State of play in the EU on GM-free food labelling schemes and assessment of the need for possible harmonisation

Case studies

Written by ICF GHK
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DG SANCO, European Commission

A report submitted by ICF GHK

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A1.1 Government-led Type I schemes: explicit GM(O)-free labelling rules and guidelines

A1.1.1 Regulatory basis and historical context

GM(O)-free labelling in Austria is based on the 'Guidelines on GMO-free production and food labelling' which is part of the Codex Alimentarius Austriacus. The first edition was introduced in 1998 as the Codex-guideline 'Gentechnikfrei'. The guideline was republished on 6 December 2007 (BMGF-75210/0014-IV/B/7/2007), and last changed on 21 December 2012 (BMG-75210/0020-II/B/13/2012).

In 1997, the ARGE Gentechnik-frei was founded by NGOs and companies from the food industry[1] in response to a petition signed by approximately 1.2 million Austrians who declared their opposition to biotechnological inventions. The ARGE Gentechnik-frei served as a platform and forum for the exchange of views on GM(O)-free food. In September 1997, the ARGE Gentechnik-frei published a first draft of proposed guidelines on GM(O)-free production and food labelling.

In April 1998, the first version of a guideline on GM(O)-free food labelling was published as part of the Third Edition of the Austrian Codex Alimentarius. In 2003, the standards changed following publication of EU Regulation No 1829/2003 which set new limits for accidental contamination.

The guideline was amended in 2005 based on a study that assessed whether GM(O)-free food could be produced in greater volumes under existing conditions. The study identified problems with regard to the use of additives and difficulties in ensuring and maintaining a supply of GM(O)-free feed (AGES 2005). In 2006 the standards were assessed again following changes in the EU Regulation on organic food and in light of difficulties guaranteeing the supply of non-GM feed ingredients. The Austrian Ministry of Health, Family and Youth published the new guidelines on GM(O)-free production and food labelling on 6 December 2007. The new guideline is now part of the Fourth Edition of the Austrian Food Book (Codex Alimentarius Austriacus), although it is not legally binding.

In March 2008, amendments to the scheme were published. In December 2008, guidelines on the use of risk-based control were published as the basis for the accreditation of control institutions and in order to standardize controls. The guidelines stipulate the requirements for the labelling of conventional food products which were produced without containing or without the use of GMOs. Chapter 7 of the guidelines regulates the label itself. In practice, a universally accepted label already exists, 'gentechnik-frei erzeugt', assigned by the association 'ARGE gentechnik-frei'. The current text of the guidelines can be found in the Austrian Food Book (Codex Alimentarius Austriacus, Vierte Auflage). The requirements of the Austrian GM(O)-free scheme are summarised in Table A1.1.

Table A1.1 Guidelines on GM(O)-free production

General	
Type	Guideline
Requirements concerning labelling	No limitations for food, but for feed only one claim is admitted: 'geeignet zur Herstellung gentechnik freier Lebensmittel' ('suitable for the production of gene-technology-free products')
In food	
Threshold of allowed GMO	Legal provisions according to EU Regulation 1829/2003 and

[1] Founding members included Greenpeace, Global 2000, Bio-Ernte Austria and food producers. Today, the ARGE Gentechnik-frei membership includes companies and organisations across a range of different sectors and includes Hofer, REWE, Spar, Zielpunkt, Lidl, Bio Austria, Greenpeace, Global 2000, Umweltbundesamt, Arbeiterkammer, AEGR gesundeTierernährung, Fairtrade, Landwirtschaftskammer, nearly all Austrian dairy farmers, nearly all Austrian egg producers, poultry producers, Rupp AG, Iglo Austria, Fleischwaren Berger, Styria Beef, SB Frischleisch, Sojarei, Joya, HaberfellnerMühle, Vonwiller-Erste WR. Walzmühle, Vorarlberger Mühlen, Spitz, Bonduelle, Agrana, Diamanti, Handelshaus Pilsts, and others.

contamination in **food**	1830/2003 (<0.9 per cent, if adventitious or technically unavoidable). Contamination detected below the threshold requires that additional controls must be applied. In practice, operators voluntarily adhere to a 0.1% threshold.
Additives, technological auxiliaries, flavour, enzymes in **food**	No GMOs permitted, but GM inputs can be used in certain exceptional circumstances if authorized by the Codex Commission (e.g. if non-GM alternatives are unavailable and their usage is recommended according to a set list of reasons). No exceptional circumstances are currently allowed.
In feed	
Threshold of allowed GMO contamination in **feed**	Legal provisions according to EU Regulation 1829/2003 and 1830/2003 (<0.9 per cent, if adventitious or technically unavoidable). Contamination detected below the threshold requires that additional controls must be applied. In practice, operators voluntarily adhere to a 0.1% threshold.
Additives, technological auxiliaries, flavour, enzymes in **feed**	Must be non-GM
Feeding periods without GMO ■ Bovines, equines ■ Pigs, goats, sheep ■ Milk producing animals ■ Poultry for egg production ■ Poultry for meat production ■ Fish	Transitory provisions (to 2017) ■ 12 months and, in any case, less than ¾ of their life ■ Entire fattening period ■ 2 weeks ■ 6 weeks ■ 3 days after birth ■ Entire lifetime (from birth) In practice, most operators voluntarily feed animals non-GM feed from birth.
Veterinary medicine and vaccines	GM veterinary pharmaceuticals are permitted

A1.1.2 Rationale

The rationale behind the Austrian guidelines is to allow producers of GM(O)-free products to compete in the marketplace and to recognise consumers' interests in these products by allowing them to make an informed choice. The guidelines are intended to fill a gap in the current EU legislation regarding the use of GM feed in the production of animal products.

A1.1.3 Labelling rules

Under the national scheme, food can be labelled 'gentechnikfrei erzeugt' or 'ohne Gentechnik hergestellt' (i.e. 'GM(O)-free production' and 'genetic engineering-free production') if it meets the requirements set out in the Austrian Codex Alimentarius (Austrian food book [2]). It is also possible to use other wording and the guidelines provide possible terms to be used for food products.[3] The only claim allowed for feed, however, is 'geeignet zur Herstellung gentechnikfreier Lebensmittel' (suitable for the production of gene-technology-free products).

The label of the ARGE Gentechnik-frei uses two different wording formulations: 'gen-technik frei erzeugt' or 'ohne gen-technik hergestellt', as shown in Figure A1.1 below.

[2] Oesterreichisches Lebensmittelbuch

[3] Including "gentechnikfrei erzeugt" (i.e. 'reared without gene technology'), "gente chnikfrei" (i.e. 'free from gene technology'), "GVO-frei", "ohne Gentechnik" (i.e. 'without gene technology'), "ohne Verwendung von Gentechnik" (i.e. 'without the use of gene technology') or similar.

Figure A1.1 ARGE Gentechnik-frei logos

About 90 per cent of the Austrian GM(O)-free products are labelled with the labels of the ARGE Gentechnik-frei. In the future, the second label 'ohne gentechnik hergestellt' will be more widely used, because this wording is similar to the obligatory wording under the official German VLOG-label. Aside from the ARGE label, there are about 20 other logos that are in use to label a product as GM(O)-free in Austria (e.g. see Figure A1.2). All products labelled as GM(O)-free must fulfil the requirements of the Austrian Codex-standard.

Figure A1.2 GM(O)-free logo used to label dairy products of Niederösterreichische Molkerei NÖM

There are no restrictions regarding the size of the label or placement on the package. But the label must include the name of the certification body.

A1.1.4 Product scope

The label's scope is very broad and is available to all producers and covers all eligible food products (i.e. those with an authorised GM equivalent). The GM(O)-free labelling is mainly used for dairy products as well as eggs, vegetables, meat and cereal products. Discussions have also taken place regarding GM(O)-free labels for more processed products as long as it can be guaranteed that the main part of the product is GM(O)-free. For instance, in the case of marinated barbecue meat, guaranteeing that the meat itself has been produced without GMOs is relatively straightforward. But the marinade is normally composed of many different ingredients for which it is more difficult to provide a 'GM(O)-free' guarantee. Nonetheless, having the possibility to use a GM(O)-free label that only refers to a certain component of a processed product could be valuable to consumers (Faber, ARGE).

A1.1.5 Thresholds/detection levels for adventitious or technically unavoidable GM presence

The threshold for adventitious or technically unavoidable GM presence for food and feed is defined according to regulation (EC) No 1829/2003 and 1830/2003 at <0.9 per cent with the provision that exceptions are permitted up to 0.9 per cent provided the exceptional presence is adventitious or/or technically unavoidable. Contamination detected below the threshold requires that additional controls must be applied. In practice, operators voluntarily adhere to a <0.1% threshold.

A1.1.6 Input specifications and exemptions

GMOs or GM products cannot be used in or as food, feed, additives or production aids, plant protection products, fertiliser, soil conditioner, seeds, plant propagating material, micro-organisms or animals. This prohibition excludes veterinary medicines (para. 4.1.1). Suppliers/producers should

adhere to the requirements for labelling GM products as specified in Regulation (EC) No 1829/2003 and Regulation (EC) No 1830/2003 to help them determine whether a product contains GMOs (para. 4.1.2; para 4.1.3). Suppliers/producers must ask for a guarantee from suppliers regarding the exclusion of GMOs in their products for unlabelled products (4.1.4).

If approved by the Codex commission, GM food and feed additives, technological auxiliaries, flavours, enzymes and vitamins may be used where non-GM alternatives are unavailable. Their use is recommended where circumstances match a certain set of criteria laid down in para. 5 and are tested by an expert group (para. 8). Minimum non-GM feeding times for animals are provided in Table A1.1.

These periods of time have been specified as exemptions. Consumers expect that GM(O)-free animal products have been produced from animals which have been fed on non-GM feed for their whole life, not only during the fattening period (Gressl (AMA), Fertl (Bio Austria), Plsek (Bundesministerium für Gesundheit)). The current guidelines on feeding periods are likely to last for another five years, as decided in summer 2012 (Agricultural Chamber Austria,Gressl, AMA, Faber, ARGE Gentechnik-frei, Anonymous, Bio Austria).The use of non-GM feed for breeding animals is sought from 2013 onwards (Leible 2010, pp. 30).

A1.1.7 Certification and control requirements

In December 2008 the Austrian Federal Ministry for Economy, Family and Youth introduced guidelines for risk-based controls to ensure the absence of GMOs in food products (BMWFJ 2008). Controls are standardised by the guidelines set out by the Bundesministerium für Familie, Wirtschaft und Jugend (BMWFJ). The rules for controls are laid down in the 'Leitline zur risikobasierten Kontrolle auf Gentechnikfreiheit' (Guideline for the risk-based control of the absence of genetic engineering), published in 2008 and are also an important element for accreditation.

Point 6 of the guideline according to Codex Alimentarius Austriacus sets out the requirements that must be met in order to label a product as GM(O)-free. Self-monitoring and third party certification by an accredited body is required at all stages of the supply chain (6.1-6.3). As long as the GM(O)-free production requirements are met and verified, adventitious or technically unavoidable GM-contamination is tolerated. The threshold level of 0.9 per cent in the European Regulations (No. 1829/2003 and 1830/2003) is the maximum acceptable threshold if contamination is accidental and technically unavoidable (6.4). If GMOs are detected below the threshold, further self- and external-controls are required (6.5). In practice a threshold of <0.1% applies.

The scheme includes self-controls, external controls and oversight from an accredited independent body as well as a compulsory monitoring system. The scheme includes guidelines and tools for documenting and implementing self-controls. Compliance should be checked at all stages of production, including agricultural production. As with organic production, there are controls over the movement of goods as well as controls of random samples. The certifying authority needs to be displayed on the label. GM(O)-free products are controlled and certified according to EN 45011. Several independent external control organisations in Austria are authorised to certify and control GM(O)-free food.

Table A1.2 Organisations involved in governance and administration of the GM(O)-free scheme

Name of organisation	Function (e.g. licensing, control compliance)
Federal Ministry of Health	Responsible for publishing the guideline according to Codex Alimentarius Austriacus
Federal Ministry of Economy, Family and Youth	Authorisation to accredit, responsible for Accreditation Guideline
Competent Authority for food control (Federal Länder)	Market control
AGROVET Lebens- und Umweltqualität Sicherungs GmbH	Organisation accredited to certify and control GM(O)-free labelling in Austria according to Codex Alimentarius Austriacus
Austria Bio Garantie (ABG)	Organisation accredited to certify and control GM(O)-free labelling in Austria according to Codex Alimentarius Austriacus

Name of organisation	Function (e.g. licensing, control compliance)
BIOS – Biokontrollservice Österreich	Organisation accredited to certify and control GM(O)-free labelling in Austria according to Codex Alimentarius Austriacus
Kontrollservice BIKO Tirol	Organisation accredited to certify and control GM(O)-free labelling in Austria according to Codex Alimentarius Austriacus
Lacon GmbH	Organisation accredited to certify and control GM(O)-free labelling in Austria according to Codex Alimentarius Austriacus
SGS Austria Controll-Co GesmbH	Organisation accredited to certify and control GM(O)-free labelling in Austria according to Codex Alimentarius Austriacus
Salzburger Landwirtschaftliche Kontrolle GesmbH (SLK)	Organisation accredited to certify and control GM(O)-free labelling in Austria according to Codex Alimentarius Austriacus

The application of the ARGE-Gentechnik-frei logo is authorised by the ARGE Gentechnik-frei[4] only if the following requirements are met:

- Compliance with the rules set out in 'Richtlinie zur Definition der 'Gentechnik-freien Produktion' von Lebensmitteln und deren Kennzeichnung' provided in the Austrian Codex Alimentarius in its current version;
- Compliance with additional production rules required by the ARGE;
- A license contract with the ARGE;
- ARGE membership (the membership fee includes the license fee for the use of the label);
- A contract for controls with a control institution certified by the ARGE;
- Compliance with the control rules published by the BMWFJ (2008);
- Entry in the ARGE product list;
- The provision of regular information to the ARGE about products on the market which use the GM(O)-free label;
- Compliance with the basic values of the ARGE, which include:
  - Increasing organic agriculture;
  - Promoting sustainable agriculture;
  - Transparency in food production;
  - Development and innovation in food production; and
  - Conservation of a rural living culture.

If a product is going to be labelled as GM(O)-free, the producer must implement appropriate measures for self-control. The control bodies also audit the producer according to the control standards (BMWFJ). A risk evaluation is also conducted, according to which further controls may be required. The control frequency depends on the risk assessment and the role of the company in the production process as set out in Table A1.1.

Table A1.1 Risk assessment of companies based on production processes

Type of company	Level of Risk			
	0	1	2	3
Agricultural production, animal production	25 (see point 1) plus additional controls (see point 2)	50 (see point 1) plus additional controls (see point 2)	100	No certification possible
Agricultural	10	25	50	No certification

[4] http://www.gentechnikfrei.at/start.asp?ID=303&b=56

	Level of Risk			
production, plant production				possible
Single agricultural production	100	100	100	No certification possible
Processing	100	100	100 (at least √n of which are unannounced; see point 3)	No certification possible
Trade and storage	100	100	100 (at least √n of which are unannounced; see point 3)	No certification possible

Point 1: if there is a demand of 25 per cent control, every company should be controlled at least once within 4 years (50 per cent: twice within 2 years).

