



European Centre of Tort and Insurance Law

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**Liability and Compensation Schemes
for Damage Resulting from the Presence
of Genetically Modified Organisms
in Non-GM Crops**

Annex II:
Legislative and Other Materials

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2. Belgium – Walloon Region

Preliminary draft decree on the coexistence of genetically modified crops, conventional crops and organic crops (excerpts)¹

Chapter I – Definitions

Article 1. For the purposes of this Decree and its implementing orders, the following definitions shall apply:

1. Genetically modified plant (GMP): plant or part of plant, capable of reproducing or transferring genetic material, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination, in accordance with the definition of genetically modified organism (GMO) in Article 2(2) of Directive 2001/18 of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC;
2. genetically modified crop: crop of genetically modified plants grown from planters labelled GMO or labelled as containing GMOs, in accordance with current legislation;
3. organic crop: crop yielding produce that is intended to carry indications referring to organic production, in accordance with Council Regulation (EEC) No 2092/91 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs;
4. genetically compatible plant: a plant is said to be genetically compatible with a genetically modified plant where it can integrate genetic material from the genetically modified plant into its genome by sexual reproduction;
5. genetic event: the combination of genes characterising the genetic modification of a genetically modified plant;
6. conventional crop: crop which does not come under the definition of an organic crop, or the definition of a genetically modified crop;
7. producer: any natural or legal person growing a crop for their own profit, whether or not they themselves carry out the agricultural work, transportation and storage operations relating to it;
8. unique identifier: identifier assigned to genetically modified organisms in accordance with Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and Regulation (EC) No 65/2001 [sic] of 14

¹ Available on the TRIS database at <http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=getdraft&inum=1291307>.

January 2004 establishing a system for the development and assignment of unique identifiers for genetically modified organisms;

9. isolation distance: minimum distance to be kept between the edge of a crop of genetically modified plants and the nearest edge of a conventional or organic crop of plants which are genetically compatible with the genetically modified plants;
10. Fund: the „Budgetary Fund for the quality of animal and vegetable products“ established by the Programme-Decree of 18 December 2003 applying various measures in the areas of regional taxation, liability and debt, organisation of energy markets, environment, agriculture, local and delegated powers, heritage and housing and the civil service;
11. supervisory authority: the body appointed by the Government to supervise the implementation of this Decree.

Chapter II – Aims and scope

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Article 3. This Decree applies to all producers of genetically modified crops grown from varieties whose placing on the market has been authorised in accordance with Council Directive 90/220/EEC of 23 April 1990 on the deliberate release into the environment of genetically modified organisms, or Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 and the laws transposing these in the various Member States of the European Union, or Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003, and to enterprises and persons undertaking any cultivation work with these crops.

This Decree shall apply to persons and enterprises ensuring the transportation, storage or processing of GMPs where these plants may be a source of adventitious presence of GMPs in a conventional crop or organic crop.

This Decree shall apply to owners of land on which a crop of GMPs has been grown, and owners of land located within the isolation distance.

This Decree shall apply to producers of organic or conventional crops farming plots of land located within the isolation distance of a crop of genetically modified plants, and any producer wishing to assert their right to compensation from the Fund for financial losses suffered due to the adventitious presence of genetically modified plants in a conventional crop or organic crop.

Article 4. This Decree's main objective is to keep the involuntary release of genetically modified plants under control in order to preserve producers' freedom of choice between genetically modified crops, conventional crops and organic crops, and consumers' freedom of choice between the products of these different crops. A second objective is to prevent and, where applicable, to compensate financial losses which may be suffered as a result of adventitious presence of genetically modified plants in a conventional crop or organic crop.

Chapter III – Determination of financial losses

Article 5. Section 1. For conventional crops, financial losses shall mean the negative difference between the market value of a harvest that must be labelled as containing

GMOs in accordance with European legislation in force and the market value of a similar harvest that does not require labelling as containing GMOs.

If the harvest cannot be placed on the market because of admixture with genetically modified plants, the financial losses shall be taken as the market value of a similar harvest not labelled as containing GMOs, from which shall be deducted, where applicable, any type of benefit gained from this harvest, including use within the farm.

Section 2. If the producer is committed to a contract imposing a GMO content below the legal labelling threshold, the financial losses shall be defined as the negative difference between the market value of a harvest containing genetically modified plants and the value of a similar harvest placed on the market as a product conforming to the contract terms, provided that all other contract requirements have been met and that the contract is based on a specification sheet officially recognised within the context of this Decree.

If the produce cannot be placed on the market because of admixture with genetically modified plants, the financial losses shall be taken as the market value of a similar harvest conforming to the contract terms, from which shall be deducted, where applicable, any kind of benefit gained from this harvest, including use within the farm.

Section 3. For organic crops, financial losses shall mean the negative difference between the market value of a harvest containing genetically modified plants and the market value of a similar harvest placed on the market as a product meeting the standards laid down for products of organic agriculture.

If the harvest cannot be placed on the market as a certified product of organic agriculture because of admixture with genetically modified plants, the financial losses shall be taken as the market value of a similar harvest conforming to the standards laid down for products of organic agriculture, from which shall be deducted, where applicable, any kind of benefit gained from this harvest, including use within the farm.

Further losses occurring due to any decommissioning or suspension of plots of land or products, or part or all of a farm, shall be added, where applicable, to the financial losses incurred.

Section 4. Whatever the kind of crop, the financial losses shall also include the costs associated, where applicable, with destroying harvests, and any other losses or costs directly linked to adventitious presence of GMPs in the crop.

Section 5. Contaminated organic or conventional crops shall be marketed, at the choice of the producers of these crops, either by themselves or by an operator appointed by the supervisory authority.

Section 6. The Government shall lay down the methods of implementation of Sections 1 to 5, including in particular the methods of assessment of financial losses and methods of recognition of specification sheets referred to in Section 2.

Chapter IV – Authorisation of cultivation, notifications and requirements for producers and enterprises

Article 6. Only producers having received authorisation from the inspection authority, in accordance with Article 8, shall be authorised to cultivate genetically modified plants in the territory of the Walloon Region.

Article 7. Section 1. Producers intending to grow a genetically modified crop shall provide prior notification of this intention to:

1. all producers farming land the boundaries of which are located within the isolation distance. The Directorate-General for Agriculture shall provide producers, on request, with the list of producers for information purposes. This shall not, however, free these producers from their full and complete responsibility in the area of coexistence;
2. all producers with whom they regularly share agricultural machinery, whether or not they own the machinery. This prior notification shall not apply if the machinery is shared by means of an agricultural enterprise;
3. owners of the land on which they intend to grow the crop, if they do not themselves own the land.

Section 2. The Government shall determine the methods of these notifications.

Article 8. Section 1. Producers intending to grow a genetically modified crop shall submit a request for authorisation to the supervisory authority and inform them of, at least:

1. their producer number issued in the context of the Directorate-General of Agriculture's „Integrated Management and Control System (IMCS)“
2. the precise position and surface area of the plot of land on which they intend to grow the crop in question;
3. the name of the species that will be sown or planted;
4. the unique identifier of the genetically modified plant and the name of the variety that will be grown;
5. the cultivation period;
6. the written commitment of producers farming land within the isolation distance not to grow a conventional or organic crop of a plant species genetically compatible with the planned genetically modified crop on this land in the same crop year. In the absence of this written commitment, evidence of notification of intent of cultivation in accordance with Article 7(1)(3°);
7. where applicable, evidence of notification of intent of cultivation to producers with whom they regularly share agricultural machinery, in accordance with Article 7(1)(2°);
8. evidence of notification to the owner of the land in accordance with Article 7(1)(3°);
9. a commitment to meet the operating conditions defined in accordance with Article 10.

Section 2. The Government shall lay down the methods of requesting authorisation from the supervisory authority. The supervisory authority shall grant authorisation for cultivation. This authorisation shall be subject to payment of a subscription to the Fund. This subscription, the sum and payment methods of which shall be set by the Government, shall be established for all producers and other participants in the agricul-

tural sector. The subscription may be modulated according to risk factors of release of the genetically modified crop such as, in particular: whether or not GMPs are grown, whether or not work is carried out requiring contact with GMPs, the species grown, the surface area to be cultivated, the distance separating the genetically modified crop from land farmed by the nearest neighbouring producers, the coexistence on a farm of a GMP crop and non-genetically modified crops such as those referred to in Article 15(1), and taking account of cultivation agreements which may have been concluded between neighbouring producers. Where a producer or operator poses no risk, the subscription shall be set at zero. Subscriptions shall be set taking account, where applicable, of subscriptions to insurance by GMP producers or operators carrying out work relating to GMPs.

Section 3. The supervisory authority shall draw up a map of genetically modified crops in the Walloon Region and keep a register of the authorisations granted. The Government shall determine its form and content. Information on this register may be provided to the federal authority responsible for keeping the register of the location of GMOs cultivated, provided for by Article 48(2)(b) of the Royal Decree of 21 February 2005 regulating the deliberate release into the environment and the placing on the market of GMOs or GMO-containing products. These documents shall be sent to the Walloon Parliament as part of the annual report compiled by the Follow-up Committee established by Article 21.

Article 9. As per their request on the basis of Article 8, producers shall authorise the supervisory authority to make the information required by Article 8(1)(1°) to (4°) available to the public, concerning their name or company name, and the address of their place of business. The Government shall determine what information is to be made public, in what circumstances and by what means, in accordance with public access to environmental information as laid down by the Aarhus Convention, Directive 2003/4/EC on public access to environmental information and Book I of the Environment Code.

Article 10. The Government shall determine the operating conditions for genetically modified crops, according to species grown, contributing towards the objectives of Article 4. These operating conditions shall concern, in particular:

1. the isolation distance between genetically modified plant crops and other kinds of crops;
2. all operations linked to cultivation, whatever the cultivation method, from the receipt of seeds or planters to harvest;
3. all necessary operations prior to cultivation;
4. all necessary operations after the crop is harvested;
5. all measures aimed at preventing the adventitious release of genetically modified plants by agricultural machinery;
6. all operations transporting or storing the harvest until the harvested product no longer fits the definition of GMP as set out in Article 1(1);
7. without prejudice to the requirement of prior notification set out in Article 7, all producers' other obligations to notify:.

- a) natural or legal persons carrying out any cultivation work with the crop, and those ensuring the transportation or storage of the harvest, until the harvested product no longer fits the definition of GMP as set out in Article 1(1);
- b) natural or legal persons farming the land on which the genetically modified crop has been grown, after the crop has been harvested and for a period to be set according to the crop;
- c) persons using agricultural machinery that has been used for the genetically modified crop and that has not been the subject of prior notification, as laid down in Article 7.

The Government shall determine the methods for these notifications.

Article 11. All agricultural enterprises other than the producer planning to work with a genetically modified crop, whatever the cultivation work planned, must be approved by the supervisory authority. All agricultural enterprises other than the producer carrying out transportation or storage of genetically modified plants in the territory of the Walloon Region must be approved by the supervisory authority. The Government shall determine the methods and conditions of these approvals, which must be subject to payment of an annual subscription to the Fund, and the requirements that must be met by these enterprises.

Article 12. Without prejudice to other legal provisions on the subject, the Government shall determine, according to the species cultivated, the requirements to be met by producers farming land on which a genetically modified crop has been grown previously and, where applicable, by the owner of the land.

Article 13. Section 1. Producers of genetically modified crops shall notify the supervisory authority within 72 hours of any unexpected or abnormal occurrence relating to the objectives of this Decree that they have observed on plots of land containing GMPs or in areas near these plots of land. This information must be sent to the federal authorities responsible for monitoring GMOs placed on the market.

Section 2. Without prejudice to the requirements on traceability and labelling laid down by Regulation 1830/2003 of the European Parliament and of the Council of 22 September 2003, producers of genetically modified crops shall provide the information required by Article 4 of the said Regulation including all information the Government shall deem necessary relating to the species cultivated, cultivation work, transportation and storage. Producers shall make this information available to the supervisory authority whenever the latter requests it, for a period determined by the Government.

Article 14. Section 1. The Government shall determine any requirements to be met by producers of conventional or organic crops farming land within the isolation distance from planned or existing genetically modified crops. These requirements may for example concern the requirement to reply to a notification of intent to cultivate referred to in Article 7(1°) within a set time limit. The Government may decide that the absence of a reply to the notification constitutes a tacit commitment not to grow a plant species which is genetically compatible with the genetically modified crop within the isolation distance in the same crop year, as required by Article 8(6°).

Section 2. The Government shall determine, where applicable, the methods of transferring the requirements determined in Section 1 to producers taking over from those hav-

ing received the notification of intent to cultivate referred to in Article 7(1°). Owners of land located within the isolation distance shall be held responsible for the transfer of requirements.

Chapter V – Compensation

Article 15. Section 1. Without prejudice to recourse to civil law by the parties concerned, financial losses as defined in Article 5 shall be compensated by the Fund, provided that the claimant producer does not grow genetically modified crops characterised by the same genetic event as that which caused the financial losses, and has not done so for a number of years set by the Government for each species concerned. If the producer grows or has grown a genetically modified species characterised by the same genetic event as that which caused the financial losses, the losses may nonetheless be compensated by the Funds provided that the producer of the genetically modified crop can prove to the supervisory authority that they have followed all the legal requirements relating to the cultivation concerned.

The Government shall set the methods by which claims for compensation must be submitted by producers and the methods of payment of the compensation to the producers concerned. The Government may set a threshold below which compensation shall not be due, and a deadline after which compensation can no longer be claimed.

Section 2. Without prejudice to other penalties, the compensation provided for by Section 1 may be wholly or partially incumbent on producers which have grown genetically modified crops within the isolation distance either without notifying neighbouring producers or without taking account of their planned cultivations. This compensation shall concern plots of conventional or organic crops of which a part of the surface area is located in the isolation zone and which suffer financial losses as a result of admixture with a genetically modified plant identical to that grown by the producer of the genetically modified crop.

Section 3. The compensation provided for by Section 1 may be reduced or cancelled if the producer that suffered the financial losses may have contributed to the presence of genetically modified plants in their conventional or organic crop due to behaviour or practices increasing the risk of adventitious admixture. The Government shall determine the particular circumstances which shall lead to a reduction of compensation and the sum of this reduction.

Section 4. The Government shall set the subscriptions to the Fund referred to in Article 8(2) and Article 11 to ensure that the sums received cover the sums paid in compensation for the financial losses defined in Article 5 and, at least in part, the costs of recording, monitoring and administrative management linked to the implementation of this Decree.

The Government may decide in implementing this Decree that economic operators other than producers growing genetically modified crops or the operators cited in Article 11 shall subscribe to the Fund. The Government shall set the sums due, and shall determine the methods of payment for these subscriptions, and the activities which may be financed by the Fund in the context of GMO management.

...

5. Denmark

Act on the Growing etc. of Genetically Modified Crops (excerpts)²

Compensation Scheme and Obligation to Contribute

9. (1) Within a framework provided for in the Budget the Minister for Food, Agriculture and Fisheries shall pay compensation to any farmer who suffers a loss due to the occurrence of genetically modified material in his crops if:

- in the same growing season within a specified area, a genetically modified crop of the same or a related variety has been grown which may be crossbred into the crop of the farmer suffering the loss and
- the genetically modified crop can be identified in the crop of the farmer suffering the loss.

(2) The Minister shall lay down rules on the delimitation of the area mentioned in (1)(i) above.

(3) The amount entitling a farmer to compensation cf (1) above shall not exceed:

- the reduction in the sales price of the crop caused by the occurrence of genetically modified material,
- the costs for sampling and analysis and
- any losses as a consequence of requirements for conversion of organic areas or animals due to the occurrence of genetically modified material.

