exists. This information is not part of regular monitoring and reporting. The legal basis and whether it is based on EU or exclusively on national law also often remains unclear. Partly, for detailed GFP definitions, especially the verifiable and implemented standards, information is also lacking.

It has to be mentioned that the “Annual Reports” on implementation of the Common Rules Regulation 1259/1999 have not been widely accessible. Reports have been made available to the authors for Austria, England, and Germany. The report format differs, and the reports do not give a comprehensive overview on environmental regulations and their implementation:

- UK (2000-2001): Contains description of „cross-compliance“ and other measures, no data on control and compliance of GFP or „cross-compliance“.
- Austria (2002): Contains description of „cross-compliance“ on set aside land, data on control of „cross-compliance“ on set aside, but no information on GFP control.
- Germany (2002): Contains short description of GFP control in the areas fertilising and pesticide use, data on numbers of control, breaching and range of fines for 8 criteria.

Therefore, the comparison has been focussed on definitions according to the Rural Development Regulation 1257/1999. Key questions for the comparison are:

- Which areas / environmental problems are covered by GFP (comprehensiveness)?
- Are standards based on legislation or on additional requirements?
- Are standards binding on national level or in specific regions?
- How strict are the standards (i. e. are they basic requirements or a detailed list of measures under one heading)?
- Is there a focus on “verifiable standards” used for regular control of beneficiaries?

For the actual Member States analysed for this report, table 5.1 gives an overview on areas included in GFP definitions according to the RDR.

**Table 5.1: Comparison between Member States**

X = Principle of GFP leg = legislation vs = verifiable standard (R) = regional

Categories of GFP	Austria	Denmark	England	Germany	Greece <sup>5</sup>	Ireland	Italy (Emilia-Romagna)	The Netherlands	Spain <sup>8</sup>	Sweden
<b>Fertilising:</b>										
Storage		vs <sup>3</sup> (leg)	vs (leg)			vs (leg)	vs (leg)	vs (leg)		vs (leg)
Use of mineral f.	vs (leg)	vs (leg)	leg <sup>4</sup>		X	vs (leg)	vs (leg)	X		vs(leg)(R)
Use of organic f.	vs (leg)	vs (leg)	leg <sup>4</sup>	vs (leg)	X	vs (leg)	vs (leg)	X		vs(leg)(R)
Time-limit for org.f.		vs (leg)	leg <sup>4</sup>				vs (leg)			vs (leg)
Time-limit for min. f.			leg <sup>4</sup>				vs <sup>7</sup>			vs(leg)(R)
Livestock density	vs (leg)		leg <sup>4</sup>	vs (leg)			(indirect)		vs	vs (leg)
Soil testing										
<b>Pesticide Use</b>	vs (leg)	vs (leg)	leg <sup>4</sup>	vs (leg)	X (leg)	vs (leg)	vs (leg)	X		vs (leg)
<b>Buffer zones</b>	vs (leg)	vs <sup>3</sup> (leg)			X	vs (leg)				
<b>Water use (Irrigation)</b>					X			X		
<b>Farm Management: (e.g. nutrient plans)</b>		vs (leg)		vs (leg)	vs		vs (? <sup>6</sup> )	vs (leg)		

(Table 5.1, continuation)

Categories of GFP	Austria	Denmark	England	Germany	Greece	Ireland	Italy	The Netherlands	Spain	Sweden
<b>Soil conservation:</b> Soil cover Maintenance of grassland Sewage sludge and compost Erosion, tillage Crop rotation	X <sup>1</sup> X <sup>1</sup> vs (leg) X <sup>1</sup>	vs (leg) vs <sup>3</sup> (leg)			X X		vs (?)		vs	vs (leg)(R)
<b>Husbandry:</b> Animal housing Animal welfare Grazing	vs <sup>2</sup> (leg)	vs (leg)	vs		X <sup>2</sup> X	vs (leg) vs			X X	
<b>Biodiversity/ Landscape:</b> Protection of biotopes/species Field boundaries Hedgerows Heritage Conservation	X <sup>1</sup>		vs (leg) vs (leg) vs leg		X	vs (leg) vs vs (leg)			X	
<b>Other:</b> Waste handling Burning grass, stubble Fire protection		vs <sup>3</sup> (leg)	vs(leg) leg		leg X X	vs (leg) vs (leg)			X vs X	

- 1: included in the agri-environment “basic support measure”, with principles above UGFP but which are the prerequisite for other agri-environment measures
- 2: quality of animal feed and ban on specific substances (e.g. hormones)
- 3: only compulsory for the agri-environment-measure “subsidy for green account (farm audit)”, compliance with relevant legislation is controlled by the respective authorities
- 4: included in RDP definition of GFP (regulations, Action Programme), but not controlled under REG 1257/1999
- 5: Greece didn't specify verifiable standards, the standards of GFP are considered to be all verifiable in theory. Inspections check existence of a management plan that includes all relevant rules, invoices for fertiliser purchase and carries out laboratory analyses.
- 6: ?: Standards are generally based on legislation, but corresponding legislation wasn't obvious in all cases
- 7: announced in cabinet, but not yet in force
- 8: Spain developed a general code of GAP, farmers have to comply with in order to receive benefits within agri-environment measures. Definition of regional standards, enforcement and control takes place on regional level. 3 essential and verifiable standards have been specified in the report.

### ***Areas covered:***

Most countries have defined verifiable standards for fertiliser and pesticide use. In Austria, Denmark, Germany, the Emilia-Romagna (in Italy, the adaptation of general rules to the local conditions is left to the regions), Sweden and The Netherlands emphasis is laid on fertilising and pesticides. Denmark, Germany and The Netherlands require nutrient accounting, and their control relies heavily on records. Sweden controls additional standards for farms in NVZs. In the Emilia-Romagna also a fertilisation plan and two more indicators for soil protection are subject to controls.

In Germany, although each federal state can present its own selection of criteria, a set of six indicators in the areas of fertilisation and pesticide use is generally used. Livestock density is regulated indirectly through the maximum allowed amounts of manure. The verifiable standards represent a selection of criteria out of the broader national GFP requirements (see table 5.2).

In The Netherlands all aspects of fertilisation are covered with very detailed standards for production, storage and application of fertiliser and manure. A mineral accounting system (input/output) with specific loss standards for N and P is set up, which is compulsory for all farmers. Livestock density is controlled indirectly (farmers unable to dispose of their manure surpluses have to reduce their number of livestock).

Austria and Denmark have included a few verifiable standards for animal husbandry, soil cover or use of sewage sludge in their rural development plans. Austria specifies standards for UGFP for soil protection, such as compliance with regional and local regulations for soil protection and waste management and avoidance of erosion and soil compaction (in areas at risk the local administration can order measures such as minimal tillage or soil cover, or recommends to minimise pressure on the soil). Both countries

have in common that they define additional requirements for certain agri-environment measures. In Denmark, the first 7 standards are compulsory for all measures under article 14 and 23 the majority of which sets out detailed requirements for fertilising; the next 6 standards are only compulsory for the measure “subsidy for green account (farm audit)”. In Austria, participation in the agri-environment “basic support measure“ is based on additional principles above UGFP. Compliance with these principles is financially supported. This measure is the prerequisite for other measures on farm level or can only be taken in combination with other agri-environment measures.

Germany, The Netherlands and Sweden haven't defined any more verifiable standards in other categories (only Sweden has defined rules for soil cover in certain areas on farms with > 5ha).

England and Ireland show another picture. They lay big emphasis on the areas of biodiversity and field boundaries. Three verifiable standards have been defined alone for grazing, as overgrazing is a significant problem in many upland areas of the UK. Other definitions of GFP cover waste handling (in the case of England the disposal of sheep dip) and burning of grass and crop residues. As well in England, legislation on heritage conservation and evidence of dark smoke (from grass, crop residues or waste burning) will be checked during inspections according to the RDR. The only verifiable standard in the area of fertilising refers to storage of silage and slurry, where a farmer has to notify the environment agency before starting to use a new storage facility.

For Greece and Spain, the definition of verifiable standards remains unclear. In Greece all standards of GFP are considered to be verifiable in theory. Inspections check the existence of a management plan that includes all relevant rules to comply with and invoices for fertiliser purchase, additionally, laboratory analyses are carried out. Spain developed a general code of GAP, farmers have to comply with in order to receive benefits within agri-environment measures. Three essential and verifiable standards have been pointed out for livestock density, stubble burning and anti-erosion measures. More standards for fertiliser and pesticide use are mentioned. But control and enforcement lies in the hands of the regions and they can define their own standards according to their climatic and soil conditions. Both countries included standards for fire protection, irrigation and erosion protection. Waste handling and the limitation of the stocking density are covered as well in both countries, while Greece limits also the grazing period. Control according to the RDR via laboratory analyses is carried out in the Emilia-Romagna (chemical multiresidue analysis of fruit, leaves, shoots and weeds) and in Greece.

Despite these marked differences within the definition of verifiable standards, this doesn't mean that categories not covered by mandatory standards defined in the rural development plans are not taken into account. There might be national legislation (e.g. for



waste handling, nature protection and animal housing in Germany and Denmark) and advice.

### ***Standards based on legislation or additional?***

In Denmark, most activities relating to manure handling are legally controlled, and an annual fertiliser account is mandatory. The so-called “Harmony Rule” requires a balance between the farmers’ land area and the manure produced and regulates livestock density.

In Germany, the verifiable standards are solely based on special agricultural law on the use of fertilisers and pesticides.

As well in Ireland and in Sweden, the existing legislation has been chosen to be the basis of GFP according to the RDR.

Again, England chose another strategy with GFP as defined in the rural development plan consisting of a combination of relevant legislation and complementary verifiable standards often going beyond legislation (e.g. standards for grazing or time where trimming of hedgerows is not allowed).

### ***Number of verifiable standards:***

Only few control indicators are used in Denmark (7, mainly records), Germany (6, mainly records) and Sweden (4 for all farms, 6 additionally in specific areas). It appears that Greece is carrying out the control of GFP only through 3 indicators (records and laboratory analyses). Spain is emphasising the importance of 3 standards, although no information was available about implementation of control procedures in the regions. In the Emilia-Romagna 7 indicators have been chosen for control of GFP, including records, chemical multiresidue analyses and direct controls in the area of manure storage and soil conservation. England defined 8 verifiable standards.

A more detailed list of verifiable standards is subject to control within the rural development regulation in Austria (12 + 6 for the basic support measure within the agri-environment programme), and The Netherlands are having a very elaborated set of specific requirements for fertilising.

Ireland specified in its rural development plan all the requirements with appropriate control measures, 10 of which are controlled by the Department of Agriculture, Food and Rural Development (DAFRD) in a random check of 5% of participants in rural development measures, another 14 standards are controlled via internal (other sections of the DAFRD) and external (bodies implementing environmental legislation) cross-reporting.

***Conclusion:***

The comparison shows that countries have chosen different strategies for the definitions of codes of GFP according to Reg. (EC) 1257/1999, reaching from a selection of few areas of GFP to a broad coverage of categories and from a narrow choice of control indicators to a detailed list of requirements. In most countries, mandatory standards of GFP consist of existing legal obligations, mainly in the field of fertiliser and pesticide use, laid down in EU, national and regional law, and only few countries defined standards going beyond legislation, or covering issues of biodiversity. Catalogues with few, verifiable standards often represent a selection of criteria out of the broader national GFP requirements (for example in Germany, see table 6.2). Thus, GFP definitions for the implementation of Reg. (EC) 1257/1999 do not provide a comprehensive overview on GFP standards in the EU Member States.

**Table 5.2: GFP in Germany – according to Reg. 1257/1999 and GFP standards in general**

leg = legislation vs = verifiable standard adv = advice ( R ) = regional

<b>Categories of GFP</b>	<b>Statutory and advice oriented GFP standards in general</b>	<b>Verifiable GFP standards in the Rural Development Plan according to Reg. (EC) 1257/1999</b>
<b>Fertilising:</b> Storage Use of mineral f. Use of organic f. Time-limit for org.f. Time-limit for min. f. Livestock density Soil testing	leg leg leg leg adv <i>(indirect)</i> leg	      <b>vs (leg)</b>      <b>vs (leg)</b>
<b>Pesticide Use</b>	leg	<b>vs (leg)</b>
<b>Buffer zones</b>	leg ( R )	
<b>Farm Management: (e.g. nutrient plans)</b>	leg	<b>vs (leg)</b>
<b>Soil conservation:</b> Soil cover Maintenance of grassland Sewage sludge and compost Erosion, tillage Crop rotation	adv (leg) adv (leg) leg ( R )/ adv leg adv (leg)	
<b>Husbandry:</b> Animal housing Animal welfare Grazing	leg leg	
<b>Biodiversity/ Landscape:</b> Protection of biotopes/species Field boundaries Hedgerows Heritage Conservation	leg ( R ) leg ( R ) leg ( R ) leg	
<b>Other:</b> Waste handling Burning grass, stubble Fire protection	leg leg	

### *Comparison of GFP in Accession Countries*

In spite of the different stage of implementation, table 5.3 shows the areas covered by GFP in Accession Countries. Bulgaria requires compliance with mandatory standards of GFP for farmers participating in agri-environment schemes. Standards cover most of the areas, although sometimes only few basic principles are defined in a very generalised way, such as to store manure without danger of soil and water pollution, to apply farmyard manure on land to enhance soil fertility or not to use polluted water for irrigation. The Czech Republic combines legislation and, sometimes additional, verifiable standards of GFP for soil protection, grassland management and protection of biotopes, defined in the rural development plan. One standard is to comply with environmental law. Some principles are not defined very clearly, such as to prevent significant sward damage through grazing, and the recommendation to undertake contour cultivations and transport along contours on steep slopes.

Estonia has defined verifiable standards as a baseline for agri-environment measures, all based on legislation, including a maximum livestock density, the requirement to keep a field record book and standards for waste handling. Most categories of GFP except soil protection are covered, although the principles concerning the use of fertiliser only state that application on snow and frozen ground is prohibited. The Code of Good Agricultural Practice includes legislation and additional recommendations in these areas. Latvia has got detailed mandatory standards of GFP in all categories. Additional standards for fertilising and soil protection in nitrate vulnerable zones are defined. Latvia has selected just two indicators in the areas of fertilising for control according to RDR. Lithuania defined mandatory standards of GFP in its Agriculture and Rural Development Plan 2000-2006, resulting in an elaborated catalogue of standards for GFP, all covered by legislation. For karst zones, additional rules apply. In Poland standards of UGFP are defined in most of the categories as minimum standards for RD measures. Standards are based on the relevant legislation.

Countries are in a different stage of defining standards. Hungary is just in the progress of defining standards according to RDR. Poland has not selected verifiable standards yet out of their catalogue of principles of UGFP. In Lithuania the government has not formally approved the Code of Good Agricultural Practice yet. Farmers can follow the requirements on a voluntary basis. But the legally mandatory rules of the Code are prerequisites for rural development measures. In the Czech Republic control of verifiable standards is not yet fully implemented, and in Bulgaria environmental legislation is often not enforced, and verifiable standards acting only as non-binding advice. Most of the Accession Countries have taken great effort to include all the main categories of GFP in their definition of mandatory standards, which brings up the question of practicability of controls. Only Latvia has chosen a strategy of selecting only two control indicators. Standards of GFP are generally based on environmental legislation, and only the Czech Republic explicitly added verifiable standards going beyond legislation.