Point 2: for each negative control an additional control must be conducted. Controls are negative if sanctions above level 2 are given.

Point 3: √n is the square root of the number of certified companies

Source: BMWFJ 2008, p. 13

A1.1.8 Market share

The GM(O)-free labelling scheme in Austria is reported by stakeholders to cover between 1,800 and 2,000 products in the following categories: dairy products (100 per cent product coverage), eggs (100 per cent product coverage), poultry meat (95 per cent product coverage), juices, organic products and others (25 per cent product coverage). The vast majority of GM(O)-free labelled products are dairy products, followed by eggs.

More than 1,650 products – including milk and milk products, eggs, bread and bakery products, soy products, oils, cereals and beverages – are labelled with the ARGE label 'gentechnikfrei' (Top Agrar Austria, 2012). In 2010, the entire Austrian milk industry and egg producers switched to controlled GM(O)-free fed animal products. Since January 2012, the biggest poultry producers, which cover about 90 per cent of the Austrian market, use non-GM feed. Poultry meat is labelled 'GM(O)-free' at the point of sale. Roughly 30 per cent of poultry farms produce GM(O)-free meat (Gressl, AMA). Because of the size and market relevance of the involved retailers (Hofer, REWE Group, Spar) and producers, it is expected that the rest of the sector will soon follow. GM(O)-free fresh poultry meat is currently available on the market but not processed poultry products (Top Agrar Austria, 2012).

Given the transition in 2012 to entirely GM(O)-free production in the egg and poultry sector, there is no longer a price differential between GM(O)-free and conventional products and therefore no longer a premium associated with 'GM(O)-free' (Interview Agricultural Chamber Austria).

No GM(O)-free beef products are yet on the market. There is a potential of 50 per cent, given combined production processes of milk and beef meat on 50 per cent of cattle farms (Agricultural Chamber of Commerce, Austria). GM(O)-free pork production is more difficult to implement given:

- The important contribution of soy to the feed used; and
- The few valuable parts of the hog carcass (e.g. chops, loin), which must absorb all the additional costs of GM(O)-free production.

The biggest and most important producer of GM(O)-free pork in Austria is the Oberndorfer Fleisch GmbH with its GM(O)-free brand IBOSCHWEIN. IBOSCHWEIN was launched in July 2011. To date, 100,000 hogs have been marketed under IBOSCHWEIN (Interview Franz Oberndorfer).

In March 2012, Billa AG launched GM(O)-free pork products in all 1,000 of its stores. Currently there are four meat products under the store's own brand 'Hofstädter' labelled with the ARGE GM(O)-free label. The price of the GM(O)-free products is 50 cents/kg higher than the price of the conventional

alternative. During a pilot phase, the supplier Oberndorfer Fleisch GmbH processed 1,000 hogs per week (BauernZeitung.at 2012). The Oberndorfer Fleisch GmbH aims to launch processed GM(O)-free pork products at the end of 2012 for the first time, using the ARGE GM(O)-free label (Interview Franz Oberndorfer). There are also six small pilot projects to market GM(O)-free pork in cooperation with the Agrarmarkt Austria Marketing (AMA), including 100 farms (see 4.4.5). Altogether, only about one per cent of the pork market is GM(O)-free, although another two per cent is organic pork (Agricultural Camber Austria)

Spar Austria labels its own organic brand – Spar Naturpur – with the ARGE-label. The label covers about 600 products. The Hofer supermarket carries entirely GM(O)-free white dairy products, whilst the majority of yellow dairy products are also GM(O)-free. All fresh chicken meat and eggs are also GM(O)-free.

The GM(O)-free label predominantly covers fresh products sold in the food retail sector, where animal welfare and food origins are important to consumers, as well as other elements such as whether a product is GM(O)-free. It is much less common in the case of processed food products and in 'cash and carry' markets in Austria (Agricultural Chamber Austria).

Exports

Spar Austria operates their stores in Hungary, Croatia, Northern Italy, Slovenia and the Czech Republic, where their bio-brand carrying the ARGE GM(O)-free label is sold. Whilst the demand in Slovenia and Northern Italy is strong, there is very little demand in countries such as Hungary and Czech Republic.

A large proportion (44 per cent) of Austrian milk products, all of which are labelled GM(O)-free, are exported, mostly to Germany and Italy (Gressl, AMA).

The most important Austrian producer of GM-free pork (IBOSCHWEIN brand) exports 10 per cent worth of sales to Northern Italy (South Tyrol), given the high demand for GM(O)-free products in that region (Interview Franz Oberndorfer). About 10 per cent of Austrian produced chicken meat is exported to Germany (Mayringer, Geflügelmastgenossenschaft).

In the wider European market for eggs and poultry, GM(O)-free products from Austria are not competitive given the fact that production costs are much higher (Interview representative of Agricultural production).

A1.2 Type II schemes: 'GM(O)-free is one attribute of a quality label

A1.2.1 AMA

AMA is legally obligated to promote agricultural marketing in Austria. An advisory board, in collaboration with agriculture and business groups, has developed the AMA guidelines. The AMA Seal of Approval provides an indication of quality and the country of origin. The AMA is responsible for the licensing system. AMA approved products are independently inspected. The AMA label is provided in Figure A1.1.

Figure A1.1 AMA-label

AMA product guidelines include voluntary GM(O)-free production alongside other, obligatory, quality criteria. At producer level, there are GM(O)-free guidelines for cattle used to produce milk and meat, sheep and goats, laying hens and fruit and vegetable production. The AMA guidelines refer to the Codex Alimentarius guidelines and recommend the use of the ARGE label. Discussions are ongoing

as to whether GM(O)-free production should be a requirement for all AMA labeled products rather than a voluntary element of the scheme (Petschar, Association of Dairy Industry).

A1.2.2 Heumilch

There are milk products in Austria called 'Heumilch' (hay milk),[5] which means that the milk is only produced from cows fed on grass, hay and some cereals in winter. Soya, silage and additives are not used, therefore no GMOs are used in the production process. About 8,000 farmers produce hay milk. The Heumilch logo is provided in Figure A1.2.

Figure A1.2 Heumilch label in Austria

All Heumilch producers are members of the ARGE Heumilch (association of farmers who produce hay milk) and the ARGE Gentechnik-frei. Not all hay milk products (milk, cheese, cream, yoghurt, etc.) use the GM(O)-free label on the packaging, although most include at least some indication that the product is GM(O)-free. According to the stakeholders interviewed for this research, this is the only production programme in Austria which includes a GM(O)-free element aside from organic production.

A1.3 GM(O)-free production costs and price premia

All milk products and fresh eggs are GM(O)-free in Austria; there are no conventional alternatives. Consequently, there is no price differential in the market for these products. GM(O)-free alternatives for other products are slightly more expensive than the conventional equivalent. For example, GM(O)-free pork products in a pilot project in Billa stores cost €0.50 cent/kg more than the conventional alternative.

Higher costs for GM(O)-free products result from more expensive feed and control costs. Non-GM feed costs €30-60/t more than conventional feed (March 2012). Additional costs are only partially compensated for by the retailers. Producers and traders bear most of the additional cost, with very little being passed on to consumers via higher prices (interviews with Spar Austria, Matousek, REWE, Anonymous, Bio Austria, Faber, ARGE). In the case of GM(O)-free poultry production, typically between 50 and 100 per cent of the additional costs are compensated for by the retailer (interviews with Gressl, AMA and Mayringer, Geflügelmastgenossenschaft).

GM(O)-free pork production is associated with higher costs than the production of GM(O)-free milk, eggs and poultry. Additional feed costs associated with GM(O)-free poultry production depend on the kind of poultry (€0.03-0.06 cent/kg live weight) (Mayringer, Gelfügelmastgenossenschaft). Additional costs to GM(O)-free pork producers range from €0.05 to €0.06 cent/kg. On farms where breeding and fattening is combined in one production process, the additional costs are even higher (€0.10 cents/kg), resulting in price premiums of €1/kg meat at the point of sale. In Austria, about 50 per cent of pork farms include both breeding and fattening of the hogs (Gressl, AMA). IBOSCHWEIN brand pork meat incurs 10 per cent additional costs for GM(O)-free production (Interview Franz Oberndorfer). Additional costs to milk producers range from €0.01 to €0.015 cent/litre milk (Petschar, Association of Dairy Industry).

[5] http://www.heumilch.at/

Additional costs are high in the case of GM(O)-free imports from South America due to the distance and requirements associated with GM(O)-free transportation since Austria has no sea port. There is also considerable volatility in the price of GM(O)-free feed. In 2012, the GM(O)-free price premium of soya more than doubled from €30 €/t to €60-70/t (Agricultural Chamber Austria). These price fluctuations cannot be transferred to the retailer or to consumers (Gressl, AMA; Matousek, REWE).

Spar Austria sells imported products labelled with the German VLOG-Label in addition to those carrying the Austrian ARGE label. Spar Austria also exports ARGE labelled products to its stores in other European countries.

A1.4 GM(O)-free labelling outlook

The ARGE Gentechnik-frei is currently revising and amending the control systems for GM(O)-free production (Agricultural Chamber Austria). There are also plans to expand GM(O)-free production into different markets. For instance, there are currently several pilot projects seeking to implement GM(O)-free pork production. The AMA pork branch, the chamber of agriculture and the farmers' association are all participating in a pilot project to develop a GM(O)-free label in addition to the AMA label. The AMA is currently developing production and labelling guidelines. On the basis of these guidelines farmers and retailers will then discuss how to deal with the additional costs associated with using non-GM feed. At the end of 2013, the AMA will evaluate consumer responses to GM(O)-free meat (Lebensministerium, Juli 2012). There are six small projects involving around 100 farms (Gressl, AMA).

A new initiative called 'Donausoja' (Project 'Soy from the Danube')[6] was founded in January 2012 and aims to foster and to promote the cross-border production and sale of soy in the Danube region. The objective of the project is to improve the independence of soy imports into Europe from other parts of the world. The association aims to develop guidelines for soy production, which would serve as the basis for contract schemes and quality controls of soy production within the Danube region. At the beginning of September 2012, an international symposium took place in Wien, where representatives from different countries gathered to discuss participation in the project. Harmonising the different GM(O)-free production rules in different EU countries would be very beneficial to the project (Krön, Donau-Soja).

GM(O)-free labels may become less important over time as animal welfare labels become increasingly important. New regional programmes are also emerging which require GM(O)-free production without using this claim for marketing purposes. Consequently, GM(O)-free production may become one quality criterion among others. These kinds of quality programs (animal welfare, regional origin, GM(O)-free production) can only perform successfully under contract-based production conditions (Gressl, AMA).

If GM cultivation in Europe increases, the importance of GM(O)-free claims are expected to increase significantly (Agricultural Chamber Austria). Overall, most of the stakeholders interviewed for this study believed that GM(O)-free claims will increase in importance over time, not just in terms of the number of products, but also the scope of the products being covered (e.g. poultry and pork production).

A1.5 Problem definition and potential impacts of harmonisation

A1.5.1 Problems and potential impacts for consumers

In 2010, a survey of 1,500 Austrians reported that 74 per cent of the Austrian population believes that being free of GMOs is a very important food quality criterion. Participants were also asked to rank the importance of different food quality aspects. GM(O)-free was rated the third most important quality after freshness and taste (GfK Austria 2010, S. 6).

Another study by Marketagent.com was carried out in 2012 ('Happiness and freedom from GM-food'), drawing on the views of about 2,000 people from across Austria through a computer assisted web

[6] http://www.donausoja.org/donau-soja):

survey. When respondents were asked which of the 11 aspects they thought were very important when buying food, about 20 per cent selected being GM(O)-free, which was rated the sixth most important criteria overall, after regional origin and quality. The most important element was freshness. Older interviewees (above the age of 40) rated this aspect as being more important than younger interviewees. Respondents also rated the probability that different foods contain GMOs: the highest probability was given to food from countries outside of Austria, followed by processed foods, animal products and soy products.

The survey also asked respondents whether they believed that all food containing GMOs are marked as such, according to European legislation. More than two thirds believed that the rule is being followed, or at least followed in Austria. Only a third believed that the rule was being followed in other Member States. About five per cent were unconvinced that the rule was being followed in Austria, whilst 15 per cent believed the same for other Member States. Moreover, 22 per cent believe that the rule probably was not being followed in Austria, whilst 44 per cent believed the same in other Member States. More young people than older people trust that the correct labelling is used.

People were also asked whether they believed that there are certain quality labels which indicate that a product is GM(O)-free. About 30 per cent said that there are such labels and that they knew of them, another 39 per cent believed there are such labels but they did not know of them and the remainder (31 per cent) said no such labels existed. Younger participants were more knowledgeable about these labels than older participants.

Six labels (GMO-free, AMA quality label, quality from Austria, Austrian Organic, farmers' guarantee and European Organic) were then shown to the participants and they were asked which of the labels provided a guarantee that animal products are produced from animals fed a non-GM diet. Only 56 per cent of the respondents thought that the GM(O)-free label provided that guarantee, whilst for the AMA label about 53 per cent thought so. Furthermore, 29 per cent believe this of the 'quality from Austria' label, 23.5 per cent of the Austrian Organic label, 16 per cent of the farmers' guarantee label and 10.6 per cent of the European Organic label. Younger people were once again more aware of the requirements underlying these labels compared to older people. These results contrast somewhat with the opinion of some stakeholders interviewed for this study (Matousek, REWE, Plsek, BMG), who generally believe that Austrians are well aware of GM(O)-free food and related GM(O)-free labels, and therefore there is little need for further promotion or education.

Another survey conducted by Marketagent.com in March 2012 reported that 68.3 per cent of the participants (n = 508) will not buy food that contains GM plants, whilst 71.1 per cent would not buy animal products when GM feed is used in its production (Marketagent.com, 2012a).

According to a Neilsen survey (2010) conducted through computer aided web interviews of 1,000 participants, the Austrian GM(O)-free label was known to about 61 per cent of people interviewed. Some labels were better known (e.g. AMA, Guetesiegel, Stiftung Warentest, Fairtrade) than others (e.g. Bio Austria, Demeter, Der blaue Engel). About two third of the respondents rated the GM(O)-free label as being either very important or important. Another 57 per cent stated that they trust the GM(O)-free label. The rating was higher for some other labels such as AMA Guetesiegel or Fairtrade (Nielsen 2010).

A survey conducted in 2011 with roughly 400 participants also showed a high importance attached to products being GM(O)-free: it was rated as the second most important product attribute, after freshness. Moreover, 64 per cent of respondents said that this was a very important consideration for them when buying food (Der Standard, 2011).

When there is a GM(O)-free label on animal products, Austrian consumers expect that the animals are fed non-GM feed for their entire life, not only during the time of fattening (Gressl, AMA). Consumers also often think that GM(O)-free labels stand for sustainable production, like organic, for example. Furthermore, few consumers are aware of the fact that organic products must also be GM(O)-free.

A1.5.2 Problems and potential impacts for operators

Some of the stakeholders interviewed for this study think that consumers in Austria are already well informed about GM(O)-free products (Matousek, REWE, Plsek, BMG), while others think that more

needs to be done (Anonymous, Bio Austria, Porstner, Global 2000, Faber, ARGE, Gaugitsch, Umweltbundesamt).