(4) Irrespective of the provisions of (1)(i) and (ii) above, the Minister will pay compensation if an authorised organic farmer suffers a loss due to the occurrence of genetically modified seed in his seed for sowing. The loss entitling such farmer to compensation shall be calculated in accordance with the provisions of (3) above.

(5) The compensation may be reduced or, depending on the circumstances, be forfeited altogether if the farmer suffering the loss has deliberately or inadvertently contributed to the occurrence of the loss or due to his behaviour has reduced his opportunities of making a recourse claim, cf. section 11.

(6) Compensation cannot be paid for any loss suffered by such farmer as a consequence of the occurrence of genetically modified material in the crops of the farmer suffering the loss if the occurrence of genetically modified material does not exceed a specific threshold value fixed by the Minister.

10. (1) Compensation claims shall be filed without undue delay after it has come or should have come to the knowledge of the person suffering the loss that genetically modified material has been mixed in with his crop. If a claim is not filed without un-

² Available on the TRIS database at <http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=getdraft&inum=1163900>.

due delay, the right to compensation shall be forfeited. The Minister for Food, Agriculture and Fisheries shall lay down specific rules governing the requirements for filing such claims and the information which the farmer is subsequently required to provide in order to obtain compensation.

(2) The right to receive compensation shall be forfeited if the claim has not been filed by 1 August in the first calendar year after harvesting the crop.

11. To the extent compensation is paid under the rules of this Act, the Minister for Food, Agriculture and Fisheries shall be subrogated to any claims for damages the farmer suffering the loss may have as against the person responsible for the loss, always provided that the farmer suffering the loss shall retain his right to put forth claims against the person responsible for the loss with regard to losses in excess of the compensation paid.

12. (1) In whole or partial cover of the costs associated with the compensation scheme DKK 100 shall be payable per year per hectare on which genetically modified crops are grown.

(2) The Minister for Food, Agriculture and Fisheries shall lay down provisions governing the collection and payment of the amount mentioned in (1) above.

Executive Order on Compensation for Losses due to Certain Occurrences of Genetically Modified Material

In pursuance of section 9(2), section 10(1) and section 15(2) of the Danish Act No. 436 of 9 June 2004 on the Growing etc. of Genetically Modified Crops and by authorisation, the following is laid down:

1. (1) In pursuance of section 9(1) of the Act on the Growing etc. of Genetically Modified Crops, the Danish Plant Directorate shall pay compensation to any farmer who suffers a loss due to the occurrence of genetically modified material in his crops within a framework established in the Budget, but see section 2 below, if

- i) in the same growing season within the distance stipulated in Annex 1, a genetically modified crop of the same or a related kind has been grown which may be cross-bred into the crop of the farmer suffering the loss and
- ii) the genetically modified crop can be identified in the crop of the farmer suffering the loss.

(2) Irrespective of the provisions of (1) above, the Danish Plant Directorate may pay compensation to an authorised organic farmer who suffers a loss due to the occurrence of genetically modified seed in his seed for sowing.

2. (1) Compensation can only be paid for the loss suffered by the farmer if the occurrence of genetically modified material in his crop exceeds a threshold value of 0.9 per cent. For growers of seed for sowing the labelling threshold for adventitious presence of genetically modified material in seed, in force at any time pursuant to the Community legislation, shall apply.

(2) Based on the result of the analyses described in section 8 below, the Danish Plant Directorate decides whether the condition stipulated in (1) above has been fulfilled.

3. Compensation for the occurrence of genetically modified material in a crop cannot be paid to farmers who have signed an agreement with reference to section 10 of the Executive Order on the Growing etc. of Genetically Modified Crops in so far as the crop in question is concerned.

Filing of Claims

4. (1) Compensation claims shall be filed with the Danish Plant Directorate at Skovbrynet 20, DK-2800 Kgs. Lyngby. The claim filed shall include information about the name and address of the farmer suffering the loss, information about the kind and variety of the lot in which genetically modified material occurs as well as information about the size and location of such lot. Furthermore, the claim filed shall include an explanation of how the occurrence was found.

(2) Claims received later than 14 days after the time at which the mixing in with genetically modified material came or should have come to the knowledge of the person filing the claim will generally not be satisfied.

(3) The right to compensation shall be forfeited if the claim has not been received by 1 August in the year following the harvest year.

5. (1) Not later than four weeks after the filing of a claim, the following shall be forwarded to the Danish Plant Directorate:

- i) Information about the origin of the sowing material.
- ii) Information about the times of sowing and harvesting.
- iii) Sketch of the location of the field on which the crop in question was grown and information about the field block number.
- iv) Information about whether a machine pool, shared machines or the like was used and if so the name and address of such.
- v) A description of the circumstances regarding the present and previous, if any, storing of the harvested crop.

(2) The information shall be submitted by means of a form which may be obtained from the Danish Plant Directorate or at www.pdir.dk.

6. The Danish Plant Directorate may request further information or documentation for use in its consideration of the compensation claim.

Sampling and Analysis

7. (1) With a view to identifying and quantifying the occurrence of genetically modified material, a sample is taken and analysed from the field of the person filing the claim. The sampling may be performed by the Danish Plant Directorate or by a sampler authorised in pursuance of the provisions of the Executive Order on Field Seeds or the Executive Order on Seed Corn. The sampling shall be performed in pursuance of the Danish Plant Directorate's »Instructions for sampling of seed« (»Instruks i prøvetagning af frø«).

(2) The sampling shall be requested concurrently with the forwarding of the information mentioned in section 4(1) above.

8. For use in the assessment of the type and nature of the occurrence of genetically modified material, the Danish Plant Directorate will decide what analyses to perform and what methods of analysis to use based on the information submitted.

9. The costs for sampling and analysis shall be paid by the person filing the claim but will be reimbursed if the Danish Plant Directorate pays compensation. Information about the costs in connection with the analysis shall be given to the person filing the claim prior to commencement of the analysis.

Calculation of Compensation

10. (1) In pursuance of section 9(3) of the Act on the Growing etc. of Genetically Modified Crops the loss eligible for compensation cannot exceed:

- i) the reduction in the price of the crop caused by the occurrence of genetically modified material and
- ii) any losses as a consequence of requirements for conversion of an organic area or animals due to the occurrence of genetically modified material.

(2) The person suffering the loss shall forward documentation for the loss mentioned in (1) above.

11. (1) In pursuance of section 9(5) of the Act on the Growing etc. of Genetically Modified Crops the compensation may be reduced or, depending on the circumstances, be forfeited altogether if the farmer suffering the loss has deliberately or inadvertently contributed to the occurrence of the loss or due to his behaviour has reduced the Danish Plant Directorate's opportunities of making a recourse claim, cf. section 12 below.

(2) The Danish Plant Directorate may entirely or partially refuse to pay compensation and require that compensation paid be repaid if the farmer suffering the loss receives compensation for such loss from the person responsible for the loss, or if the loss is covered by an insurance benefit or by other benefits in the nature of compensation for damages.

12. To the extent compensation is paid under this Executive Order, the Danish Plant Directorate shall, cf. section 11 of the Act on the Growing etc. of Genetically Modified Crops, be subrogated to any claims for damages the farmer suffering the loss may have as against the person responsible for the loss.

Appeals

13. (1) The decisions regarding compensation made by the Danish Plant Directorate cannot be appealed to another administrative authority.

(2) In pursuance of section 16(2) of the Act on the Growing etc. of Genetically Modified Crops, any person whom the decision regarding compensation concerns may request that the decision be brought before the courts of law. Such request shall be made to the Danish Plant Directorate within four weeks after the date of receipt of the decision. Subsequently, the Danish Plant Directorate will institute legal proceedings under the rules of civil procedure.

Coming into Force

14. This Executive Order shall come into force on 17 December 2005.

Annex: Distances in relation to compensation

The distances within which farmers may claim compensation for losses due to the occurrence of genetically modified material.

The distance between fields is measured from field edge to field edge.

<i>Crop</i>	<i>Seed-growing</i>	<i>Production</i>
Maize	-	300m
Beet	3,000m ¹⁾	75m
Potato	30m	30m

¹⁾ In case of growing of seed for sowing on a field with genetically modified beet.

7. Finland

Gene Technology Act³ (excerpts)

Sec. 2 [Scope of application of the Act]. (1) This Act shall apply to the contained use and deliberate release into the environment of genetically modified organisms. The Act shall also apply to the launch and operation of installations and premises intended for the handling of genetically modified organisms. ...

Sec. 36 [Compensation for loss]. (1) Compensation for damage to the environment arising as a consequence of activities referred to in this Act is subject to the provisions of the Act on Compensation for Environmental Damage (737/1994).

(2) Compensation for loss caused by a product containing genetically modified organisms to a person or to property intended for private use or consumption and used by the injured party mainly for such purpose is subject to the provisions of the Product Liability Act (694/1990).

(3) Compensation for other loss caused by activities referred to in this Act is subject to the provisions of the Tort Liability Act (412/1974). The operator is liable to compensate for such loss, even if it was not caused wilfully or through carelessness.

(4) The provisions of paragraphs 1 to 3 shall not restrict the right of the injured party to compensation on the basis of an agreement or by virtue of other acts than those referred to in paragraphs 1 to 3.

Environmental Damage Compensation Act⁴ (excerpts)

Section 1 [Scope of application]. (1) Compensation shall be paid for a loss defined in this Act as environmental damage, caused by activities carried out in a certain area and resulting from:

1. pollution of the water, air or soil;
2. noise, vibration, radiation, light, heat or smell; or
3. other similar nuisance.

(2) The keeper of a road, railway, port, airport or other comparable traffic area shall also be considered to be carrying out activities referred to above in paragraph 1.

(3) This Act does not apply to contractual liability for compensation.

Section 2 [Relationship to other legislation]. (1) This Act does not apply to losses, compensation for which is provided for in another Act.

³ Law No. 377/1995 as amended (unofficial translation by the Finnish Ministry of Social Affairs and Health, <http://www.finlex.fi/fi/laki/kaannokset/1995/en19950377.pdf>).

⁴ Law No. 737/1994 (unofficial translation by the Finnish Ministry of Social Affairs and Health, <http://www.finlex.fi/fi/laki/kaannokset/1994/en19940737.pdf>).

(2) This Act, however, also applies to environmental damage where compensation is due by virtue of the Product Liability Act (694/90).

(3) The Adjoining Properties Act (26/20) and the Water Act (264/61) contain separate provisions on losses to be compensated under this Act.

(3) The application of the provisions of this Act in procedures under certain other Acts is laid down in section 12.

(4) Unless otherwise provided for in this Act, the Damages Act (412/74) applies to compensation for environmental damage.

Section 3 [Causality]. Compensation shall be paid for environmental damage in accordance with this Act if it is shown that there is a probable causal link between the activities and the loss referred to in section 1, paragraph 1. In assessing the probability of causality, consideration shall be given, among other things, to the type of activity and loss and to the other possible causes of the loss.

Section 4 [Obligation to tolerate the nuisance]. (1) Compensation shall be paid for environmental damage by virtue of this Act only if toleration of the nuisance is deemed unreasonable, consideration being given, among other things, to local circumstances, the situation resulting in the occurrence of the nuisance, and the regularity of the nuisance elsewhere in similar circumstances.

(2) The obligation to tolerate the nuisance prescribed in paragraph 1 above shall not, however, apply to loss inflicted deliberately or criminally, nor to bodily injury, nor to material loss of greater than minor significance.

Section 5 [Damage for which compensation is due]. (1) Compensation shall be set for bodily injury and material loss in accordance with the provisions of chapter 5 of the Damages Act. Compensation shall be paid for financial loss not connected with bodily injury or material loss if the loss is not minor. Compensation shall, however, always be paid for loss inflicted criminally.

(2) Reasonable compensation shall be paid for environmental damage other than that specified in paragraph 1; in the determination of this compensation, due consideration shall be given to the duration of the nuisance and the loss, and to the chances of the person suffering the loss avoiding or preventing this loss.

Section 6 [Costs of prevention and reinstatement]. (1) Compensation shall also be paid by virtue of this Act for:

1. the costs of the measures needed to prevent environmental damage, as referred to in section 1, threatening the person undertaking the measures, or to reinstate a damaged environment;
2. the costs, incurred by authorities, of measures to prevent the threat or the effects of a nuisance referred to in section 1, or to reinstate a polluted environment to its original state, if the costs are reasonable relative to the nuisance or the threat thereof, and to the benefit gained by the measures; and
3. the costs of investigations that proved unavoidable in carrying out the preventive measures or reinstatement referred to above in subparagraphs 1 and 2.

(2) This section does not apply to costs provided for in section 17 of the Act on the Imposed Threat of a Fine (1113/90).

Section 7 [Persons liable for compensation]. (1) Even when the loss has not been caused deliberately or negligently, liability for compensation shall lie with a person

1. whose activity has caused the environmental damage;
2. who is comparable to the person carrying out the activity, as referred to in subparagraph 1; and
3. to whom the activity which caused the environmental damage has been assigned, if the assignee knew or should have known, at the time of the assignment, about the loss or the nuisance referred to in section 1 or the threat of the same.

(2) In the assessment of the comparability referred to in paragraph 1, subparagraph 2, due consideration shall be given to the competence of the person concerned, his financial relationship with the person carrying out the activity and the profit he seeks from the activity.

Section 8 [Joint and several liability]. (1) Persons liable for compensation shall be jointly and severally liable for environmental damage probably caused by the relevant activities as a whole.

(2) Unless otherwise agreed, the joint and several liability for compensation shall be divided equitably, giving due consideration to the grounds for the liability, the chances of preventing the damage and the other prevailing circumstances.

(3) However, liability for compensation shall not be imposed by judgment, in a degree exceeding the appropriate share, on a person whose share in inflicting the loss is manifestly minor.

Section 9 [Advance compensation]. (1) If the future environmental damage resulting from a nuisance can be assessed in advance, compensation for it shall on demand be pre-set either as a lump sum or as an annual payment. If there is later an essential change in circumstances, or the assessed loss is otherwise essentially different from that actually resulting from the nuisance, the compensation set in this manner may be adjusted to a reasonable extent considering the circumstances.

(2) An advance lump-sum compensation to be paid for damage caused to real estate shall be ordered to be deposited if the real estate, due to a mortgage or according to the provisions on the lien for an outstanding purchase price, stands as security for a claim or the right to collect a specific revenue in money or goods, and the owner does not show that the rights holders have consented to the payment of the compensation to him, or a court of law considers that the property can, despite the environmental damage, clearly bear the encumbrances attached to it. The provisions of section 7 of the Act on the Redemption (Expropriation) of Immoveable Property and Special Rights (603/77) apply, where appropriate, to the deposit and withdrawal of the compensation.

Section 10 [Duty of redemption]. (1) If, owing to environmental damage, the real estate is rendered entirely or partially useless to the owner, or its use for its intended purpose is essentially hampered, the party liable for compensation shall redeem the entire real estate or part thereof on the demand of the owner.

(2) If a court of law rules that the real estate or part thereof shall be redeemed, the provisions of the Act on the Redemption (Expropriation) of Immoveable Property and Special Rights apply to the redemption.

(3) If the damage has been caused jointly by several persons, the provisions of paragraph 1 only apply to the persons whose shares in causing the entire damage are substantial. The provisions currently in force on compensation paid under section 8 shall apply to the redemption compensation paid.

Section 11 [Compensation procedure]. An action referred to in this Act shall be brought before the court of law competent to hear a case concerning compensation by virtue of chapter 10 of the Code of Judicial Procedure. ...