**Table 5.3: Comparison between Accession Countries:**

X = Principle of GFP leg = legislation vs = verifiable standard R = regional standard

Categories of GFP	Bulgaria	Czech Republic	Estonia	Latvia	Lithuania	Poland
<b>Fertiliser:</b>						
Storage	vs (leg)	leg	vs(leg)	X(leg) (R)	X (leg)	X <sup>7</sup> (leg)
Use of mineral f.	vs (leg)	leg	vs(leg)	X (leg) (R)	X (leg) (R)	X (leg)
Use of organic f.	vs (leg)	leg	vs(leg)	vs (leg)	X (leg) (R)	X (leg)
Time-limit for org.f.		leg		X (leg) (R)		X (leg)
Time-limit for min.f.				X (leg) (R)		
Livestock density	vs		vs(leg)	indirect		
Soil testing				vs		
<b>Pesticide Use</b>	vs (leg)	leg	vs(leg)	X (leg)	X (leg)	X (leg)
<b>Water Use</b>	vs (leg)				X (leg)	
<b>Buffer Zones</b>	vs (leg)			X (leg)	X (leg)	X (leg)
<b>Farm Management (e.g. nutrient plans)</b>	vs	leg	vs (leg)	X (leg)		

(Table 5.3, continuation)

	<b>Bulgaria</b>	<b>Czech Republic</b>	<b>Estonia</b>	<b>Latvia</b>	<b>Lithuania</b>	<b>Poland</b>
<b>Soil conservation:</b>						
Soil cover				X (leg) (R)	X (leg) (R)	
Maintenance of grassland		vs (leg)			X (leg)	X (leg)
Sewage sludge and compost				X (leg)	X (leg)	X (leg)
Erosion, tillage						
Others	vs <sup>1</sup> (?²)	vs (leg)		X <sup>5</sup> (leg) (R)	X (leg) X <sup>6</sup> (leg)	X (leg)
<b>Husbandry</b>						
Animal housing				X (leg)		
Animal welfare			vs(leg)	X (leg)		
Grazing		vs				X (?)
<b>Biodiversity/ Landscape</b>						
Protection of biotopes	vs (leg)	vs (leg)	vs(leg)	X (leg)	X (leg)	X (leg)
Heritage Conservation	vs (leg)		vs(leg)		X (leg)	
<b>Other:</b>						
Waste handling			vs(leg)		X (leg)	X (leg)
Burning grass	vs (?)					X (?)
Obvious pollution	vs <sup>3</sup> (?)					
other		vs <sup>4</sup>			X (leg)	

- 1: Farmers have to maintain and enhance soil fertility by applying manure produced on their farm on their land
- 2: Standards are generally based on legislation, but corresponding legislation wasn't obvious in all cases
- 3: No use of farmland for non-agricultural purposes without permission
- 4: Grasslands on agricultural land are to be cut at least once a year, in case of meadows where two cuts are usual twice, in order to prevent weeds spreading.
- 5: Observation of crop rotation
- 6: Landowners have to preserve and enhance soil fertility
- 7: Storage facilities for manure and slurry must have a capacity of at least 6 months (although the *Fertilisers and Fertilising Law* defines only 4 months)

## 6 Indicators for the control of GFP

For the implementation of GFP, operational indicators are needed both for farmers and their management decisions as well as for administrative control. For GFP within the RDR, verifiable standards have to be defined, while for general environmental standards or specific cross-compliance standards pursuant to the Horizontal Regulation to date no detailed requirements have been formulated. Indicators generally need to fulfil several criteria (SRU 1998):

- high correlation with the environmental issue
- high correlation to the farmers actions and sensitivity to changes in farm management
- data collection at reasonable cost

For the control of GFP through IACS inspections or other forms of standardised on-the-spot inspections, some additional requirements are relevant. Indicators should:

- be easy to control without expert knowledge
- enable temporal flexibility for on-the-spot checks
- provide legally defensible results

Obviously, a set of indicators should also cover all relevant environmental aspects and not leave out entire domains. Many of the indicators used in the Member States and Accession Countries are not suitable for standard inspections of random samples as they are only ascertainable at certain moments (e.g. immediate incorporation of manure, soil conditions for spreading fertiliser, pesticide use in accordance with label instructions, buffer zones, direct entry of fertiliser into watercourses). Others require expert knowledge (pesticide use in accordance with label instructions) or need high efforts (e.g. chemical multiresidue analysis, assessment of under/overgrazing in the UK). Some of the indicators are targeted to specific national or regional environmental problems of farming practices (stubble burning, disposal of sheep dip) and thus are only applied in few countries.

Records are indicators used quite commonly (i.e. nutrient plans, pesticide records), because their existence is easy to check and they can be used to improve farm management. Nevertheless, records are indirect indicators, often with limited significance for the environmental problem, and manipulation is possible. For on-the-spot control, cross checking e.g. on the basis of economic and tax accounts is necessary, and for this high efforts are needed.



The different control-indicators used by Member States and Accession Countries for the control of compliance with codes of GFP in the framework of rural development measures or environmental standards for cross-compliance are listed in Table 5.1. Obviously not all aspects subject to GFP control are included in the table. For some indicators the relevant information is missing, and others are controlled in another but the Reg. 1257/99 or 1259/99 context (i.e. the N-surplus in the Dutch mineral accounting system MINAS). Some of the listed "indicators" remain rather vague and may be controlled in different ways. However, information on the exact control indicators is often not available.

**Table 6.1: Control indicators in Member States and Accession Countries**

<b>Control indicators for fertilisation</b>	<b>Countries</b>
<b>Minimum storage capacity</b> of manure containers (no information on requirements or procedure available)	CZ, IT
<b>Notification of manure storage</b> with the Environment Agency	UK
<b>Soil conditions for spreading:</b> on-the-spot-check (mainly due to suspicion or complaint) of organic or chemical fertiliser being spread on wet, waterlogged, frozen, snow covered soil or on land sloping steeply towards a watercourse.	CZ, AU, IR, NL
<b>Maximum N input from livestock manure and livestock density:</b>	CZ, D, AU, DK, SP
D: 170 kg N/ha on arable crops, 210 kg N/ha on grassland	
DK: max. 1.4 LU/ha for pigs, 1,7 LU/ha for cattle, goats, sheep, poultry and 2,3 LU/ha for pure cattle farms	
AU: < 2.7 LU/ha arable land	
SP: thresholds for livestock densities in forage production lands in relation the annual rainfall:	
• < 400 mm: [ 0.5 LU/ha	
• 400 - 600mm: [ 1 LU/ha	
• 600 - 800mm: [ 1.5 LU/ha	
• > 800mm: [ 2 LU/ha	
<b>Fertiliser plans &amp; records/accounts, nutrient balances</b> (availability, timeliness, quality, completeness)	CZ, D, DK, IT, NL, IR
D: fertiliser plans for each crop, farmgate-balances for N (yearly) and P and K (every 3 years) required	
DK: fertiliser plan (due 31.3.) shows the expected nitrogen demand (including both inorganic and organic nitrogen) for the whole farm as well as the nitrogen and phosphorous demand for the single fields.	
NL: registration of supply and abduction of livestock manure on farm level	
IR: Record of date, type and quantity of chemical fertilisers and organic waste brought onto or leaving the farm	
<b>Time-ban for fertilisation:</b>	CZ, D, IT, NL
NL: 1. Sept. - 1. Feb. in sensitive areas	
D: generally between the 15. Nov.-15. Jan.	
<b>Quality of manure spreading</b> (low emission application techniques)	CZ, NL

(Table 6.1, continuation)

<b>Soil testing</b>	D
– D: Soil tests on mineral N have to be carried out on a yearly basis, the respective information can be substituted by recommendations of local advisory services.	
– Soil test for K and P have to be carried out once in every crop rotation but at minimum every 6 years, on extensive permanent grassland every 9 years.	
<b>Immediate incorporation of manure</b>	D
<b>Direct entry of fertiliser into watercourses</b>	D, IR
<b>Catch crop requirement</b> (catch crops on at least 6 % of the farm area which may not be ploughed before 20.10.)	DK
<b>Buffer zones</b>	AU, IR
AU: buffer zones to watercourses	
IR: - Chemical fertiliser being spread within 1.5 m of a watercourse - Organic fertiliser being spread 10 m of a watercourse or within 50 m of a domestic well or public water supply source	
<hr/>	
<b>Pesticide Use</b>	
<b>Expert certificate</b>	D, AU
<b>Use of approved pesticides</b>	CZ, AU
<b>Registration &amp; technical control of spraying equipment</b>	CZ, D
<b>Storage safety requirements</b>	CZ, IR
<b>Use in accordance with label instructions</b>	CZ, AU, IR
<b>Pesticide plan &amp; record</b>	DK, IT, IR
DK: record updated latest 7 days after a ppp has been used, has to be kept for 5 years, identification of the area where the ppp has been used, the size of the area, the crops on the fields, name of the ppp, dosing per hectare, the date of the treatment and the name of the owner or user of the area.	
IR Record of date, type and quantity of pesticides brought onto or leaving the farm	
<b>chemical multiresidue analysis</b>	IT, NL
<hr/>	
<b>Soil conservation</b>	
<b>Soil cover requirement:</b> plant cover of 65 % must be established during autumn and winter (up to 20% can be fulfilled by leaving straw from cereals and rapeseed on the field).	DK
<b>Maximum plough depth</b>	IT
<b>Contour tillage on steep slopes</b>	SP
<b>No grassland conversion</b>	AU
<b>control of certificates of sewage sludge</b> (with content of pollutants, delivery note, crop, time of application), on-the-spot checks by appearance (suitability of soil and limits for amount and timing of application)	AU
<b>General erosion measures</b>	AU, IT, UK
IT: ditch maintenance, distance between water gullies/ditches in sloped areas	
UK: No supplementary feeding to avoid poaching and erosion	

(Table 6.1, continuation)

<b>Husbandry</b>	
<b>Herd- &amp;, Flock Register, Animal Remedies Record</b>	IR
<b>Animal feed:</b> on-the-spot checks of approval, labelling, contents, control of pollutants	AU
<b>Overgrazing:</b> no single maximum stocking density, instead farms with a stocking density of 1.4 Livestock Units (LU)/ha (1.8 in Northern Ireland <sup>2</sup> ) or above will be subject to physical inspection at least once every three years .	UK
<b>Undergrazing:</b> minimum stocking density of 0.15 LU/ha unless otherwise required by agri-environment measures or other recognised environmental prescriptions e.g. on designated sites	UK
<b>Storage and use of hormones banned:</b> on-the-spot controls, taking of samples in case of suspicion	AU
<b>Biodiversity/Landscape</b>	
<b>time bans for trimming of hedgerows:</b> 1 March to 31 July	UK
<b>Crop rotation requirement:</b> Cereal or maize < 85% of arable land	AU
<b>Destruction of hedges and stonewalls</b> not permitted except by consent	UK
<b>Maintenance of landscape elements and Heritage Conservation:</b>	UK, AU
UK: farmers are required to notify the respective agency (i.e. English Nature) of any intended operations that are likely to damage statutorily designated Sites of Special Scientific Interest	
<b>Others</b>	
<b>Waste handling:</b>	IR, UK
IR: on-the spot-control of discharge of waste into water sources, watercourses, and drains	
UK (Northern Ireland): obvious pollution problems on a holding or breaches of regulations in terms of waste disposal on land are reported to Environment and Heritage Service	
<b>Sheep dip disposal requires authorisation</b> from Environment Agency (England) or Environment and Heritage Service (Northern Ireland)	IR, UK
<b>Environmental farm management plan</b>	GR
<b>Activity diary</b>	GR
<b>Burning grass, stubble</b>	IR, SP
SP: No burning of stubble and pastures unless authorised by the Technical Services of the Regional Authorities based on sanitary requirements	
IR: Burning of growing vegetation on non-cultivated land between April 15th and August 31 <sup>st</sup>	

<sup>2</sup> Furthermore in areas where overgrazing can occur at a lower stocking density, risk analysis is used in determining the selection of farms for physical inspections will be weighted towards those farms with the highest stocking densities even if below 1.4 LU/ha (1.8 in Northern Ireland).

## **7 Results and open questions**

### **7.1 GFP based on national or regional agri-environmental legislation**

In the past, codes of GFP have been defined and implemented primarily on Member State or regional level through agri-environmental legislation, and implementation has been independent from farm support. Although information on implementation and enforcement in this field is scarce, it can be assumed that the current implementation, monitoring and enforcement of GFP, defined in the Member States and independent from farm support, is facing certain shortcomings:

- Codes of GFP as defined in agri-environmental legislation are often vague, abundant and compiled in different laws. Thus, improvement of knowledge on the codes of GFP and on the ecological context is a crucial element for implementation and acceptance.
- Controls of GFP in many cases are only carried out on suspicion or complaint, and often control frequency is comparatively low to pose a threat of being caught when breaching a law.
- Farmers are not acquainted with the administrative fines they will face for an offence, because catalogues of administrative fines often do not exist or are not published. Therefore, farmers are not deterred by the amount of the fine since they do not know which fines are imposed.
- Breaches of environmental law in agriculture are often responded with admonishments or marginal administrative fines, and farmers are not deterred by the penalty as no significant penalty is imposed.
- Allocation of competence for inspections may cause conflicts of interests. Agricultural agencies normally see their duty in assisting the farmer (they are often also providing extension services) and can be reluctant to discipline farmers who are in conflict with agri-environmental legislation.
- GFP in some cases has been modified frequently (i.e. distance rules for plant protection have been changed 4 times in one year in Germany), so that farmers face difficulties to comply with current standards.

Although the extent and importance of these shortcomings is difficult to quantify, the improvement of implementation and enforcement of codes of GFP is an important issue for agri-environmental policy.

## 7.2 GFP in the context of the Agenda 2000

On the EU level, GFP definitions and implementation are relevant both for EU environmental policy and for competitiveness in the agricultural sector. Since Agenda 2000, and with even more emphasis since the Luxembourg decisions on a new CAP reform, the EU has tried to enforce implementation of environmental standards through cross-compliance in the 1<sup>st</sup> pillar as well as GFP and minimum standards as a precondition for support in the 2<sup>nd</sup> pillar. Nevertheless, to date GFP definitions vary widely between the EU Member States and regions. Reasons for these differences are:

- EU environmental legislation provides only a framework for GFP definitions, is not covering all areas of environmental policy and often does not refer directly to the farm level. Since there are no detailed requirements for the establishment of GFP standards, no common baseline exists across the EU beyond the legal framework of EU legislation.
- Natural, structural and socio-economic conditions of farming as well as the main environmental problems differ between Member States leading to different national preferences and strategies.
- Definitions are mainly made by Member States
  - using the degrees of freedom given by EU legislation,
  - based on historically grown environmental law and
  - having different preferences and strategies of combining command and control measures with advise and financial instruments (especially incentive driven agri-environmental measures) („policy mix“),
  - influenced by different national and regional political and administrative competencies and frequently by several ministries or departments involved in GFP definition and implementation.

Because of the risk of disallowances when GFP control is part of EU payments, Member States can opt for reducing the number of GFP standards attached to farm support in order to facilitate GFP implementation reported to the EU. This applies especially to the RDR measures and the freedom for the Member States to design their individual set of verifiable standards. Therefore, a comparison based exclusively on GFP definitions in the framework of RDR measures does not give a comprehensive view on mandatory regulations in the EU Member States and provides no solid basis for judgements.

GFP defined by the Member States and regions for the implementation of the Rural Development Regulation (EC) 1257/1999 varies between comprehensive catalogues of criteria and few, but operational verifiable standards. As some catalogues contain recommendations without clarifying whether these codes are subject to control and punishments, and only a little information on control, compliance and punishments is

available, so comparisons remain difficult. Most catalogues contain standards for the use of fertilisers and pesticides, while codes for protection of landscape and biodiversity are rarely included in GFP definitions.