Some stakeholders (Bio Austria, Faber, ARGE Gentechnik-frei, Porstner, Global 2000) believe that a comprehensive labelling policy on GMOs in food production, which includes the labelling of the use of GM feed, is preferable to a GM(O)-free label.

Some experts (Gaugitsch, Umweltbundesamt, Anonymous, Bio Austria) suggested that the requirements and definition of GM(O)-free products should remain similar to the definitions under European legislation on organic foods. They also suggest that it should be possible to apply both a GM(O)-free label and other labels like organic and details of a product's origin on the same product.

Overall, the current GM(O)-free label in Austria is thought to have the following strengths and weaknesses:

- Strengths of the Codex standard:
  - It is a long standing standard which can easily be tested and improved;
  - Guidelines are provided for a standardised control system and certification;
  - Guidelines are provided across all production stages instead of a regulation for the final consumer product;
  - Guidelines on the use of GM additives are flexible: upon approval by the Codex commission, GM food and feed additives, technological auxiliaries, flavour, enzymes and vitamins can be admitted for use under certain circumstances, such as where GM(O)-free alternatives are permanently unavailable or where their usage is recommended according to a set list of criteria and recommended by an expert group. There is also added flexibility because the guidelines have no legal status and therefore can be adapted relatively easily if the need arises; and
  - Temporary provisions regarding the required time of non-GM feeding are practicable and make the conversion to GM(O)-free production easier for operators. Alternatively, a process whereby GM(O)-free feeding is introduced in stages is also possible.

Retailer and trade agriculture representatives would nonetheless welcome harmonisation of GM(O)-free labelling, as it would be expected to reduce consumer confusion. Additionally, uniform EU-guidelines could reduce distortions in terms of competition and trade, which also arise due to control costs from ensuring GM(O)-free production in Austria. With a harmonized label, some stakeholders believe cross-border trade would increase. Moreover, producers of GM(O)-free food would also potentially benefit as it might make it easier to obtain GM(O)-free ingredients from the rest of the EU.

An obligatory optional system was suggested by some stakeholders (Kroßdorff, Fachverband), whereby a producer may choose to voluntarily label his products as GM(O)-free, but in order to do so, must follow a set of consistent rules and requirements. Some stakeholders, however, prefer a system similar to that of the European organic scheme (e.g. Kroßdorff, Fachverband, Faber, ARGE).

Annex 2 France case study

A2.1 Government-led Type I schemes: explicit GM(O)-free labelling rules and guidelines

A2.1.1 Legislative basis and historical context

The labelling of GM(O)-free food products in France is legislated under Decree n° 2012-128 (30 January 2012).[7] The decree was published in the French Official Journal on 31st January 2012 and came into force on 1 July 2012.

A2.1.2 Labelling rules

The decree makes several distinctions concerning the labelling of food products that are 'free from genetically modified organisms'. These are highlighted in Table A2.1 below.

Table A2.1 Food product labelling distinctions under Décret no 2012-128

Label	Description	Product type covered
GMO-free	Plants and ingredients of plant origin made from raw material containing less than 0.1 per cent GMO*	Vegetable origin
Fed on non-GMO feed (<0.1 per cent)	Unprocessed ingredients of animal origin obtained from animals fed on GMO-free feed*	Animal origin
Produced from animals fed on non-GMO feed (<0.1 per cent)	Processed ingredients of animal origin, including eggs and milk, obtained from animals fed on GMO-free feed*	Animal origin
Fed on non-GMO feed (<0.9 per cent)	Unprocessed ingredients of animal origin obtained from animals fed on feed not subject to [EU] labelling requirements	Animal origin
Produced from animals fed on non-GMO feed (<0.9 per cent)	Processed ingredients of animal origin, including eggs and milk, obtained from animals fed on feeds not subject to [EU] labelling requirements	Animal origin
GMO-free within a radius of 3km	Honey and other products relating to apiculture	Bee-derived

** On condition that this presence is accidental and technically unavoidable.*

There is no logo specified under the French legislation. Permitted labels consist of the wording highlighted in the first column of Table A2.1 above, which are to be included as part of the list of ingredients or as a footnote. The specific packaging requirements are as follows:

- *For pre-packaged food products*: the relevant wording, as listed above, should be included within the list of ingredients immediately after the relevant ingredient or as a footnote at the end of the list. The 'GM(O)-free' wording must be in the same font, font size and colour as the other ingredients on the list.
- *For non-pre-packaged foods*: the relevant wording should be mentioned after the relevant ingredient on a label placed on each food product or lot of food products provided that the lot contains food products that adhere to the same labelling requirements.

A2.1.3 Product scope

Only plant or plant derived products which have a GM alternative may be labelled as 'GM(O)-free'. Since no GM crops are permitted to be grown in France at the moment, it is expected that the uptake

[7] Décret n° 2012-128 *relatif à l'étiquetage des denrées alimentaires issues de filières qualifiées 'sans organismes génétiquement' modifiés*

of labels will primarily concern animal and animal-derived products. The label can only be used on food products made up of several ingredients where the non-GM ingredient makes up at least 95 per cent of the total weight of the product and where the other ingredients are not subject to these labelling requirements (salt and water are not included in the product weight).

Agreement on this figure was reached after much discussion and polarised views from stakeholders during the consultative process prior to the decree's publication.[8] Many retailers favour reducing the percentage threshold above which an ingredient may be labelled so that a greater percentage of products which contain non-GM ingredients may be eligible for GM(O)-free labelling. Some retailers also advocate allowing certain ingredients to be labelled even if they are not major product constituents where there is a GM alternative (such as soy), so that the consumer may be reassured of the nature of the food product. These retailers, including Carrefour and Auchan, argue that having more products eligible for GM(O)-free labelling would provide greater consumer choice.

On the other hand, some other food industry stakeholders would prefer that ingredients in 'transformed' food products, or products containing several ingredients, are not permitted to be labelled as GM(O)-free. The government position is that a lower threshold might lead to consumers being misled if a 'GM(O)-free' label referring to a minor ingredient is highlighted on the packaging.

Article 7 of the French decree relates specifically to apiculture or honey making. It states that if the hives have been placed outside a 3km radius of GM crops it may be labelled as 'GM free within a radius of 3km'. The association of honey producers (UNAF) have yet to ask their members whether they intend to take up the GM(O)-free label.[9]

A2.1.4 Thresholds/detection levels for adventitious or technically unavoidable GM presence

There are different thresholds for adventitious or technically unavoidable GM presence for food and feed (see also Table A2.1 above):

- <0.1 per cent for plants and ingredients of plant origin;
- <0.1 per cent for processed and unprocessed ingredients of animal origin obtained from animals fed on non-GM feed; and
- <0.9 per cent for processed and unprocessed ingredients of animal origin obtained from animals fed on feed that is not subject to EU labelling requirements.

A2.1.5 Input specifications and exceptions

The following GM inputs are prohibited by the Decret:

- Preparation aided by GMO-derived compounds or processing aids;
- Production from animals fed on GM feed; and
- Production from animals fed on feed that contains GM additives.

Exceptions are provided for each of these where a non-GM alternative is not available. There is no mention of the use of veterinary pharmaceuticals made produced from modern biotechnology.

A2.1.6 Minimum non-GM feeding times for animals

The minimum feeding times for animals fed on non-GM feed are provided in Table A2.2.

Table A2.2 Minimum 'GM-free' feeding times

Product type	Description	Minimum feeding time before slaughter or production
Dairy	Before milk production	6 months
Poultry	Before slaughter	3 days from birth

[8] Communication with DGCCRF, 24 September 2012

[9] Communication UNAF, 27 September 2012

Product type	Description	Minimum feeding time before slaughter or production
Eggs	Before egg production	6 weeks
Pigs	Before slaughter	12 months or the equivalent of three quarters of their life span if less than one year – approximately 4.5 months for pigs
Cattle	Before slaughter	12 months
Other	Before slaughter	12 months or the equivalent of three quarters of their life if life span is less than one year

A2.1.7 Certification, controls and monitoring requirements

The French GM(O)-free labelling scheme is processed-based for animal and animal-derived products. The manufacturing process (e.g. use of non-GM feed) determines whether the product is eligible to be labelled. Monitoring is based on checks and tests on the inputs to the final product, rather than the end product itself. In the case of plants and ingredients of plant origin, the scheme is product-based. The end products are tested for compliance with the labelling requirements.

There are no certification requirements that accompany the application of the new decree. It is a voluntary scheme and operators are free to label their products using the designated wording if all requirements are met.

The Direction Générale de la Concurrence, de la Consommation et de la Répression des Fraudes (DGCCRF) is responsible for monitoring operators to ensure that they are compliant with EU and National Legislation. Two complementary tools are used:

- Traceability of GM(O)s from raw materials. This includes an audit trail identifying the product origin and destination at each commercial transaction.
- Analytical laboratory tests to check the presence of DNA or genetically modified proteins in raw materials, ingredients and finished products.

Controls are undertaken in both manufacturing plants and depots.

The DGCCRF carries out investigations in the seed, food and feed production sectors. Control plans are established at each stage of the production process. The investigations include:

- Documentary controls (invoices, commercial documents, specifications, internal lab test reports, and supply documents);
- Official sampling for analysis, if and when necessary; and
- Verification of internal controls or self-controls carried out by operators.

DGCCRF agents carry out documentary controls on the nature and validity of the methods employed by the operators within a sector to ensure that the consumer is correctly informed about a product. Samples may also be taken in order to look for or quantify the presence of GMOs.

The frequency of controls depends on the perceived risk of the operator breaching the conditions of the decree. Where a breach has been identified, the operator may be controlled several times a month until the authorities are satisfied that the conditions have been met. In other cases, inspections may be conducted annually or with less frequency. Operators must also carry out their own controls, including:

- Auto-controls which may include revising the product specification details as well as sample analysis; and
- Commissioning an independent and authorized third party certification body to carry out controls of the production process (internal control).

The operator self-controls and third party controls are checked by the DGCCRF.

Table A2.3 Organisations involved in the compliance and monitoring of the French national labelling scheme

Name of organisation	Function	Description of Function
DGCCRF	Monitoring and compliance	Documentary controls to ensure correct specifications are in place and the traceability of the product. Laboratory analysis may be undertaken. Verification of self- and internal controls.
Certification bodies	Monitoring	Documentary and technical controls (testing)
Food chain operators	Self-monitoring	Revising specifications and laboratory analysis

A2.2 Private operator-led Type I schemes: explicit GM(O)-free labelling rules and guidelines

Several GM(O)-free labelling schemes employing explicit wording and/or a logo have been identified in France (Table A2.4).

Table A2.4 Labelling overview

Operator / organisation	Label wording
Carrefour	Nourri sans OGM guaranti à 99.1 per cent* ('Fed with non-GM feed, guaranteed at 99.1 per cent')
Loué	Nourri sans utilisation d'OGM minimum 99,1 per cent* ('Fed without the use of GMOs min 99.1 per cent')
Sweet corn producers	Ce maïs doux est sans OGM ('This sweet corn is GMO-free')
Beansprout producers	Les pousses de haricot Mungo (pousses de soja) sont sans OGM conformément à la réglementation' ('Mungo beansprouts are non-GM conforming with legislation')

**These labelling indications were in use before the French legislation came into effect; both companies have revised their labels to reflect the requirements set out in the legislation.*

A2.2.2 Carrefour

Carrefour is one of the largest food retailers in France. In October 2010, Carrefour launched a 'GM(O)-free' label, 'Nourri sans OGM guaranti à 99,1 per cent' ('Fed with non-GM feed, guaranteed at 99.1 per cent'), which is restricted to Carrefour's own-branded products. The label was introduced ten years after the retailer established an identity preserved 'non-GM' feed supply chain for non-GM soy meal. The rationale behind setting up a non-GM supply chain and GM(O)-free label was a belief in consumer choice and a desire to increase customer understanding of the products they consume, in order to increase their confidence in those products. The explicit labelling of food products to allow customers to easily and immediately distinguish GM from non-GM products has been a long-term goal of the retailer. This labelling scheme is process-based, as it is the process of making the food product (non-GM soy feed production) that is subject to the labelling claims.

The Carrefour scheme covers animal products including meat (veal, pork, and poultry), eggs and farmed fish. It does not cover milk or dairy products because Carrefour considers the milk supply chain to be too complex and difficult to trace. Carrefour's GM(O)-free labelled products are only sold in France.

Carrefour promises customers that its animals are fed from birth on non-GM feed (<0.9 per cent). The use of GM(O)-free additives, enzymes and veterinary products are used wherever possible, but some synthetic (GM) amino acids do not have substitutes and are allowed.

Carrefour has a policy of working closely with farmers and feed producers to make sure it has control over the quality of its supply chain. The retailer has developed a control plan and carries out annual

controls at the producer level to ensure that the feed they receive meets their requirements. This may involve lab analysis. Feed manufacturing plants are certified as GM(O)-free by independent accreditation bodies. Carrefour works with farmers to ensure that they procure their feed from these manufacturers.

An independent accreditation body has been commissioned by Carrefour to carry out annual controls of its processes concerning the procurement of animal feed. The type of controls may be documentary controls (verification of supply documents, invoices to ensure traceability) and samples taken for laboratory analysis.

Table A2.5 Organisations involved in the monitoring of the Carrefour labelling scheme

Name of organisation	Function	Description of Function
Carrefour	Auto-controls	Documentary and laboratory analysis of feed used by breeders
Certification bodies (Qualité France, Bureau Veritas)	Monitoring	Documentary and technical controls (testing) of supply chain

The label is applied to over 350 Carrefour animal products. Some of these make up a significant proportion of total meat sales. For example 71 per cent of pork sold by Carrefour in France is fed on non-GM feed.

Around 56 per cent of all meat sold by Carrefour is non-GM fed pork. This equates to annual production of 2.8 million pigs fed on non-GM feed by an estimated 1,870 producers. In 2010, around 25.2 million pigs were produced in France. Carrefour's annual production of non-GM fed pigs therefore represents over 11 per cent of total pig production.[10] Veal fed on non-GM feed represents 11 per cent of all meat sales by volume, involving around 880 producers. Together, non-GM fed pork and non-GM fed veal sales make up 67 per cent of all meat sales by volume at Carrefour.

Table A2.6 Carrefour non-GM label products sales volume

Product	Percentage of total (GM and GM(O)-free) product sales by volume
Eggs	46 per cent
Poultry	30 per cent
Salmon	13 per cent (salmon and trout) and 91 per cent (all fresh salmon)
Cooked Ham	25 per cent
Pork	71 per cent
Veal	60 per cent

Note: These figures apply to products sold in France only

A2.2.3 Loué

The Loué brand was established about 50 years ago. In 1996, it was given a provenance label IGP. It also carries a Label Rouge (see Section A2.3.3 below). In 1999, Loué farmers decided that the use of GM feed was incompatible with high quality poultry produce and put in place supply chain controls which allow complete traceability and control over non-GM feed. This was coupled with an understanding that consumers did not want to buy food products that contain GMOs. In June 2009, following the release of rules for the voluntary labelling of non-GM(O) fed animals by the National Consumer Council, Loué farmers launched their own label.