8. France

Projet de loi adopté par le Sénat relatif aux organismes génétiquement modifiés⁵ (excerpts)

Titre II *bis*. La coexistence entre cultures

Chapitre Ier. Modifications du code rural

Art. 20. I. – L'article L. 251-1 est ainsi modifié :

1° Le II est ainsi rédigé :

« II. – Le Haut conseil des biotechnologies mentionné à l'article L. 531-3 du code de l'environnement est consulté sur les protocoles de surveillance. » ;

2° Après la première phrase du IV, il est inséré une phrase ainsi rédigée :

« Toute personne cultivant des organismes génétiquement modifiés doit déclarer auprès de l'autorité administrative et aux personnes exploitant une parcelle visée au 1° de l'article L. 662-6 les lieux où sont pratiquées ces cultures. » ;

3° Dans le VI, les mots : « comité de biovigilance » sont remplacés par les mots : « Haut conseil des biotechnologies ».

II. – Dans le sixième alinéa de l'article L. 251-2, les mots:

« pris après avis du comité de biovigilance » sont supprimés.

Art. 20 *bis* (nouveau)

Après l'article L. 251-1, il est inséré un article L. 251-1-1 ainsi rédigé :

« Art. L. 251-1-1. – L'autorité administrative établit un registre national indiquant la nature et la localisation à l'échelle départementale des cultures d'organismes génétiquement modifiés. Ce registre est rendu public et régulièrement mis à jour. »

Art. 21. Après le chapitre II du titre VI du livre VI, il est inséré un chapitre II *bis* ainsi rédigé :

« CHAPITRE II BIS.

« La culture des plantes génétiquement modifiées

« Art. L. 662-4. – La mise en culture des plantes et plants autorisés au titre de l'article L. 533-4 du code de l'environnement ou en vertu du règlement n° 1829/2003 du Parlement européen et du Conseil, du 22 septembre 2003, concernant les denrées alimentaires et les aliments génétiquement modifiés pour animaux est soumise au respect de conditions techniques visant à éviter la présence accidentelle d'organismes génétiquement modifiés dans d'autres productions.

⁵ Available at <http://www.senat.fr/dossierleg/pjl05-200.html>.

« Ces conditions sont fixées par arrêté du ministre chargé de l'agriculture, après avis du ministre chargé de l'environnement.

« Art. L. 662-5. – Le respect des prescriptions prévues à l'article L. 662-4 est contrôlé par les agents mentionnés au I de l'article L. 251-18. En cas de non-respect de ces prescriptions, l'autorité administrative peut ordonner la destruction totale ou partielle des cultures.

« L'ensemble des frais entraînés par ces mesures est à la charge de l'exploitant.

« Art. L. 662-6. – I. – Tout exploitant agricole mettant en culture une variété génétiquement modifiée dont la mise sur le marché est autorisée est responsable, de plein droit, du préjudice économique défini au II résultant de la présence fortuite de l'organisme génétiquement modifié de cette variété dans la production d'un autre exploitant agricole, lorsque sont réunies les conditions suivantes :

« 1° Le produit de la récolte dans laquelle la présence de l'organisme génétiquement modifié est constatée est issu d'une parcelle située à proximité d'une parcelle sur laquelle est cultivée cette variété et a été obtenu au cours de la même campagne de production ;

« 2° Le produit de la récolte était destiné, lors de la mise en culture, soit à être vendu en tant que produit non soumis à l'obligation d'étiquetage mentionnée au 3°, soit à être utilisé pour l'élaboration d'un tel produit ;

« 3° L'étiquetage du produit de la récolte dans laquelle la présence de l'organisme génétiquement modifié est constatée est rendu obligatoire en application des dispositions communautaires relatives à l'étiquetage des produits contenant des organismes génétiquement modifiés, qui sont d'ordre public.

« II. – Le préjudice économique mentionné au I est constitué par la dépréciation du produit résultant de la différence entre le prix de vente du produit de la récolte soumis à l'obligation d'étiquetage visée au 3° du I et celui d'un même produit non soumis à une telle obligation.

« Art. L. 662-7. – Tout exploitant agricole mettant en culture une variété génétiquement modifiée autorisée à la mise sur le marché doit souscrire une garantie financière couvrant sa responsabilité au titre de l'article L. 662-6.

« Cette garantie résulte de la souscription d'un contrat d'assurance ou, à défaut, du versement de la taxe prévue à l'article L. 662-8.

« Art. L. 662-8. – Tout exploitant agricole ayant droit à la réparation d'un préjudice économique au titre de l'article L. 662-6 est indemnisé par un fonds géré par l'Office national interprofessionnel des grandes cultures.

« Ce fonds, créé pour cinq ans, est alimenté par une taxe, due par tout exploitant mettant en culture une variété génétiquement modifiée qui n'a pas souscrit le contrat d'assurance mentionné à l'article L. 662-7.

« Le montant de cette taxe est fixé par arrêté du ministre chargé de l'agriculture et du ministre chargé du budget, dans la limite de 50 € par hectare de culture de la variété génétiquement modifiée.

« Cette taxe est exigible à compter de la déclaration prévue à l'article L. 251-1. Elle est constatée, contrôlée et recouvrée par l'Office national interprofessionnel des grandes cultures suivant les règles, garanties et sanctions applicables en matière d'impôts directs.

« Le fonds est également abondé par des contributions versées par les organismes professionnels et interprofessionnels concernés par l'obtention, la production ou la vente de semences, plantes ou plants génétiquement modifiés.

« La gestion comptable et financière du fonds relève d'un compte distinct de ceux qui retracent les autres opérations pratiquées par l'Office national interprofessionnel des grandes cultures. Les frais exposés par l'office pour sa gestion sont pris en charge par le fonds.

« Art. L. 662-9. – L'instruction des demandes d'indemnisation présentées au titre de l'article L. 662-6, la formulation des offres d'indemnisation ainsi que le paiement des indemnités sont assurés par l'Office national interprofessionnel des grandes cultures.

« L'acceptation d'une offre d'indemnisation vaut transaction au sens de l'article 2044 du code civil. La transaction est portée à la connaissance des personnes dont la responsabilité peut être engagée en application du I de l'article L. 662-6.

« Les actions contre l'Office national interprofessionnel des grandes cultures, résultant de l'application du présent article, sont portées devant le juge judiciaire.

« Art. L. 662-10. – L'exploitant qui a contribué par sa faute à la réalisation du préjudice mentionné au II de l'article L. 662-6 est exclu du bénéfice de l'indemnisation à due proportion du dommage qui lui est imputable.

« Art. L. 662-11. – Les dispositions de l'article L. 662-6 ne font pas obstacle à la mise en cause de la responsabilité de l'exploitant mettant en culture une variété génétiquement modifiée sur tout autre fondement.

« Art. L. 662-12. – Si l'exploitant agricole responsable du dommage a souscrit un contrat d'assurance couvrant sa responsabilité au titre de l'article L. 662-6, l'Office national interprofessionnel des grandes cultures est subrogé dans les droits du demandeur, à concurrence des sommes versées, contre l'assureur de l'exploitant responsable.

« Si l'exploitant agricole responsable du dommage n'a pas souscrit un tel contrat, l'Office national interprofessionnel des grandes cultures est subrogé dans les droits du demandeur, à concurrence des sommes versées, contre cet exploitant, en cas de non-respect des obligations mentionnées à l'article L. 662-4.

« Art. L. 662-12-1 (nouveau). – Le ministre de l'agriculture informe le Comité national de l'assurance en agriculture visé à l'article L. 361-19 des conditions de mise en œuvre du présent chapitre et le consulte sur la base d'un rapport annuel établi par l'Office national interprofessionnel des grandes cultures.

« Art. L. 662-13. – Un décret en Conseil d'État précise les conditions d'application du présent chapitre, à l'exception de l'article L. 662-4. »

Art. 22. Le titre VII du livre VI est complété par deux articles L. 671-14 et L. 671-15 ainsi rédigés :

« Art. L. 671-14. – Est puni de deux ans d'emprisonnement et de 75 000 € d'amende le fait de ne pas respecter une mesure prise en application des dispositions de l'article L. 662-5.

« Art. L. 671-15. – Est puni de six mois d'emprisonnement et de 7 500 € d'amende le fait de mettre obstacle à l'exercice des fonctions des agents mentionnés au I de l'article L. 251-18 agissant en application de l'article L. 662-5. »

Chapitre II. Modifications d'autres codes ...

Titre III. Dispositions diverses ...

Art. 27. Le fonds mentionné à l'article L. 662-8 du code rural est créé pour une durée de cinq ans à compter de l'entrée en vigueur du décret prévu à l'article L. 662-13 du même code.

Trois ans après la date visée à l'alinéa précédent, le Gouvernement présente au Parlement un rapport sur la situation du fonds, l'opportunité d'étendre sa durée et les perspectives de développement des produits d'assurance permettant de satisfaire aux dispositions de l'article L. 662-7 du même code.

La clôture du fonds entraîne l'abrogation de l'article L. 662-8 du même code.

9. Germany

§ 36a Genetic Engineering Act⁶ [Claims in connection with impairment of use].

(1) The transfer of characteristics from an organism arising from genetic engineering work, or other dispersal of genetically modified organisms, shall constitute a significant impairment in the sense of Section 906 of the Code of Civil Law, if, contrary to the intention of the party with the right of use, the transfer or other dispersal means that products in particular

1. cannot be placed on the market, or
2. under the provisions of this Act or other provisions, may be placed on the market only if labelled with a reference to the genetic modification, or
3. cannot be placed on the market with a label that would have been permitted under the relevant legal provisions for the production method.

(2) Compliance with good professional practice under Section 16b (2) and (3) is deemed to be economically reasonable in the sense of Section 906 of the Code of Civil Law.

(3) When assessing the usual local situation in the sense of Section 906 of the Code of Civil Law, it shall not be considered whether products are produced with or without genetically modified organisms.

(4) If, in the actual individual circumstances, several neighbours may have caused the impairment, and it is not possible to determine which of them has caused the impairment by their actions, each of them shall be liable for the impairment. This shall not apply if each of them has caused only part of the impairment and it is possible to divide the compensation between the perpetrators in accordance with Section 287 of the Code of Civil Procedure.

§ 906 BGB [Introduction of imponderable substances].⁷ (1) The owner of a plot of land may not prohibit the introduction of gases, steam, smells, smoke, soot, warmth, noise, vibrations and similar influences emanating from another plot of land to the extent that the influence does not impair the use of his plot of land, or impairs it only to an insignificant extent. An insignificant impairment is normally present if the limits or targets laid down in statutes or by statutory orders are not exceeded by the influences established and assessed under these provisions. The same applies to values in general administrative provisions that have been issued under section 48 of the Federal Environmental Impact Protection Act [*Bundes-Immissionsschutzgesetz*] and represent the state of the art.

(2) The same applies to the extent that a significant impairment is caused by a use of the other plot of land that is usual in the location and cannot be prevented by measures that are economically reasonable for users of this kind. If the owner is obliged to toler-

⁶ Available on the TRIS database at <http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=getdraft&inum=1148700>

⁷ Available at http://www.gesetze-im-internet.de/englisch_bgb/.

ate an influence under these provisions, he may require from the user of the other plot of land reasonable compensation in money if the influence impairs a use of the owner's plot of land that is customary in the location or its income beyond the degree that the owner can be expected to tolerate.

(3) Introduction through a special pipe or line is impermissible.

12. Ireland

Coexistence of GM and non-GM Crops in Ireland – Report of the Working Group (excerpts)⁸

Chapter 8. Economic loss, liability and redress

8.1 Introduction

In accordance with the Commission Guidelines the issue of coexistence concerns the potential economic loss and impact of the admixture of non-GM and GM crops, and the most appropriate measures that can be taken to minimise admixture. It is important to differentiate between the costs associated with implementing the coexistence measures in order to minimise admixture and the economic loss arising through reduced market value or market accessibility following the admixture of GM and non-GM crops.

Coexistence measures to minimise admixture are discussed earlier at Chapters 4 to 7 and include crop management measures, administrative and procedural requirements. The measures recommended in this Report take cognisance of the principle that *'those who introduce a new production type should bear the responsibility of implementing the farm management measures necessary to limit gene flow'*. The new production type is defined according to what is already most commonly practiced in the region.

Coexistence may also have other cost implications for non-GM crop growers e.g.

- Taking of voluntary or additional measures to minimise admixture e.g. testing of home-saved seed.
- Testing of crops for verification of GMO content might be regarded under civil law as a cost of operating a competitive business.

Where non-GM crop growers voluntarily choose to impose additional or stricter requirements on their production systems over and above the legal minimum, in order to gain market or price advantage, then non-GM crop growers are responsible for ensuring those requirements are met and for meeting their associated costs, if any.

8.2 Economic loss

In the context of liability, the term economic loss, resulting from the admixture of GM and non-GM crops, applies when a non-GM crop grower incurs a loss as a result of the actions of a third party. The extent of this loss will depend on the:

Difference in the market value or, inaccessibility to certain markets, arising from having to label non-GM crops as GM when thresholds, as set out in Community legisla-

⁸ The full report is available at http://www.agriculture.gov.ie/index.jsp?file=publicat/publications2005/gm_coexistence/index.xml

tion, have been exceeded. The economic loss is potentially greater for higher value crops such as organic produce.

Remediation measures for ensuring purity in subsequent crops and the associated costs. These costs may potentially be greater for organic crop production.

Duration of loss in market value and the period over which remedial action is required. This may extend beyond the current year of production in certain circumstances.

Such issues relating to economic loss necessitate the requirement to determine liability, assess the level of loss incurred and establish possible measures to redress such loss.

8.3 Liability

8.3.1 Background to legal liability in Ireland

There are three categories of liability:

- i. Civil,
- ii. Criminal
- iii. Administrative.

All three are relevant to the coexistence of GM and non-GM crops, although the circumstances under which they apply and the consequences arising may vary.

(i) Civil liability

Civil liability applies when an individual wishes to claim damages against another individual/organisation. The action is taken through the civil Courts. It is the only form of liability that may give rise to the payment of damages, or compensation.

Civil liability is essentially the liability of a defendant to compensate a claimant for personal damage or damage to his/her property:

- a) in so far as this can be *quantified* in money terms
- b) the damage was *reasonably foreseeable* and not too 'remote'⁹.
- c) the *burden of proof* is on the claimant, and,
- d) the claimant must also be owed a *duty of care* by the defendant.

(a) Quantification

⁹ Remoteness of damage applies primarily in breach of contract cases, where the defendant will only be held liable for damages as may be fairly and reasonably be considered either arising naturally from the breach of contract, or which was foreseeable as being the result of a breach of contract at the time of agreeing the contract. Remoteness also applies in the tort of negligence, but whether the GM crop farmer is found liable depends on to whom the GM crop farmer owes a duty of care. If the person is outside the class of those to whom he owes a duty of care, even if that damage was entirely foreseeable, then the GM crop farmer may not be liable for it.

The principal function of damages is to restore the person whose right has been invaded back to his/her previous position. It follows that there must be a protectable right, i.e. one that is recognised in law. For example, there is no such right that members of the public can invoke to prevent or rectify adverse impacts on public goods, such as the landscape or biodiversity.

Damages are paid based on the harm done and what is required to remediate that harm. What constitutes 'harm' is contentious however. For example, the loss of organic status for crops that are perfectly sound and capable of being sold on the open market may not be actionable harm. However the losses suffered through the inability to obtain the organic premium, or if the farm loses its organic status may be actionable harm. In such circumstances however, 'harm' may not be actionable where the damage is adventitious contamination below the threshold levels that determine the status of the crop.

It should be noted that in civil law, once harm has been established the defendant is liable for all financial losses flowing from it providing they are not too remote.