The definition of „verifiable standards“ including appropriate indicators for control and enforcement is a crucial point. Breach reports have to be legally defensible, so that the enforcement of codes of GFP frequently is concentrated on a few, well-defined criteria. Indirect indicators are used which are easier to control but not very close to the environmental problem initially addressed. An example is the control of the inspection certificate of field sprayers, which represents a technical standard for equipment, but not for management. Wrong use of a technically proper equipment still can cause severe environmental damages. Verifiable standards are included in check lists for the regular control of 5 % of AEP and LFA beneficiaries according to the Rural Development Regulation. Although regular control of GFP is obligatory, information on results is scarce. The importance of AEP and LFA allowances in terms of participating farms and agricultural area covered differs a lot throughout the EU and even between regions within the Member States. Thus, a highly varying impact of GFP enforcement according to RDR on farmers behaviour and the environment can be expected.

GFP controls in the framework of AEP and LFA are normally concentrated on farmers receiving high amounts of payments, new beneficiaries and beneficiaries with history of non-compliance. Beneficiaries to be controlled are mostly extensive farms, many of them situated in less favoured areas. Due to the mainly payment-oriented selection for control, GFP controls of the beneficiaries of RDR measures tend to show low rates of breaching against environmental standards (see Prinz, contributed paper in Annex II G). Due to this, RDR controls presumably have a low impact on environmental behaviour. In comparison, controls performed by a specialised environmental administration are following an environment-oriented risk assessment for the selection of farms to be controlled, assessing the probability of breaching and the potential of environmental damages. Often, on the spot inspections through a specialised environmental administration are performed subsequent to complaints or due to suspicion, and are focussing on specific standards instead of broad catalogues. Thus, specific controls detect more infringements, lead to more cases of punishment and have stronger effects on enforcement. On the other hand, the mandatory, regular on the spot control of GFP focussed on mainly extensive farms participating in AEP and LFA schemes is absorbing scarce capacities and from the viewpoint of environmental policy these capacities are used in a less efficient way.

The co-operation between agricultural and specialised environmental administration in the performance of controls is necessary. For the risk assessment, information on the history of non-compliance is needed, and specialised on the spot checks require trained personnel. Also, existing competencies of the institutions involved have to be regarded. On the other hand, combined on the spot checks can reduce the frequency of inspections at the farm level, if more criteria are included, but demand well- trained personnel.

Measures according to the Horizontal Regulation (EC) 1259/1999, documented in „Annual Reports“ to the EU Commission, differ greatly between Member States. While in some countries the optional cross-compliance is used to solve specific environmental problems, e.g. restrictions on irrigation in France, control of overgrazing in U.K., or limited pesticide use in maize in The Netherlands, other Member States like Germany do not apply cross-compliance and report on results of controls on selected general mandatory standards.

Due to the fact that most „Annual Reports“ are not published, implementation of environmental standards according to the Horizontal Regulation remains widely non-transparent. Currently, standard definitions according to the Horizontal Regulation have not been harmonised with codes of GFP according to the RDR. The same applies to regular controls in farms not participating in AEP and LFA schemes, which are controlled often with rates far below 5% of the total. Differences in GFP standards and in the selection of farms to be controlled can result in a disadvantage for farms participating in AEP and LFA schemes.

Another crucial point is the sanctions for breaching. The way to calculate payment reductions differs greatly between Member States and even between regions within the Member States, and farmers affected by cross-compliance or RDR sanctions feel that they are punished twice: by the normal administrative fine and in addition by a reduction or even by total cancellation of farm payments.

As natural, socio-economic and political conditions differ between Member States, a simple harmonisation of GFP does not seem to be reasonable. On the other hand, considering impacts on competitiveness and regarding the need to implement EU environmental law, clearer definitions and requirements on how Member States should define and implement GFP standards are an issue suitable for further discussion. Regarding the observed lack of transparency, reporting on GFP implementation seems to be another key issue. The following points should be considered:

- for the definition of environmental standards and GFP:
  - areas covered regarding the main environmental problems,
  - farms / regions affected by GFP, and
  - the legal basis (EU legislation, other legislation or requirements beyond?)
- requirements for implementation, control and reporting (harmonised format)
- concentration on verifiable standards

Environmental standards will become an even more important element of agricultural policy in future. Environmental requirements are part of cross-compliance in the 1<sup>st</sup> pillar to be implemented according to the CAP reform recently adopted in Luxembourg. In the work package 2 of the Concerted Action, much information on environmental standards

and their implementation, an often quite non-transparent topic, was exchanged. Nevertheless, several questions remained open for further analysis and discussion:

- Optimal design and implementation of environmental standards and GFP (especially verifiable standards and appropriate indicators, risk assessment for the selection of farms to be controlled, control and punishment, integration of co-operative elements like self-reporting on compliance),
- degree of harmonisation throughout the EU (common minimum criteria for environmental standards and GFP definitions, implementation and reporting),
- harmonisation of environmental standards in the 1<sup>st</sup> pillar of CAP and of codes of GFP and minimum standards in the 2<sup>nd</sup> pillar as well as harmonisation of their enforcement (control rates, sanctions),
- coherence of procedures in payment-oriented schemes of the CAP and in the specialised environmental administration, making best use of scarce administrative capacities.

### **7.3 Considerations about cross-compliance according to the Luxembourg decision on a CAP reform**

In the context of the Council compromise of June 2003 in Luxembourg including an obligatory cross-compliance approach, the question has to be raised whether cross-compliance is a tool to improve implementation and enforcement of agri-environmental legislation. Cross-compliance will increase the risk of punishment for farmers through farm payment reductions and minimum requirements of the EU for on-the-spot checks, which exceed in many cases the control rates observed in the current administrative practice. Regarding requirements of Annex III of the new Horizontal Regulation, based on EU legislation, the commission gets a more direct control on implementation and enforcement of EU legislation in the Member States. As cross-compliance forms a direct connection between farm payments and implementation of EU legislation, insufficient enforcement can result in disallowance of EU funding. This constitutes a much more immediate and direct sanction of the EU against Member States, compared to long-lasting infringement procedures before the European Court of Justice.

While it is certainly difficult to explain to the public why farmers are receiving EU-subsidies even if they were not respecting European or national agri-environmental legislation, it might be as hard to communicate why existing legislation is not implemented the usual way, using controls and fines independent from support measures.



The use of farm payment reductions to improve compliance with environmental legislation can be seen from two different points of view:

- Cross-compliance standards are eligibility criteria for farm support, so that even total exclusion from payments is reasonable when severe breaching is detected.
- Reductions of farm payments through cross-compliance can be seen as surrogate fines, with the difference that the amount differs not only according to the degree and impact of breaching, but depends on the amount of payments per farm.

For cross-compliance, understood as an eligibility criteria for direct payments of the 1<sup>st</sup> pillar, proportionality of punishments regarding the environmental damage of breaching and the economic impact of the sanction for the affected farm is not as much considered as in the area of “traditional” administrative fines. While administrative fines have to be reasonable and proportional to the damage or economic loss to the public involved in an infringement, and also proportional compared to fines in other sectors, this principles are not binding for cross-compliance.

Seen from the second point of view, reasonability of the amount of farm payment reductions plus administrative fines (“double punishment”) is an important issue as many farms in the EU are highly dependent on direct payments. The high increase of (surrogate) fines due to cross-compliance is posing an existential threat to those farms. As the amount of direct payments differs, the logic that severe environmental damage should result in severe punishment is rolled up since only farms receiving high payments will face severe punishments while others face little more than the (generally not painful) national administrative fine. Thus, the combination of cross-compliance and administrative fines is scarcely targeted to govern environmental behaviour of farmers, but constitutes an uneven, but in many cases severe increase of fines throughout the whole EU. Together with the requirements for minimum control rates, this will result in an enforcement of the implementation of environmental standards and a certain harmonisation in the EU.

Cross-compliance does not provide for a long-term concept as the EU direct payments are subject to changes and will most likely be reduced in the coming decades. Another shortcoming is that through cross-compliance on direct payments of the 1<sup>st</sup> pillar could be understood as a compensation for compliance with legislation, this is inconsistent with legal approaches in other sectors. Nevertheless, cross-compliance could be used in future to justify scarcely targeted direct payments of the 1<sup>st</sup> pillar.

An important element for a better implementation of GFP is the farm advisory service, a new RDR measure which is also part of the CAP-Reform package. The setting up of a farm advisory service is compulsory for Member States from 2007, while the participation is voluntary for the farmers. A Commission report due by 2010 may propose a compulsory participation for farmers. This service may help farmers to get more

information about the requirements of cross-compliance and GFP and penalties involved. It can increase acceptance explaining the environmental consequences of farming, recommend and assist farm adaptations for better compliance and help to provide the documentation necessary for the control of standards. This measure should be further investigated within the Concerted Action.

As another tool, leading to higher transparency and a better harmonisation throughout the EU, are requirements to publish regular reports on the control of environmental standards and GFP, indicators used and sanctions imposed should be defined, as they would encourage at the same time Member States to improve enforcement of environmental standards. Furthermore, more published data and information on GFP definitions, implementation and enforcement would facilitate the exchange of national experiences and implementation strategies which would help to improve the implementation of GFP throughout the EU.

## 8 References

- Baedecker, H. J. (1994): Der Umweltschutz zwischen Gesetzgebung und Vollzug. In: Barz et al. (ed.): Vollzugsfragen im Umweltschutz. Symposium am 14. und 15. Juni 1993 in Münster.
- Baldock, D.; Mitchell, K. (1995): Cross-Compliance within the Common Agricultural Policy: A review of options for landscape and nature conservation. A discussion document for the Netherlands' Ministry of Agriculture, Nature Management and Fisheries and the UK Department of the Environment. May 1995, IEEP London.
- Bültmann, A.; Wätzold, F. (2002): Der Vollzug von Umweltrecht in Deutschland. Ökonomische Analyse und Fallstudien. Metropolis-Verlag, Marburg.
- Commission of the European Communities (2003a): Proposal for a council regulation establishing common rules for direct support schemes under the common agricultural policy and establishing support schemes for producers of certain crops. COM(2003) 23 final.
- Commission of the European Communities (2003b): EU fundamentally reforms its farm policy to accomplish sustainable farming in Europe. Press release IP/03/898, Luxembourg, 26/06/2003.
- Council of the European Union (2003): CAP Reform - Presidency Compromise (in agreement with the Commission). 10961/03. Brussels, 30 June 2003.
- De Clercq, P.; Sinabell, F.; Hofman, G.; Jarvis, S. C.; Neetson, J. J.; Gertsis, A. C. (2001): Discussion and conclusions. In: DeClercq et al. (Ed.): Nutrient Management Legislation in European Countries. Wageningen Pers, The Netherlands. 307-327.
- Rapp, N. (1998): Optimale Gestaltung von Naturschutzverträgen. Shaker Verlag, Aachen.
- SRU (Rat von Sachverständigen für Umweltfragen) (1998): Umweltgutachten 1998: 'Umweltschutz: Erreichtes sichern, neue Wege gehen'. Bonn: Heger. Drucksache/Deutscher Bundestag 13/10195.

## Annex I

### Fact sheets: GFP in EU Member States and Accession Countries

The fact sheets aim at providing a concise overview on definitions and standards of Good Farming Practice, monitoring- and control mechanisms implemented and sanctions imposed for the following countries:

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The fact sheets are based on information on the implementation of GFP according to Reg. (EC) 1257/1999 and on mandatory environmental requirements as well as cross-compliance according to article 3 of Reg. (EC) 1259/1999 from different sources, mainly:

- the presentations of Seminar 1 “Good Farming Practice – definitions, implementation, experiences”<sup>2</sup> - 3 June 2003, Braunschweig, Germany (available on the Institutes Homepage: <http://www.bal.fal.de/en/>),
- the Workshop "Good Farming Practice in CEECs" in Budapest on the 7-8 April 2003,
- Rural Development Plans according to Reg. (EC) 1257/1999,
- „Annual Reports“ according to Reg. (EC) 963/2001, on the implementation of Reg. (EC) 1259/1999,
- Country Reports provided by some members and partners or compiled by the authors of this report (see Annex II),

- publications on the implementation of EU law (bibliographies given in the Country Reports) and
- the IEEP Publications "Good agricultural practice in Germany, Sweden and the UK. A report for AScA" and "Study of the implementation of selected environmental legislation in the agricultural sector in five EU member states. A final report to DEFRA".

The fact sheets concentrate on the descriptive presentation of available facts (blanks are left where information is missing) and do not provide for an analysis of the implementation and control of GFP. Gaps arise because the respective information could not be provided by project partners or members, because it is not available to the public and/or to research or because EU regulations are not fully implemented yet (Accession Countries). For many countries additional background information is available in the country reports.

For some Accession Countries (Lithuania, Latvia, Poland, Bulgaria) country reports are available but no fact sheets have been included. This is due to the fact that only very limited information on the specific issues presented in the fact sheets was available for those countries.

## Fact sheet Austria

### Reg. (EC) 1257/1999

#### Definition and Standards

The required minimum standards regarding environment, hygiene and animal welfare are specified in the Austrian Programme for Rural Development and consist of existing legal obligations, laid down in national, regional and EU law. Codes of Good Farming Practice as a condition for participation in agri-environment measures and for support in Less Favoured Areas and Areas of Environmental Constraints is defined through legal minimum requirements, covering the areas of fertiliser and pesticide use, soil protection and animal husbandry.

Verifiable standards:

- Until 12.2002 < 3.5 LU/ha arable land; from 2003 < 2.7 LU/ha arable land. Keeping of more animals has to be approved according to water law.
- Fertilising on slopes: Liquid manure on bare soil only when there is no danger of run-off into watercourses and with immediate incorporation. On slopes > 20 % fertilising only during vegetation period or before cultivation with crops.
- Keeping of buffer zones to watercourses and avoidance of fertiliser run-off into open water.
- Fertiliser must not be applied on wet, snow covered or frozen ground.
- Only use of approved plant protection products.
- Use of plant protection products in accordance with label instructions.
- Authorisation for purchase of "poisonous" or "very poisonous" plant protection products.
- Plant protection products may only be used by trained persons or under their supervision.
- Rules for application of sewage sludge (report of suitability of soil and limits for amount and timing of application, certificate of sewage sludge with content of pollutants, delivery note, crop, time of application).
- Application of slurry: compliance with prohibitions and in accordance with need of N-fertilising.
- Quality of animal feed (approval, labelling, contents).
- Ban on specific substances in animal husbandry: Use or storage of hormones.

In the Austrian agri-environment programme (ÖPUL 2000), a second set of standards is defined in a “basic support measure” (*Grundförderung*) with principles slightly above GFP which sets out the following requirements:

- Max. 2 LU/ha
- No conversion of grassland (with exceptions)
- Compliance with rules of fertilising (table in Annex)
- Maintenance of landscape elements
- Measures against erosion (e.g. in viticulture)
- Cereal or maize < 85 % of arable land (if more than 2 ha arable land)

## **Monitoring and Control**

For agri-environmental measures, 100 % of applicants are subject to an administrative control of GFP. At least 5 % of participants are controlled via on-the-spot checks based on environmental random selection (at least 1000 farms) and environmental risk-analysis. Controlling institution for rural development measures is "Agrarmarkt Austria" (AMA). Every participant has to keep any records concerning the respective rural development measures for 7 years.

## **Sanctions**

A catalogue of sanctions for non-compliance with the verifiable standards has been specified in the Rural Development Programme reaching from issuing of a warning to a reduction of payments of 20 % up to 100 % for the respective measure or all agri-environment measures. A farmer can be excluded from the agri-environment programme for the next year, if he makes deliberately false statements. Repeated breaches within the period of participation in an agri-environmental measure can accumulate and result in more rigorous sanctions. Beneficiaries of LFA support or within areas with environmental restrictions can be subject to a reduction of payments of 20 or 100 % and farmers may be excluded from the programme for up to 5 years in severe cases.