The labelling scheme covers poultry and egg products. All Loué products are GM(O)-free and labelled as such, including their organic range. The label is process-based. This is evident in the monitoring

[10] Conseil général de l'alimentation, de l'agriculture et des espaces ruraux, (2012) "Quel avenir pour la filière porcine française?"

procedures carried out at the animal feed plant. GM(O)-free additives and veterinary products are used as far as possible, however Loué accept the use of certain genetically modified synthesised amino-acids which do not have a non-GM alternative.

Many controls, at several different levels, are carried out at each stage of production, including:

- Auto-controls: carried out by Loué (analysis and testing of raw material if required);
- Internal controls: carried out by an ODG (Organisme de Gestion) which ensures the conformity of the product and that the specifications have been met; and
- External controls: carried out by an independent certification body accredited by the COFRAC (Comite Francais d'Acreditation) and registered by the INAO (Institut National de l'Origine et de la Qualité).

Controls are carried out at both conventional and organic feed production plants. The DGCCRF will also carry out checks on producers, the frequency depending on the perceived risk of infringing labelling laws.

Table A2.7 Organisations involved in the monitoring of the Loué labelling scheme

Name of organisation	Function	Description of Function
Loué	Auto-controls	Documentary and laboratory analysis
ODG	Internal control	Ensures product meets specifications
Independent Certification bodies (Qualité France, Bureau Veritas)	Monitoring	Documentary and technical controls (testing)

Around 28 million GM(O)-free fed poultry products, and 28 million eggs are produced each year by Loué. France is a leading egg producer in the EU. In 2011 around 12.9 billion eggs were produced in France.[11] Loué eggs therefore make up around 0.2 per cent of total production in France. Approximately 90 per cent of Loué products are sold in France, the remaining 10 per cent within the EU.[12]

A2.2.4 Sweet corn and beansprouts

Genetically modified varieties of maize (maïs) and soy (soja) are used as animal feed in France. Although these two crop varieties are unrelated to the production of sweet corn and beansprouts (called pousses de soja in French) for human consumption, the nomenclature used was confusing for consumers. Sweet corn and beansprout producers and distributors claimed declining sales as a result. In 2004 the following labels were permitted for use on these two products respectively[13]:

- '*le maïs doux est sans OGM, conformément à la réglementation*': Sweet corn is non-GM in conformity with legislation, and
- '*les pousses de haricot Mungo (pousses de soja) sont sans OGM conformément à la réglementation*': Mungo beansprouts are non-GM in conformity with legislation.

The labelling was authorised despite the fact that no GM alternatives exist for these plant products. These labels are product-based.

All sweetcorn produced in France is labelled as indicated above. France is the second most important sweetcorn producer in the EU behind Hungary, with six companies (nine factories) employing nearly 2,000 staff. Around 270,000 tonnes of tinned sweetcorn and 28,000 tonnes of frozen sweet corn products were produced in 2011.

[11] Service Economie ITAVI, (2012) "Point sur le marche des oeufs et des produits oeufs"

[12] Requests for further marketing figures from the company were denied and are not publically available.

[13] DGCCRF, (2004) "Les OGM et leurs produits dérivés doivent-ils être étiquetés?"

A2.2.5 Auchan

Auchan has been selling non-GM animal produce since 1997. This includes a large proportion of organic own-brand food products (around 2,000 products). This policy was introduced in response to a belief that consumers want the choice to buy GM(O)-free food. When the GM(O)-free labelling decree came into force in 2012, Auchan introduced GM(O)-free labelling for around 70 own-brand conventionally produced animal and animal-derived products in their stores. The products include fish, poultry, pork and eggs.

The main animal feeds are soy, maize and rape. The supply chain from the feed manufacturers to the farms is checked. An independent certification body carries out controls on behalf of Auchan. The types of control are two-fold:

- Analytical testing of the feed; and
- Audit of the processes and documents of the feed manufacturers and farmers.

A2.3 Type II schemes: 'GM(O)-free' is one attribute of a quality label

A2.3.1 Organic products

Under the new decree on GM(O)-free labelling, organically produced animal products may carry the following labels:

- 'Fed on non-GMO feed (<0.9 per cent) in conformity with the regulation on organic production'; or,
- 'Produced from animals fed on non-GMO feed (<0.9 per cent) in conformity with the regulation on organic production'

The organic food market is still increasing in France. In 2011, the majority of organic food consumed in France (78 per cent) was also produced France, with imports only amounting to 32 per cent.[14] In early 2012, the number of hectares of organically farmed land passed the 1 million threshold. The total number of organic operators increased by 14 per cent and stood at 35,271 in the last quarter of 2011. At the same time, the number of farms had increased by 12.3 per cent to reach 23,135. In 2011, nearly €4 billion worth of organic produce was sold in France, an 11 per cent increase compared to 2010.

A2.3.1.1 Bio Cohérence

Bio Cohérence is a specific label for organic products that meet more specific and stringent requirements than other organic produce. The specifications include measures to be taken to avoid GM contamination (e.g. thorough cleaning of shared machinery, systematic testing of feed providers, including organic providers, and avoiding the use of soy feed). Bio Coherence labeled products must meet one of the two following thresholds for adventitious or technically unavoidable GM presence:

- <0.01 per cent for raw materials; or
- <0.1 per cent for processed food.

Figure A2.1 Bio Cohérence label

[14] Agence Bio, (June 2012), "La Bio: une Alternative qui prend de l'ampleur"

A2.3.2 Designation of origin and geographic indications

The AOC designates a product from a specific region or named area from which its quality is essentially derived. It is a result of the combination of a certain production method and the land on which it is produced. The AOP is the European equivalent of the AOC, which protects the name of a region or specific area.

The AOC label for cheeses indicates a level of quality based on certain specifications being met. Many French cheeses that are labelled AOC include a requirement that they are made with milk from animals fed on non-GM feed, and without the use of GMOs for fermentation. The detection level for these GM(O)-free cheeses is <0.9 per cent.

There are 46 AOC cheeses. In 2010, twenty-one of these were GM(O)-free with 10 more planning to set specifications to prohibit the use of GMOs in their production.

Figure A2.2 The AOC label

In order to get AOC certification, a product must be controlled in three different ways:

- Auto control: the producer or manufacturer registers all the information concerning their products, its traceability and the ingredients used;
- Internal control: carried out by a collective organisation called an ODG (Organisme de Gestion) which ensures the conformity of the product and that the specifications have been met; and
- External control: Undertaken by an independent inspection body which reports back to the national AOC body INAO (Institut National des Appellations d'Origine).

A2.3.3 Label Rouge

The Label Rouge is a sign of quality, indicating that the products have certain organoleptic properties (i.e. qualities of a substance that stimulate the sense organs) that give them a superior taste. Around 500 products (meat and meat derived products, dairy products, fish and seafood products, plant and plant derived products) carry the Label Rouge. These products must comply with a specific set of requirements at all stages of production and preparation. Producers are monitored several times a year with chemical and microbiological tests carried out to demonstrate the gustative quality of the product. The exclusion of GMOs is found in many Label Rouge products, but is not compulsory and depends on the individual product. Loué poultry carry the Label Rouge, as well as the GM(O)-free label.

Figure A2.3 Label Rouge

The different organisations involved in making a Label Rouge product (producers, animal feed manufacturers, etc.) form an association within collective structures called ODGs (Organismes de Défense et de Gestion). The ODG's functions include drafting product specifications, managing the Label Rouge, carrying out internal product controls and marketing and promotion.

Many controls are undertaken at each stage of the Label Rouge production, and at different levels, including:

- Internally by the businesses (auto-controls);
- By the ODG (internal controls); and
- By an independent certification body accredited by the COFRAC (Comité Français d'Acréditation) and registered with the INAO (Institut National de l'Origine et de la Qualité) (external controls).

The INAO validates control plans that define the distribution of internal and external controls and frequency of controls at each stage.

A2.3.4 Regional Labels

A2.3.4.1 Signé Poitou Charentes

In the Poitou Charentes region, farmers and collectives have set up a 'Signé Poitou-Charentes' label,[15] a voluntary label for food products meeting specific requirements including a threshold for the use of non-GM animal feed (<0.9 per cent). The on-going objective is to achieve a <0.1 per cent threshold.

Figure A2.4 Signé Poitou Charentes label

The requirements for production include:

- Effective product traceability; and
- Control and monitoring carried out by quality engineers from the regional food quality institute (IRQUA).

Almost 30 products carry the label with around 1,500 operators involved, of which 83 per cent are producers, 13 per cent independent small farmers and 4 per cent intermediaries.

[15] « Signe Poitou-Charentes les guaranties, 23 novembre 2011, IRQUA

A2.3.4.2 Défis Ruraux (Haute Normandie), including the Porc des Chaumières label

Défis Ruraux is an association of food producers in Normandy engaged in more sustainable agriculture. The farmers involved produce local and quality food. Amongst other things, the association helps farmers to stop using GM feed, as well as to reduce the use of chemicals and fossil fuels, to benefit biodiversity and to transition towards more sustainable production methods. Défis Ruraux assists farmers by putting into place local procurement procedures and to develop regional quality foods.

Figure A2.5 Défis Ruraux (Haute Normandie) and Porc des Chaumières

The farmers who carry the label on their products are selected using the following method:

- A technician goes on-site to evaluate the farmer's environmental, social and economic practices;
- The resulting report is reviewed by an ethics committee (consumer representatives, producers and experts) including whether the farmer's practices conform to the specification of the Défis Ruraux;
- The farmer signs a contract which states specific improvement objectives to be met within the next 2 years; and
- The producer is re-evaluated every two years, with new objectives.

A2.3.5 Summary

Table A2.8 Product scope

Product category	Carrefour*	Loué	Auchan*	Organic Products	Bio cohérence	Some AOC cheeses	Some Label Rouge	Signé Poitou Charentes	Défis Ruraux
Vegetables	×		×	✓	✓	×	✓	✓	✓
Oils / fats	×	×	×	✓	✓	×	✓	✓	✓
Meat	✓	✓ (poultry)	✓ (poultry, pork)	✓	✓	×	✓	✓	✓
Processed meat products	✓ (ham)	×	×	✓	✓	×	✓	✓	✓
Eggs	✓		✓	✓	✓	×	✓	✓	✓
Milk	×	×	×	✓	✓	×	✓	✓	✓
Other dairy products	×	×	×	✓	✓	✓	✓	✓	✓
Other animal products	✓ (farmed fish)	×	✓ (fish)	✓	✓	×	✓	✓(prawns)	✓

**Own-branded products only*

Table A2.9 Thresholds for adventitious or technically unavoidable GM presence

Parameter	Carrefour*	Loué	Auchan	Organic Products	Bio cohérence	Some AOC cheeses	Some Label Rouge	Signé Poitou Charentes	Défis Ruraux
Food	N/A	N/A	N/A	<0.9%	<0.1%	N/A	<0.9%	<0.9%	<0.9%
Feed	<0.9%	<0.9%	<0.9%	<0.9%	<0.1%	<0.9%	<0.9%	<0.9%	<0.9%

Table A2.10 Minimum non-GM feeding times for animals*

Product type	Description	Carrefour	Loué	Organic Products	Bio cohérence	Some AOC cheeses	Some Label Rouge	Signé Poitou Charentes	Défis Ruraux
Dairy	Before milk production	N/A	N/A	From birth	From birth	From birth	From birth	From birth	From birth
Poultry	Before slaughter	From birth	From birth	From birth	From birth	N/A	From birth	From birth	From birth
Eggs	Before egg production	From birth	From birth	From birth	From birth	N/A	From birth	From birth	From birth
Other	Before slaughter	From birth	N/A	From birth	From birth	N/A	From birth	From birth	From birth

** Excludes Auchan as information unknown*

A2.4 GM(O)-free production costs and price premia

The FNSEA, one of the French farmer's unions, estimates that the premium on GM(O)-free soy feed is approximately €40 per tonne.[16] Carrefour estimates that the premium is approximately €30 per tonne. The major producers and importers to France of soy-feed are in Argentina and Brazil. The additional cost of producing GM(O)-free crops is related to managing the risk of contamination from GM crops, which these countries also produce, and implementing the necessary measures required to avoid contamination (seed certification, cleaning the harvesting and transport equipment, sampling and tests).

The FNSEA suggested that the ease of uptake of a new labelling programme would greatly depend on the sector in question. In the production of pork, for example, it is common practice for the sows to be fed on (cheaper) GM feeds, whilst their piglets are fed on non-GM feed. Rearing pigs in this way means that their meat cannot be labelled as GM(O)-free as set out in the regulations. For many producers, switching to non-GM feed for all pigs would not be financially viable, however.

One reason why the new French labelling decree has been welcomed by most French stakeholders in the retail and agricultural production sector is the value-added it may provide to the entire supply chain if customers are willing to pay more for GM(O)-free products.

Where the additional costs of GM(O)-free feed are absorbed, it appears to depend on the distributor/producer. Carrefour has stated that its consumers would not tolerate a price premium on GM(O)-free products, and the cost is therefore absorbed by the breeders. Loué producers also absorb the additional cost of producing GM(O)-free products. Costs are increasing and uptake of the GM(O)-free labelling is welcomed as it is perceived to add value to the sector. Some producers believe that greater visibility of GM(O)-free food might lead to greater quantities of GM(O)-free feed being required and produced, which would help reduce costs compared to other production methods.

[16] Communication with FNSEA, 27 September 2012

A Greenpeace study on the economic costs of coexistence between GM and non-GM feed sectors suggests that most producers depend on being able to pass on the additional cost of GM(O)-free production to consumers. Creating and maintaining demand for such products is considered essential and labelling is one of the major tools to do this.

A2.5 GM(O)-free labelling outlook

In France there are private retailer initiatives and some regional GM(O)-free labelling schemes. They have a minor share of the total French food market though this is expected to change with the new labelling decree in force. The law may allow existing products, which already exclude the use of GMOs and use other labels of quality and origin (Label Rouge, AOC, IGP, and Organic) which do not currently specify the GM(O)-free nature of the products to include the permitted wording on labels.

Retailers and producers using labels that did not conform with the new decree were required to have these in place by 1 October 2012. One retailer, Auchan, is known to have taken advantage of the new legislation to begin labelling some of its meat, fish and egg products.[17] The DGCCRF (government department responsible for labelling) believe that most new labelling will relate to animal and animal-derived products, since there are no authorised GM plants or plant derived products for human consumption in France.

There are some concerns amongst stakeholders regarding the low thresholds included in the recent legislation. Some stakeholders hold the view that the two threshold levels for animal products (<0.1 per cent and <0.9 per cent) were included to please the many and opposing stakeholders engaged in the non-GM food production debate. The lower threshold is thought by many to be technically infeasible, and had the <0.9 per cent not been included, GM(O)-free food labelling may never enter the market place.

The threshold for accidental or technically avoidable presence of GMOs for some product labels (plant-derived foods have a tolerance threshold of <0.1 per cent) set out in the decree is lower than the current EU threshold for positive labelling of 0.9 per cent. Most stakeholders consulted for this study considered this to present a potential issue in terms of distorting competition amongst the Member States, which may have higher thresholds. Nonetheless, products manufactured and labelled in another MS may be sold in France even if the requirements are different (e.g. if they use a higher tolerance level).