(b) Reasonably foreseeable

The damage must be foreseeable, as well as not too remote. The damage foreseen must also represent a real risk, in that it is justifiable not to take steps to eliminate a risk if it is small and the circumstances are such that a reasonable person, careful not to damage the interests of his/her neighbour, would think it right to neglect it – such as when it may involve considerable and disproportionate expense to eliminate it.

(c) Burden of proof

As the burden of proof rests on the claimant, they must be able to demonstrate that any admixture was not caused by fault on their own behalf. Thus documentary evidence for the use of certified seed, or that home saved seed was tested prior to planting, or records to indicate that shared machinery was properly cleaned prior to use would all assist in this regard.

It should also be noted that responsibility for mitigating the risk of damage also rests with the injured party. Therefore if, for example, the defendant is a GM crop grower, then the responsibility for mitigating risk of damage rests not only on the GM crop grower, but also on his non-GM crop neighbours, providing they have been made aware of his/her intention to cultivate GM crops. Thus, where a person intending to cultivate GM crops actively alerts his/her neighbours to this, those who might be at risk of admixture are advised to take measures to avoid this risk – as, even assuming the GM crop grower might ultimately be liable for any damage caused, *the general obligation is to mitigate any possible damage, where it is reasonably practicable to do so, as failure to do so may affect the strength or credibility of any future claim for damages.*

This is one of the reasons a formal approval system for the growing of GM crops that requires consultation with farm neighbours, has merit in terms of mitigating potential economic losses associated with the cultivation of GM crops.

(d) Duty of care

Civil liability applies where there is a clear duty of care. Someone who is owed the duty of care can be described as 'persons who are so closely and directly affected by

my act that I ought reasonably to have them in contemplation as being so affected when I am directing my mind to the acts or omissions that are called into question'. Thus a claimant must establish that the defendant owed him/her a duty of care and in doing so the Courts will examine whether imposing a duty of care would be fair, just or reasonable. Within the context of coexistence, the GM crop grower owes a duty of care to his/her farming neighbours.

Except under very specific circumstances, public bodies are not subject to a duty of care when they take decisions that are within the ambit of a statutory discretion due to it. This is to allow statutory bodies to implement regulations without the risk of litigation, as without such protection statutory bodies may be unwilling to regulate at all, even if the circumstances require it.

Civil liability is most likely to be in 'tort' or fault based, but civil liability in some circumstances is also '**strict**', as opposed to fault based. In other words, damages may be recovered even in the case of no fault. It normally applies where one party is undertaking an activity that entails a greater risk of loss to others than usual, and when it may be considered right that he/she accept the consequences if the loss materialises, however hard he/she tries to avoid this. The 'polluter pays' principle is an example of **strict liability** where the polluter pays for all the consequences regardless of whether or not he/she was at fault. It may take the Courts to decide whether strict liability will apply to the growing of GM crops in certain circumstances.

Contractual liability may also arise – for example under the Sales of Goods Act (1979), or if the terms of a tenancy agreement have been breached. Thus, contractual liability is relevant where seed is purchased that does not conform to its description, including any descriptions relating to its GMO content. Strict liability also applies where the goods are not of satisfactory quality and in this sense, GMO seed and product is no different from any other. Contractual liability also applies where a tenancy agreement is breached, for example where a grower grows a GM crop on rented land where the landowner has forbidden it.

There are a number of **defences** against liability, even strict liability, which can be invoked. These include:

- i. An 'Act of God'.
- ii. The intentional acts of third parties provided appropriate measures were in place (i.e. vandalism).
- iii. Compliance with a compulsory order from a public authority.

(ii) Criminal liability

Criminal liability applies if the sanction for an unlawful act or omission is penal – i.e. a fine or imprisonment. Such a sanction is designed to punish the guilty defendant, but not to provide compensation for anyone who has been injured as a result – therefore damages do not apply. The proceeds of fines are usually paid to the exchequer, thus a person who has suffered significant damage would still need to take civil proceedings to obtain full recompense. The State is the only body that can take a case for criminal liability to Court.

(iii) Administrative liability

Unlike the majority of European countries, Ireland and the UK have what is termed administrative law, which is a system of regulatory powers that have been given by statute to a variety of public and other authorities, whose exercise of them is subject to supervision by the Courts. In the context of coexistence, it is important, as it defines the responsibilities of the State when setting the coexistence measures and its obligations with regard to enforcement when those measures are breached. The powers may include the issue and service of ‘stop’ and ‘enforcement’ notices, coupled with a right of entry onto private property to ensure the notices are acted on.

Administrative law does not usually extend to the levying of fines or other penalties, nor to requiring compensation to be paid to third parties for past actions. Regulatory authorities may impose criminal sanctions if their orders are not complied with, but these are reserve powers to punish non-compliance with the orders and not the original act or omission which gave rise to them.

Regulatory authorities have no legal obligation to act against a person in breach of the applicable rules if they consider it inappropriate or unnecessary. However, a regulatory authority may be considered to be in breach of its duty of care and therefore liable if it fails to take appropriate action, where it has the power to do so and the Courts deem it was appropriate to do so – for example, against breaches of approval conditions to cultivate a GM crop. Under some statutes a person responsible for damage can be required to remediate that damage – such as the liability of a polluter to remediate any pollution he/she may have caused.

8.3.2 Determining liability

Responsibility for redress is linked to determining with whom liability lies. Where admixture occurs from the growing of GM crops, disputes can arise between seed suppliers, land-owners and tenants, haulage companies, contractors and growers, etc. in the same way as with conventional crop production. However, additional disputes, may arise between a number of parties that are specific to GM crop production and which would not be normally associated with the production of conventional crops including, for example:

(a) Between GM crop grower and non-GM crop grower:

Where the dispute arises between the GM and non-GM crop grower, two distinct scenarios are possible:

- Adventitious contamination occurs despite the fact that the GM crop grower has adhered to the coexistence measures.
- Adventitious contamination occurs where the GM crop grower is considered to have breached one or more of the measures.

(b) Between GM/non-GM crop growers and the State:

Two distinct scenarios arise:

- (i) Between the GM crop grower and the State where coexistence measures have been adhered to but where he/she is still held personally liable for damages. The GM grower may choose to seek damages from the State on the grounds of negligence, or the

breach of duty of care, or of statutory duty on the basis that the coexistence measures failed to prevent adventitious contamination, for which she/he has been held liable.

(ii) Between the non-GM crop grower and the State where the coexistence measures are adhered to, but where the GM crop grower is not held liable for damages.

It is therefore clear from the above that current law allows for many instances where GM crop growers and the State are possibly subject to liability being established against them. While leaving the determination of liability and redress i.e. payment to be made by the persons held liable for the damage and losses incurred, solely to the Courts is no doubt possible, its practicality may be questioned on a number of grounds. For example,

- In the event of relatively small losses, would using the Court system be a reasonable approach in terms of both cost and timeliness?
- If the growing of GM crops were to become commonplace, could the unknown burden of litigation be handled by the Courts?
- Would a decision to leave recourse purely in the hands of the legal system prove to be a disincentive to farmers wishing to grow GM crops and therefore be construed as an indirect barrier to trade? Most EU countries acknowledge that proving liability for adventitious contamination is difficult and may in some instances be impossible.

Taking a Court action may result in an injured party failing to receive any compensation, for example, where liability cannot be established.

The Commission Guidelines stipulate that the coexistence measures should be (i) efficient, cost effective and proportionate, (ii) should not go beyond what is necessary in order to ensure that adventitious traces of GMOs stay below the tolerance thresholds and (iii) should avoid any unnecessary burden for growers, seed producers, co-operatives and other actors associated with any production type. Equally, and under competition law, the actions of the State should not prevent the development of a market, including a market for GMOs. This has implications for the legislative environment in which the industry operates and the freedoms or constraints it imposes upon it.

Furthermore, the Commission Guidelines stipulate that 'no form of agriculture, be it conventional, organic or agriculture using genetically modified organisms (GMOs) should be excluded within the European Union', and that 'farmers should be able to cultivate the types of agricultural crops they choose'. In order to allow this, and for the 'ability to maintain different agricultural production systems that are a prerequisite for consumer choice', the Commission Guidelines state that Member States should take measures to allow the coexistence of conventional, GM and organic crops.

With respect to the practicality of the Court system in the determination of liability and with the possibility of fear of litigation preventing farmers from choosing the production type they prefer, it is therefore necessary to develop a system where damage to third parties is minimised, that is proportional, not anti-competitive and where the right of the *'farmer (GM and non-GM) to choose the production type they prefer, without*

*imposing the necessity to change already established production patterns in the neighbourhood*¹⁰, is respected.

In this regard the Working Group examined other options for redress as outlined in the following section 8.4.

8.4 Alternatives to the Courts for redress of economic loss

8.4.1 Private settlements

Co-operation between growers in resolving disputes that may arise over compensation for economic loss could be successful in many cases where the liable party can be identified. Affected parties should make every effort to reach agreements in this regard.

8.4.2 Insurance

Private insurance is an option that may offer protection and thus a reassurance to GM crop growers and their immediate neighbours, that in the event of a GM crop grower causing loss to a neighbouring farm, the insurance would cover their financial liability for that loss.

Insurance is predicated on establishing, in advance and on an actuarial basis, the likelihood of, and level of loss occurring based on the actual risk involved. However, for GM cropping the level of losses are unpredictable and in many cases the level of loss caused cannot be easily foreseen or indeed quantified in advance.

To date, insurance companies have not been prepared to offer insurance to the growers of GM crops and at present this is not a realistic option. In the future, the insurance industry may decide to offer protection in relation to certain economic aspects associated with GM crop cultivation.

8.4.3 The establishment of a redress fund

In the absence of private insurance to mitigate the liability risks facing both the non-GM and GM crop grower, the Working Group considered the creation of a fund as an alternative to insurance and until such time as the market provides this service. The creation of a fund offers advantages to both the GM and non-GM crop growers, and to a certain extent the State, as follows:

It assists in the creation of a favourable environment whereby it offers protection to those who cultivate GM crops and their neighbours for losses they may incur as a result of the GM crop cultivation.

Specifically –

It provides a more rapid means of addressing claims for economic loss compared with a Court-based approach.

It provides reassurance to non-GM crop growers who incur economic loss arising from GM crop cultivation that they will not be responsible for meeting those losses, and can

¹⁰ Article 2.1.7 of the Commission Recommendation 2003/556/EC on Guidelines for Coexistence

have recourse to a non-Court based process to seek redress. It also provides reassurance to the GM crop growers who have caused the economic loss that they are not personally liable for meeting the associated costs [see (iii) below].

It assists the State in meeting its obligations in relation to the Commission Guidelines.

It provides protection for GM crop growers in the event of the imposition of strict liability in the case of no fault on the part of the GM crop grower.

It provides redress in the case of adventitious contamination where a grower lacks adequate personal assets to cover the claimant's losses, and thus reduce any financial loss the claimant may incur as a result.

By virtue of being a rapid and cost effective process for providing redress, it may reduce the number of subsequent claims made in the Courts for damages. However, this does not preclude the individual from pursuing a subsequent Court case if he/she so chooses.

It reduces the State's exposure in cases where economic loss arises even though coexistence measures have been adhered to i.e. the provision of redress through a fund means the GM crop grower is not personally liable for damages and is thus unlikely to counter-sue the State should coexistence measures fail to prevent adventitious contamination of his/her neighbour's crop.

It provides baseline information, which may encourage private sector insurance companies to develop their own insurance services.

On the basis of the above, the Working Group is of the opinion that a fund for redress for economic loss arising from adventitious admixture above the legal threshold levels represents a useful approach to dealing with the issues of liability and redress until such time as the insurance market provides this service.

However, the creation of a fund represents a more interventionist approach to the growing of GM crops, and while in principle it may offer a number of benefits, there are practical considerations that should be addressed before such a fund is established. These are as follows:

(i) Source of funding

In addressing this question the Working Group was conscious that the benefits of a fund accrue to both GM and non-GM crop growers alike. The size of the fund would need to be adequate to cover any economic loss that is calculated based on specific criteria as set down for access to this fund, irrespective of any benefits accruing to GM crop growers from the cultivation of GM crops.

Therefore the following are options for funding:

A levy on the GM crop sector (GM crop growers, biotech companies and other industry beneficiaries).

On the basis that the growing of GM crops will result in economic benefits to growers and the biotech industry, it could be argued that responsibility for the redress of economic loss incurred by non-GM crop growers should be covered by the main beneficiaries i.e. the GM crop sector. Therefore, a fund developed by placing an obligatory levy on the GM crop sector would be a realistic option. However, this could be viewed

as a levy or tax on GM crop cultivation and therefore be regarded as representing a barrier to production, and as such, the size of this levy would need to be carefully considered. Other Member States (e.g. Denmark) have opted for this approach.

A levy on the general crop sector (GM and non-GM crop growers)

A crop specific levy on all growers, both GM and non-GM, is another option. This may be regarded as being disproportional and unwarranted on non-GM crop growers, due to the fact that they carry out normal agricultural activity (as opposed to the new production type introduced by GM crop growers) and do not benefit economically from GM technology. However, non-GM growers will be the main beneficiaries of the fund and contributions could be viewed as equivalent to normal insurance contributions.

Revenue from fines where coexistence measures are breached.

Revenues generated from fines arising from breaches of mandatory coexistence measures could be used to maintain the fund. However, it is anticipated that this source of revenue would be very limited.

State funded

The Working Group is of the opinion that it is not the responsibility of the State to be directly involved in the provision of insurance for the economic risks associated with the growing of GM crops. However, the State has responsibility to put in place measures to protect non-GM crop growers from direct economic loss as a result of the introduction of the new (GM) crop type. At the same time, these measures should not make prohibitive the cultivation of GM crops. In this regard, State contribution, either partially or wholly, to a redress fund could be considered. However, such a contribution would have to be on a cost recovery basis. The recovery of costs should be from contributions from the main beneficiaries i.e. the GM crop grower, biotech companies and other industry beneficiaries. This would support the current positive but precautionary policy the State established on GMO technology¹¹.

(ii) Start-up time and duration of fund

The fund could be established before the cultivation of GM crops begin or, after a period of time once cultivation of GM crops has commenced. The latter option would allow for a better assessment of the extent to which a fund would be required. The fund could be a permanent or temporary measure. This will depend on whether the insurance industry enters the market and the extent to which GM admixture of non-GM crops occurs under the coexistence measures proposed in this Report.

(iii) Losses covered

Redress from the fund should be restricted to covering economic loss, as defined earlier in this chapter, as a result of the adventitious admixture of non-GM produce by GMOs. In addition, the rules governing the distribution of any monies from this special fund should be very strict and controlled. To this effect, the Working Group has developed the following suggestions in relation to accessing the fund:

¹¹ GMO Consultation Paper 1998

Economic loss should be calculated when the following criteria apply:

- When the statutory labelling GMO thresholds are exceeded in non-GM produce.
- Where the loss is verifiable and quantifiable and based on the current year's calculation.
- Where the loss is limited to the difference in the market value of the crop pre- and post-admixture and also those costs associated with remedial measures for ensuring purity in subsequent crops.
- Where losses may continue for more than one year provided there is sufficient evidence that reasonable efforts were made to minimise them by the claimant.

Non-GM crop growers must be able to provide reasonable evidence that the source of admixture was external and was through no fault of their own, e.g. testing of home-saved seed, adherence to rotation interval, etc.

Access to the fund should be available to:

- Non-GM crop growers, where the cause of admixture cannot be determined.
- Non-GM crop growers where the liable party can be identified, but where attempts to reach a private settlement have failed. It could be argued that there is little incentive for GM crop growers to adhere to the coexistence measures in this scenario. However, GM crop growers will be incentivised to adhere to coexistence measures by imposing sanctions in the event of breaches.
- Sectors of the farming community who choose to impose non-statutory, additional or stricter requirements on their production systems in order to gain market or price advantage, should themselves be responsible for ensuring those requirements are met.