For a breach of mandatory environmental requirements administrative fines are specified.

## **Reg. (EC) 1259/1999**

### **Definition and Standards**

Austria specified the following environmental requirements for set-aside arable land:

- Prohibition of application of fertilisers, waste waters, sewage sludge and composted waste on the set-aside area
- Prohibition of application of pesticides
- Specific cultivation measures to keep the area in a "satisfying agronomic condition"

### **Monitoring and Control**

N/A.

### **Sanctions**

The measure of setting aside land does not provide for a cut of payments, but non-compliance constitutes an administrative offence and can be fined with up to 36.340 •. Controlling institution is the "Agrarmarkt Austria" (AMA).

In 2002, 6 offences have been committed against the requirements for set-aside land. The farmers were reported to the responsible administrative body.



# Fact sheet Czech Republic

## GFP in the Czech Rural Development Plan

### Definition and Standards

Standards of GFP are defined in the Czech Rural Development Plan as conditions for support within agri-environment schemes and for LFA-support, areas with environmental restrictions, afforestation, soils improvement and creation of landscape features as a part of ECONETT. GFP consists of legislation related to protection of natural resources and additional requirements (verifiable standards) going beyond existing legislation.

The following principles of good farming practice shall be mandatory for the farmers taking part in measures “Less-favoured areas and areas with environmental restrictions” and “Agri-environmental measures”.

1. Growing of wide-row crops such as maize and root crops on parcels with distinctive slope (above 12°) shall be avoided. Agrotechnical operations and movement of machinery should be made for the most part along contour lines.
2. In the catchment area of water sources, along watercourses, and on shallow, stony soils that are highly permeable, grassland may be removed only within grassland renewal with subsequent immediate sowing without an addition of clover seeds. Grasslands shall not be removed from steeply sloping parcels (above 12°).
3. Grasslands (including grassed areas of arable land) shall be grazed or mowed at least twice a year (unless the description of management set out for individual schemes of the agri-environmental measure stipulates otherwise or in justified cases, where mowing can be made only once a year). The mowed green mass shall be removed from the parcel. The first mowing shall take place by 15 July at the latest, unless the description of management set out for individual schemes of the agri-environmental measure stipulates otherwise.
4. The rules for the storage and handling of chemicals shall be adhered to in conformity with appropriate legal regulations so as to avoid a contamination of the components of the environment.
5. On sloping arable parcels without cover (slope of more than 3°), farmyard manure, organic and organo-mineral fertilisers and mineral nitrogen fertilisers shall be immediately worked into the soil.
6. Clear records of the quantity, type and period of application of fertilisers shall be kept by individual parcels, land use types and years for at least seven years.

7. No effluents detrimental to water (slurry, silage liquors, etc.) may flow out from livestock buildings, storage facilities for farmyard manure, stored bulk feed or any other farm premises.
8. Livestock shall be kept in conditions supporting its life, health and welfare and shall be in particular provided with a sufficient access to safe quality feed and drinking water.

## **Monitoring and Control**

The control according to the RDR is not fully developed yet, although the respective rural development measures on the basis of compliance with GFP are already implemented. The regional offices of the Ministry of Agriculture (MoA), the Agricultural Agencies (AA), are in charge of the control of compliance with GFP. The AA are doing regular inspections on the fulfilment's of the obligations of the agri-environmental measures on all farms and random checks on the compliance with the mentioned codes of GFP.

The control of compliance with codes of GFP of fertiliser- and pesticide use are not carried out by the MoA. Information on non-compliance is transmitted to the MoA by the institutions in charge, the State Phytosanitary Service and the Central Institute of Supervising and Testing. In general, there is higher probability of further inspections after breaching has been detected.

## **Sanctions**

Sanctions for non compliance with the codes of GFP can take the form of warnings, fines and reductions of payments up to a reclaim of 100 %.

- Only few farmers were excluded from RD payments due to non-compliance with fertiliser law. Penalties are rare and usually the consequence of repeated breaches.
- No sanctions have been imposed concerning pesticide law (there have only been few cases of pesticide abuse) although there is the possibility of an exclusion from the RD support.
- A report by the controlling authority of non-compliance with rules of soil protection to the AA can lead to a 100 % reduction of any support. Additionally, fines according to national law of up to 34.000 • can be imposed.

## National Law

### Definition and Standards

Standards of GFP according to the national law are defined with respect to fertiliser use, pesticide use and soil conservation.

#### Nutrient use:

- the application of fertiliser is not allowed on water-saturated soil, soil covered by snow higher than 5 cm or frozen deeper than 8 cm
- nutrients should not enter directly into water in cases of an application of fertiliser near water courses
- the capacity of manure storage should be:
  - 6 months for solid manure (not applicable on piled heaps of manure),
  - 5 months for slurry and
  - 4 months for urine
- records of manure use have to be made for each field and should be kept for 7 years
- time ban for fertilisation depends on type of crop, type of region and type of fertilisers, but generally it is (earliest and latest term): 15. 9.-31.3.
- Maximum Nitrogen to be applied: 170 kg N/ha (chem. fertilisers and manure)
- Erosion protection:
  - On slopes above 7° row- crops are not allowed
  - On slopes above 12° without green cover, no nitrogen fertilisers are allowed.
  - On grasslands on slopes above 7° one dose of fertiliser should not exceed 80 kg/ha.
  - On arable land without green cover on slopes above 3° fertilisers and manure should be ploughed in within 24 hours limit.
  - Slopes above 17° are not allowed for grazing.
- On strips along the watercourses a 1 meter wide not ploughed strip should be kept, on slopes above 7° there should be a 25m wide strip on which liquid fertilisers will not be applied.

#### Pesticide use:

- Only registered pesticides may be used
- Use of toxic and highly toxic substances should be announced 48 hours in advance to District Hygiene Service and to local municipality
- Equipment used for pesticides application should be registered and labelled (there is a register renewed 1st of January each year) and its compliance with technological requirements checked.

### Soil conservation

- Change of grassland into arable land only after official approval

## **Monitoring and Control**

Control of national law includes storage and management of fertilisers and manure and control of compliance with the Action Programme according to the Nitrates Directive (application of fertiliser, checking of fertiliser plans, storage capacity for manure, pesticide use, indicators for soil protection, animal housing and biodiversity).

- Usually 30 % of all farms are controlled for compliance with the regulations concerning fertiliser use under the responsibility of the Central Institute of Supervising and Testing. Regional staff select random samples and additionally inspect farmers subject to suspicion.
- The State Phyto-Sanitary Service carries out annual controls of compliance with pesticide law. Control of spraying equipment is done every year on all farms. Additionally, there are random checks on pesticide storage and inspections for specific reasons (e.g. due to complaint or suspicion).
- Random samples are taken for compliance with mandatory requirements of soil conservation.

## **Sanctions**

N/A.

# Fact sheet Denmark

## Reg. (EC) 1257/1999

### Definition and Standards

Under the Less Favoured Area support scheme and the Agri-environmental measures 10 compulsory codes of GFP have been defined. 7 rules concern the protection of the environment (rules 1-7 in the following) and 3 relate to animal welfare<sup>3</sup>. Farmers implementing the measure “green accounts”, which is a part of the Agri-environmental measures, additionally have to comply with 6 rules concerning the environment (rules 8-13).

#### The 13 rules are:

1. The Consumption of nitrogen on the farm may not exceed the nitrogen quota attributed to the farm
2. A plant cover of 65 % must be established during autumn and winter (up to 20% can be fulfilled by leaving straw from cereals and rapeseed on the field).
3. Field plans have to be prepared
  - showing the plant cover (to be prepared before the 1st of September)
  - indicating which crops and catch- or cover crops are growing on each field in the planing period (to be prepared at least the following 31st of March)

4. Fertiliser plans and accounts have to be prepared

The fertiliser plan (due on 31st of March) shows the expected nitrogen demand (including both inorganic and organic nitrogen) for the whole farm as well as the nitrogen and phosphorous demand for the single fields.

The fertiliser account has to be based on the field and the fertiliser plan. It shows:

- the total nitrogen quota of the farm and the farms total consumption of nitrogen (including both organic and inorganic nitrogen)
- the animal units and the total farm area with its fertiliser demand

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<sup>3</sup> Environmental codes of GFP being the issue of interest, GFP concerning animal welfare will not be described.

- information on agreements made on the farm concerning leasing of land for the spreading of manure
5. Catch crops must be sown after harvest
 

At least 6% of the farm area should be established with catch crops which may not be ploughed before 20th of October and the area may not be sown again before spring next year.
  6. A record of pesticide use has to be made
 

The record has to be prepared continuously and updated latest 7 days after a pesticide has been used. The record has to be kept for 5 years. It must include an identification of the area where the pesticide has been used, the size of the area, the crops on the fields, the name of the pesticide, the dosing per hectare, the date of the treatment and the name of the owner or user of the area.
  7. The animal husbandry has to be in accordance with the "Rules of Harmony"
 

The "Harmony rules" (harmony between land and amount of manure on the farm) are:

    - The level of manure applied per hectare per year may not exceed the corresponding amount of 1.4 animal units.
    - For farms with cattle, goats, sheep, poultry etc., manure corresponding to 1.7 animal units may be applied.
    - For pure cattle farms, manure corresponding to 2.3 animal units may be applied.
    - If the farmer has less land available than required for the spreading of manure produced on the farm, a contract has to be provided securing that the surplus of manure can be sold or delivered to another farm, a biogas plant etc.
  - 8+9. A control of containers for the storage of liquid manure has to be carried out every 10 years. A supplementary control must be accomplished if the standard control has demonstrated a lack of tightness and strength of the container.
  10. Waste products have to be kept (stored) in accordance with rules
  11. Field and fertilisation plans have to include maps showing the areas foreseen for the spreading of manure and sewage sludge etc. and have to be sent to the municipality council.
  12. Application of waste products has to be in accordance with rules concerning the maximum amounts of nutrients to be applied.
  13. Cultivation, digging, planting, changing of terrain, placement of fences and the erection of buildings is not allowed in a distance of less than 2 metres along natural or regionally targeted watercourses and lakes.

## Monitoring and Control

For the 7 compulsory codes of GFP, verifiable standards have been defined. These verifiable standards are used for the national control of the legislation. The present statistics on control do not differentiate between the beneficiaries of the RDP (~12.000 farmers have an agreement) and other farmers, as the specific controls for the RDP have been carried out for the first time in 2002 and the results are not available yet. The percentages of controls and breaches thus refer to the total of Danish farms (60.000). The control includes administrative checks (i.e. field plans, fertilisation plans/accounts) and controls on the farm (i.e. catch crops, number of livestock). The on-the-spot checks are carried out on about 3 - 5 % (1600-1800) of all Danish farms.

The inspections are carried out by the Danish Plant Directorate (requirements 1-7), a body within the Ministry of Agriculture, Food and Fishery. The Ministry is the paying authority according to Regulation 1257/1999. Additional controls are conducted mainly by the municipalities (requirement 8-13). For the remaining 6 requirements, no verifiable standards have been defined in the RDP. Those codes of GFP are not subject to the standard 5 % on-the-spot-inspections and the control bodies (in most cases the municipalities) are not obliged to report breaches to the Ministry of Agriculture, Food and Fishery.

**Table 1: Results of the GFP controls 1999/2000**

Nr.	requirement	1999/2000	
		controls	breaches
2, 3, 5	the plant cover (65% requirement), catch crop (6% requirement) and field plan	701	59 (9%) incorrect, mostly too late, in 15 cases police reporting
4	fertilisation plan	181	in 38 cases (21%) farmers were told to comply with the regulation
1 + 4	the nitrogen quota and the consumption of nitrogen (the balance of the fertilisation account) fertilisation account (contents and submission)	1753	239 (14%) of which 33 (2%) resulted in reporting to the police, the rest was told to improve their accounts
6	pesticide record	1617	119 (7 %) were not made, 40 (2,5%) were told to improve their records, in 7 cases (0,4%) fines were imposed or the cases reported to the police
7	compliance with the animal husbandry “harmony rules” (control of the fertilisation account and the number of livestock units and the size of the agricultural area)	786	110 (14%) were told to correct their faults, 33 cases (4%) are under further investigation and are likely to result in a police reporting

## Sanctions

**Table 2: Sanctions imposed in cases of breach of GFP**

<b>Nr.</b>	<b>requirement</b>	<b>Penalty</b>
1	nitrogen quota and the consumption of nitrogen (the balance of the fertilisation account)	The fine will be calculated according to the amount of nitrogen exceeding the quota of the farm. Fines between 6000 dkk (808 •) and 50.000 dkk (6760 •) have been imposed.
3	field plan	2000 dkk (270 •)
4	fertilisation plan (contents and submission)	2000 dkk (270 •)
6	pesticide record	The first non compliance with the rules results in a warning. If a second irregularity is detected a fine of 2000 dkk (270 •) is imposed.
7	compliance with the animal husbandry “harmony rules”	The fine is 500 dkk (67 •) per exceeded livestock unit in relation the amount of land required according to the harmony rules.
8 + 9	inspection of manure containers	Information on the fines is not available.
10	storage of waste products	see 8 + 9
12	application of waste products	see 8 + 9
13	no cultivation near watercourses	2000 dkk (270 •)

## Reg. (EC) 1259/1999

### Definition and Standards

Denmark had implemented cross-compliance for all arable area payments and livestock premium in the beef sector. For direct payments, existing requirements of the national agri-environmental legislation have to be observed.

Conditions for arable area payments were:

- preparation of a field and fertilisation plan
- the establishment of 2 metre wide non-cultivated bufferzones along rivers and lakes

Conditions for beef premiums were:

- the preparation and submission of an account on the use of fertiliser and manure on the farm
- limiting the use of fertiliser and manure to the specific quota allocated to the farm

Cross-compliance has been abandoned for political reasons by April 2002.



## Monitoring and Control

The Danish Plant Directorate is in charge of the control of the below mentioned conditions, except the 2 metre buffer-zone for which the responsibility lies with the municipalities and the counties.

**Table 3: Results of the cross-compliance controls in 2001**

Measure	Number of beneficiaries	Condition	Number of Controls (2001)	Number of Breaches (2001)
arable area payments	50,000	2 metre bufferzones	N/A.*	333
		non-compliance with the rules of field and fertilisation plans	837	8
beef premium	30,000	missing submission of the fertilisation account**	~ 30.000	156 (final)
		5 % excess of the fertiliser balance	30.000/3800***	16

\* The number of breaches is based on reports from the 275 municipalities and 14 counties to the Ministry of Agriculture. However these reports do not include information on the number of controls.

\*\* For the animal premium the deadline for the submission of the fertilisation account for the year 2000 was the 31 of March 2001. If this deadline was not observed, the payment had been detained until the account would be submitted and controlled. If the account was not submitted before the first of June 2001 the whole animal premium of the farmer was cancelled. Before the last deadline all the farmers received two reminders. 1747 farmers got a reminder and 156 (0.5%) got their animal payment detained.

\*\*\* An administrative inspection of all fertiliser plans and their fertiliser balance was carried out of which 3800 were selected for a further inspection.