It is not clear how many GM(O)-free food products are actually imported from other Member States. For example, Carrefour indicated that this was not a major issue as local provenance is another important factor for consumers.

There are also questions regarding the compensation processes in the event of contamination of non-GM crops. Currently no insurers in France will provide cover for GM crops and it is unclear how and if compensation will be offered in the case of claims against GM crop producers.

A2.6 Problem definition and potential impacts of harmonisation

A2.6.1 Problems and potential impacts for consumers

Many consumer surveys on attitudes to GMOs in food and their labelling have been carried out over the past few years, commissioned by consumer organisations, environmental NGOs and retailers (e.g. Carrefour). Each of them shows (to varying degrees) that consumers are wary of the presence of GMOs in their food and that they favour transparent labelling.

For example, a survey carried out for ANIA (the national association for the food industry)[18] showed that 71 per cent of people believed that GMOs presented a significant risk to food safety, a third of which felt this strongly. A survey by IFOP carried out for Dimanche Ouest France[19] revealed that two-

[17] Communication with DGCCRF, 24 September 2012

[18] L'Institut CSA pour l'ANIA , (Mars 2010), Sondage « Les Français et leur alimentation »

[19] IFOP pour Dimanche Ouest France, (Décembre 2011) « Les Français et les OGM »

thirds (65 per cent) of people are worried about the possible presence of GMOs in food products, with 27 per cent of respondents stating that they are 'very worried'.

A survey carried out in October 2010 by IFOP for Carrefour (shortly before Carrefour announced their non-GM(O) labelling programme) reported that the majority of French people (76 per cent) felt that it was very important that the presence or absence of GMOs in animal feed should be mentioned on the relevant food products.[20]

A survey by Efficience 3 for Loué on French consumers' views of 'non-GM' animal derived food products found that most (76 per cent) are in favour of a GM(O)-free label as they felt that it was unreasonable that those producers choosing to feed their animals on non-GM (<0.9 per cent) feed are not able to communicate this.[21]

A2.6.2 Problems and potential impacts for operators

Auchan believe that the current information available to consumers does meet consumer expectations. Current labelling regulations mean that a plethora of labels can be carried on one product which can confuse the consumer. The retailer's view is that labelling a product is only one way, and a limited one, of passing information on to consumers. Different consumers look for different information about a product (e.g. whether it is GM(O)-free, Fairtrade, organic, of local provenance, etc.). The information consumers seek is often qualitative and could be made available through various media such as websites, phone apps and other options in collaboration with NGOs and producers.

Most stakeholders consulted for this study welcome the French labelling law, as it will bring a more consistent approach to labelling, which would lead to less confusion for the customer. A study by Greenpeace[22] on the economic costs of coexistence of GMOs and non-GM feed sectors suggests that certain producers may take the price of feed into account year on year, keeping open the option to use GM feed in some years, or non-GM feed together with GM feed.

All stakeholders (with one exception) are in favour of an EU harmonised approach to GM(O)-free labelling, principally because it would help to rectify any competition distortions. The notable exception came from the ANIA, who oppose a labelling scheme in general, and consider the costs of an EU harmonised programme a waste of resources. Their objections concentrate on what they consider to be misleading claims to the consumer; their position is that a 'GM(O)-free' label should require a tolerance threshold of 0.0 per cent for both feed and inputs (i.e. absolute purity as the label suggests).

The economic costs of harmonisation were perceived to be difficult to measure before knowing the requirements of such a programme and whether they would be in line with the French legislation. There was a general view that there would be a positive impact on most groups, with some possible additional costs to producers and public authorities in terms of additional testing, and a potential cost to retailers if labels had to be modified.

The official French government view (including both the Ministry of Agriculture and the DGCCRF) is that it would welcome an EU harmonised approach to GM(O)-free labelling. Such an approach might correct the present perceived market distortion and improve consumer choice. Given that French legislation on GM(O)-free labelling is now in place, with thresholds lower than the current EU rules for positive labelling (0.9 per cent), there are concerns about how this would be integrated into an EU-wide scheme. Prior consultation with operators, taking into account existing schemes and customers' expectations, and a sufficient transition period were suggested.

[20] IFOP pour Carrefour, (Octobre 2010), « Etude sur le thème des OGM »

[21] Efficience 3 (Février 2009), « Opinion des Français sur le « Sans OGM »dans les produits alimentaires d'origine animale »

[22] Greenpeace, (2008) "OGM : le prix à payer -Les conséquences économiques des cultures OGM sur les filières sans OGM"

The French authorities believe that there may be an impact on the supply chain as operators conform to the new legislation. A harmonised approach may differ from the current French legislation, with costs to French producers increasing if there were a marked difference.

The Carrefour group is in favour of a harmonised approach to labelling for the following reasons:

1. The French National Consumer Council discussions revealed that consumer associations were in favour of GM(O)-free labelling of meat products guaranteed up to 0.9 per cent;
2. Different labelling laws in the Member States create market distortions within the EU;
3. Information provided to the consumer through labelling would secure the sector concerned and promote an informed and sustainable choice to the consumer. Securing a non-GM feed supply chain is essential to offering consumers a sustainable alternative to GM products; and
4. Carrefour estimates that the premium on non-GM soy feed is 8 to 10 per cent. Such a price differential would be difficult to justify if information on the process used in making the food product cannot be made available to consumers.

Carrefour states several conditions for the success of a harmonised labelling programme which also addresses the use of non-GM feed in the production of animal products, including:

- A maximum threshold presence of 0.9 per cent GM content;
- Audit by an independent third party; and
- The label should state: 'lack of GMOs in animal feed'.

The costs would be variable depending on the criteria imposed by a future regulation, but these are considered unlikely to be more stringent than those set out in the French labelling scheme. The impact on the supply chain was thought likely to be positive at all levels.

The Loué Farmers are also very supportive of a harmonised approach to labelling, citing distortion of competition if the current situation remains. Specific threshold levels (<0.9 per cent adventitious presence) would be an important requirement of an EU-wide labelling programme.

Auchan believes that harmonising the current labelling arrangements in the Member States would be difficult. The retailer would like to see a harmonised approach but is sceptical about its success. Auchan's point of view is that a more holistic approach to the provision of information for consumers would lead to reduced costs for producers as there would not be a requirement for labelling. Providing information on their products would be cheaper given the economies of scale this would generate, and this would be done in the most convenient and efficient way possible.

The views of seed and food producers consulted for this study are summarised as follows:

- **Orama (federation of cereal growers):** a harmonised approach would have a positive impact on producers. The main positive aspect identified is preventing the distortion of competition.
- **UFS (Union of Seed producers):** the harmonisation of a threshold for the adventitious presence of GMOs in seed must go hand in hand with harmonisation of testing protocols. The associated costs would be high because of the obligation to test and the required traceability to guarantee product identity. Nonetheless, the UFS believe that there would be a very positive impact for the food industry and competent authorities. About 8 per cent of their members (maize growers) would be affected by harmonisation of GM(O)-free labelling.
- **FNSEA (Farmers' Union):** The absence of a coherent approach to labelling leads to confusion for the consumer and to market distortion within the EU. The Union is in favour of harmonisation. The impact on the supply chain at all levels is considered to be positive as it would pave the way for fairer competition and easier exchange.
- **Synabio (union of organic farmers):** a policy of harmonisation is important in order to create conditions for fair trade within the EU.

The views of food and consumer associations consulted for this study are summarised as follows:

- **ANIA (association representing agro-food businesses):** the association does not agree with harmonisation of a GM(O)-free labelling programme because it is likely to increase confusion for consumers. Moreover, it was noted that GM(O)-free products are a niche market and therefore should not be considered a priority issue as this would unnecessarily use up limited EU resources. The requirement for food products that contain GMOs above the 0.9 per cent threshold to be labelled provides sufficient information to the consumer. If the consumer wishes to buy food products which have been made without the use of GMOs, the organic label meets this requirement. Other issues identified arising from harmonisation include the potentially significant impact on control agencies and the difficulty in achieving consensus between Member States, some of which have already implemented legislation. If an EU-wide approach were to be put in place, there should be zero tolerance for adventitious presence and the use of GM inputs (i.e. absolute purity). Higher thresholds are considered to be misleading to consumers.
- **CLCV (Consumer association):** The CLCV is strongly in favour of harmonisation. The association lobbies for greater transparency and consumer choice so they are pleased with the progress the new French Degree has made in this area. In a press release that was published in February 2012[23], the CLCV call on the French government to bring the debate to the EU and international levels in order to reform and harmonise the regulatory framework on GM labelling.

[23] CLCV, (February 2012), "Etiquetage "Sans OGM": une avancée majeure."

Annex 3 Germany case study

A3.1 Government-led Type I schemes: explicit GM(O)-free labelling rules and guidelines

A3.1.1 Legislative basis and historical context

GM(O)-free labelling in Germany is based on the 2004 'EC-GMO Implementation Act'. On April 1 2008, the Bundestag (German Federal Parliament) amended the Implementation Act[24] so that the labelling of GM(O)-free products is better regulated than previously and more applicable for producers. In its earlier form, the label was rarely used because the requirements were very strict. For instance, no GM feed ingredient, no GM enzymes or other additives and no GM veterinary pharmaceuticals were allowed under any circumstances (i.e. there were no exceptions). The legislation was changed in 2008 to make it easier for producers to use the label by introducing exceptions for food and feed ingredients as well as for veterinary pharmaceuticals.

There is no regional legislation on GM(O)-free labelling although several regional quality schemes are considering including the criterion 'GM(O)-free' as part of their respective scheme's requirements. Some examples of requirements under current regional quality schemes in Germany are:

- The quality label of the federal state of Hesse ('Geprüfte Qualität – HESSEN') does not require that producers follow the rules for GM(O)-free food completely, but they do require certain elements to be fulfilled. For instance, no GM seeds are allowed to be used. Moreover, no GM feed may be used in the production of animal products. Any products which have to be labelled as containing GMOs (i.e. >0.9 per cent authorised GM presence) cannot be included in the scheme. For producers who want to use a specific GM(O)-free label, other criteria have to be fulfilled which are stricter than those included under the official German scheme. For example, in the case of poultry, eggs and pork products, the animals must be fed a non-GM diet from birth. To date, a GM(O)-free label has been applied alongside eggs produced under the regional quality scheme, and a dairy factory is also using the label. Pork producers have not yet used a GM(O)-free label under the quality scheme.
- The criteria for the quality scheme in the federal state Baden-Württemberg ('Gesicherte Qualität – Baden-Württemberg') have been revised and from 1 January 2015 all food under this scheme must meet the GM(O)-free requirements of the official national scheme, although GM(O)-free labelling will remain voluntary.[25]
- A proposal was submitted in April 2012 to the Bavarian parliament to extend the criteria of the regional quality scheme in Bavaria ('Geprüfte Qualität – Bayern') to exclude the use of GMOs, but this proposal was turned downed in July 2012.[26]

A3.1.2 Rationale

The rationale behind the national law is to ensure that consumers are able to make an informed choice when making purchasing decisions. The legislation also seeks to close the gap perceived in the current EU legislative framework on GMOs for food and feed, by enabling producers to signal to consumers where they have used non-GM feed or other food ingredients in the production of their products.

[24] Gesetz zur Änderung des Gentechnikgesetzes, zur Änderung des EG-Gentechnik-Durchführungsgesetzes und zur Änderung der Neuartige Lebensmittel- und Lebensmittelzutaten-Verordnung (EC-GMO Implementation Act and to amend the Novel Foods and Food Ingredients Ordinance)

[25] http://www.gemeinschaftsmarketing-bw.de/zeichen-foerderung/qualitaetszeichen-bw.html

[26] http://www1.bayern.landtag.de/webangebot1/servlet/Vorgangsmappe?wp=16&typ=V&drsnr=12289&intranet=

A3.1.3 Labelling rules

There is one official GM(O)-free labelling scheme in Germany which has been in use since 2008. The indication is 'ohne Gentechnik' (i.e. 'without genetic engineering'). The label was first introduced in 1998 under the German novel food regulation.[27] The legislation was replaced in 2008,[28] and Government developed and sponsored a logo in August 2009 (Figure A3.1).

Figure A3.1 The 'Ohne GenTechnik' logo

The official 'ohne GenTechnik' logo is a trademark registered in the name of the Federal Ministry of Food, Agriculture and Consumer Protection (BMELV). The scheme is operated by a governing body, the Verband Lebensmittel ohne Gentechnik e.V' (Association for Food without Genetic Engineering), or 'VLOG', which was established in 2010. The VLOG is an industry association based on membership from various sectors including retail, food production, processing and monitoring. The association is responsible for the certification and management of the 'ohne GenTechnik' indication. VLOG is exclusively authorised to license companies who wish to use the official logo on their products.

As a result, companies may use a logo of their own design, but they may not label their products as being 'ohne GenTechnik' (i.e. using those terms) without following the requirements specified under the national labelling law. The official GM(O)-free logo therefore co-exists with other private logos which, nonetheless, all need to comply with the same requirements as the official scheme. There are an estimated 15 firm-specific GM(O)-free logos in use alongside the national GM(O)-free logo, all of which comply with the same requirements. The only difference between these is the logo design.

A3.1.4 Product scope

Any producer producing any eligible product may use the 'ohne GenTechnik' indication. For the use of the official logo, they producer must apply to the VLOG. The scheme covers a wide range of food products.

A3.1.5 Thresholds/detection levels for adventitious or technically unavoidable GM presence

The threshold for adventitious or technically unavoidable authorised GM presence for food is not defined in the legislation, although contamination up to the generally accepted threshold of 0.1 per cent authorised GM presence is tolerated in practice due to the limitations of existing analytical methods. The threshold for feed is defined according to regulation (EC) No 1829/2003 and No 1830/2003 at <0.9 per cent with the provision that exceptions are permitted up to 0.9 per cent provided the exceptional authorised presence is adventitious or/or technically unavoidable.

A3.1.6 Input specifications and exemptions

The following GM inputs are prohibited in GM(O)-free products under the German law:

[27] Neue Lebensmittel- und Lebensmittelzutaten-Verordnung, NVL

[28] *EG-Gentechnik-Durchführungsgesetz (EGGenTDurchfG): geregelt wird die Angabe 'ohne Gentechnik'*

- Preparation aided by compounds or processing aids that contain GMOs or are produced from or by GMOs;
- Production from animals fed on GM feed; and
- Production from animals that have been fed on feed that contains GM additives.

Production from animals treated with veterinary pharmaceuticals produced with modern biotechnology is not covered by the legislation as long as they do not require labelling under Regulation (EC) No 1829/2003 and No 1830/2003.

Similarly, an exception is allowed for GM feed additives if they are produced by GMOs but do not require labelling under Regulation (EC) No 1829/2003 and No 1830/2003.

A3.1.7 Conversion periods/minimum feeding times for animals fed on non-GM feed

The minimum feeding times for animals fed on non-GM feed are provided in Table A3.1.