All and any other losses are still pursuable at the discretion of the claimant through the civil Courts.

Administration of fund

The Working Group is of the opinion an Independent Body should be responsible for the administration of the fund.

Recommendations

- I. Where a non-GM crop grower incurs a verifiable and quantifiable economic loss as a result of the maximum labelling threshold in his/her crop being exceeded through admixture by the actions of a third party, the affected grower should be compensated.**
- II. Where economic loss arises as a result of admixture, and where the liable party can be identified, every effort should be made by affected parties to reach a settlement.**
- III. A redress fund should be established for the redress of economic loss if and when the necessity arises. Such a fund should be established by the State but on a cost recovery basis. The recovery of costs should be from contributions**

from the main beneficiaries i.e. the GM crop grower, biotech companies and other industry beneficiaries.

- IV. An Independent Body should be established to carry out the administration of the fund. Payments from this fund should be strictly controlled.**
- V. Notwithstanding the establishment of a redress fund, National law on liability would still apply and non-GM crop growers are entitled to pursue a civil action through the Courts.**

15. Lithuania

Rules on co-existence of genetically modified crops with conventional and organic crops (excerpts)¹²

General provisions

1. The Rules on co-existence of genetically modified (GM) crops and conventional and organic crops (hereinafter referred to as „the Rules”) are aimed at regulating the possibilities of farmers to cultivate desirable GM plants while preventing migration of genetically modified organisms (GMOs) to fields of conventional and organic crops.
2. The Rules are drafted following Commission Recommendation 2003/556/EC of 23 July 2003 on guidelines for the development of national strategies and best practices to ensure the co-existence of genetically modified crops with conventional and organic farming.
3. The Rules shall establish requirements for cultivation, maintenance, harvesting, storage and transportation of GM crops to prevent migration of GMOs to fields of conventional and organic crops, and shall provide for liability for GMO contamination.
4. The Rules are binding on farmers cultivating GM crops (agricultural operators) and national supervisory bodies responsible for supervision of GM crops and accumulation of information.
5. The Rules shall not be applied in cases of GMO release into the environment for any other purposes than for placing on the market.
6. For the purposes of the present Rules:

Genetically modified crops shall mean agricultural crops, vegetable crops, garden or ornamental plant nurseries, including propagation material in which the genetic material has been altered using the techniques of genetic engineering in a way that could not occur naturally by mating and/or natural recombination. GM crops shall also include those conventional or organic crops in which GMOs are found after deliberate or adventitious cross-breeding, the spreading of seeds or vegetative parts of plants the amount of which exceeds the established threshold for adventitious and unavoidable GMO presence.

GMO unique identifier shall mean a numeric code specified in Article 3.4 of Regulation (EC) No. 1831/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food products and feed products produced from genetically modified organisms, and amending Directive 2001/18/EC.

National supervisory bodies shall mean the State Seed and Grain Service under the Ministry of Agriculture responsible for supervision of propagation material of GM

¹² Available on the TRIS database at <http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=getdraft&inum=1260256>.

seed crops and garden and ornamental plants, and the State Plant Protection Service responsible for supervision of crops other than seed crops.

Threshold shall mean the threshold for adventitious and unavoidable GMO presence in all non-GM products specified in Regulation (EC) No. 1830/2003 of the European Parliament and of the Council of 22 September 2003 in excess of which the products must be labelled as being or containing GMOs.

Co-existence shall mean the co-existence of GM crops with conventionally and organically cultivated crops of the same family, genus or species.

Garden or ornamental plant nursery shall mean a nursery in compliance with requirements for growing the seedlings, grafts and shoots and propagation of stocks of garden or ornamental fruit and berry plants.

Other definitions for the purposes of the present Rules are used as defined in the Law on Genetically Modified Organisms of the Republic of Lithuania (Official Gazette, 2001, No. 56-1976), the Law on Plant Seed Growing of the Republic of Lithuania (Official Gazette, 2001, No. 102-3623; 2004, No. 156-5687) and the Description of the procedure for deliberate release into the environment and placement on the market of genetically modified organisms, approved by Order No. D1-225 (Official Gazette, 2004, No. 71-2487) of the Minister for the Environment of the Republic of Lithuania.

VIII. Liability and obligations

27. In the case of mixing or cross-breeding of GM plants with conventional and organic plants or in the case of spillage of GM plants or their products:

27.1 Competent national supervisory bodies must be informed of the incident;

27.2. Counter-measures must be applied following the drafted action plan;

27.3. Spilled products must be disposed of;

27.4. Production mixed in storage must be placed on the market as a GMO or, if laboratory tests show the threshold has not been exceeded, may be placed on the market as non-GM;

27.5. Crops where GMOs have spread must be disposed of or cultivated as GM crops observing all requirements of the present Rules with the exception of Articles 7.1 to 7.11.

28. Farmers shall be liable for infringements of requirements of the present Rules on GM crops in accordance with the procedure prescribed by legislation of the Republic of Lithuania.

29. GM crop producers shall not be liable for infringements of the present Rules according to Resolution No. 840 of 15 July 1996 of the Government of the Republic of Lithuania on the approval of rules on exemption from liability in the event of force majeure (Official Gazette, 1996, No. 68-1652).

18. Netherlands

HPA Regulation on the Coexistence of Crops 2005¹³

Regulation by the Commodity Board for Arable Farming (Dutch abbreviation: HPA) of 10 November 2005 regulating the cultivation of permitted or licensed GM crops alongside organic and conventional crops (HPA Regulation on the coexistence of crops 2005)

The committee of the Commodity Board for Arable Farming;

Having regard to Articles 93, 95, 104(1) and (3) and 106 of the Industrial Organisation Act and Articles 3, 17 and 18 of the Decree establishing the Commodity Boards for Arable Farming;

Having heard the Crops Commission;

Has decided to lay down the following regulation:

Section 1 Definitions

Art. 1. In this regulation, the terms below shall be defined as follows:

- a) *commodity board*: Commodity Board for Arable Farming;
- b) *committee*: commodity board committee;
- c) *administrative board*: administrative board of the commodity board;
- d) *chairman*: chairman of the commodity board;
- e) *sector manager*: official appointed by the administrative board in that capacity and who is specifically responsible for crop matters;
- f) *commission*: Crops Commission;
- g) *coexistence*: the existence alongside each other of genetically modified, organic and conventional crops;
- h) *operator*: a natural person or legal entity who runs a company covered by the scope of the commodity board;
- i) *GMO grower*: an operator who grows GM crops or commissions a third party to do the same;
- j) *non-GMO grower*: an operator who does not grow GM crops and does not fall within the scope of the definition included under k;
- k) *GMO-free grower* : organic and other operators who wish to remain completely GMO free and have applied this principle right across their farms and can also demon-

¹³ Available on the TRIS database at <http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=getdraft&inum=1255325>.

strate that their consumers make specific market requirements with regard to the GMO-free status of the end products;

- l) GMO-free defined market:* market in which consumers make specific requirements with regard to the GMO-free status of the end products;
- m) consumers:* distributors, retailers and consumers;
- n) GMO Decree:* Decree on genetically modified organisms under the Environmentally Hazardous Substances Act (Bulletin of Acts and Decrees 1993, 435);
- o) permitted:* permitted for cultivation within the European market in accordance with the provisions in Section 3.3 of the GMO Decree or in line with Regulation (EC) 1829/2003;
- p) licensed :* licensed in accordance with the provisions contained in Section 3.2 of the GMO Decree;
- q) GM crops:* genetically modified potato, sugar beet and maize varieties;
- r) potatoes:* plants of the species *Solanum tuberosum*;
- s) volunteer potatoes:* potato plants growing from potato tubers or seed left behind on a plot of land;
- t) sugar beet:* plants of the species *Beta vulgaris*;
- u) sugar beet bolters:* sugar beet that has run to seed in the first year (combined with extending stems, also known as 'bolting');
- v) volunteer sugar beet (weed beet):* sugar beet growing from seed that has landed on a plot of land on which sugar beet was grown in a previous growing season;
- w) maize:* plants of the species *Zea mays*;
- x) isolation distance:* distance measured horizontally between the centre or first plant of the row of GM crops and the centre or first plant of the row of non-GM crops of the same plant species with different growers;
- y) plot of land:* one continuous crop;
- z) adjacent:* next to.

Section 2 Obligations

Art. 2. (1) The GMO grower shall give notice of his intention to cultivate permitted or licensed GM crops in writing and in good time and shall consult growers of adjacent plots of land and growers whose plots of land fall within the isolation distances of the permitted or licensed GM crops about the same in good time. The requirement to do so in good time shall be deemed not to have been met if the date of 31 January of the year in which he intends to grow the permitted or licensed GM crops has passed.

(2) The GMO-free grower shall notify the GMO grower in writing and within two weeks of this GMO grower having met the provisions of paragraph 1 of the fact that he grows crops for the GMO-free defined market, thus allowing the GMO grower to observe the necessary isolation distance.

(3) The GMO grower is required to give notice of his intention to grow permitted GM crops before 1 February by registering with the GMO Crops Register.

Art. 3. GMO growers are required to observe the following minimum isolation distances:

- a in the case of non-GMO growers: 3 m for potatoes, 1.5 m for sugar beet and 25 m for maize;
- b in the case of GMO-free growers: 10 m for potatoes, 3 m for sugar beet and 250 m for maize.

Art. 4. GMO growers, non-GMO growers and GMO-free growers shall all take measures in order to keep the products of permitted or licensed GM crops and non-GM crops completely separate during cultivation, treatment, processing, transport and storage. During cultivation, this particularly refers to:

- a controlling volunteer potatoes;
- b controlling sugar beet bolters;
- c controlling volunteer sugar beet (weed beet).

Section 3 Other provisions

Art. 5. (1) By Decree, having heard the commission, the committee may grant exemption from the provisions in Articles 2, 3 and 4 of this Regulation and prescribe more detailed regulations upon written and reasoned request.

(2) A Decree as referred to in paragraph 1 shall be published in the Trade Journal and shall enter into effect from the second day following its promulgation, unless otherwise stipulated in the Decree in question.

(3) On behalf of the committee, the sector manager shall be authorised, at the operator's written request, to grant exemption from the provisions in Articles 2, 3 and 4 and lay down more detailed regulations.

Art. 6. The provisions in, or pursuant to, Articles 2, 3 and 4 that impose obligations on operators shall also be binding upon other natural persons and legal entities that perform activities normally performed commercially by companies covered by the scope of the commodity board.

Art. 7. Infringements of the provisions in or pursuant to this Regulation are deemed to be actions which may necessitate disciplinary measures.

Section 4 Final provisions

Art. 8. This Regulation shall enter into effect on a date determined by the chairman, on behalf of the committee, by Decree.

Art. 9. This Regulation shall be cited as the HPA Regulation on the coexistence of crops 2005.

*Explanatory Memorandum***The Crops Commission**

The primary sector, in the form of the Crops Commission that was specifically set up for this purpose, has decided to make recommendations to the HPA's committee.

The members of the Crops Commission are appointed by the committee on the recommendation of the LTO [Dutch Organisation for Agriculture and Horticulture], NAV [Dutch Human Genetics Association], CNV Bedrijvenbond [Christian Trade Union Federation] and FNV Bondgenoten [Trade Union Federation]. As a consequence, the commission is an accurate reflection of the sector in question.

Given the specific nature of the area of policy on crop matters, the Commission's responsibilities are as follows:

- Issuing prompted and unprompted advice to the committee on crop matters;
- Drafting (or commissioning a third party to draft) regulations on crops and on funding projects and institutions, such regulations having to be established by the committee;
- Formulating (multi-annual) budgets, to be established by the committee, so as to determine the funding needed to (co-)finance projects and institutions;
- Taking decisions on spending the budget made available;
- Monitoring (co-)funded projects and institutions;
- External consultations in relation to the task area;
- External representation of the commodity board in terms of the policy area of crop matters;
- Issuing advice on funding the commissions and the commodity board's secretarial and administrative support activities;
- Granting exemptions if given the opportunity by regulation.

Objective of the regulation

The regulation follows on from the Agreement on Coexistence in the Primary Sector of November 2004. The Agreement fleshes out the Dutch coexistence strategy which is required on the basis of the European coexistence guidelines (2003/556/EC) and Article 26 a of Directive 2001/18/EC. In its policy document of October 2003, the Dutch Government indicated that the responsibility for fleshing out coexistence lies, first and foremost, with those parties with a direct interest and that coexistence measures should be determined by such interested parties.

The objective of the regulation is to flesh out coexistence in the primary sector, whereby measures must make it possible to grow permitted and licensed GM crops separately from organic and conventional crops. The regulation aims to leave maximum freedom of choice and contains the compulsory measures that prevent permitted and licensed GM crops from being mixed with organic and conventional crops, with all the attendant direct economic damage that this may entail.

The Agreement stipulates that the grower, provided he has met the obligations in this regulation, is no longer liable for damage resulting from mixing. In the exceptional event that damage were to result from such a situation, the parties to the Agreement have agreed that growers who have sustained damage, under certain conditions – including that damage can be demonstrated and that it is not self-inflicted – qualify for compensation to cover the direct economic damage (including loss of turnover and any costs of analysis) which may result from mixing. A damage fund will be set up for that purpose.

Explanatory note to definitions and articles

Article 1, sub-section l: GMO-free defined market.

This involves crops for which GMO alternatives are available.

Article 1, sub-section o: permitted.

Genetically modified crops that, in accordance with the provisions in Section 3.3 (on purposeful introduction into the environment by introduction onto the market) of the Decree on genetically modified organisms under the Environmentally Hazardous Substances Act (Bulletin of Acts and Decrees 1993, 435, most recently amended by Decree of 3 August 2004, Bulletin of Acts and Decrees 2004, 418) or in accordance with Regulation (EC) 1829/2003 (on genetically modified food and feed, OJ L 268), are permitted on the European market for the purpose of growing crops.

Article 1, sub-section p: licensed.

Genetically modified crops that are licensed in accordance with the provisions in Section 3.2 (on the purposeful introduction into the environment for other purposes) of the Decree on genetically modified organisms under the Environmentally Hazardous Substances Act (see under Article 1, sub-section o). This involves, inter alia, field trials with GM crops for which a licence is required. Registration will coincide with the application for a licence from the Ministry of Housing, Planning and the Environment.

Article 1 sub-section x: isolation distance.

Isolation distances must, in principle, be observed at the GMO grower's farm. The space within the isolation distance should be filled with crops of a different plant species or no crops at all. Public spaces (ditches, roads, etc.) can be included in this. The isolation distances included in the regulation do not apply to spaces in between permitted or licensed GM crops of different growers.

Upon selling, the GMO grower must meet the regulations of Regulation (EC) 1830/2003 (concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC).

As stipulated in the Agreement, isolation distances can be modified on the basis of consensus of the parties to the Agreement as new evidence comes to light, resulting, for example, from monitoring or research activities.

The isolation distances to be amended shall be submitted to the HPA committee in a draft amending Regulation.

Article 2(1) and (2)

Upon request, the HPA will make standard forms available for notifications in writing. GMO growers will consult non-GMO growers and GMO-free growers about harmonising building and cultivation plans.

Article 2(3).

The GMO Crop Register is maintained for and on behalf of the Ministry of Housing, Planning and the Environment at the Regulations Service of the Ministry of Agriculture, Nature and Food Quality.

Article 6.

The regulation pertains to all forms of cultivation, including field trials and allotment gardening.