## Sanctions

**Table 4: Sanctions imposed in cases of breach of the cross-compliance codes of GFP**

<b>Measure</b>	<b>Condition</b>	<b>Sanction in case of detected breach</b>
arable area payments	2 metre bufferzones	reduction of the payment equalling the subsidy for one ha of cereals
	non-compliance with the rules of field and fertilisation plans	reduction of the subsidy up to 6 %, max. 30.000 DKK (4.050 •)
beef premiums	missing submission of the fertilisation account	annulment of the beef premium
	5 % excess of the fertiliser balance	reduction of the animal premium to the amount equalling the percent of the nutrient excess

In the year 2001 the detected breaches resulted in a reduction of the subsidy of 7-100%. Out of 50,000 beneficiaries of the arable area payments 341 (0.7 %) were detected breaching the cross-compliance rules resulting in a return of subsidies of 807.115 dkk (108.727 •). Of the 30.000 beneficiaries of the beef premium 156 (0.5%) had their payment held back amounting to 1.7 mills. dkk (229.000 •).

## Fact sheet Estonia

### Reg. (EC) 1268/1999 (SAPARD)

#### Definition and Standards

The SAPARD Programme for Estonia for the period 2000-2006 contains a draft for "Good Agricultural Practice Guidelines" with the categories planning in agriculture, manure handling, plant production, plant protection, wastewater management and biodiversity and is derived from the "Code of Good Agricultural Practice", which had been developed for compliance with the Nitrates Directive.

Besides environmental codes of GFP requirements for animal welfare are included (but will not be specified here):

#### **Water protection:**

- Farmer has to keep a field record book
- Maximum of 1.5 LU/ha arable land (1 LU/ha in NVZs)
- No spreading of fertiliser on snow and frozen ground
- No discharge of wastewater in groundwater and onto frozen ground
- Storage facilities for manure and liquid manure (with exceptions). Farms with more than 10 livestock units of animals must have a manure storage facility and a urine depot. Minimum capacity for the manure storage facility 8 months, for pig or poultry manure 10 months. The minimum capacity for the urine depot must correspond to the amount of urine produced in 10 months.
- Compliance with water protection requirements for storage facilities of manure and liquid manure

#### **Plant protection:**

- Farmer has to keep records of plant protection products used

#### **Waste handling:**

- Duty for prevention of waste production and reducing of quantity, etc.
- Delivery of waste to approved facility or recycling or disposal

#### **Biological Protection and Nature and Heritage Conservation:**

- It is prohibited to damage single natural objects.

- The establishment of new land improvement systems, altering the level and damaging the shores of water bodies, storage of waste, and the use of fertilisers and toxic chemicals is prohibited in a "special zone".
- It is prohibited to destroy or damage monuments.

## **Monitoring and Control**

Compliance with GFP is controlled by supervisory authorities (specified in legislation), compliance with the Water Act by the paying agencies.

## **Sanctions**

N/A.

## Fact sheet France

### Reg. (EC) 1257/1999

In France codes of Good Farming Practice are targeted to nutrient use while plant protection is covered solely by the pesticide authorisation scheme. The Nitrate Directive played a major role in the development of the GFP of fertilisation in France covering the following aspects:

- the delimitation of nitrate vulnerable zones - NVZ (46 % of the UAA)
- the development of a code of GFP for NVZ voluntary in its application.
- the development of Action Programmes in each *Département* containing NVZ, defining local specifications of the more general code of good farming practices.

The French regulation provides terms with regard to periods and conditions suitable for manure and slurry application (distance to water source, nature of field, type of fertilisers), and specific storage practices.

### Definition and Standards

N/A.

### Monitoring and Control

N/A.

### Sanctions

N/A.

### Reg. (EC) 1259/1999

### Definition and Standards

In France cross-compliance is implemented for all the farms receiving direct payments for irrigated arable crops (maize, oat, barley, millet, high protein-plants, sorghum) and rice. The provisions refer to national regulation on irrigation water according to the water law

("Loi sur l'eau") and the "Code de l'environnement". In the year 2000 only an authorisation for irrigation was required, in 2001 a second condition was introduced which obliges the farmer to use water meter counters at the withdrawal points.

## Monitoring and Control

The verifiable standards used for control are the acknowledgement (of receipt) of the irrigation authorisation and the equipment for the irrigation (water meter) for the surfaces declared for the direct payments. Two civil services are involved in control:

- the water police is in charge of the irrigation authorisation's acknowledgement;
- the regional ministry of agriculture is in charge of the direct payments management.

The implementation of the control system for the cross-compliance measure is based on the transfer of information between the administrative departments:

- first administrative check of the direct-payments declaration papers for both requirements;
- verification of the existence of the irrigation authorisation's acknowledgement (administrative control with the information of the water policy);
- on-the-spot-checks of the water meter equipment.

Depending on the regions, the water police or the services of the ministry of agriculture, or both of them are in charge of those controls. All payment contracts for irrigated crops are controlled for the irrigation authorisation's acknowledgement.

## Sanctions

The sanctions are calculated on the basis on the difference between irrigated surfaces which have been declared for receiving irrigated payments (S1) and the irrigated surfaces which are in order with the regulation (S2) :

- If the difference (S1 – S2) is lower than 20%, then the irrigated payments are calculated on the basis of the irrigated crops's yields for the surface S1 diminished of five parts of (S1- S2). So the surface for calculating the irrigated payments is equal to  $S3 = S1 - 5 * (S1 - S2)$  ; the rest of declared surfaced, equal to (S1 – S3) is paid on the basis of dry yields (basic arable crops direct payments).
- If the difference (S1-S2) is greater than 20%, then the amount of direct payment for S1 is calculated on the basis of the dry crops yields;

The sanctions can reach the total suppression of direct payments for irrigated crops but farmers do always receive the crops basic direct payment. Table 5 shows the results of the controls for the years 2000 to 2002. In those years an average of 0,3 % of all claimants

and 0,25 % of the surface receiving direct payments for irrigated crops were found not respecting the cross-compliance criteria and were sanctioned.

**Table 5: Controls and sanctions in 2000 to 2002**

	<b>direct payments for the irrigated crops</b>			<b>sanctions imposed</b>		
	claimants	ha	payments (• ]	claimants	ha	penalties (• )
2000	47.235	1.043.465	490.312.600	259	3.359	404.279
2001	45.588	1.078.529	540.146.900	201	2.756	337.442
2002	45.364	1.097.646	550.537.499	182	2.276	305.020

## Fact sheet Germany

Good Farming Practice in Germany is generally implemented according to the special agricultural laws on nutrient use and plant protection (Federal Fertiliser Act, Ordinance on Fertilisation, Plant Protection Act and several Plant Protection Ordinances).

GFP of fertilisation:

- Equipment for spreading fertiliser and livestock manure has to comply to the acknowledged rules of technology.
- Immediate incorporation of livestock manure required.
- Calculation of fertiliser plans for N for each crop and of yearly farmgate-balance required.
- Calculation of fertiliser plans for P and K and of farmgate-balances every 3 years required.
- Records, including soil tests on N, P, K have to be retained for 9 years.
- Application of manure forbidden between the 15. 11.-15.1.
- Soil tests on mineral nitrogen have to be carried out on a yearly basis, the respective information can be substituted by recommendations of local advisory services.
- Soil test for Potassium and Phosphate have to be carried out once in every crop rotation but at minimum every 6 years, on extensive permanent grassland every 9 years.
- The quantity of nitrogen phosphate and potassium in livestock manure has to be determined either through testing or calculated using recognised recommendations of an official agency
- Maximum amount of manure applied: 170 kg N/ha on arable crops, 210 kg N/ha on grassland
- A maximum of 40 kg NH<sub>4</sub>-N/ha or 80 kg N/ha in liquid fertiliser or manure is to be applied in autumn after harvest.

According to the Federal Plant Protection Act, plant protection products (ppp) have to be used in conformity with the principles of GFP. These principles are abundant but for most parts not legally binding. General codes of GFP are for instance:

- All plant protection measures are to be carried out site-, plant- and situation-specific and the use of ppps limited to the necessary extent
- Established non-chemical measures are to be used
- Preventative measures should be applied

The codes of GFP also include the consideration of the principles of integrated plant protection (i.e. assessment and evaluation of infestation and damage, choice of suitable



control measures, application of non-chemical measures, efficiency reviews and documentation of measures) as well as the protection of surface- and groundwater (i.e. spraying of ppps in direct vicinity to surface waters is prohibited as well as washing of sprayers and tanks on the farm yards).

Most of the more specific aspects are handled in the accreditation process in which application clauses and -conditions are defined. Detected non-compliance with application clauses results in administrative fines being imposed. Depending on the ppp used specific distances have to be kept from surface waters and terrestrial biotopes and/or drift minimising technique used<sup>4</sup>. The aforementioned codes of GFP have to be observed. in addition to these application clauses.

## **Reg. (EC) 1257/1999**

### **Definition and Standards**

Each federal state presents its own definition of GFP in the Rural Development Plans according to Reg. (EC) 1257/1999. Some federal states stick to the controlled GFP aspects of fertilisation and plant protection while others start on a broader base and include recommendations. In contrast to this variety in the definitions of GFP, the control of its implementation is generally carried out using a set of six indicators on which the federal states have agreed.

### **Monitoring and Control**

Procedure:

- Inspection of at least 5% of beneficiaries of less favoured area support and agri-environmental measures
- Standardised implementation in all Federal States using 6 indicators
- Carried out by the Integrated Administration and Control System - IACS
- No national report available

The indicators for control are:

1. Control of immediate incorporation of livestock manure and liquid sewage sludge on uncultivated arable land
2. Control of the Nitrogen soil tests or the local recommendations

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<sup>4</sup> Distances vary not only according to the ppp and the equipment used but also with respect to the regional endowment with landscape elements (hedges etc.) the character (path, street, biotope) and size of the non-target area.

3. Control of the Potassium and Phosphorus soil test
4. Control of the documentation of examinations and estimates used, fertiliser plans, nutrient balances
5. Control of plant protection expert knowledge certificate
6. Control of the inspection certificate of field sprayers

## Sanctions

No information about the number of reductions of payments is available on the national level. Reductions of payments of beneficiaries of less favoured area support and agri-environmental measures follow different systems in the federal states:

**Table 6: Sanctions in LFA-support and AEM**

<b>Federal State</b>	<b>payment abatement 1257/99</b>
Baden-Württemberg	abatement at the amount of the administrative offence fine
Bavaria	percentage abatement according to the severity of the breaching (5 %, 10 %, 20 %)
Berlin	percentage abatement according to the severity of the breaching (5 %, 10 %, 20 %) (stage of affairs in 2002, Information from BMVEL 6/03)
Brandenburg	percentage abatement according to the severity of the breaching (5 %, 10 %, 20 %)
Hamburg	reclaim of the entire payment if an administrative fine is imposed (stage of affairs in 2002, Information from BMVEL 6/03)
Hesse	abatement amounting to the administrative offence fine but not less than 10% and not exceeding 50 % of the payment (Barunke 2002, p. 94)
Mecklenburg-Western Pomerania	percentage abatement of 10 % if an administrative fine is imposed
Lower Saxony	since 2003: percentage abatement according to the severity of the breaching (5 %, 10 %, 20 %) before 2003: abatement amounting to twice the administrative offence fine
North Rhine-Westphalia	abatement amounting to the administrative offence fine
Rhineland-Palatinate	abatement only in case of repeated breach, then total exclusion from the measure (Barunke 2002, p. 94)
Saarland	abatement amounting to the administrative offence fine plus the fine of admonishment (stage of affairs in 2002, Information from BMVEL 6/03)
Saxony	percentage abatement according to the severity of the breaching (5 %, 10 %, 20 %)
Saxony-Anhalt	percentage abatement of 10 % if an administrative fine is imposed (even if the fine has not yet become final)
Schleswig-Holstein	abatement amounting to the administrative offence fine (stage of affairs in 2002, Information from BMVEL 6/03)
Thuringia	reclaim of 5000 • but not exceeding 50 % of the payment

## Reg. (EC) 1259/99

### Definition and Standards

Germany chose option 2 of article 3 (general environment requirements) and does not implement cross-compliance<sup>5</sup>.

The definition of GFP in the „Annual Reports“ according to Reg. (EC) 963/2001 for the implementation of Reg. (EC) 1259/1999 is based on the legislation on the use of fertilisers and plant protection products. Eight standard indicators at farm level are used for control of compliance.

### Monitoring and Control

Procedure:

- Concentration on inspections for specific reasons (e.g. due to suspicion or complaint) and
- Risk-orientated selection of farms (not in all Federal States) with scheduled inspections (dependant on weather and growing season) and/or spontaneous random sample inspections
- Carried out by different specialised departments of the Federal States

**Table 7: Results of controls of GFP in the average of 2000-2002**

<b>Fertiliser Law 2000-2002</b>	<b>Controlls</b>	<b>Breaches</b>	<b>%</b>
Control of prevention of direct entry of fertiliser into watercourses	1.414	37	3
Control of the compliance with the periods when the application of manure is prohibited	981	58	6
Control of the maximum amount of livestock manure applied to arable land and grassland	3.446	46	1
Control of the soil tests or the local recommendations	10.258	692	7
Control of the documentation of examinations and estimates used, fertiliser plans, nutrient balances	6.904	424	6
<b>Total/Average</b>	<b>23.003</b>	<b>1.256</b>	<b>5</b>

<sup>5</sup> Unlike the perception in other EU Member states the requirements which apply to set aside (plant cover required, no fertilisation allowed, constraints for the application of ppps etc.) are not considered as cross compliance.

<b>Plant Protection Law</b>	<b>Controlls</b>	<b>Breaches</b>	<b>%</b>
Control of the compliance with the restrictions and interdictions for the application of ppp active ingredients and for specific sites	4.142	129	3
Control of plant protection expert knowledge certificate	3.941	95	2
Control of the inspection certificate of field sprayers	5.963	256	4
<b>Total/Average</b>	<b>14.046</b>	<b>480</b>	<b>3</b>

#### Conclusions:

- Those codes of GFP which are controlled are generally well implemented.
- Controls have been increased by 38 % from 2001 to 2002.
- In the German average, less than 1 % of all farms has been subject to controls of GFP according to Reg. (EC) 1259/1999.

## Sanctions

No information about the number of administrative fines imposed is available on the national level. In most federal states no catalogue of fines exists. The fine is fixed by the administration in accordance with the severity of the environmental damage expected or established. It varies to a great extent between the *Länder* and between different cases.

**Table 8: range of fines imposed in 2002**

<b>Fertiliser Law</b>	<b>imposed fines (2002)</b>
Direct entry of fertiliser into watercourses	75 - 500 •
Non compliance with the periods when the application of manure is prohibited	35 - 500 •
Exceedance of the maximum amount of livestock manure applied to arable land and grassland	35 - 4500 •
Soil tests or test on the nutrient content of the manure not carried out.	15 - 550 •
Documentation of examinations and estimates used, fertiliser plans, nutrient balances not available	25 - 1250 •
<b>Plant Protection Law</b>	<b>imposed fines (2002)</b>
Non compliance with the restrictions and interdictions for the application of certain ppp active ingredients and for specific sites	75 - 6600 •
Control of plant protection expert knowledge certificate	0
Control of the inspection certificate of field sprayers	25 - 500 •

## Fact sheet Greece

### Reg. (EC) 1257/1999

#### Definition and Standards

In Greece the definitions of Good Farming Practice in the framework of the Reg. (EC) 1257/99 have different requirements for:

- a) agri-environmental measures (Chapter VI),
- b) investment aid, young farmers aid, adaptation and development of rural areas (chapters I, II, and IX) and
- c) LFA-support (Chapter V).

But while the differences between a) and b) are restricted to requirements with respect to livestock production (grazing loads), LFA support has its own codes of GFP.