Table A3.1 Minimum 'GM-free' feeding times

Product type	Description	Minimum feeding time before slaughter or production
Dairy	Before milk production	3 months
Poultry	Before slaughter	10 weeks
Eggs	Before egg production	6 weeks
Pigs	Before slaughter	4 month
Equidae and cattle	Before slaughter	12 months but at least ¾ of life
Small ruminants	Before slaughter	6 months
Other[29]	Before slaughter or production	entire life

A3.1.8 Certification, controls and monitoring requirements

National legislation does not include any obligatory controls on GM(O)-free labelled food. A control framework is under discussion with the VLOG and its members and licencees. Currently, applicants for the use of the label must provide documentary evidence to the VLOG that ingredients come from GM(O)-free sources/products. This does not include a formal certification process. The GM(O)-free guarantee is based exclusively on documentary evidence which states or shows that no GMOs have been used according to the law.

Responsibility for ensuring compliance with the national laws falls to the regional Länder (state) authorities. Almost every Bundesland (state) has its own authority to monitor food, feed and agricultural production on its territory.[30] Since there are no official national requirements, regions (Bundesländer) set their own mechanisms for monitoring and controls but follow a jointly created harmonised guideline.

A3.1.9 Market share

As of March 2013, there are 126 producers using the common GM(O)-free indication on a wide range of different products (dairy, eggs, meat, pasta and juices) being labelled as GM(O)-free. The majority are dairy products, followed by eggs. The number of retailers carrying GM(O)-free products is

[29] According to the reasons of the law issued by the parliament, all animals not covered explicitly in the annex of the law must be fed non-GM feed for from birth (http://dip21.bundestag.de/dip21/btd/16/078/1607868.pdf; page 18).

[30] http://dev.gdch.de/strukturen/fg/lm/ag/ueberwach/ueberw_recht.pdf

unknown, since many of the products carrying the label are branded products which are available in a variety of stores. As some of the labelled products are nationally distributed brands, it can be assumed, that 'ohne Gentechnik' food is sold in most supermarkets.

The sales volumes of these products are also unknown although for some products an increase in sales has been observed following the use of the GM(O)-free label. For example, sales of a mozzarella cheese branded Zottarella nearly doubled after it began using the GM(O)-free label. Use of the new logo was also accompanied by a considerable amount of marketing and promotion.

A3.2 Type II schemes: 'GM(O)-free' is one attribute of a quality label

A3.2.1 Organic products

The GM(O)-free standards/specifications built into the GM(O)-free legislation match those set out in the German Bio (Organic) scheme, except for the threshold for adventitious or technically unavoidable authorised GM presence, which is higher under the Bio (Organic) scheme (up to 0.9 per cent of adventitious GM presence is permitted for food products under the Bio scheme, compared to 0.1 per cent under the national GM(O)-free scheme).[31]

A3.2.2 The Pro Planet label

The Pro Planet scheme is a private label based both on national legislation and rules set by the REWE Group. The label was introduced in 2010 and is governed by the REWE Group, which comprises retailers such as REWE, Penny-Markt, toom and others. The requirements under the Pro Planet scheme are the same as those for the national GM(O)-free label. The scheme therefore covers GM inputs in terms of food, animal feed, processing aids, feed additives, medicines and vaccines. The Pro Planet logo is provided in Figure A3.2. The words 'ohne Gentechnik' are depicted below the logo where REWE wants to communicate the GM(O)-free status of a product.

Figure A3.2 The Pro Planet label

The label is based on a private standard and certified by an external audit firm (TÜV Rheinland). In order to qualify, a supplier must undergo a process defined individually for each product category, for example fruits and vegetables, dairy, bread and bakery, paper, textiles, etc. The Pro Planet label can therefore be applied to most products that the REWE Group sells. Consumers can determine whether a product is GM(O)-free if they look up the product number on the Pro Planet home page on the internet. Most of the milk, eggs and poultry supplied to the REWE group are produced without GMOs. It is more difficult for red meat and meat products to be produced without GM(O)s since the supply chain is more complex. The REWE Group is planning to extend the label to several product categories, including red meat. The scheme covers most types of food products.

Together, the REWE group has about 15,700 stores, with sales volumes of about €48 billion (based on 2011 figures). Despite this market presence, the Pro Planet label is still relatively new to the

[31] More information and details of the scheme can be obtained from the following site; http://www.bmelv.de/DE/Landwirtschaft/Oekolandbau/oekolandbau_node.html

market and is therefore not yet easily recognised by consumers. This may be due, in part, to the fact that the REWE Group have not yet promoted the label to any significant degree.

Pro Planet products are only sold in Germany. Harmonisation at EU level is expected to make it easier for REWE to supply non-domestic markets with GM(O)-free products. For instance, GM(O)-free products from Austria could be more easily sold as GM(O)-free in Germany and vice versa. Due to the single market principle of the EU, Austria-produced and labelled products can already be marketed anywhere in the EU.

The aim of the label is to supply consumers with sustainable food at fair prices. Consequently, Pro Planet products are not supposed to be more expensive than other products, even though they are more expensive to produce. The increased costs of production are not translated into higher prices for consumers, as this might make them less favourable. Instead, the REWE Group bears the increased costs in order to ensure that Pro Planet products can be provided to the consumer at no extra cost.

A3.3 Private, Type III non-GM supply chain requirements

Some companies (e.g. Lidl) have committed themselves to excluding GMOs from the supply chains of some of their products, without signalling this to consumers through a label. The non-GM element is just one of several in a package of purchasing practices that form part of the 'commitment' or 'offer' to the consumer.

A3.3.1 Lidl

In some regions of Germany, Lidl sells non-GM milk products in its stores without signalling this to consumers through the use of a label. Baby food is also usually produced with non-GM inputs. This, too, is not explicitly mentioned on the packaging which may also be due to the fact that baby foods are subject to more restrictive rules compared to other food products. In some regions (e.g. Bavaria), Lidl uses a regional label. Its GM(O)-free commitments are not communicated to consumers in these instances either, since Lidl is concerned that doing so might signal that other products are not GM(O)-free and therefore may be avoided by consumers.

A3.4 GM(O)-free production costs and price premia

The GM(O)-free label tends to be associated with higher costs for producers, especially where non-GM feed must be used. Other costs include the licensing fee, as well as costs incurred from changing the packaging design and administrative costs associated with, for instance, providing the necessary evidence and documentation. Companies using the official seal pay fees according to their total annual turnover (e.g. with a turnover of 5-200 million Euros a food producer pays €1,000 per annum for the license. Small licencees pay at least €100) regardless of the sales of the labelled product. Compliance costs for analytic testing total about €150-200 per analysis. These rules are set by the VLOG.

These increased costs are rarely passed on to the consumer, which means that GMO-free products are usually not any more expensive than conventional products. The impact on consumers is therefore small, as producers tend to recoup the costs from additional sales (i.e. volume), rather than through higher prices.

A3.5 GM(O)-free labelling outlook

Legislation on GM(O)-free products has been in place in Germany since 1998. The requirements set out in this regulation were considered to be too strict for most producers to use in practice and there were uncertainties about the control requirements and evidence provision. As a result, the regulation was rescinded and in April 2008 new legislation on GM(O)-free labelling was introduced.

Some stakeholders believe that the current legislation no longer goes far enough, and that stronger restrictions on the use of non-GM feed are needed. Proponents of the regulation highlight that stricter requirements will restrict (and potentially preclude) use of the label completely as occurred prior to the 2008 legislative revisions.

Some political parties believe that a GM(O)-free label is needed in order to provide consumers with the means to make informed decisions and to avoid GMOs in their food if they so choose. Other parties are opposed to GM(O)-free labelling, although they do not argue against the *status quo*. Whether a party is for or against GM(O)-free labelling is largely linked to their position towards the use of GMOs in agriculture: those who support the use of GM in agriculture tend to oppose the use of GM(O)-free labels, and vice versa. All parties (particularly SPD and the Green Party) tend to agree on the need for harmonisation at the European level.[32]

A3.6 Problem definition and potential impacts of harmonisation

A3.6.1 Problems and potential impacts for consumers

It is difficult to estimate consumer willingness to pay for GM(O)-free products since there are virtually no GM(O)-free products offered as alternatives to conventional products in Germany. Where possible, retailers tend to convert entire product lines to being GM(O)-free due to concerns that consumers would avoid the conventional products if only some products are declared to be GM(O)-free.

A consumer survey on the importance of a GM(O)-free label on animal products in Germany was conducted in 2009 and repeated in 2011. In 2009, the survey was conducted on behalf of BUND (Friends of the Earth Germany) and in 2011 on behalf of Zott, a dairy company. The 2009 survey found that 78 per cent of the German population thought that it would be useful to label animal products produced with the use of GM-feed. This proportion rose slightly to 82 per cent in 2011. Before being asked the survey questions, interviewees were not informed that animals are not required to be fed non-GM feed for their entire lives in order to be allowed to use the label (Forsa 2009, 2011). The studies further found that about 73 per cent of people in 2009, and 75 per cent in 2011 would pay attention to such a label when shopping for food. In 2011, 77 per cent of participants stated that they would buy GM(O)-free products, even if they were more expensive.

The GM(O)-free label was also assessed in a representative online survey of almost 2,000 people conducted in 2010, only one year after the common logo was developed and presented (Buxel and Schulz, 2010). The survey results showed that 14 per cent of respondents recognised the official logo of the national GM(O)-free scheme. Of these, 13.6 per cent trust it completely, 44.5 per cent trust it, 33.7 per cent trust it somewhat and 8.2 per cent do not trust it at all. On the basis of the survey results, the authors estimated that the market penetration[33] for the GM(O)-free logo is 7.6 per cent.

A3.6.2 Problems and potential impacts for operators

Studies conducted in Germany following the change in GM(O)-free labelling legislation in 2008 suggest that consumers expect higher standards of purity for products labelled as GM(O)-free than what is currently the case under the legislative requirements (Herrmann et al, 2008 and Henseleit et al, 2009). However, experience based on the legislative requirements that were in place before 2008 suggests that producers would struggle to meet stricter requirements, which would largely prohibit GM(O)-free products from being placed on the market. The current policy seeks to balance the needs and demands of the consumer with what is practical and feasible for producers and suppliers.

Slight differences in the requirements for GM(O)-free labelling in Germany and Austria have led to some problems for cross-border trade of non-GM raw materials between the two countries. It is a problem, for example, to use GM(O)-free Austrian milk to produce GM(O)-free dairy products in Germany. The same problem is evident in trade between Germany and France. There are therefore potential benefits to the harmonisation of GM(O)-free labels, in that cross-border trade in these products would then be further facilitated.

[32] http://www.gruene-bundestag.de/archiv/2008/januar/kennzeichnung-ohne-gentechnik-ist-wichtig.html; http://dip21.bundestag.de/dip21/btd/17/017/1701790.pdf; http://www.konsumo.de/news/3338-Bundestagswahlkampf-2009-Verbraucherschutz-Parteien-lebensmittelkennzeichnung-ampel-ohne-gentechnik-logo

[33] Penetration = share of people aware of the logo x share of buyers

Annex 4 Italy case study

A4.1 Government-led Type I schemes: explicit GM(O)-free labelling rules and guidelines

Although some European countries have developed national rules or guidelines on labelling for GM(O)-free products, the Italian government has not yet addressed this issue. The Italian regions have developed their own positions in the absence of government action. The Conference of Italian Regions and Autonomous Provinces has declared itself 'GM(O)-free' for many years.[34] There are a variety of regional and private operator-led GM(O)-free initiatives described below.

A4.2 Private operator-led Type I schemes: explicit GM(O)-free labelling rules and guidelines

Two Type I schemes have been identified in Italy:

- The Italian National Unification Body (Ente Nazionale Italiano di Unificazione), or UNI working group, covering food, animal and feed products; and
- COOP Italia covering animal products.

A4.2.1 UNI (Ente Nazionale Italiano di unificazione) working group

Several organisations, including the farmers' organization 'Coldiretti', participate in the UNI working group. The working group studies, develops, approves and publishes voluntary standards establishing minimum requirements for a 'GM(O)-free' declaration. The standard applies to:

- GM(O)-free food products obtained from raw materials or ingredients obtained from raw materials, which include genetically modified varieties authorized by the EU and listed in the register of genetically modified food and feed;
- Food additives which contain or may contain raw materials made from genetically modified varieties authorized by the EU and listed in the register of genetically modified food and feed;
- Feed which contains or may contain raw materials made from genetically modified varieties authorized by the EU and listed in the register of genetically modified food and feed; and
- Animals fed with feed which contains or may contain raw materials made from GM varieties authorized by the EU and listed in the register of GM food and feed, and products obtained from animals fed with such feed.

A 'GM(O)-free' claim can only be used on a product containing <0.1 per cent authorised GM content. These products may carry a label with the wording 'non-OGM' ('non-GMO'). For animal products produced from animals fed on non-GM feed, labels with the statement 'alimentazione non OGM' ('GMO-free feeding') can be used. The threshold for adventitious or technically unavoidable authorised GM presence is <0.9 per cent. The statement permitted on a feed label is 'conforme alla norma UNI' ('conforms with UNI standards').

In order to use the label, organisations must adhere to the following control procedures:

- Develop and formalize a risk assessment to identify the stages in the process during which there may be a risk of authorised GM contamination. At a minimum, the risk analysis should consider the following :
  - Composition of the food and/or feed;
  - Sources of raw materials that comprise the food and /or feed; and

[34] This position was reiterated by the Conference Agenda dated 4 April 2012, which requested that the Agricultural Minister activate the safeguard clause provided by Dir. 18/2001 and transposed into Art.25 of DL 08 July 2003. The Conference also asked for a revision of the decree itself in order to allow the regions to decide on the matter of GMOs, given its agricultural relevance.

  - The potential for cross-contamination at different stages of the process (e.g. coexistence of GM and non-GM materials within the same facilities).

- Identify necessary measures (e.g. procedural or based on documentation, inspection and/or analytical tests) to reduce the risk of GM contamination, validate these measures and define the frequency with which these measures must be implemented;
- If the risk assessment identifies the need for analytical testing, to identify the steps in the process during which a test may detect the presence of DNA from authorised GM varieties. Testing should be conducted in accordance with the ISO standard ISO17025; and
- Define the sampling criteria consistent with the risk assessment, ensuring that the sample is representative of the lot as a whole.

Moreover, organisations must:

- Develop and formalize a system of traceability, including documentation to show how the operator manages any non-conformity found during production, sale and/or marketing activities for products covered by the standard. The documentation must include actions to be undertaken where non-compliance is found.
- Ensure that any products which do not conform to the standard, or which are awaiting the outcome of compliance assessment are identified, segregated and controlled to prevent their unintended use or delivery. Procedures must be developed which detail the management responsibilities, modes and records to be used in the case of a non-conforming product.

A4.2.2 COOP Italia – animal products

COOP Italia has developed a private standard for GM(O)-free labelling which refers only to animal and dairy products. Products belonging to this scheme can only be labelled as being GM(O)-free if they were produced from animals fed from birth on feed which contains no more than 0.9 per cent authorised GM content. The scheme also excludes the use of GM additives.

The scheme was established in 2000, initially covering poultry products produced from chickens fed on non-GM feed. Other products soon followed, including farmed fish, pork and Piemonte's beef in 2001, and other poultry products (turkey, cockerel, and capon) and veal in 2002. COOP Italia was the first Italian retailer to obtain authorisation to claim that its beef products are GM(O)-free.[35] COOP Italia also obtained GM(O)-free certification for hens and eggs in 2004, followed by milk in 2005.