Article 8.

The chairman will take a decision once he has received a unanimous proposal on this subject from the Agreement partners via the Coexistence Agreements Steering Committee.

Following entry into effect, the regulation will be assessed within three years of the first commercial GM crops being grown.

Further explanation of the need for public legislation, in this case the regulation

the commodity board is set up as an organisation based on public law for all arable farms. All farms are required to observe the compulsory measures in the framework of coexistence, as laid down in the Agreement and included in the regulation. Without the regulation, the coexistence of permitted or licensed GM crops and non-GM crops could be at risk.

Comparison against private alternatives

In order to ensure that the entire sector complies with the obligations (as included in public legislation), it is impossible to guarantee that this be achieved by private arrangements, for example. The generally binding nature of public legislation is preferable to the voluntary nature of private arrangements. This is because, in order to meet the objectives, the obligations need to be met.

The implementation and enforcement aspects of the regulation

The obligations contained in the current regulation will be monitored in the framework of the crop certification schemes which include, or make reference to, binding measures. These comprise, for example the 'Food Safety Certificate in Arable Farming' or individual schemes for potatoes, sugar beet, grains, seeds and pulses and the GMP11 code for growing animal feed. GMO growers must have crop certificates of the relevant GM crops.

In accordance with Article 104 of the Industrial Organisation Act, as entered into force by Royal Decree (Bulletin of Acts and Decrees 2002, 642) on 1 January 2003, infringements of prohibitive provisions of this regulation result in disciplinary action. On the basis of court trial reports of the supervisors appointed by the committee, the chairman will bring cases before the disciplinary tribunal.

The judicial process of the disciplinary enforcement procedure is provided for in the Act on disciplinary jurisdiction within the industrial organisation 2004 which entered into effect on 1 April 2004.

The disciplinary measures that can be taken in the event of an infringement of the regulation include:

- reprimands;
- financial penalties up to €4 500 maximum;
- publication of the ruling at the expense of the party involved;
- putting stricter monitoring in place on the farm of the party involved at the latter's expense for two years maximum.

If the value of the goods involved in the infringement, or the value of the unauthorised benefit that has been derived, either wholly or in part, from the infringement exceeds €1 135, a financial penalty can be imposed in the sum of maximum €11 250.

Financial implications of the regulation

The costs of enforcement are paid by the potato, sugar beet and maize growers as part of the monitoring costs in the framework of certification.

Allocation of committee powers

The committee is authorised to grant exemption from the provisions in Article 2, 3 and 4. Such exemptions will only be granted in exceptional circumstances. This involves exemptions for several growers in the face of natural disasters or epidemics, for example.

On behalf of the committee, the sector manager is authorised to grant exemption from the provisions in Article 2, 3 and 4.

The circumstances under which exemption can be granted are exceptional. An exemption is granted by great exception and only upon approval of the parties to the Agreement via the Coexistence Agreements Steering Committee. The conditions of exemption ensure that the implementation of the regulation remains as much as possible intact. An exemption will apply for a restricted period of time.

The exemption will also stipulate that the growers in question will notify the parties with a direct interest of the fact that they have obtained this exemption.

A circumstance in which exemption is necessary is the sowing seed production of sugar beet (exemption from the provisions in Article 4 sub-section b).

21. Portugal

Draft Decree-Law¹⁴

Decree-Law which establishes, in the Ministry of Agriculture, Rural Development and Fisheries, together with the Directorate-General for Crop Protection, the Compensation Fund intended to support possible damage, of an economic nature, arising from accidental contamination from the cultivation of genetically modified varieties

Decree-Law No 160 of 21 September 2005 regulating the cultivation of genetically modified varieties aims to ensure their coexistence with conventional crops and with organic production.

The Decree-Law lays down specific cultivation rules for genetically modified varieties by regulating activities, placing responsibility on those involved in the respective production process and seeking to ensure compliance with the applicable European Union legislation on traceability and labelling of agricultural products. These provisions set a labelling threshold of 0.9% accidental contamination with genetically modified organisms for products which are not genetically modified.

However, despite compliance by farmers with the cultivation rules laid down, it must be accepted that situations may occur in which sexually compatible plant species are accidentally contaminated at levels above 0.9%. If these situations are found to have occurred, the products produced must consequently be labelled as containing genetically modified organisms. This may cause the economic value of these products to be reduced, with negative consequences for the respective farmer.

In this respect, and in accordance with the provisions of Article 14 of Decree-Law No 160 of 21 September 2005, a Compensation Fund is to be created which is intended to compensate farmers for possible economic damage suffered.

The Fund shall initially remain in force for five years but may be extended if this can be justified by technical or scientific reasons or due to economic impact.

The governing bodies of the Autonomous Regions have been heard.

Consequently:

Pursuant to Article 198(1)(a) of the Constitution, the Government hereby decrees the following:

Article 1. Object and nature

1 — The Compensation Fund, hereinafter referred to as the „Fund”, which is intended to support any economic damage arising from accidental contamination due to the cul-

¹⁴ Available on the TRIS database at <http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=getdraft&inum=1272584>.

tivation of genetically modified varieties, is created within the Ministry of Agriculture, Rural Development and Fisheries, linked to the Directorate-General for Crop Protection.

2 — The Fund is established as a separate resource without any legal personality and the compensation awarded by this Fund shall be exclusively financial.

Article 2. Scope

The provisions of this Decree-Law shall apply to unprocessed agricultural products in the first phase of marketing for which it is proven that these have been contaminated, at levels exceeding 0.9%, by the genetically modified organisms contained in the genetically modified plant varieties whose cultivation is governed by the provisions of Decree-Law No 160 of 21 September 2005.

Article 3. Administration

1. Without prejudice to the provisions of the following paragraph, the Fund shall be managed by:

- a) The Directorate-General for Crop Protection, with regard to technical matters, which shall for this purpose provide the necessary administrative and logistical support;
- b) The Directorate-General for the Treasury, with regard to managing the funds and respective resources.

2. The Fund Management Rules shall establish the terms of the management referred to in this Article and shall determine the conditions under which expenses shall be paid by the Fund. These Rules shall be approved by a joint order of the members of government responsible for finance and agriculture.

3. The Fund's expenses shall be those resulting from the costs incurred as a result of applying this Decree-Law.

Article 4. Assessment Group

1. The Assessment Group is created in order to assess the requests for compensation.

2. The Assessment Group shall be responsible for assessing and deciding on the award of compensation, including calculating the respective amounts.

3. The Assessment Group shall be composed of:

- a) One representative of the Directorate-General for Crop Protection who shall chair the Assessment Group;
- b) One representative of the Regional Agriculture Directorate, pursuant to paragraph 4;
- c) One representative of the Confederação dos Agricultores de Portugal (CAP) [Confederation of Farmers of Portugal];
- d) One representative of the Confederação Nacional de Agricultura (CNA) [National Agriculture Confederation];

- e) One representative of the Confederação Nacional das Cooperativas Agrícolas de Portugal (CONFAGRI) [National Confederation of Farming Cooperatives of Portugal];
 - f) One representative of the Associação dos Jovens Agricultores de Portugal (AJAP) [Young Farmers' Association of Portugal];
 - g) One representative of the Associação Nacional dos Produtores e Comerciantes de Sementes (ANSEME) [National Seed Producers and Dealers Association];
 - h) One representative of the Associação Portuguesa das Indústrias de Alimentos Compostos para Animais (IACA) [Portuguese Association of Animal Feed Industries];
 - i) One representative of the Federação das Indústrias Portuguesas Agro-Alimentares (FIPA) [Federation of Portuguese Agri-Food Industries];
4. The representative referred to in subparagraph *b)* of the above paragraph shall come from the Regional Agriculture Directorate or from the respective services of the Autonomous Regions which are responsible for the area where the agricultural holdings in question are located.
5. The Assessment Group shall meet when convened by its chairman who may, whenever appropriate, convene or invite other persons or entities.
6. The Assessment Group shall decide by simple majority of the votes cast by the permanent members who are present. In the event of a tie, the chairman shall have the casting vote.
7. No compensation shall be payable to the members of the Assessment Group for their participation in this Group.

Article 5. Financing

The Fund shall be financed:

- a) From the taxes collected pursuant to this Decree-Law;
- b) From the income and property from which it benefits.

Article 6. Seed tax

1. An annual tax shall be payable on each packet of seed of genetically modified varieties marketed or used in Portugal under the terms of this Article.
2. The marketing or use of packets of genetically modified maize seed shall be subject to a tax of €4 per packet of 80 000 seeds. Those packets containing a number of seeds above or below this figure shall be subject to a tax which shall be directly proportional to the number of seeds contained in these packets.
3. The amounts indicated in the above paragraphs may be updated annually through a joint order of the Ministers for State and Finance and for Agriculture, Rural Development and Fisheries, in accordance with the coefficient resulting from the variation in the retail price index, excluding housing.
4. The taxes shall be collected by the State Treasury on behalf of the Directorate-General for Crop Protection from seed producers or packagers or other entities, including farmers. These taxes must be paid by 31 October.

Article 7. Beneficiaries

The beneficiaries of the Fund shall be farmers, whether natural or legal persons, who can prove that they have suffered an economic loss due to the occurrence of accidental contamination exceeding 0.9% of their agricultural products produced.

Article 8. Eligibility criteria

1. Without prejudice to the provisions of the following paragraph, requests for compensation which prove that all the following criteria are met shall be eligible:

- a) The accidental contamination must have occurred in the same growing year and in a species sexually compatible with the species of genetically modified varieties cultivated in Portugal;
- b) There must be proof of the contamination of the agricultural products produced, namely by means of the identification and quantification of the genetically modified organism present, determined in accordance with the provisions of the following Article;
- c) The seed used for sowing must be certified.

2. Compensation requests based on contamination caused by non-compliance, by the farmer cultivating genetically modified varieties, with the technical rules laid down in Decree-Law No 160 of 21 September 2005 shall not be eligible. These non-compliances shall be governed by said Decree-Law and by the general law on civil liability.

Article 9. Sampling and analyses

1. The identification and quantification of the genetically modified organism present in the agricultural products produced shall comply with the provisions of this Article.
2. Sampling must be carried out in accordance with the international rules in force by sampling experts, namely the seed quality inspectors of the Regional Agriculture Directorates.
3. At least two samples must be taken from each batch to be analysed. These samples must be labelled with the identification of the sampling expert and the farmer, the date of collection, the name of the agricultural holding and the plot number. The expert must affix a seal so that the samples cannot be opened without damaging the seal. One of the samples shall be sent to the analysis laboratory and the other shall be delivered to the Directorate-General for Crop Protection with the compensation request.
4. The analyses must be carried out by a laboratory which is duly authorised to perform these analyses, namely a laboratory within the European Network of GMO Laboratories (ENGL).
5. The costs arising from the sampling and analyses shall be borne by the requester.

Article 10. Compensation request

1. Compensation requests shall be made to the Directorate-General for Crop Protection by completing the specific form provided by this body to which the following documents must be attached:

- a) Copy of the identity card or tax identification card of the requester;
 - b) Proof of the requester's bank identification number;
 - c) Copy of the purchase invoice for the seed used for sowing;
 - d) Copy of the certification label for each batch used for sowing;
 - e) Reports giving the results of the analyses carried out to quantify and identify the genetically modified organism;
 - f) Declaration made by the product's purchaser indicating the price agreed for the purchase of the uncontaminated product and the price applied to the contaminated product;
 - g) Copy of the documents proving the costs incurred for the sampling and analyses carried out.
2. The second sample collected, referred to in paragraph 3 of the above Article, shall be delivered with the request.
3. Requests must be delivered to the Directorate-General for Crop Protection by 31 December of the production year at the latest.

Article 11. Request and assessment fee

1. A €100 fee shall be payable, to the Directorate-General for Crop Protection on delivery of the compensation request, for each request submitted and for its subsequent assessment by the Assessment Group.
2. The amount indicated in the above paragraph may be updated annually through a joint order of the Ministers for State and Finance and for Agriculture, Rural Development and Fisheries, in accordance with the coefficient resulting from the overall variation in the retail price index, excluding housing.

Article 12. Assessment of the request and decision

1. Once the requester has submitted all the required information, the Assessment Group shall be convened to assess the request and make a decision.
2. The Assessment Group may request additional information if it considers this necessary in order to properly assess the request.
3. The Assessment Group's duly reasoned decisions refusing or granting the compensation requests shall be notified to the requesters by 1 March of the year following that in which the request was made.
4. If the request is granted, the compensation amount shall be calculated, to which shall be added the amount of the fee paid on delivery of the request. Payment shall be made within 10 working days of the request being approved.
5. No compensation shall be awarded when it is found that the requester has acted negligently or fraudulently in such a way that this has contributed to the contamination or has caused this.

6. If it is proven that the farmer causing the damage has acted fraudulently or negligently and if the State pays out compensation, it shall have a right of redress against the guilty parties.

Article 13. Approval

The Assessment Group's decisions to award compensation shall be subject to approval by the Minister for Agriculture, Rural Development and Fisheries.

Article 14. Compensation limit and apportionment

1. The financial compensation to be awarded each year shall be limited to the amount available in the Fund for this year.
2. When the amount available in the Fund is not sufficient to pay out all the calculated compensation to be awarded in a given year, the amounts of this compensation shall be recalculated in proportion to the amount available.
3. If the amount available in the Fund is not used up in a given year, it shall be carried forward to the following year and capitalised.

Article 15. Validity

1. The Fund hereby established shall remain in force for five years but may be extended if this can be justified by technical or scientific reasons or due to economic impact.
2. The terms under which the Fund shall be closed and then settled or under which it shall be extended shall be determined by a joint order of the Ministers for Finance and Public Administration and for Agriculture, Rural Development and Fisheries.

23. Slovenia

Draft Coexistence of Genetically Modified Plants and Other Agricultural Plants Act (excerpts)¹⁵

I. General Provisions

Art. 3 [Meaning of terms]. The terms used in this Act shall have the following meanings ascribed to them:

1. GMPs are agricultural plants that are genetically modified organisms (hereinafter: GMOs) under the regulations governing GMOs;
2. GMP species are genetically modified plants of a specific agricultural plant species;
3. a unique identifier for GMOs is a code used to identify a specific GMO and assigned in accordance with Commission Regulation (EC) 65/2004 of 14 January 2004 establishing a system for the development and assignment of unique identifiers for genetically modified organisms (OJ L 10 of 16 January 2004, p. 5);
4. coexistence is the cultivation of agricultural plants in a specific area under conditions and using methods that allow a choice to be made between GMP cultivation and conventional, organic or other forms of cultivation;
5. an agricultural holding is a holding entered in the register of agricultural holdings under the act governing agriculture;
6. a farm is a form of organisation of an agricultural holding under the act governing agriculture;
7. a member of a farm is a natural person defined as a member of a farm under the act governing agriculture;
8. a GMP producer is a natural or legal person who is the head of an agricultural holding under the regulations governing agriculture, and who is in possession of a decision authorising the cultivation of GMPs at this agricultural holding;
9. the cultivation of GMPs in the open air is the cultivation of GMPs on a specific graphic unit of use of agricultural land (hereinafter referred to using the Slovenian acronym GERK) without the use of any form of shelter, or cultivation under protective sheeting (including mobile tunnels) or using other covering materials;
10. the cultivation of GMPs under shelter is the cultivation of GMPs on a GERK on which the actual land use is designated, under the regulations governing records of actual use of agricultural and forestry land, as „1190 – Greenhouse“;

¹⁵ Available on the TRIS database at <http://ec.europa.eu/enterprise/tris/pisa/app/search/index.cfm?fuseaction=getdraft&inum=1305441>.