**Table 9: GFP definitions**

LFA SUPPORT	AGRI-ENVIRONMENTAL MEASURES AND CHAPTER I, II, IX
<b>1.1. Crop rotation requirements</b>	
<ul style="list-style-type: none"> <li>– Cereals: at least once a soil improving crop (a leguminous crop) in a 4 years period.</li> <li>– Leguminous : at least once a cereal crop in a 4 years period.</li> </ul>	<ul style="list-style-type: none"> <li>– Sugar beet: 40 % of the farm area in rotation, every 4 years in the same parcel.</li> <li>– Tobacco, tomato for canning, cereals, maize, helianthus, potatoes, peanuts, rice: 20 %</li> <li>– Cotton : rotation of 15 % for farms up to 6 ha, and 20 % for larger ones.</li> </ul>
<b>1.2. Fertiliser management</b>	
<ul style="list-style-type: none"> <li>– Cereals: No N application in basic fertilisation. Max 140 kg N /ha, in split superficial applications end of the winter beginning of spring.</li> <li>– On acid soils (pH&lt;6.5) no ammonium fertilisation allowed except ammonium calcium nitrate.</li> </ul>	<ul style="list-style-type: none"> <li>– Soil and foliar nutrient analysis required<sup>6</sup></li> <li>– Split application required (perennial crops μ 2, annual spring crops μ 3).</li> <li>– For winter cereals no basic N fertilisation allowed.</li> <li>– No application of fertilisers allowed 2 m from surface waters (6 m in case of steep [&gt; 8 %] slopes).</li> </ul>

<sup>6</sup> The analysis has to be carried out in laboratories accredited according to EN 45002. Until enough laboratories are accredited and up to 31/12/2001, prefectural fertilisation protocols are applied. The proposed amounts are considered as the maximum allowed.

LFA SUPPORT	AGRI-ENVIRONMENTAL MEASURES AND CHAPTER I, II, IX
<ul style="list-style-type: none"> <li>- No application of fertilisers allowed 2 m from surface waters and NATURA 2000 sites.</li> </ul>	<ul style="list-style-type: none"> <li>- On acid soils (pH&lt;6.5) no ammonium fertilisation allowed except ammonium calcium nitrate. Farmers should raise the initial soil pH by at least 0.5.</li> <li>- Provisions for Nitrate Sensitive Areas and NATURA 2000 sites to be followed.</li> <li>- Fertilising equipment must be calibrated and checked regularly and at least yearly</li> </ul>
<p>1.3. Soil protection measures (<i>Need for Prefectural Administration decision</i><sup>7</sup>)</p>	
<p>In steep slopes (more than 6%):</p> <ul style="list-style-type: none"> <li>= Contour cultivation required. If not possible, non cultivated strips (2-4 m) should be left.</li> <li>= No deep ploughing allowed without permission of the Prefectural authorities.</li> <li>= No straw burning allowed.</li> </ul>	<p>No heavy machinery allowed without permission of the Prefectural authorities.</p> <p>In steep slopes (more than 6%):</p> <ul style="list-style-type: none"> <li>= Contour cultivation required. If not possible, non cultivated strips (2-4 m) should be left.</li> <li>= No deep ploughing allowed without permission of the Prefectural authorities.</li> <li>= No straw burning allowed.</li> </ul>
<p>1.4. Fire protection measures</p>	
<ul style="list-style-type: none"> <li>- Straw burning not allowed in steep slopes (over 6%) and 500 m from forests and Natura 2000 sites</li> </ul>	<ul style="list-style-type: none"> <li>- Straw burning not allowed in steep slopes (over 6%) and 500 m from forests.</li> </ul>
<p>1.5. Crop protection products</p>	
<ul style="list-style-type: none"> <li>- Spraying not allowed 2 m from surface waters and Natura 2000 sites.</li> </ul>	<ul style="list-style-type: none"> <li>- Spraying not allowed 2 m from surface waters, 1m from wildlife, tree or bush fences and forests.</li> <li>- Spraying equipment calibrated and checked regularly and at least yearly.</li> </ul>
<p>1.6. Water use</p>	
<ul style="list-style-type: none"> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Drip irrigation required in light soils and steep (more than 6%) slopes, if the crop is appropriate<sup>8</sup>.</li> <li>- In zones where the underground aquifers are under threat of exhaustion, annual water use must be reduced by 5-10% depending on the degree of the problem.</li> </ul>

<sup>7</sup> NUTS III level is called Prefecture (Nomos) in Greece. The prefect is elected in direct voting every 4 years.

<sup>8</sup> Other irrigation systems are allowed up to the date of their full depreciation. Adequate irrigation system is required in the investment plan. The total quantity of water used and the schedule according to prefectural protocols.

LFA SUPPORT	AGRI-ENVIRONMENTAL MEASURES AND CHAPTER I, II, IX
1.7. Biodiversity – Landscape	
<ul style="list-style-type: none"> <li>– Spraying not allowed 2 m from surface waters and Natura 2000 sites.</li> <li>– No application of fertilisers allowed 2m from surface waters and NATURA 2000 sites.</li> <li>– Straw burning is not allowed 500 m from forests and Natura 2000 sites.</li> </ul>	<ul style="list-style-type: none"> <li>– Non cultivated zone of 1 m between parcels. No herbicides allowed 1 m from hedges. Prohibition of cultivation of areas revealed after the withdrawal of surface aquifers (lakes, rivers etc.). When this is allowed after special permission the use of fertilisers or pesticides is not allowed.</li> <li>– Cereals harvest stopped after sunset. No night harvesting using artificial light.</li> <li>– Special provisions for NATURA 2000 sites and environmentally Sensitive Areas should be followed.</li> <li>– In NATURA 2000 areas, when the non cultivated area between farms is up to 5 m (10 m) hedges should be at least 1.5 m, (2 m) wide.</li> </ul>
2. Livestock production	
<ul style="list-style-type: none"> <li>– Limitations of grazing periods, grass cutting (Demanding Prefectural Administration decision)</li> <li>– No fires allowed for the regeneration of grass</li> <li>– No grazing in burned or areas under reafforestation (AEI +LFA) or long term set aside under agrienvironmental measures (only LFA)</li> <li>– Control of use of substances under Dir. 96/22</li> <li>– National Legislation for waste management. (National Legislation)</li> <li>– Grazing is not allowed near the steep (over 40% inclination) lake shores and river banks and for 30m from them.</li> <li>– Special provisions for Nitrate Sensitive Areas (Dir 91/676) should be followed. The same holds for NATURA 2000 sites. More concretely in wet pastures for 70% of the year the level of ground water should not be below 10-50 cm depending on the soil type. The rest 30% of the year wet pastures should be drenched.</li> </ul>	
<p>Allowed grazing loads (GL) to be set by the prefectural authorities. Until then <sup>9</sup>:</p> <p>Semi mountainous areas:</p> <ul style="list-style-type: none"> <li>– 1 LU/ha</li> </ul> <p>Insular pastures</p> <ul style="list-style-type: none"> <li>– 1 LU/ha (only on 120 days/year)</li> </ul> <p>Marginal or degraded pastures</p> <ul style="list-style-type: none"> <li>– GL is reduced by 30%</li> </ul>	<p>Allowed grazing loads to be set by the prefectural authorities. Until then:</p> <p>Semi mountainous- mountainous pastures:</p> <ul style="list-style-type: none"> <li>– 0,5 - 0.8 LU/ha</li> </ul> <p>Insular pastures</p> <ul style="list-style-type: none"> <li>– 0,2 - 0.5 LU/ha</li> </ul> <p>Marginal or degraded pastures</p> <ul style="list-style-type: none"> <li>– GL is reduced by 30%</li> </ul>

<sup>9</sup> For measures under chapter I, II and IX of Reg. (EC) 1257/99: GL for cattle and pigs are: 0,6 - 1.4 LU/ha, for sheep and goats: 0,7 - 1.4 LU/ha

## Monitoring and Control

Results of controls are not available in Greece.

Indicators for control are:

- the environmental farm management plan,
- the activity diary and
- invoices for input purchases.

The quality of the management plan and the implementation of the specified plan is evaluated when presented by the farmer. The control is carried out by the Directorate of Agriculture of the Prefecture on a 5 % basis (0.5-1 % for laboratory analysis like fertiliser control or pesticides).

## Sanctions

The following sanctions are to be imposed in cases of detected breach:

Agri-environmental measures: A fine equal to the amount gained by the infraction plus the amount of the payment (twice in case of repeated breach) is imposed. The third detected breach leads to an exclusion from the programme and a reclaim of the payments received in the respective year.

Investment aid, young farmers aid, adaptation and development of rural areas: Exclusion from the programme and reclaim of a share of the payment

LFA-support: Reclaim of payment for the year of the infraction, in case of repetition exclusion from the measure for 5 years.

## Reg. (EC) 1259/1999

Cross-compliance is in theory implemented in Greece, requiring all farmers receiving direct payments to observe the complete set of codes of GFP. Thus specific environmental requirements for cross-compliance have been defined but no penalizations



have been applied as provided in article 3. Difficulties encountered in the implementation and excessive strictness of the standards have been the reasons advocated by Greece<sup>10</sup>.

## **Definition and Standards**

The codes of GFP are almost identical to those relevant for agri-environmental measures of Reg. (EC) 1257/99. The only difference is that there are no crop rotation requirements for cotton and that the grazing requirements are those of chapter I, II, IX of Reg. (EC) 1257/99.

## **Monitoring and Control**

Control for compliance with the codes of GFP is carried out together with the IACS inspections. The rules applied for sampling etc. are the same as in the IACS<sup>11</sup>.

Up to now report on the results of the controls is available.

## **Sanctions**

No information on sanctions is available, neither on the procedure nor on effectively imposed fines and reclaims of payments in the case of detected breaches of GFP. The only sanctions mentioned are those in case of wrongly declared area or numbers of animals. Those sanctions depend on the difference between declared and actual situation and the possible repetition of the infraction.

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<sup>10</sup> Written communication from Maria Fuentes-Merino, DG Agriculture of the European Commission

<sup>11</sup> See Reg. 2419/2001, laying down detailed rules for applying the integrated administration and control system for certain Community aid schemes established by Council Regulation (EEC) 3508/92.

# Fact sheet Ireland

## Reg. (EC) 1257/1999

### Definition and Standards

Ireland has defined requirements for Good Farming Practice in its Rural Development Plan 2000-2006. Farmers receiving CAP support under the EAGGF in agri-environment schemes or LFA allowances have to comply with Good Farming Practice. The Department of Agriculture, Food and Rural Development (DAFRD) also prepared and distributed a booklet for information of farmers, in which GFP is described in more detail, including good nutrient management, collection and storage of waste, avoidance of manure spreading during November and December, careful handling of pesticides and chemicals, observing buffer zones and legislation concerning water quality; advice for disposal of sheep dip is not included.

### Monitoring & Control

#### *Control of GFP requirements:*

- Direct scheme controls (random checks on 5% of participants) are carried out by Department of Food, Agriculture and Rural Development (DAFRD).
- Internal cross reporting from/to other sections of the DARFD
- External cross reporting from/to relevant responsible implementing bodies, who have the responsibility and competence to implement environmental legislation

GFP requirements subject to control measures (according to RDP 2000-2006):

#### *Nutrient Management:*

- Conform to official recommendations (Teagasc Soil analysis & Fertiliser, Lime, Animal manure & Trace Element Recommendations 1994 and subsequent updates) on the use of organic manures, chemical fertilisers (N, P and K) and lime.
- Conform to recommendations for the management, provision and adequate storage and spreading of organic manures and effluents as set out in the Nitrate Code.

Check:

- Discharge of waste into water sources, watercourses, and drains (DAFRD & external cross reporting)

- Wastes (Slurry, manure, soiled water, sheep dip etc.) collected or stored in a manner liable to cause pollution (DAFRD & internal & external cross reporting)
- Non-compliance with Action Plans applicable to NVZs (external cross reporting)
- Non compliance with local Bye-Laws on the regulation of agricultural practice in river catchment areas (external cross reporting)

***Grassland Management:***

- The management of animal outdoors shall not result in severe poaching or severe over grazing with possible pollution risk. Particular attention will be paid where the stocking rate is above 2 LU/ha (Check: DAFRD).
- Burning of vegetation shall be in compliance with The Wildlife Act, 1976 (Check: Burning of growing vegetation on non-cultivated land between April 15th and August 31st: DAFRD & external cross reporting).

***Protect watercourses and wells:***

- Comply with recommended buffer zones as specified in the Nitrate Code, for the protection of water sources and watercourses when spreading chemical fertilisers or organic waste.

Check:

- Chemical fertiliser being spread within 1.5m of a watercourse (DAFRD & external cross-reporting)
- Organic fertiliser being spread within 50m of a domestic well or public water supply source of 10m or a watercourse (DAFRD & external cross reporting)
- Organic or chemical fertiliser being spread on wet, waterlogged, frozen or on land sloping steeply towards a watercourse (DAFRD & external cross reporting)

***Wildlife Habitats:***

- Comply with the requirements applicable to National Heritage Areas, NATURA 2000 sites, Commonage Land and The Wildlife Acts 1976-2000 (Check: internal & external cross reporting)

***Maintain farm boundaries:***

- External boundaries or roadside fences of fields (excluding Commonage Land) occupied by livestock should be stockproof. (Check: DAFRD & internal cross reporting)

***Use of pesticides and chemicals:***

- Safe storage of pesticides and chemicals (Check: external cross reporting).

- Use in accordance with product label instructions and Statutory Code of Good Plant Protection Practice. Comply with statutory maximum pesticide residue limits. (Check: internal cross reporting)

***Features of historical and archaeological interest:***

- Comply with National Monuments Act 1994. Do not damage or remove archaeological monuments and sites listed on the Record of Monuments and Places. (Check: external cross reporting)

***Visual appearance of farm and farmyard:***

- Comply with the Litter Pollution Act 1997 (Check: external cross reporting)

***Maintain records as specified:***

- Maintain the following records: Herd Register, Flock Register and Animal Remedies Record as required by DAFRD. Record of date, type and quantity of chemical fertilisers, organic waste and pesticides brought onto or leaving the farm. (Check: DAFRD & internal cross reporting)

The definition of GFP contains further standards for animal welfare and hygiene.

The minimum level of compliance checks of participants (5%) is complied with by the checks carried out by scheme staff of DAFRD. Internal and external cross reporting is carried out independently.

## **Sanctions**

If there is non-compliance with any principle of GFP, a penalty is imposed as a percentage of the total annual payment to which the farmer is entitled under the scheme in which he is participating and is additional to any scheme penalty, although, in the first year after the introduction of GFP, no penalties have been imposed.

## **Reg. (EC) 1259/1999**

Nutrient management planning is increasingly integrated in schemes and services and mandatory for farmers receiving tax allowances for the provision of farm pollution control facilities and financial assistance under the Scheme of Investment Aid for Farm Waste Management, and has been incorporated into water quality and waste legislation.

As a new development, legislation, commonly known as the Regulations for Good Farming Practice, will be introduced before the end of 2003, and is expected to regulate some issues of the EC Water Framework Directive and lay down many principles of waste management of now voluntary Codes of Practice, such as timing and rate of

fertiliser application, organic wastes types which may be used as fertiliser and farmyard management.

### **Definition and Standards**

N/A.

### **Monitoring and Control**

N/A.

### **Sanctions**

N/A.