Today the scheme covers a wide range of products, including poultry, pork, beef, farmed fish, eggs and milk. Some products are excluded (e.g. mayonnaise, meat stuffing, egg pasta) where it is particularly difficult to provide a GM(O)-free guarantee. This is partly due to high compliance costs for suppliers and decreasing availability of non-GM soybean and maize. COOP Italia is nonetheless considering whether to extend the scheme's scope to include these types of products. Products such as hams, cold cuts and cheese have also been introduced.

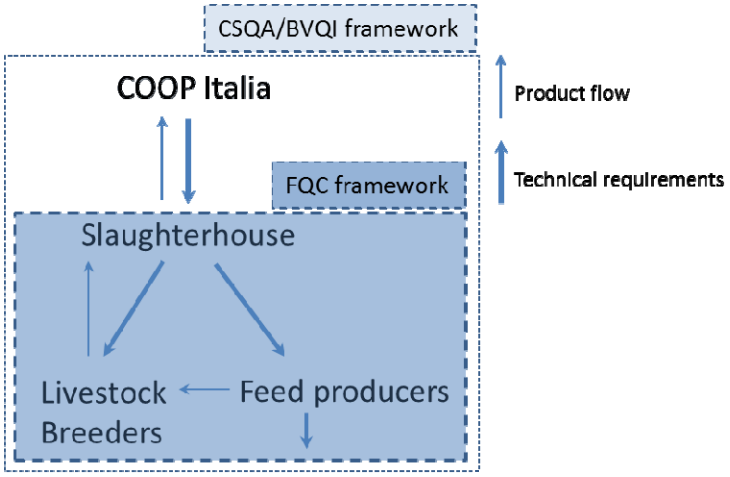
The scheme is driven by negative consumer attitudes towards GMOs in food. COOP Italia's surveys showed that consumers are increasingly aware of the potential presence of GMOs in food products, particularly for raw materials in animal products.

The scheme covers many stages in the supply chain and is based on technical contracts (formalized by COOP Italia) with which suppliers must comply. The scheme is monitored through a system of audits by First Quality Certification (FQC),[36] which is the external body that monitors COOP's supply chain on behalf of the retailer, and COOP Italia's third party certifiers for private labels (i.e. CSQA and Bureau Veritas). The scheme is voluntary: any supplier wishing to commit to a non-GM supply chain can choose to apply to join the scheme and become a 'qualified supplier'.

[35] GM(O)-free claims for beef shall be preliminarily verified by the Ministry of agriculture and by the ISS (Istituto Superiore di Sanità).

[36] FQC is an Italian cooperative that specializes in monitoring the quality of food products at the production/distribution level, including traceability.

Figure A4.1 Operation of the COOP Italia scheme



COOP's qualified suppliers must maintain a level of adventitious or technically unavoidable authorised GM presence in feed below the 0.9 per cent legal threshold by ensuring compliance with a list of strictly binding technical specifications which are set out in delivery contracts. These include techniques for product segregation and logistics management, as well as the implementation and management of a traceability system.

Qualified suppliers along the supply chain are monitored by COOP Italia and by third party certifiers. Both parties systematically verify supplier compliance with the technical guidelines through audits, sampling and laboratory analysis which may be either delegated to externally certified facilities (which are also regularly monitored) or to COOP Italia laboratories. Suppliers are subject to annual inspections and controls.

Interviews with qualified feed producers suggest that producers generally consider third party product certification to be a valuable asset of the COOP Italia scheme. The number of inspections and audits required for feed producers (i.e. a minimum of 4-5 controls per year) is also generally thought to be appropriate.

COOP Italia has also developed a supply chain coordination framework in order to ensure traceability for animal products. This includes protocols developed with the main participating farmer organisations, including Coldiretti, CIA and ANCA, and agreements with the major processors and importers of raw material which may contain GMOs.

COOP Italia's system for the supply of GM(O)-free animal products is mainly endorsed by two certifiers, BVQI (Bureau Veritas Qualità International) and CSQA, both of which are accredited by Accredia. The certification covers both the product and the production process. Certification began in 2000 and currently covers meat products, fish products, eggs, milk, approximately half of cold cuts, Grana Padano (aged for 16 months) and Mozzarella di Bufala Campana DOP.

A4.3 Type II schemes: 'GM(O)-free' is one attribute of a quality label

Some Italian regions have developed quality labels which include GM(O)-free criteria (e.g. the Qualita' delle Marche (QM) label). These include both raw and processed foods. In addition, there is a non-GM fed poultry meat producer, Fileni S.r.l.

A4.3.1 Fileni S.r.l.

Fileni's GM(O)-free scheme was developed for certifying non-GM animal feed using the CSQA standard DTP 030 (Rt-11). Each supplier in the non-GM supply chain must adopt self-control procedures and activities set out in a supply contract. Fileni also monitors its suppliers, including breeders and feed mills. CSQA verifies that Fileni has adopted measures to avoid contamination.

The scheme applies to all poultry meat products produced by the company, including whole chickens and 'ready to eat' pre-cooked products. The labels are used for primary (whole chickens) and

secondary products (chickens parts, e.g. drumsticks). The 'non-OGM' label for whole chickens is prominently displayed on the packaging. Labelling on secondary products indicates that the product was produced using non-GM feed. Labels on pre-cooked products do not mention that the product is 'non-OGM'.

In 2005, Fileni partnered with Avitalia in order to further develop its labelling scheme. Avitalia is an association of poultry and rabbit breeders which was set up in 1994 to improve the representation of animal breeders in the European Union. The Avitalia labelling scheme is authorised by the Italian Ministry of Farming, Food and Forestry. The words 'No GMO feed' can appear on these labels (Figure A4.2.

Figure A4.2 Example of an Avitalia label

ID of poultry: example of labelling, subject to Ministerial Decree on Farming Policies dated 29/07/2004

Health & Safety stamp
Product brand
Product description

FRESH CLASS A – TO BE SOLD BY WEIGHT
CONSERVE AT 0° TO 4 °C - EAT COOKED

TRACEABILITY CODE .....
POULTRY MEAT BORN, RAISED AND BUTCHERED IN ITALY
LAND RAISED
NO GMO FEED
FEED FREE FROM ADDED ANIMAL FAT, FREE FROM ANIMAL/VEGETABLE MEAL WITH INTEGRATION OF VITAMINS AND MINERAL SALTS
AVITALIA MIN. AUTHORISATION NO. IT 001EA

A4.4 Type III schemes: 'GM(O)-free' is a supply chain requirement, but no labels appear on product packages

Type III schemes in Italy include:

- Some milk (Latte Milano) and cheese (Trentingrana) products which include non-GM maize in their production;
- Private voluntary standards which are used in the poultry industry for non-GM maize and soy used as feed (Amadori);
- All 'Coldiretti' products (farmers markets and retail products) which are promoted under the name 'Campagna Amica' as 'GMO-free', but do not use a label;
- COOP Italia who have declared themselves GM(O)-free since 1997. All food products are 'GM(O)-free' by corporate policy and are marketed as such, but do not carry a GM(O)-free label (animal products may include a 'GM(O)-free' label as described in section A4.2.2).

A4.4.1 COOP Italia – food products (not including animal products)

COOP Italia has declared the absence of GMOs in products produced with maize or soybean ingredients since 1997 through its corporate policy. Although the products themselves do not include an explicit statement regarding the absence of GMOs, this feature is advertised to consumers through COOP Italia's marketing campaign. COOP Italia have chosen not to use a specific label due to the

lack of potential GM ingredients in other processed products which have been prepared without the use of either soybean or maize ingredients.

COOP products produced with maize or soybean ingredients account for almost 10 per cent of the category's scope. The scheme thus covers a wide and heterogeneous number of processed products (495 in total). Products are classified into three risk categories for the purposes of determining traceability and monitoring requirements:

- Risk category 1: the product does not use ingredients that potentially contain GMOs but GM products might have been handled or produced in the same facilities;
- Risk category 2A: ingredients have been used which may contain GMOs and can be analytically detected (e.g. soy lecithin, maize, maize flour, maize gluten, maize sugars and maize starch); and
- Risk category 2B: ingredients have been used which are unlikely to contain GMOs that can be analytically detected, but which may have been derived from GMOs (maize and soybean).[37]

Of the products covered by this scheme, 187 fall under the first risk category and 308 fall into either category 2A (134 products) or 2B (178 products). Eleven products fall into both categories 2A and 2B. Since all of these products are intended for human consumption, COOP Italia uses a threshold level for adventitious or technically unavoidable authorised GM presence of <0.1 per cent. This threshold level refers to the final product.

Suppliers' participation in COOP Italia's non-GM supply chain is voluntary although COOP's Private Label suppliers must ensure the absence of GMOs below a given threshold (0.1 per cent in the case of processed products) by complying with a list of strictly binding technical specifications which are detailed in delivery contracts. Product traceability and certification requirements are similar to those described for COOP Italia's labelling scheme for animal products set out in section A4.2.2.

Thresholds for adventitious or technically unavoidable authorised GM presence have been established for a range of products, including <0.1 per cent for food products, <0.01 per cent for seeds and <0.9 per cent for feed.

Technical document RT-11[38] was developed for the certification of non-GM animal feed. This certification is required by retail chains and / or animal product supply chains. It is also recognized under Regulation EC 1760/00. All raw materials must be certified as GM(O)-free or subjected to analytical tests which verify the absence of GMOs and cross contamination against acceptable limits.

The standard has been extended beyond animal products and today it applies to:

- Food products for human use that contain or may contain soy, maize and / or their derivatives;
- Additives that contain or may contain soy, maize and/or their derivatives;
- Maize and soy seeds;
- Animal feed that contains or may contain soy, maize and their derivatives; and
- Animals fed with animal feed that contains or may contain soy, maize and their derivatives.

A4.5 Structure of the supply chain in Italy

Details regarding the structure and requirements of the non-GM feed supply chain in Italy were obtained from Neviani Mangimi and Progeo Mangimi, two of six major Italian non-GM feed processors. The other four processors include Ferrero mangimi (200 Mt per year), Carra mangimi, Veronesi (one dedicated facility) and Raggio di Sole (Cargill, one dedicated facility, 200 Mt per year).

The market for non-GM feed is small compared to the market for conventional feed. There are two typical approaches to non-GM feed processing:

[37] For example, maize glucose, maize glucose syrup, maize citric acid, maize ascorbic acid, maize oils, maize sugars, maize dextrose.

[38] RT-11 (2004/14/12): Minimum requirements for certification of products with non-GMO characteristic/requisite

- Small or medium-sized enterprises focusing solely on non-GM feed; and
- Large producers with a dedicated non-GM product line.

The latter approach requires investment in specific processing facilities for non-GM products. Working with small production volumes means it is more difficult to build and take advantage of potential economies of scale. This can result in higher costs and inefficient use of processing capacity. The market also requires flexibility in terms of delivery schedules and 'just in time' production in order to meet temporary supply shortages. Neviani Mangimi argues that medium/small producers therefore have a competitive advantage due to greater flexibility.

Progeo is one of the first Italian producers of non-GM(O) feedstuff to have two processing plants. The largest one is located in Sorbara (Modena) and produces about 120,000 Mt of both non-GM and organic feed for hogs, cattle and poultry. The second one is located in San Vito (Pordenone) and produces nearly 75,000 Mt of non-GM feed.

Large or more typically, medium producers tend to outsource the production of non-GM lines to small enterprises and then to aggregate some of the activities. For instance, Neviani Mangimi collaborates with Progeo to produce non-GM feed; since Progeo needs a dedicated plant for producing non-GM feed, the company outsources the activity to Neviani Mangimi thereby sharing the retail channel, laboratory activities and procurement offices. Progeo audits the activities carried out by Neviani Mangimi.

COOP Italia plays an important role in the non-GM product market in Italy, shaping the structure of the supply chain by means of the standards that suppliers must adopt in order to comply with COOP's policy. For example, Neviani Mangimi supplies non-GM feed to the pig farms which are part of COOP's supply chain.

One hundred per cent of the maize processed by Neviani Mangimi is procured in Italy. Difficulties in using imported maize arise from having to ask suppliers to provide precise documentation for traceability, evidence of plant segregation and cleaning transport trucks to avoid any adventitious presence. Similarly, Neviani Mangimi buys soybeans and soybean meal primarily from Italgreen Oil. All non-GM raw materials are procured through suppliers that have been pre-checked and verified.

Progeo sources its raw materials (maize, rapeseed meal, soybean meal, etc.) primarily from suppliers who have been certified by COOP Italia. Soybean meal is purchased exclusively from Italian crushers including Cerealdocks, ItalgreenOil and Oleificio Medio Piave. Maize is sourced both from Italian and Central European farmers, dryers and grain merchants.

Non-GM soybean meal is typically purchased from either Italian crushers or on rare occasions from international marketing companies buying soybean mainly from Brazil. Non-GM maize can also originate from Uruguay, but the risk of adventitious or technically unavoidable authorised GM presence is higher (often above 0.3 and 0.4 per cent).

Neviani Mangimi has its own policy regarding the threshold level for adventitious or technically unavoidable authorised GM presence in soybean/soybean meal. If the product is found to contain more than 0.6 per cent GM content the entire batch is marked as 'non-conforming', the product is sold off in order to take it out of the supply chain as quickly as possible and the production line is cleaned with inert material. Neviani Mangimi loses the price premium between the non-GM product and conventional product. If the product is found to have between 0.5 and 0.6 per cent adventitious or technically unavoidable GM presence, it is stored as a 'risky product'. Neviani Mangimi set this lower threshold level because a 0.9 per cent limit does not guarantee that the product will remain non-GM once stored, mostly due to sampling bias.

A4.6 GM(O)-free production costs and price premia

COOP Italia indicated that retailers can play a moderating role regarding the final prices for non-GM food products. Although COOP Italia is bound to guarantee a premium price to suppliers dealing with non-GM products, in order to offset their higher costs in terms of both raw materials and technical compliance, the actual retail price is not higher than those for conventional products. Segregated processing facilities, logistics operations and paying premiums on non-GM products means suppliers

have to bear higher operating costs (as well as hidden costs, such as the opportunity costs of handling conventional goods).

COOP Italia estimated that the cost of monitoring the entire supply chain for non-GM goods totals €298,000 per year. Beef certification is most expensive, totalling €90,000, whereas the egg supply chain is considerably less expensive to certify, totalling €5,000. The cost of controls for non-GM processed grocery products comes to an estimated €22,000 per year.

Whilst the price premium is important for non-GM soybean products, the size of the premium is less relevant in the case of compound feed given that the price premium is influenced by the content of soybean meal. This means that cattle feed is less sensitive to the premium price paid for non-GM soybean products. As a result, customers of this type of feed can afford to pay slightly more in order to benefit from the long standing relationship.

According to Neviani Mangimi, non-GM feed products are niche products which enable producers, especially small and medium-sized enterprises to exploit a particular market in order to offset the difference in terms of competitive advantage that large feed producers can achieve through economies of scale. In other words, the benefits associated with serving the non-GM market are more indirect than direct; they are not necessarily related to the price premium which processors can potentially get from dealing with segregated goods.