11. a GERK is, under the act governing agriculture, a united area of agricultural or forestry land with the same actual land use, used by one agricultural holding and designated by means of a unique identification number (GERK_PID);
12. other land is all land not entered in the GERK records under the act governing agriculture, with the exception of forestry land and aquatic and other areas, on which agricultural plants of the same species as the GMPs, or of a species related to them, may not be cultivated.

Art. 4 [General conditions for the cultivation of GMPs]. (1) GMPs may only be cultivated pursuant to a decision authorising the cultivation of GMPs issued pursuant to this Act by the ministry responsible for agriculture (hereinafter: the Ministry), if the GMPs are cultivated on a GERK or GERKs entered in the GERK records of an agricultural holding whose head is a GMP producer under the act governing agriculture, and if the GMP producer:

- meets the prescribed conditions regarding professional training in the management of GMPs;
- can provide assurances that measures will be taken on those GERKs on which GMPs are cultivated, and on GERKs and other land located in the buffer zone, to ensure the coexistence prescribed under this Act;
- and declares that they will meet the obligations of a GMP producer referred to in Article 9 herein.

(2) A GMP producer shall be deemed to be professionally trained to manage GMPs if they are in possession of a valid certificate attesting to the fact that they have passed the examination referred to in the second paragraph of Article 18 herein (hereinafter: examination certificate) themselves, or if the examination has been passed by another person on the agricultural holding responsible for the cultivation of GMPs. If GMPs are cultivated on a farm, the examination certificate must be held by a member of that farm.

(3) A GMP producer shall give assurances that the measures prescribed by this Act for buffer zones shall also be taken on GERKs and other land located in the buffer zone not used or owned by their agricultural holding, if they enclose with the application to cultivate GMPs the consent of those heads of agricultural holdings who use GERKs in this buffer zone, and the consent of owners of other land located in the buffer zone.

VII. Compensation.

Art. 28 (Notification of damage). (1) If the presence of GMPs is found in agricultural plants cultivated using a conventional, organic or other GM-free method, or in their products, such that it could reduce the market value or usefulness of these plants or their products, the head of the agricultural holding may notify the competent inspectorate of the damage within eight days of the day the presence of GMPs was found in the agricultural plants or their products.

(2) Notwithstanding the provisions of the preceding paragraph, a head of an agricultural holding who in accordance with Articles 7 or 12 herein gave their consent to a GMP producer to cultivate a specific GMP species on a specific GERK or neighbouring GERKs or their consent to the agreement on the cultivation of GMPs in a specific

area, and who cultivated agricultural plants of the same species as the GMPs, or of a species related to them, may not submit a notification.

(3) On the basis of the notification referred to in the first paragraph hereto, the competent inspector shall examine the data in the register of GMP producers and the documentation held by the head of the agricultural holding that notified of the damage (hereinafter: notifier of damage) and perform an on-the-spot check to ascertain whether there is any deliberate presence of GMPs in agricultural plants or their products. As part of the on-the-spot check, the inspector shall inspect the GERK on which the notifier of damage is cultivating agricultural plants in which the presence of GMPs has been detected, as well as all GERKs and other land located in the buffer zone laid down according to the regulations referred to in the eighth paragraph of Article 6 herein, if agricultural plants of the same species have been cultivated on these GERKs or other land. The inspector shall take any required official samples in order to establish the presence of GMPs in agricultural plants or their products. The inspector shall compile records of checks and samples. These records shall contain findings on the deliberate or adventitious presence of GMPs in agricultural plants or their products.

(4) It shall be deemed that the presence of GMPs in agricultural plants or their products is deliberate if the competent inspector finds, on the basis of the check referred to in the preceding paragraph, that:

- the notifier of damage cultivated GMPs on the inspected GERK without the authorisation referred to in the first paragraph of Article 4 herein;
- GMPs were cultivated without the authorisation referred to in the first paragraph of Article 4 herein on a GERK or other land located around the inspected GERK within the buffer zone laid down according to the regulations referred to in the eighth paragraph of Article 6 herein;
- the presence of GMPs in agricultural plants or their products is the result of a violation of the obligations of a GMP producer referred to in Article 9 herein or a violation of the obligations of a head of an agricultural holding in an area for the cultivation of GMPs referred to in Article 15 herein.

(5) The legal or natural person that caused the damage that has arisen on account of the deliberate presence of GMPs in agricultural plants or their products shall be held liable for it.

(6) Unless this Act determines otherwise, the provisions of the Code of Obligations concerning general damage liability shall apply to liability for damage that arises on account of the deliberate presence of GMPs in products .

Art. 29 [Adventitious presence of GMPs in agricultural plants and their products]. (1) If the inspection records on the check referred to in the third paragraph of the preceding article indicate that the deliberate presence of GMPs in agricultural plants and their products cannot be established, or if deliberate presence is the result of ecological factors such as insects or the wind that caused the unforeseen transfer of genes from GMPs to other agricultural plants of the same species as the GMPs, or of a species related to them, the presence of GMPs in other agricultural plants and their products shall be deemed to be adventitious.

(2) The Republic of Slovenia shall bear objective liability for damage that arises as a result of the adventitious presence of GMPs in agricultural plants or their products to a level determined in accordance with Article 30 herein. The Ministry shall secure funds for the payment of compensation.

(3) The head of an agricultural holding that suffers damage resulting from the adventitious presence of GMPs in agricultural plants or their products may notify the Ministry of the damage within 30 days of receipt of the inspection records.

(4) The Ministry shall lay down in detail when it shall be deemed that the adventitious presence of GMPs in products is the result of the factors referred to in the first paragraph hereto.

Art. 30 [Level of compensation]. (1) The Ministry shall set the level of compensation for the adventitious presence of GMPs in agricultural plants and their products by decision in an administrative procedure on the basis of the inspection reports and of the evidence enclosed with the notification of damage by the notifier of damage, which must indicate the surface area of cultivation and the loss of income resulting from the reduced value of agricultural plants and their products that contain GMPs. The level of compensation shall be set by a special committee appointed by the Minister.

(2) Compensation shall be calculated as the difference between the market value of agricultural plants or their products that contain GMPs and the market value of agricultural plants or their products that do not contain GMPs.

(3) Notwithstanding the provisions of the preceding paragraph, a notifier of damage that is engaged in a form of farming in which the use of GMOs is not permitted shall also be awarded special compensation amounting to a maximum of 40% of the costs that have arisen as a result of engagement in forms of farming in which the use of GMOs is not permitted, which shall be ascertained by the committee referred to in the first paragraph hereto.

(4) No appeal or administrative dispute shall be permitted against the decision on the level of compensation referred to in the first paragraph hereto. A notifier of damage that does not agree with the decision of the Ministry may, within 90 days of the issuing of the decision referred to in the first paragraph hereto, put forward a motion requesting that the competent court fix the level of compensation.

(5) If the Ministry fails to issue the decision referred to in the first paragraph hereto within 60 days of submission of the compensation request, the notifier of damage may put forward a motion requesting that the competent court fix the level of compensation.

(6) The court shall decide on the requests referred to in the fourth and fifth paragraphs hereto in a non-litigious procedure.

(7) The costs arising from the work of the committee referred to in the first paragraph hereto shall be covered from the state budget. Funds for the work of the committee shall be secured by the Ministry.

(8) The Minister shall lay down in detail the methods and criteria for fixing the level of compensation and special compensation referred to in the second and third paragraphs hereto.

Art. 31 [Committee]. (1) The committee referred to in the preceding article shall be made up of at least three members with at least graduate qualifications in the field of agriculture or economics and with several years' work experience.

(2) The members of the committee must perform their tasks in a professional manner, in accordance with the rules of the agricultural profession and with plant protection and other regulations.

Explanation of Articles

Art. 28: This article lays down that an agricultural inspector shall check, at the request of a head of an agricultural holding who is cultivating agricultural plants using a conventional, organic or other GM-free method and who has suffered damage because the presence of GMPs in his agricultural plants and their products has lowered their market value or their usability, whether the presence of GMPs in these plants and products is deliberate. The article also lays down the circumstances in which the presence of GMPs in other agricultural plants and products is deemed to be deliberate, and that in such cases the person that caused the damage shall be liable for that damage. In such cases the provisions of the Code of Obligations shall be applied in relation to damage liability.

Art. 29, 30 and 31: These articles lay down that the Republic of Slovenia shall be liable for damage that arises as a result of a reduction in the market value or usability of agricultural plants and their products on account of the adventitious presence of GMPs. Compensation is paid from the budget of the ministry responsible for agriculture. The level of compensation shall be fixed by a special committee appointed by the minister of agriculture. It is defined as the difference between the market value of a product containing GMPs and that of a GM-free product. Special compensation may be claimed if the damage was suffered by a head of an agricultural holding engaged in a sustainable, GM-free form of farming. The procedure of claiming compensation and the possibility of appeal are also laid down.

26. Switzerland

Federal Law relating to Non-human Gene Technology (GTL)¹⁶

Art. 30 GTL [Principles]. (1) Any person subject to the notification or authorisation requirement, who handles genetically modified organisms in contained systems, releases such organisms for experimental purposes or markets them without permission is liable for any damage that occurs during this handling that is a result of the genetic modification.

(2) The person subject to authorisation is solely liable for any damage that occurs to agricultural or forestry enterprises or to consumers of products of these enterprises through the permitted marketing of genetically modified organisms, that is a result of the modification of the genetic material, if the organisms:

- a. are contained in agricultural or forestry additives; or
- b. stem from such additives.

(3) In the liability under paragraph 2 recourse to persons who have handled such organisms inappropriately or have otherwise contributed to the occurrence or exacerbation of the damage is reserved.

(4) If damage is caused by any other permitted marketing of genetically modified organisms as a result of the modification of the genetic material, the person subject to authorisation is liable if the organisms are faulty. He or she is also liable for a fault which, according to the state of knowledge and technology at the time when the organism was marketed, could not have been recognised.

(5) Genetically modified organisms are defective if they do not provide the safety that is to be expected, taking into consideration all situations; in particular the following should be considered:

- a. the way in which they are presented to the public;
- b. the use that can reasonably be expected;
- c. the time at which they were marketed.

(6) A product made from genetically modified organisms is not considered defective for the sole reason that an improved product has later been marketed.

(7) The damage must have been caused as a result of:

- a. the new properties of the organisms;
- b. the reproduction or modification of the organisms; or

¹⁶ SR 814.91; German version available at <http://www.admin.ch/ch/d/sr/8/814.91.de.pdf> (with links to French and Italian version). The translation is based upon the Swiss report quotations in Annex I/26.

c. the transmission of the modified genetic material of the organisms.”

(8) A person is exempt from liability if he or she can prove that the damage was caused by an Act of God or through gross misconduct of the injured party or of a third party.

(9) Art. 42–47 and 49–53 of the Code of Obligations are applicable.

Art. 31 [Harm to the environment]. (1) The person who is liable for handling genetically modified organisms must also reimburse the costs of necessary and appropriate measures that are taken to repair destroyed or damaged components of the environment, or to replace them with components of equal value.

(2) If the destroyed or damaged environmental components are not the object of a right in rem or if the eligible person does not take the measures that the situation calls for, damages shall be awarded to the community responsible.

Art. 32 [Limitation]. ...

Art. 33 GTL [Burden of proof]. (1) It is the responsibility of the person claiming damages to prove cause.

(2) If this proof cannot be provided with certainty or if production of proof cannot be expected of the claimant, the court may be satisfied with preponderant probability. The court may also have the facts determined proprio motu.

27. United Kingdom

DEFRA, Consultation on proposals for managing the coexistence of GM, conventional and organic crops¹⁷

Redress for Economic Losses

136. The Government's GM policy statement confirmed that Defra would consult stakeholders on „options for providing compensation to non-GM farmers who suffer financial loss through no fault of their own”, making it clear that any compensation would need to be funded by the GM sector itself, rather than by Government or non-GM producers. This section explores the issues at stake and sets out potential models for a mechanism to redress potential economic losses.

137. The basic issue is that crops grown as non-GM (conventional or organic) could be worth less if they must be sold as 'GM', because they have a GM presence above the EU 0.9% labelling threshold. This outcome would be unfair to the farmers affected, so there is a need to consider possible redress mechanisms should this occur. Existing means of seeking redress are unproven in this area. The application of the common law of negligence or private nuisance to GM cross-pollination is untested and uncertain. It may also be difficult for a non-GM farmer to establish who is the proper defendant for a case. This background creates uncertainty for both non-GM and potential GM farmers.

General Assumptions

138. Defra's view is that redress for economic loss should only be available to farmers if the GM presence in a non-GM crop exceeds the 0.9% EU threshold. It would be a disproportionate burden on the GM sector to make it liable for redress on the basis of a threshold stricter than the relevant legal standard. The general coexistence regime will aim to keep GM presence below 0.9%, and it would not be appropriate for a redress mechanism to operate at a different threshold to that used for statutory coexistence measures.

139. In considering a redress mechanism a number of further assumptions underpin Defra's approach:

- GM crops will only be grown in the UK if there is a market for them, and it should generally follow that a non-GM grower with an affected crop (GM presence >0.9%) will have a market in which to sell it.
- the potential need for a redress mechanism is predicated on non-GM crops (conventional or organic) trading at a premium. If the market does not distinguish between GM and non-GM (or if GM crops are grown which offer consumer benefits and themselves trade at a premium) no economic loss would occur to non-GM farmers and therefore redress would not be required.

¹⁷ July 2006, <http://www.defra.gov.uk/corporate/consult/gmnongm-coexist/consultdoc.pdf>, pp. 45-54.

- if effective coexistence measures are in place, then the instances where non-GM growers might face a loss due to a GM presence above 0.9% should be very infrequent; in addition, the value of any redress claim is likely to be relatively low (details on costs are given in the Regulatory Impact Assessment at Annex B). The possible implications of this are explored later on.
- the redress scheme should only cover direct financial loss from individual incidents.

What claims for economic loss should be considered?

140. In establishing any redress mechanism the specific economic losses for which redress is available need to be clearly identified. The general or default position will be that the loss is the difference in crop value where a crop has to be sold as 'GM' instead of non-GM or organic. However, a number of additional losses can be envisaged which need consideration.

Loss in Crop Value

141. If a farmer grows a crop for sale as non-GM but can then only sell it as 'GM', there may be circumstances in which there is no market for the GM equivalent (e.g. the non-GM farmer may be growing sweetcorn maize while GM maize is only being grown as a forage crop and there is no market in which it is traded). The loss in this case would be the whole of the non-GM or organic price that has to be foregone, as there is no GM market to sell into to mitigate the loss.

142. The EU 0.9% labelling threshold applies at the point where crops are sold off the farm. For crops like oilseed rape, beet or sweetcorn maize for processed food use, Defra expects that in all normal circumstances the relevant unit of production when considering possible redress will be the crop obtained from a whole field. This is because farmers will trade these crops, as a minimum, on a whole field basis. Therefore the issue of whether a non-GM crop has a GM presence above 0.9% would be assessed on a whole-field basis, and calculations of possible economic loss would be based on the value of the crop in the whole field.

143. The situation is less straightforward for sweetcorn maize intended for sale as individual corn-on-the-cob. The cobs in the nearest row of plants facing the GM field might have a GM presence above 0.9%, but the remainder of the field could be within 0.9% and therefore still be saleable as non-GM. It would be impractical to undertake widespread spot testing in the field to determine the precise extent of any excessive GM presence. At the same time it would be unreasonable to deem that the whole field must be treated as 'GM' because the 'leading' row of cobs has tested above 0.9%. Therefore, where tests for GM presence are undertaken in this context, Defra proposes a standardised approach broadly as follows:

- a first test is done on a sample of cobs in the first row nearest the GM crop; if this shows a GM presence above 0.9% a further test should be done on a sample of cobs halfway into the field.
- if the second test shows a GM presence above 0.9% the whole field must be treated as 'GM'; if the result is below 0.9%, the second half of the field can be sold as non-GM and only the first half is deemed 'GM'.