## Fact sheet Italy

### Reg. (EC) 1257/1999

#### Definition and Standards

A national document on GFP has been published by the Ministry for Agricultural and Forestry Policies with the approval of the Regions (see table 1). In the Region of Emilia-Romagna, taken as an example, a specific set of rules has been approved under Reg. 1257/1999. The set includes the entire agri-environmental standard legislation and some additional aspects:

#### Pesticide use:

- strict respect of safe-to-harvest intervals and other specific pesticide prescriptions (crop / pest / dosage / environmental / etc.)
- standard quantity/number sprays based on average conditions
- registration of pesticide use (field book)

#### Fertiliser use:

- Standard N, P & K quantity based on average conditions
- Strict application of NO<sub>3</sub> directive by means of a Regional law on livestock slurry/sewage storage & distribution; soil analysis and fertilisation plan for N, P & K, to avoid leaching and superficial water pollution, based on:
  - crop uptake
  - distribution timing

#### Soil / water management:

- max plough depth
- erosion control & improved land stability by superficial water management and other practices (e.g. ditches maintenance, max distance between water gullies/ditches in sloped areas, etc.)

#### Monitoring and Control

No national framework exists for the control procedures and many regional administrations have only started to plan the organisation of a monitoring system after the approval of their RDP.

In the period 2001 - 2003 the monitoring system should be working in all 21 regions for the less favoured areas schemes but only in 15 regions for the new agri-environmental schemes. 6 Regions in southern Italy have not yet implemented the agri-environmental schemes because overspending of the late implementation of Reg. 2078/92 does not allow for additional financial resources.

In Emilia-Romagna the following indicators are checked during the standard field inspections of 5 % of the beneficiaries, in addition to the general agri-environmental standards:

**Pesticide use:**

- Field book registration check
- Fruit / leaves / shoots / weeds chemical multiresidue analysis

**Fertiliser use:**

- Fertilisation plan check
- Manure storage
- Fertilisation timing

**Soil / water management:**

- Direct control of max plough depth
- Direct control of erosion control & land stability practices

## **Sanctions**

At present, in case of breaches of one of the general agri-environmental requirements, in the Emilia-Romagna Region, 15 days are accorded to farms to fulfil those requirements; after this time the total exclusion from the aids is applied. The additional requirements are evaluated on the basis of their importance and incidence.

## **Reg. (EC) 1259/1999**

### **Definition and Standards**

This Regulation has been applied under direct national management. The Ministry for Agricultural and Forestry Policies approved a national document on GFP in agreement with the Regions (see table 10). The adaptation of the general rules to the varying environmental, agricultural and socio-economic conditions of the regions has been left to the regional administration offices.

**Table 10: National Codes of GFP**

<b>ARABLE CROPS</b>	
<b>Soil management</b>	<ul style="list-style-type: none"> <li>- Tillage</li> <li>- Restoration of soil porosity through working the mellow soil</li> <li>- Optimisation of the surface water run-off</li> <li>- Up-keep of side-ditch and stable drainage channels</li> <li>- Creation, limited to the sloping ground, of temporary gully drains perpendicular to maximum slope</li> </ul>
<b>Crop rotation</b>	<ul style="list-style-type: none"> <li>- Limitation of "no rotation" to only motivated cases (technical-agronomic)</li> </ul>
<b>Fertilisation</b>	<ul style="list-style-type: none"> <li>- Planning fertilisation on crop nutritional requirement</li> <li>- Efficient use of fertiliser through the rational choice of fertilisation time and sound application methods</li> </ul>
<b>Plants protection and weeding management</b>	<ul style="list-style-type: none"> <li>- Identification of phytophagous, pathogen, weed and suitable plant protection product</li> <li>- Traditional pest management is only permitted when no alternative and effective methods are feasible, based on motivated (technical-agronomic) reasons</li> <li>- Observing the label prescriptions for use of plant protection products and herbicides</li> </ul>
<b>Irrigation</b>	<ul style="list-style-type: none"> <li>- Efficient use of irrigation water through suitable irrigation methods based on the type of soil, water availability, weather condition and crop</li> </ul>
<b>ORCHARD AND VINEYARD</b>	
<b>Soil management</b>	<ul style="list-style-type: none"> <li>- Management of inter-row cropping for reduction of soil erosion</li> <li>- Up-keep of side-ditch and stable drainage channels</li> </ul>
<b>Fertilisation</b>	<ul style="list-style-type: none"> <li>- Planning fertilisation on crop nutritional requirement</li> <li>- Efficient use of fertiliser through the rational choice of fertilisation time and sound application methods</li> </ul>
<b>Plants protection and weeding management</b>	<ul style="list-style-type: none"> <li>- Identification of phytophagous, pathogen, weed and suitable plant protection product</li> <li>- Traditional pest management is only permitted when no alternative and effective methods are feasible, based on motivated (technical-agronomic) reasons</li> <li>- Observing the label prescriptions for use of plant protection products and herbicides</li> </ul>
<b>Irrigation</b>	<ul style="list-style-type: none"> <li>- Efficient use of irrigation water through suitable irrigation methods based on the type of soil, water availability, weather condition and crop</li> </ul>
<b>Pruning</b>	<ul style="list-style-type: none"> <li>- Practices have to favour a rational equilibrium between vegetation and production</li> <li>- Seasoned wood and sick portions have been to remove</li> </ul>
<b>GRASSLAND MANAGEMENT</b>	
<b>Soil and grassland management</b>	<ul style="list-style-type: none"> <li>- Up-keep of side-ditch and stable drainage channels</li> <li>- Limitation of soil packing</li> <li>- Weed control have to implement to maintain the quality of grassland</li> </ul>

Environmental requirements for cross compliance have been set up by the Ministry for Agricultural and Forestry policies (MiPAF) in 2000-01. They are focussed on soil management aimed to control surface water run-off and animal waste management:

- in the sectors of arable crops, grain legumes, flax, hemp, tobacco, seeds and rice it is necessary to ensure the maintenance of side-ditch, of stable draining ditch, and - limited to the sloping ground - the creation of temporary gully drains perpendicular to the maximum slope;
- in the sector of olive oil it is necessary to ensure the maintenance of outlet rill and the maintenance of stable draining ditch;



- in the sectors of bovine and sheep meats the storage, inside naturally or artificially proofed reservoirs, of slurry of the in-house livestock must be respected.

## Monitoring and Control

The authority in charge for the implementation and control procedure is the National Paying Agency (AGEA). The monitoring system is connected to the IACS inspections and the controlling procedures are fulfilled during the summer season. According to the first Report presented by AGEA on 30 April 2002, the number of breaches during the 2001 campaign was very low<sup>12</sup>.

**Table 11: Detected breaches in 2001**

Year 2001	holdings	hectares
inspections	100.000	500.000
breaches	15	200

As mentioned in the Report, possible difficulties during field visits arose from the rich vegetation - predominant during the summer period - which does not allow an adequate verification of the situation. No information is currently available on the results of the implementation during the 2002 campaign.

## Sanctions

The penalty system is based on different levies, variable from 2% up to 7% of the specific direct payment received by the farmer. The penalty varies in relation to the degree of the damage. Expenditure savings realised in a particular region with the implementation of cross-compliance will be used in the same region to increase the financial resources of the Rural Development Plans.

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<sup>12</sup> At the time of the Report the control procedures for olive oil and livestock sectors were ongoing.

## Fact sheet Spain

### Reg. (EC) 1257/1999

#### Definition and Standards

Spain developed a general code of Good Farming Practice which is valid in the whole country. Farmers have to comply with this code in order to receive benefits under agri-environmental measures. Application, enforcement and control takes place on the regional level. Regional governments (autonomous regions) have the option to define specific criteria for their agro-climatic zones, so that the implementation of GFP differs substantially within the country.

**Table 14: National Code of GFP**

OBJECTIVE	TARGET	REQUISITE
Soil conservation	Tillage	- Tillage following contour lines (Regional Authorities may exclude certain types of land of this obligation on the basis of soil characteristics, slope, and socio-economic criteria)
	Rotations	- Fallow is considered the best GFP for dryland farming
Optimisation of the use of energy	Agricultural Machinery	- Agricultural machinery must comply with the existing norms on road and working conditions security - Efficient use of fossil fuels
Efficient use of water	Irrigation	- Comply with all existing regulations concerning water use rights and water use limitations established by the River Basin Authorities (Hydrographic Confederations) - Up-keeping of the irrigation conveyance systems to avoid water losses - Control and maintenance of on-farm irrigation canals and networks to avoid inefficient use of water
Conservation of biodiversity	Harvest and post-harvest practices	- Comply with all regulations concerning plant safety norms - Conserve nests of protected species, taking appropriate measures to avoid damage during harvest - No burning of stubble and pastures unless authorised by the Technical Services of the Regional Authorities based on sanitary requirements - Protection of areas under potential fire risk by a 3 m. wide ploughed strip
Rational use of fertilisers	Fertilisers, manure and slurry	- Compliance with Action Programs in Nitrate Vulnerable Zones (intensively irrigated areas, intensive swine production) - No manure spreading on water-logged or snow-covered lands - Compliance with regulations of Regional Authorities concerning manure and slurry

<b>OBJECTIVE</b>	<b>TARGET</b>	<b>REQUISITE</b>
Rational use of pesticides	Pesticides, herbicides	<ul style="list-style-type: none"> <li>- Comply with existing regulation on authorised products, application norms and elimination of residues</li> <li>- Respect the manufacturers' indications</li> <li>- Dispose of containers complying with existing regulations.</li> </ul>
Reduction of pollution from agriculture	Residues	<ul style="list-style-type: none"> <li>- Disposal of pruning residues (vines, olives, fruit trees etc.) according to traditional practice: green parts for livestock, larger diameter wood for firewood and smaller diameter wood for piling up and burning</li> <li>- Other wastes (e.g. plastics) to be disposed in the appropriate places.</li> </ul>
Other measures	Crops, animal safety, livestock density	<ul style="list-style-type: none"> <li>- No abandonment of crops once their economic cycle is finished to prevent pest dissemination to other crops</li> <li>- Comply with the official regulations on livestock health</li> <li>- Comply with the official regulations on non-permitted feed</li> <li>- Livestock densities in forage production lands must comply with the following thresholds: <ul style="list-style-type: none"> <li>- Annual rainfall &lt; 400 mm: [ 0.5 LU/Ha.</li> <li>- Annual rainfall 400 - 600mm: [ 1 LU/Ha.</li> <li>- Annual rainfall 600 - 800mm: [ 1.5 LU/Ha.</li> <li>- Annual rainfall &gt; 800mm: [ 2 LU/Ha.</li> </ul> </li> </ul>

## **Monitoring and Control**

The most important standards are:

- Ban of stubble burning
- No tillage following maximum slope contour lines
- Limitations on livestock density

## **Sanctions**

N/A.

## **Reg. (EC) 1259/1999**

Spain has published a Regulation (December 2002) and its cross-compliance scheme is to be applied from 2003 onwards.

## Definition and Standards

### Crops

- Prohibition of stubble burning (unless for agronomic reasons)
- Set-aside: respect of obligations set up by Art. 19(4) of Reg. 2316/1999
- Traditional set-aside (*barbecho traditional*): minimum tillage or maintenance of vegetation cover
- Prohibition of soil cultivation in the direction of the slope
- Irrigation: compliance with national/regional regulation

### Livestock

- Compliance with national/regional regulation on animal diseases
- Minimum conditions for manure storage vessels and for preventing run-off of liquid effluents
- Prohibition of pasture burning (unless for fire-prevention reasons)

## Monitoring and Control

N/A.

## Sanctions

N/A.

## Fact sheet The Netherlands

### Reg. (EC) 1257/1999

#### Definition and Standards

In the Netherlands codes of GFP require compliance with the minimum requirements derived from the relevant national and EU legislation in the fields of environment (nutrients/manure and pesticides), animal welfare, animal health. While these themes are subject to GFP control, biodiversity, irrigation and the quality of surface waters are not.

With respect to the use of **nutrients (mineral fertilisers or livestock manure)** these standards regard to:

- The application periods: The most important standard is a general ban on the use of livestock manure from 1 September to 1 February, with exceptions for specified protected areas sensitive to nitrate leaching or for specified periods outside these protected areas;
- In general the use of fertilisers is forbidden if the soil is entirely or partly frozen or the top layer of soil is entirely or partly covered in snow, flooded or saturated with water;
- Restrictions on applying fertilisers to or into the soil in accordance with good farming practice and taking account of the characteristics of the vulnerable zone concerned, i.e. state of soil, type of soil and gradient of the slopes;
- The storage capacity of tanks for livestock manure must be larger than required for the longest period (6 months) in which applying manure to or into the soil is prohibited (exception if it is documented that the excess manure will be disposed of in a manner not harmful to the environment).
- Methods for the application of chemical fertilisers and livestock manure to or into the soil, including quantity and evenness of spreading, whereby the drainage of nutrients to the water is kept at an acceptable level and volatilisation of  $\text{NH}_3$  is minimised (injection compulsory on sandy grassland soils);
- Restrictions on applying fertilisers to or into the soil in accordance with good farming practice and taking account of the characteristics of the vulnerable zone concerned, i.e. land use and agricultural practices, including crop rotation systems, and based on a balance between nitrogen requirement and nitrogen supply. In this compartment the Netherlands have introduced a mineral loss accounting system (Minas) to which all farmers with more than 2,5 LU/ha are obliged to register. Mineral losses exceeding the ones allowed will be charged with a levy. Allowed mineral losses for the year 2003 and next are:

- Grassland, farmland or fallow land: 20 kg phosphate per hectare per year;
  - Grassland on non-sensitive soils: 180 kg nitrogen per hectare per year;
  - Grassland on sensitive soils: 140 kg nitrogen per hectare per year;
  - Farmland or fallow land on clay or peaty soils or on non-sensitive sand or loessial soils: 100 kg nitrogen per hectare per year;
  - Farmland or fallow land sensitive sand or loessial soils: 60 kg nitrogen per hectare per year;
  - Nature conservation areas: 10 kg phosphate and 50 kg nitrogen per hectare per year.
- Measures to restrict or reduce the production of livestock manure, to assign and to prune manure production quotas.

With respect to the use of **plant protection products (ppp)** the standards regard to:

- The authorisation of pesticides. The most important is a ban on delivering, holding or keeping in stock, bringing into the Netherlands or using unauthorised ppps. Others are: a ban on delivering, holding or keeping in stock or bringing into the Netherlands unauthorised active substances, criteria for the authorisation of ppps;
- Provisions concerning the delivery, keeping or having in stock, transportation, use and removal of authorised ppps;
- Rules concerning the use of ppps in connection with safety and health at work;
- Rules concerning administration and provision of information regarding designated pesticides (in the interests of environmental protection).

Additionally there are codes of GFP with respect to animal health and animal welfare<sup>13</sup>.

## Monitoring and Control

The total number of beneficiaries of the Regional Development Programme (RDP) in the Netherlands is still growing: from about 1.200 in year 2000 to approximately 4.500 in year 2002. The controls on Good Farming Practices (GFP) is carried out by the National Inspection Service (AID) of the Ministry of Agriculture, Nature and Food Quality. On-the-spot controls are based on checklists which contain clearly visible and identifiable standards in the categories nutrients, plant protection, animal health and animal welfare:

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<sup>13</sup> As work package 2 of the Concerted Action concentrates on the environmental aspects of GFP these issues will not be described in further detail. This also applies to monitoring and control.

### Environment – Nutrients:

1. Is the ban on the use of livestock manure on grassland in sensitive areas (sandy soils) in the period from 1 September to 1 February violated?
2. Is the ban on the use of livestock manure on grassland in non-sensitive areas (sandy soils) in the period from 1 September to 1 February violated?
3. Is the ban on the use of livestock manure on arable land in sensitive areas (sandy soils) in the period from 1 September to 1 February violated?
4. Is the ban on the use of non emission-low application techniques on grassland or arable land violated?
5. Is the ban on the use of livestock manure on soils that are entirely or partly frozen or the top layer of soil is entirely or partly covered in snow, flooded or saturated with water respected?
6. Are the supply and abduction of livestock manure on a farm level fully and truthfully registered?

### Environment – PPPs:

1. Do all ppps present on the farm have an appropriate label?
2. Does the label mention the name and the number of authorisation of the specified ppp?
3. Are the ppps stored or kept in an appropriate and locked storing box, closet or room?
4. Are the ppps (being) used according to the rules laid down in user licence number I, II or III?
5. Are the ppps used in such a way that pollution of nearby surface waters is prevented?

## **Sanctions**

An ascertained breach of GFP leads to a reduction of the granted subsidy of 5 % for every breach of a required standard (except in cases of force majeure). For the two most important support schemes the results over the last years are shown in Table 12.

**Table 12: Controls of GFP and sanctions imposed in selected RDP measures**

Promotion of organic production (RSBP)			
	Beneficiaries	Number of inspections	Imposed sanctions
2000	0	0	0
2001	472	31	1
2002	601	49	2
Agricultural nature- and landscape management scheme (SAN)			
	Beneficiaries	Number of inspections	Imposed sanctions
2000	1.161	0	n.a.
2001	3.419	0 <sup>14</sup>	0
2002	4.650	240	13

## Reg. (EC) 1259/1999

### Definition and Standards

Cross-compliance is implemented in the Netherlands operating only with additional legislative standards. The following cross-compliance measures are operational:

- In starch potatoes the aim was a reduction in the use of chemicals for the deadening of foliage (introduced March 2000, suspended September 2001<sup>15</sup>). The standards for the farmer were:
  1. Interdiction of use of chemical deadening of foliage on 70% of the total area starch potatoes per holding;
  2. Proper registration per parcel starch potatoes of all ppps and quantities used;
- In maize the aim is a reduction in the use of herbicides by making mechanical herbal pest control obligatory (introduced in 2000). The standards for the farmer are:
  1. if herbicides are used in the period between sowing and July, 15<sup>th</sup>, the herbal pest control must have been mechanical at least once;

<sup>14</sup> In the year 2001 planned GFP-inspections (45) were not possible due to the outbreak of foot-and-mouth disease in the Netherlands. They have been carried out in 2002, combined with the normal 2002-inspections (195).

<sup>15</sup> Due to continuous heavy infections in 2001 with phytophthora in starch potatoes, which combined with extreme climatic circumstances during the harvesting period made the disease almost impossible to control, the measure was abandoned in September 2001.



2. the use of chemical herbicides is limited to a maximum of 1 kilo active substance per hectare.
- Regarding fallow land (introduced in 2001) the aim is to encouraging a minimum green soil cover (green set-aside). The farmer can choose to manage the land with the production of a non-food/non-feed crop or for a combination with a special species rich seed mixture selected from a nature conservation point of view. The farmer has to express his choice on the application form. If he chooses neither of both mentioned options, his set aside payment will administratively reduced for every hectare of non-compliance.

## Monitoring and Control

The on the spot controls on cross compliance are carried out by the National Inspection Service (AID) of the Ministry of Agriculture, Nature and Food Quality, except the controls on the green set-aside which is implemented as a administrative measure and is controlled by the paying Agency.

## Sanctions

Non-compliance with the standards for cross-compliance measures is sanctioned as follows:

- Starch potatoes:
  - reduction of the payments of EUR 83,95 per hectare from the 30 % area where chemical removal is allowed, and in case of no available registration: reduction of EUR 83,95 per hectare, counting 70 % of total crop area (EUR 58,77 per hectare total area);
- Maize: a reduction of direct payments of 25 % for every hectare of non-compliance;
- Set-aside: a reduction of the of set-aside payments of 25 % per hectare fallow land which is kept bare.

**Table 13: Inspections and imposed sanctions in 2000 and 2001**

	2000			2001		
	Number of inspections	Number of sanctions	Amount (euro)	Number of inspections	Number of sanctions	Amount (euro)
<b>Starch potatoes</b>	145	9 holdings	• 1.351,-	N/A.	65 holdings	• 42.801,-
<b>Maize</b>	251	20 holdings (51 hectare)	• 5.340,-	N/A.	3 holdings (18 hectare)	• 1.880,-
<b>Set-aside</b>	-	-	-	N/A.	4.050 ha	• 354.444,-

# **Fact sheet United Kingdom (England, Northern Ireland)**

## **Reg. (EC) 1257/1999**

In the UK, there are different rural development plans for England, Northern Ireland, Scotland and Wales but the Good farming Practice arrangements are very similar for all of them.

The approach to the definition of GFP and its implementation will be described for England and Northern Ireland.

## **England**

### **Definition and Standards**

The definition of GFP in the England Rural Development Programme (ERDP) covers the areas of water pollution, air pollution, fertilisers and pesticides, linear features, designated sites and agricultural/forestry management and consists of three elements:

- Compliance with existing environmental legislation included in the definition (e.g. The Water Resources Act, The Groundwater Regulations, legislation related to pesticide use and to the Action programme according to the EU Nitrates Directive)
- A list of "verifiable standards", partly going beyond legislation, as preconditions for participation in all new agri-environment measures and for LFA payments
- The Codes of GAP (mixture of recommendations, advice and obligations for the areas soil, air and water), which have been distributed to all farmers joining AE schemes and the advice of which he is encouraged to follow. However, non-compliance with the codes is not considered an offence.

The verifiable standards of Good Farming Practice are complementary to environmental legislative requirements and capable of verification to an audit standard. They are often not based on legislation (e.g. standards concerning over- or undergrazing, supplementary feeding and field boundaries). Verifiable standards exist for the areas of water pollution, linear features, designated sites and agricultural/forestry management. There are no verifiable standards for fertilising or use of pesticides, but there is relevant legislation and recommendations in the Codes of GAP.

Verifiable standards:

- 'Any farmer who constructs a new silage or slurry storage facility must notify the Environment Agency before starting to use it...'
- 'Any farmer proposing to dispose of sheep dip on his land must obtain prior authorisation from the Environment Agency....'
- 'Removal or destruction of any hedges or stone walls on the farm will not be permitted except by special derogation and subject to any necessary consent under the Hedgerow Regulations 1997....'
- 'Trimming of hedgerows on the farm must not be carried out between 1 March and 31 July....'
- 'Farmers are required to notify English Nature of any intended operations that are likely to damage statutorily designated Sites of Special Scientific Interest (SSSIs)....'
- Overgrazing: 'Because of the enormous variation in conditions that can arise, a single maximum stocking density as a determinant of GFP for the whole of England would not be appropriate. Instead, all farms eligible under the Hill Farm Allowance Scheme with a stocking density of 1.4 Livestock Units (LU)/ha or above will be subject to physical inspection in 2001, or in the year in which this threshold is first exceeded, and at least once every three years thereafter. Furthermore in areas where experience shows that overgrazing can occur at a lower stocking density, risk analysis used in determining the selection of farms for physical inspections will be weighted towards those farms with the highest stocking densities even if below 1.4 LU/ha....'
- 'In some cases no supplementary feeding is permitted under the terms of the agreement. Where it is permitted, the feed must be provided in such a way that the vegetation is not excessively trampled or poached by animals or rutted by vehicles used to transport feed. Cases of suspected unsuitable supplementary feeding will be investigated and failure to follow advice thereafter would be a breach of this condition....'
- Undergrazing: 'In relation to participants in agri-environment schemes which involve livestock farming, there will be provisions to ensure that livestock are distributed across the farm in such a way that both overgrazing and under utilisation are avoided. In addition, a minimum stocking density of 0.15 LU/ha will apply as a condition of receiving Hill Farm Allowance (HFA) Scheme payments under the Programme unless otherwise required by agri-environment measures or other recognised environmental prescriptions e.g. on designated sites....'

## **Monitoring and Control**

The Rural Payments Agency within the Department for Environment, Food and Rural Affairs (DEFRA) controls the verifiable standards by on the spot inspection of a minimum 5% of farms participating in rural development schemes selected on a combined risk and random basis. Additional inspections occur in suspected cases of overgrazing or unsuitable supplementary feeding.

During their regular inspections of verifiable standards, DEFRA carries out visual checks on compliance with legislation and will inform the relevant authority if they suspect any breaches. These comprise visual evidence of damage to heritage conservation, tree felling, dark smoke (from grass, crop residues or waste burning), and water pollution.

Also, these authorities will notify DEFRA if a farmer is convicted of offences or against whom a statutory enforcement notice has been raised under the environmental legislation whether or not the legal action was prompted by Defra following an inspection. Sanctions proportionate to the breach would then be imposed on payments to a beneficiary of an agri-environment scheme or of LFA payments. These would be in addition to the penalties arising from the legal action. Monitoring of compliance with GFP within agri-environment schemes was constrained by the foot and mouth disease epidemic. For overgrazing conditions there were 86 complaints mostly in the LFA (but including those arising from livestock subsidy payments which are not covered by the ERDP) between 1997-2002, 21% of which proved to be false alarms, 11% of which were addressed without further action and 16% of which ended with the farmers joining agri-environment schemes, and are now closed. The other 52% are ongoing with 13% now under prescription, 16% where investigation is underway but 23% were too small to be pursued.

## **Sanctions**

Non-compliance with verifiable standards can result in a reduction or loss of payments, the dimension of which depends on the severity and frequency of the breach. A minor or a rectifiable damage might just involve a first warning, whereas persistent or potentially permanent damage will lead progressively to a 100 % reduction of payment.

## **Northern Ireland**

### **Definition and Standards**

Although Northern Ireland has its own rural development plan, the definition of GFP is very similar to England. GFP requests compliance with environmental legislation and 8

verifiable standards in the areas of water quality, biodiversity and landscape and heritage, often going beyond legislation. As an encouragement, an explanatory booklet on Good Farming Practice is to be distributed to all participating farmers and training will be offered. As well, Codes of Good Agricultural Practice concerning water, soil and air are posted to the farmers.

Agri-environment measures encompass the Environmentally Sensitive Areas (ESAs) scheme and the relatively new Countryside Management and the Organic Farming schemes. The number of participants is increasing, and introduction of standards of GFP and locally based training programmes increased farmers environmental awareness.

Verifiable standards:

- Overgrazing: '.....because of the enormous variation in conditions that can arise, a single maximum stocking density for the whole of Northern Ireland would not be appropriate. Instead, cases of suspected overgrazing which are identified in the course of inspections will be referred to professional staff.....They will carry out a site-specific appraisal of whether overgrazing is occurring....This appraisal will be used to set a management regime including a maximum stocking rate to be observed on that site, for which no compensation is payable'. Farms with more than 1.8 LU/ha 'will be inspected at least every 3 years. Furthermore in areas where experience shows that overgrazing can occur at a lower stocking density, DARD will ensure that the risk analysis used in determining the selection of farms for physical inspections will be weighted towards those farms with the highest stocking densities even if below 1.8 LU/ha. Failure to follow this regime would be a breach of this condition and would lead to a loss of all entitlement to LFA payments.'
- 'No supplementary feeding is permitted on moorland, wetland, species-rich grassland, coastal habitats, broadleaved woodland/scrub habitats or archaeological features or adjacent to watercourses. Where supplementary feeding is permitted, the feed must be provided in such a way that the vegetation is not excessively trampled or poached...'
- 'Removal or destruction of any hedges or stone walls on the farm will not be permitted except by prior permission from the Department. Enforcement will be through visual assessment of any recent damage during field checks.'
- Areas of Special Scientific Interest: 'Farmers are required to notify the Environment and Heritage Service (EHS) of any intended operations that are likely to damage statutorily designated ASSIs.....participants will not proceed with any operations without having obtained prior approval from EHS...'
- 'Where an inspection reveals that there is an obvious pollution problem on a holding or that the farmer has breached regulations in terms of waste disposal on land, the matter would be reported to the EHS:'
- 'Any farmer proposing to dispose of sheep dip on his land must obtain prior authorisation from EHS...'

- 'Trimming of hedgerows, hedge laying and coppicing on the farm must not be carried out between 1 March and 31 August. Enforcement will be through visual evidence of recent damage during any checks carried out in these months.'
- 'Farmers are prohibited from any operations such as in-filling; reclamation; extraction of peat, sand or gravel without necessary permissions; woodland clearance; that are likely to damage wetland, moorland, broadleaved woodland/scrub, species-rich grassland and coastal habitats, archaeological features and earth science sites. Enforcement will be through visual assessment of recent damage during field checks.'

## **Monitoring and Control**

Verifiable standards are controlled at 5 % of beneficiaries, based on IACS (non-environmental) risk analysis (high value claim, new claimant, claimants with history of non-compliance) and random checks.

A report form has to be completed by inspectors of the Department of Agriculture and Rural Development (DARD). They check for compliance with environmental legislation and verifiable standards and report suspected breaches, which will then be further investigated by specialist staff.

In case of overgrazing a notification of a breach of standards leads to a thorough investigation by specialist staff and a management regime is suggested to the farmer, e.g. with a maximum number of animals. If annual compliance checks produce a further breach penalties may be applied.

## **Sanctions**

According to the GFP Breach guidelines, penalties include warnings and fines of 10% of payments up to a loss of all subsidies.

## **Reg. (EC) 1259/1999**

### **Definition and Standards**

Cross compliance is implemented in the UK. Cross-compliance in the Arable Area Payments Scheme (AAPS) sets out rules for set-aside including requirements on:

- The establishment of a green cover

- Cutting of the cover (between 15.7. - 15.8.)
- Sowing dates (not before 15.7 and no harvesting of a subsequent crop before the following January)
- Fertilising with the prohibition to use the area for storage of manure or waste disposal and to destroy or remove certain features on or immediately next to the site (e.g. hedges, trees, ditches, ponds, archaeological remains)
- Pesticide use

With the implementation of the Agenda 2000 cross-compliance has been applied to all livestock schemes.

- Farmers receiving payments under any of the livestock subsidy schemes must comply with cross compliance conditions (which have also been included as verifiable standards in the RDP) designed to discourage:
  - Overgrazing leading to environmental deterioration<sup>16</sup>
  - Damage caused by trampling and vehicle tracking during the process of supplementary feeding in winter

## Monitoring and Control

The Rural Payments Agency (RPA) within DEFRA is responsible for the annual cross-compliance control. 5 % of claimants are inspected on a random based analysis. In the AAPS scheme it is checked if ‘the details of the cover, management, and maintenance of environmental features are in compliance with the conditions of the scheme’.

Concerning the livestock subsidies, 10 % of the beneficiaries are subject to an annual inspection of compliance with the verifiable standards and legislation requirements of GFP as listed in the RDP for overgrazing and supplementary feeding. In case of overgrazing farmers have to reduce the stocking number and are encouraged to make further reductions in return for agri-environment payments.

Problems exist because of the fact that it is a time-consuming process and specialist staff is required to establish whether overgrazing is “significant”. As well, historic overgrazing or overgrazing by animals not covered by payments (e.g. deer and ponies) is not addressed in the scheme. And even in case of a loss of all subsidies a farmer might not stop overgrazing. Still, it is felt that cross-compliance measures have reduced the extent of overgrazing and unsuitable supplementary feeding in the most extreme cases, although most less significant cases have remained un-investigated.

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<sup>16</sup> No indicator/threshold such as maximum LU/ha is used for this criterion, the farmer is required to maintain the vegetation in good condition.

## Sanctions

In case of horizontal measures, non-compliance involves a reduction of payments dependant on the severity of the breach. An example for AAPS set-aside is that £ 1 of subsidy payment is deducted for every 0.01 ha on which the requirements are not followed or for each metre of a damaged linear feature. The minimum financial penalty is £ 100.

With respect to the livestock schemes payments are limited to the number of stock recommended by the control (the Grazing Evaluation Survey) if no agreement is reached with the grazier. Subsidy payments can additionally be abated (initially) by 10 % and ultimately withdrawn.