144. If a conventional (non-GM) forage crop has a GM presence above 0.9%, the EU rules still allow the farmer to feed this to his own animals and the associated products

(meat, milk or eggs) do not have to be labelled as GM. Therefore from a regulatory standpoint there is no reason why an economic loss should occur and no need to consider redress. An economic loss might arise because the farmer is subject to a supply contract which stipulates the use of non-GM feed. But this would be a market-led rather than regulatory requirement, and as such Defra does not think it would be appropriate for the Government to provide a specific redress solution (the Government's general stance is to facilitate the coexistence arrangements that can be regarded as necessary because of the EU 0.9% labelling requirement).

145. However, if an organic forage crop has a GM presence above 0.9% the EU organic standards regulation is expected to prevent the organic producer from feeding this to his own animals³⁹. In this case, therefore, an economic loss could arise due to a regulatory constraint, and Defra would see a redress solution applying in these circumstances.

Have we correctly identified the range of losses that might occur in crop values? What are your views on the proposed approach for dealing with the corn-on-the-cob scenario?

On additional losses

146. A non-GM farmer with an affected crop (GM presence >0.9%) may face additional losses to that in crop value. Costs that may flow directly would include those incurred in testing the affected crop for GM presence; the cost of storing the crop separately, or longer than intended, as a result of being unable to sell as originally intended; or extra transport costs as a result of having to treat the crop as GM rather than non-GM. Defra is open to arguments on this point, but to decide the scope of any redress mechanism a clear rationale will be required for determining those losses which are covered and those which are not.

147. A general point to bear in mind is that the more types of loss that are covered by a redress scheme, the more complicated and bureaucratic it may be to operate. Determining a loss in crop value should be relatively straightforward, but establishing the level of additional losses would entail further effort that could be disproportionate to the sum of money involved. If additional losses were to be covered, to minimise bureaucracy the best approach might be to adopt a system of fixed or standard costs (e.g. for crop storage per day), avoiding the need to assess actual costs in detail. An effective scheme would ensure that claims for redress are settled fairly promptly, the general idea being to avoid or improve upon the cost, bureaucracy and uncertainty that would arise if cases were left to be resolved through legal proceedings.

148. Other types of loss can be envisaged which Defra does not think should be part of a redress mechanism. For example, a farmer may lose subsequent business from a buyer as a result of being unable to fulfil a previous supply contract. A potential purchaser may decide not to buy a particular non-GM crop, or pay a reduced price, if it has been grown in the general locality of a GM crop, even though GM presence is be-

³⁹ As noted at paragraph 111, the European Commission has proposed an amendment to Regulation 2092/91 to make it clear that material above the 0.9% threshold cannot be used in organic production.

low the required threshold. Alternatively, a farmer may take a precautionary decision not to grow a particular crop, to avoid the possibility of it being unacceptable because of its proximity to GM crops. An organic certifying body may decide to decertify or remove accreditation from either a field or an entire farm. Defra's view is that losses resulting from voluntary standards or market-led decisions should not be covered by the redress mechanism, although compensation for these losses could still be sought through legal proceedings.

149. It is conceivable that losses may occur further up the supply chain. For example, a processing business may suffer a loss if it cannot meet its commitments because it is not supplied with a non-GM crop. However, Defra expects that normal contractual arrangements will govern the relationship between the farmer and the purchaser of his crop, and relationships further up the supply chain, and in these circumstances it may be unnecessary for a formal redress mechanism to operate.

Should consequential or additional losses be covered by any redress mechanism? If so, which should be covered and why? How likely are these to occur? Are there any other types of loss that should be considered?

Who should be entitled to claim redress and what eligibility criteria should they satisfy?

150. Strict eligibility criteria would need to be agreed to ensure that any scheme operates fairly and is not open to abuse. Redress should be limited to non-GM farmers who can demonstrate that there is a GM presence above 0.9% in their crop through no fault of their own. In order to demonstrate no fault and a just claim on their part, non-GM farmers may need to produce evidence, for example to confirm that:

- non-GM seed was used (i.e. below the relevant seed labelling threshold adopted by the EU).
- the affected crop was destined for a premium non-GM or organic market.
- any obligations arising from the coexistence regime had been complied with (e.g. accurate information was given in response to a GM neighbour's notification, and cropping plans were not subsequently altered in a way that compromised the required separation distance).
- the finding of a GM presence above 0.9% was based on samples taken in accordance with a recognised protocol and tested at a suitable accredited laboratory.

151. This is not meant to be a definitive list but indicates the sort of criteria likely to be appropriate. Defra expects that there would need to be an adjudication process to determine the eligibility of redress claims, including an appeal or arbitration mechanism (see paragraph 168).

152. If eligibility criteria were to be applied as set out above, a further issue for consideration is whether a failure to meet one of these criteria in some minor way by a non-GM farmer, which it can be demonstrated would have had no meaningful effect, should necessarily invalidate a claim for redress, or the extent to which the principle of contributory negligence should apply to reduce the compensation awarded under the scheme. In addition, it would also be necessary to consider whether eligibility for compensation is dependent upon the excessive GM presence being identified before

the affected crop leaves the farm, after which there may be other sources of GM presence.

What should the eligibility requirements be for non-GM farmers to seek redress? Are there particular criteria that have not been highlighted?

Who should pay any compensation?

153. The Government's policy statement made clear that any compensation should be funded by the GM sector. But this could take a number of forms.

GM farmers who do not comply with the specified coexistence measures

154. This would have the advantage of placing the burden on those farmers most likely to be the cause of an excessive GM presence in neighbouring crops. The GM farmer would pay for the economic loss direct to the non-GM farmer affected. This would provide a strong incentive for GM farmers to comply with coexistence measures. However, it would not cover the situation where an excessive GM presence arises through no fault of a GM farmer, or where fault cannot be specifically attributed.

All farmers growing GM crops.

155. This would spread the burden evenly among all GM growers. However, it does not have the advantage of the first option of providing a direct incentive for GM growers to comply with coexistence measures, and it could be said to penalise unfairly those farmers who do comply.

GM seed companies.

156. If GM seed companies were to fund a redress mechanism this is likely to involve the entire GM sector in the process. It would be a commercial matter between the companies and GM farmers to determine through their market relationship the precise allocation of the burden. For example, the seed companies could recover their costs through increased seed prices. It would also be open to them to recover some costs from GM farmers who have not complied with coexistence rules, by making compliance a condition of the GM seed contract. Making GM seed companies responsible would give them a clear incentive to ensure an effective coexistence regime. This in turn should increase confidence in the potential effectiveness of the regime and the degree of compliance with it.

157. The burden could be applied equally on all GM seed companies, but a potentially fairer approach might be to distinguish between the companies in some manner. For example, the burden could be distributed according to market share – the companies selling more GM seed would bear more of the burden. Alternatively, it may be possible in many cases to identify the company whose GM seed has given rise to the redress claim. But a desire to target the redress burden must be weighed against the simplicity and cost of running the scheme.

Are there any alternative ways of distributing the burden on the GM sector? Are there any strong arguments or pros/cons to each approach that have not been covered?

Possible options for seeking redress

158. Having set out the relevant considerations above, Defra has identified three basic options by which affected non-GM farmers could seek and be given redress for eco-

conomic losses. As noted earlier, it is expected that both the number of claims and their value will be small. The aim is to provide a mechanism that is clear, simple and proportionate, and which minimises the burden on both the non-GM farmer making the claim, and the GM sector in providing redress.

Option 1: Seeking compensation under existing law

159. In principle, non-GM farmers who suffer a loss would be able to seek redress through the civil courts under the current law. The non-GM farmer could seek an injunction and/or damages under the common law of tort, claiming negligence or private nuisance. However, the application of the common law of negligence or private nuisance to GM 'contamination' is untested and uncertain. To recover economic loss, the non-GM farmer would need to show either damage to his property and the loss derived from that damage or, where there was no such damage (i.e. pure economic loss), that the defendant had a duty of care to the non-GM farmer such that recovery of that loss would be fair. It is not certain whether a GM presence in a non-GM crop would be regarded as damage by the courts. A GM crop will only be grown commercially if it passes the legal risk assessment process, so it may be a contradiction to treat as a form of damage the presence of a legally-approved GMO.

160. It may also be difficult for a non-GM farmer to establish who is the proper defendant. This background creates uncertainty for non-GM and GM farmers alike. Any GM presence may have a number of sources, and accordingly it may be impossible for a non-GM farmer to identify and seek redress directly from a given GM grower, for example by proving that he had not complied with the coexistence requirements.

161. In its report on coexistence and liability the AEBC also expressed concern that pursuing a legal case could be disproportionately time-consuming and costly for farmers. It could also impact on general relations within rural communities. Accordingly, this does not provide either clarity or simplicity, and Defra shares the AEBC view that it would be preferable if coexistence disputes were settled without recourse to litigation. Litigation would, however, remain an option if the claimant did not want to use the redress scheme or was unsatisfied with the settlement offered.

Option 2: A voluntary industry-led scheme

162. An alternative would be for the GM sector to set up and fund a voluntary redress mechanism. To be effective, responsibility for this would need to rest with the GM seed companies, rather than farmers growing GM crops. It could be seen as a confidence-building measure. A voluntary scheme may offer a number of advantages. It could be established more quickly and would be more flexible than a compulsory scheme. It is likely to provide a strong incentive for the industry to ensure that GM growers comply with the co-existence rules.

163. A voluntary redress 'charter' is being developed by the farming and industry group SCIMAC, as part of its wider proposals for an industry-led coexistence regime. The SCIMAC plan involves the GM seed companies committing to a charter whose aim is to restore the market position of any non-GM farmer whose crop exceeds the 0.9% threshold through no fault of their own. It envisages a number of ways that redress could be provided, including:

- direct replacement of affected produce (i.e. crop substitution)

- indirect replacement of affected produce (e.g. 'virtual' crop substitution, where affected produce is directed to an outlet and the claimant paid as if the crop were as originally intended)
- direct cash compensation
- compensation 'in kind'

164. In terms of a delivery framework, SCIMAC favours a system for redress which mirrors or builds on existing supply chain arrangements as far as possible, and which recognises that a single prescriptive approach may not be the most effective in all circumstances. With this in mind, SCIMAC has given the following examples to illustrate potential delivery mechanisms:

- conditions of sale on GM seed: the sale of certified seed is governed by a licence between the relevant plant breeding company and seed merchants. The licence could specify that the merchants are signatories to the redress charter, and that sales of GM seed could only take place under specified conditions relating to coexistence and redress
- inter-professional agreements (IPA): it could be a condition of GM seed sales that farmers enter into an IPA that commits them to comply with coexistence requirements, in return for being covered by the industry redress charter
- farm assurance scheme: Existing crop assurance schemes have confirmed to SCIMAC that they could readily incorporate coexistence provisions. It could be a condition of GM seed sales that the farmer is a fully accredited member of a relevant assurance scheme, in return for being covered by the redress charter

Option 3: A statutory redress mechanism

165. If industry does not set up a voluntary scheme, or a proposed scheme is deemed unacceptable, then the Government would need to consider establishing a compulsory redress mechanism to be funded by the GM sector. This would probably require new primary legislation to make the GM sector strictly liable for compensation and to provide for:

- a requirement to pay compensation on the terms specified
- the establishment of a body to receive and adjudicate on redress claims (with the power to order payment), and an appeal mechanism
- the costs of the process to be charged to the GM sector

166. If a compulsory scheme made GM seed companies strictly liable it would also have to establish the mechanism by which a non-GM farmer could recover any economic loss. Possible models are:

- a) Establishing a specific body with the power to require GM seed companies to pay redress directly to non-GM growers. On the face of it this is an attractive option as it should be administratively straightforward. Redress would be payable on a case-by-case basis once the claim had been established.
- b) A variation on the above would be for the Government to act as a buffer. As above, a specific body would adjudicate on claims and if a claim is confirmed the non-GM

grower would receive redress from the Government. This would prevent any undue delay in the non-GM farmer obtaining redress once the claim has been established. The Government would then have the power separately to recover the necessary funds from the relevant GM seed company (or companies).

c) Establishing a specific fund from which redress claims are paid. Defra's initial view is that this could be financed through charges on the GM seed companies, possibly through a levy on all GM seed sold. This would spread the burden across the GM sector according to market share. The money collected would be directly related to the amount of GM seed sold and hence the extent of GM cultivation. If the amount raised exceeded claims, the charge could be reduced or suspended, or the excess funds returned. However, requiring pre-payment into a fund may create a sizeable pot of money waiting inefficiently for claims to be made against it. Administrating the levy to achieve the desired level of funding would be an added level of complexity.

167. If a compulsory redress mechanism is preferred the practical arrangements would need to be set out in detail, but it is not proposed to do that at this stage. Defra would seek to make the arrangements as simple as possible, to minimise the burden on farmers wishing to make a claim, to ensure that redress can be paid without undue delay, and to minimise bureaucracy and costs. Defra would consult on the detailed arrangements before they were put in place.

168. In establishing a body to administer the system and assess claims there would be various factors to consider, such as cost (relevant to individual claims and overall level of use), the level of expertise necessary (including legal expertise) and independence. It would have to inspire confidence and work in a clear and transparent manner. There would need to be an appeals mechanism and, possibly, arbitration procedures. It is envisaged that administration costs would be met from the GM sector.

169. It would also be necessary to set out the criteria by which the level of economic loss is set. Defra has set out the principle that in the first instance this should be the difference in value between selling a crop as GM instead of non-GM. If a pre-existing contract specifying a price for the non-GM crop was in place that would have been met except for the level of GM presence, then the value of the redress should be the difference between the value of that contract and the price achieved for the GM crop. If no pre-existing contract is in place Defra would propose that redress is paid on the basis of a rolling one-year average of any price difference between the GM crop and its non-GM counterpart. This is on the basis that while the price of commodity crops varies quite significantly during the year, it is expected that any differential which exists between the price of GM and non-GM crops would remain fairly constant. For an organic forage crop the loss recoverable would be the cost of sourcing suitable replacement forage. As the number of redress claims is expected to be small and the sums involved relatively small, Defra would favour establishing a simple administrative process for establishing the level of economic loss. Thus for additional losses such as the cost of testing, Defra would favour establishing standard rates if practical and equitable.

General consideration

170. In assessing options for a possible redress mechanism, the likely scale of the issue needs to be borne in mind so that any arrangements entered into are realistic and proportionate. As noted at paragraph 139, Defra expects that in practice there would be

very few claims for redress, and any such claims would be for relatively small amounts. If this is the case, it may be disproportionate to incur more than minor costs to set up and administer a redress scheme, which might indicate a marked preference for a solution that keeps bureaucracy to an absolute minimum. Comparing possible voluntary (industry-led) and compulsory (statutory) schemes, the former is likely to be cheaper and more straightforward to establish and operate. And in particular, the cost of setting up a statutory scheme could be relatively significant, given that in the first instance it may require new primary legislation to be adopted.

Insurance

171. In its report the AEBC suggested that insurance products may become available over the longer term that would provide cover for possible GM-related economic losses. Whilst Defra remains open to the idea of an insurance market developing, it does not see this as a solution in the short-to-medium term. Therefore, the issues around a possible insurance market have not been explored in this paper.

Which redress mechanism do you favour and why? If a compulsory redress mechanism is your preferred option, which of the models at paragraph 166 should it employ?