The market for non-GM feed is relatively small in terms of volume, which means it is difficult to benefit from economies of scale. Instead, what is important is the 'flat' nature of the market which means small processors are able to flexibly deal with demand which is more fragmented than that for conventional feed. Requests for small quantities of non-GM feed, as well as temporary shortages from small livestock breeders are not uncommon. Therefore flexible structures fit better with these market characteristics.

A4.7 GM(O)-free labelling outlook

COOP Italia believes that a lack of continued availability of non-GM raw materials could negatively affect the scheme's expansion and continued operation, although it is being extended to new products (e.g. cold cuts and cheese, meat processed products). COOP Italia is particularly concerned that ensuring the absence of GMOs in processed meat products may lead to significant additional costs for producers and suppliers, which would then be transmitted along the supply chain.

Information from interviews with COOP Italia's qualified suppliers found that the number of suppliers willing to provide non-GM products has slightly increased recently. One possible explanation is that the market for non-GM products provides a niche market or a preferred channel for small and medium-sized producers which represent a large share of the Italian food industry. This is particularly the case for small and medium-sized feed producers: whereas the market for compound feed products is characterized by large economies of scale, exploiting a niche market can provide producers with an opportunity to benefit from product differentiation.

Nonetheless, Progeo believes that the GM(O)-free market has become less attractive over time, given the general lack of a significant price premium at the point of sale, since retailers are unwilling to pass on the additional costs associated with ensuring a segregated supply chain to their customers. As a result, the production of non-GM feed in Progeo's Sorbara (MO) facility has become much more closely linked to the demand for organic feed products. Demand for non-GM products from the San Vito plant (PN) is also decreasing. The Italian market for feed is typically local and if the demand for non-GM products decreases, producers must sell a share of those products as conventional products (despite their higher production costs as non-GM).

A4.8 Problem definition and potential impacts of harmonisation

A4.8.1 Problems and potential impacts for consumers

A small number of recent studies have assessed consumers' attitudes toward and willingness to pay for GMOs in Italy. A study by Soregaroli et al. (2003) analysed consumers' acceptance of GM food products and assessed the price premium that consumers would pay for both branded and unbranded

GM(O)-free labelled food as well as their willingness to pay for these products.[39] The study results suggest that consumers' perceptions of the reliability of a GM(O)-free label depend mostly on whether there is an external certifying institution linked to the labelling requirements. Almost 30 per cent of respondents trusted the government's ability to handle the certification system. The share of respondents who implicitly trust the brand or a store (i.e. with no certification or accreditation) was much smaller. Almost 20 per cent of respondents said they would never trust such a label. Overall, however, the results suggested that consumers do not trust that certification schemes implemented by certifying institutions can guarantee the absence of GM ingredients in food.

The study also found that almost 45 per cent of respondents would not pay a price premium for unbranded GM(O)-free labelled food, whereas:

- 28% would pay a premium of 1-5%;
- 6% would pay a premium of 11-15%;
- 3& would pay a premium of 16-20%;
- 1% would pay a premium of 21-25%; and
- 4% would pay a premium of >25%.

Similar responses were observed for branded GM(O)-free labelled food, with almost 48 per cent of respondents indicating that they would not pay a premium.

Other studies do not specifically address GM(O)-free labelled products, but instead assess both consumers' attitudes and willingness to pay for GM products in Italy. A study conducted by Canavari and Nayga (2009) investigated the differences in consumers' acceptance and willingness to pay for food products obtained from first-generation GMOs (those with input trait benefits, such as reduced pesticides use) and food products obtained from second-generation GMOs (those with output trait benefits, such as nutritional enhancement). Evidence from interviews and econometric analyses showed that most consumers are unwilling to buy GM products but acceptance is increased when nutritional benefits are introduced.

Furthermore, results suggest that knowledge of scientific advancements, as well as trust in institutions, are positively correlated to consumers' willingness to pay for both plant and animal products produced with or by GMOs. The relationship between the level of education and the likelihood of GM food being purchased is negative, while income is not statistically significant. Canavari et al (2009) investigated the potential impact of a discount policy applied to GM products on consumers' acceptance of these products. They found that individuals opposed to GMOs were unwilling to purchase these products even with a 10 per cent discount. Consumers with positive attitudes towards second-generation GM foods (i.e. those who said they would buy such products) indicate that they would still buy these products even with a 10 per cent price increase. These results suggest that there is an opportunity to sell nutritionally enhanced GM products at a premium to this market segment.

Boccaletti and Moro (2001) assessed the willingness to pay for GM food products in Italy using a contingent valuation approach, which provided a direct estimation of willingness to pay. The values obtained from this methodology were used to build a set of regression models which sought to evaluate the impact of socio-demographic and knowledge-based explanatory variables. The results found that 46 per cent of respondents rated their attitudes towards GM foods as positive. Information provision was considered important, however: 94 per cent of respondents indicated that a specific label identifying GM food should be provided.

The results also showed that income affects consumers' behaviour: higher income is associated with a higher probability of willingness to pay for GM products. Moreover, the extent of a person's familiarity with and knowledge of biotechnology plays an important role in determining a person's purchasing decisions. For instance, the provision of information appears to make individuals more confident towards GM food, resulting in an increased willingness to pay. The authors suggest that one of the main reasons for low acceptance of GMOs is a lack of knowledge; when consumers are given

[39] Entitled "Consumer's attitude towards labelled and unlabelled GM food products in Italy"

more information they are more willing to purchase such products. This may be particularly true when GMOs deliver consumer benefits such as reduced health risks or improved nutritional characteristics.

The authors also note that stated acceptance of GM food does not necessarily translate into buying behaviour; in this context, price still plays an important role. Firinaiu et al (2011) prepared and distributed a questionnaire to a random sample of 98 consumers living in Northern Sardinia. The authors examined whether there were any differences in the propensity to purchase GM products between a group of 'experts' – a sample of consumers with some relevant scientific knowledge on GMOs – and a group of 'non-experts', whose main information source on these products is the media, non-specialized magazines, the internet, etc. The results indicated that the 'experts' were more willing to buy these products, with approximately 43 per cent offering a positive response compared to 23 per cent of non-experts.

A4.8.2 Problems and potential impacts for operators

The lack of national legislation on GM(O)-free labelling has led to some legal disputes concerning products containing or produced with inputs containing less than 0.9 per cent adventitious or technically unavoidable authorised GM presence. A number of Italian enterprises attempting to claim their products as 'GM(O)-free' because they contain less than 0.9 per cent GM material have faced court sentences, which state that the labelling is misleading. These sentences may have both administrative consequences (e.g. due to misleading advertising, according to DL 109/92) and penal implications (e.g. food fraud, according to art.515 of the penal code).

In one case regarding soy steaks labelled as GM(O)-free (Sentence n. 3164 dated 06.03.2004), the product was found to contain traces of GM material, even though these were below the 0.9 per cent threshold. Both distributors and producers were sued for food fraud by the Italian NAS. The Turin Ordinary Court acquitted the defendants on charges of food fraud by declaring equivalence between products containing less than 0.9 per cent GM content and a GM(O)-free product. Nonetheless, the court found the defendants guilty of an administrative offense pursuant to Decree Law 109/92 on Food Labelling for using misleading advertising as the GM(O)-free label could have rendered the product 'improperly appealing' to consumers.

Annex 5 Sweden case study

A5.1 Government-led Type I schemes: explicit GM(O)-free labelling rules and guidelines

A5.1.1 Legislative basis and historical context

Sweden has strict rules prohibiting the use of GM(O)-free labelling and marketing. The rationale for strict rules is that labelling should include only the minimum information necessary to allow consumers to make an informed decision. An indication of 'free' can only be attributed to nutritional and allergenic ingredients such as gluten or nuts. If all similar products have the same characteristics it is considered misleading in Sweden to claim that a product is 'free from…' or 'without…'

The Swedish legislative system is built on the subsidiarity principle such that the Swedish food regulation complements EU regulation (SFS 2006:804). The regulation establishes areas of responsibility for different authorities and gives the National Food Authority the right to publish regulations. The relevant regulation for GM(O)-free labelling is the National Food Agency regulation on labelling and presentation of food (LIVSFS 2004:27). Article 5a in the regulation specifies that:

'Labelling cannot mislead the customer in a significant way, especially regarding the origin, processing or production methods used or by claiming a product to have special characteristics while it has the same characteristics as similar products' (unofficial translation).[40]

A5.1.2 Rationale

Labelling is considered important for engendering consumer trust in food products. The objective of the Swedish regulation is to standardise the labelling of food belonging to the same product category. The labelling aim is primarily to provide the consumer with necessary information about the food so that the consumer can make an informed decision at the time of the purchase.

A5.1.3 Labelling rules

The Swedish labelling regulation itself does not refer to GM(O)-free labelling, but guidelines for the regulation produced by the competent authority mention cooking oil as a specific example of misleading 'free-from' labelling since any 'deliberate contamination by GMOs' must be labelled in accordance with the EU regulation.[41] All other products are by definition similar and may not carry a label suggesting a difference.

GM(O)-free labelling or marketing may not be used in conjunction with other labels such as organic labelling schemes. Product references can however include an indication that no GMOs were used in the production or processing of the product (National Food Agency 2011). GM(O)-free labelling is also perceived to be unnecessary since most agricultural, meat, and dairy products in Sweden are considered to be GM(O)-free.[42]

In an official guidance document on GMOs, the National Food Agency outlines the type of controls and documentation that would be considered acceptable for companies which, according to their

[40] LIVSFS 2004:27 Article 5a. Original text: "Märkning får inte vara sådan att den på ett avgörande sätt skulle kunna vilseleda köparna, särskilt med avseende på livsmedlets ursprung, tillverknings- eller produktionsmetod eller genom att antyda att ett livsmedel har speciella egenskaper då i själva verket alla liknande livsmedel har sådana egenskaper"

[41] Swedish National Food Agency (Livsmedelsverket) (2008) 'Guidance to the NFA provisions (LIVSFS 2004: 27) on food labelling and marketing' [*Vägledning till Livsmedelsverkets föreskrifter (LIVSFS 2004:27) om märkning och presentation av livsmedel*], http://www.slv.se/upload/dokument/livsmedelsforetag/vagledningar/vagledning_markning.pdf.

[42] Miljötidningen (2011) Förbjudet att utlova GMO-fritt. URL: http://www.jordensvanner.se/2011/forbjudet-att-utlova-gmo-fritt

GM(O)-policy, claim not to sell products produced or processed with GMOs.[43] A valid GM(O)-free policy must include measures in a company's management system to avoid GMOs in the production process. Relevant documentation must also be provided to prove that the company avoids GMOs in the production process, which can include:

- Supplier commitments: the supplier contract must include assurances that the product is 'free from GMOs'. These are typically prepared by the client and signed by the raw material supplier as an assurance that the supplier has read and accepted the terms. The supplier commitment should follow the example: *'Company X only accepts products which have not been produced or processed with GMOs';*
- Certification and raw material specifications: the supplier provides a certificate or information concerning the presence of GMOs in the raw material specification such as: *'We guarantee that the product does not contain, is not made of, or is not processed from GMOs'*; and
- Laboratory analysis from the supplier or own laboratory tests.

Declarations that are considered misleading and are therefore disallowed include statements such as: *'This product may include the presence of GMOs under the 0.9 per cent detection threshold'* and *'Free from GMOs'.*

The National Food Agency (for foodstuffs) and the Swedish Board of Agriculture (for feed) are together responsible for ensuring compliance with GM regulation.[44] The National Food Agency also supports the monitoring and enforcement of municipal authorities in the case of 'GM(O)-free' labelling (SLV 2011).[45]

A5.2 Type II schemes: 'GM(O)-free' is one attribute of a quality label

In addition to the European Union organic label and Marine Stewardship Council (MSC) label, there are two other labels present on the Swedish market, Svensk Sigil and KRAV, which include a GM(O)-free requirement.

KRAV is the most widely used and well-known organic label with over 5,500 products on the market. Their labelling rules specify that product marketing cannot include declarations that the product is GM(O)-free or similar. The producer or distributor may, however, declare that the product was produced or processed without GMOs.

KRAV bases its requirements on the European Directive on organic food and defines GMOs according to the terms in EU Directive 2001/18/EC and its use in organic labelling according to Council Regulation (EEC) No 2092/91. Users of the label are required to provide certificates that no GMOs have been used in the production or processing of the product if the product is included in a 'risk group'. There are six risk groups, divided according to risk level:[46]

- Group 1: high risk for GMOs – mix, products produced from plants;
- Group 2: lower risk for GMOs – mix, products produced from plants;
- Group 3: products that can be produced from GM inputs or with GMOs;

[43] Guidance document for REGULATION (EC) No 1829/2003 on genetically modified food and feed, COMMISSION REGULATION (EC) No 641/2004, and traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms Regulation (EC) No 1830/2003.

[44] Vägledning Genetiskt modifierade livsmedel (GMO). URL: http://www.slv.se/upload/dokument/livsmedelsforetag/vagledningar/V per centC3 per centA4gledning per cent20GMO.pdf.

[45] SLV (2011) National plan for food chain control 20122015. Part 2-Guidance and priorities. URL: http://www.slv.se/upload/dokument/livsmedelsforetag/vagledningar/NKP per cent202012-2015 per cent20- per cent20Del per cent202 per cent20Genomf per centC3 per centB6rande per cent20mal per cent20och per cent20prioriteringar.pdf.

[46] http://www.krav.se/Documents/gmo/risklista.pdf

- Group 4: products from animals which have been produced using GM feed, manure, and compost;
- Group 5: Pharmaceuticals; and
- Group 6: Products that are disallowed (unauthorised use) and where the risk of contamination is low.

Certificates might be required for shipments containing products belonging to the highest risk group, Group 1 (e.g. cotton, corn, soya, and potato derivatives). Several tests are also carried out each year and documented. Products belonging to a lower risk category such as Group 2 (e.g. nuts, rice, oils, rape, and tomato derivatives) only require one certificate per risk product, but at least one check must be carried out each year to maintain the certificate validity.[47] Products belonging to risk Group 3 require a product sheet (from a producer with verified quality monitoring) declaring that GMOs were not used in the production or processing of the product.

A5.3 Type III schemes: 'GM(O)-free' is a supply chain requirement, but no labels appear on product packages

There are other GM(O)-free schemes in Sweden, although these do not include a label. These include Arla (a producer and distributer of dairy products), Svenk Mjölk (Swedish Dairy Association) and LRF (the Swedish farmer association).

A5.4 GM(O)-free production costs and price premia

Due to the importance of controlling and monitoring GMOs in the production and processing of foodstuffs, supplier terms often include a declaration that raw material (or feed) is not produced or processed with GMOs. Of 76 companies surveyed, 16 request a supplier declaration or certificate that the raw material was not processed or produced with GMOs. Five of these request laboratory analysis and two companies conduct random tests.[48]

A5.5 GM(O)-free labelling outlook

All meat and dairy products in Sweden are produced from animals fed on non-GM feed (with the exception of pork) and most farmer associations have a GM(O)-free policy. All organic (e.g. KRAV) and Protected Designation of Origin (e.g. Svensk Sigil) products have strict GM(O)-free policies. The Swedish association of farmers (LRF) also strongly oppose GMOs on the basis of the precautionary principle. As a result, almost 100 per cent of imported feed is non-GM.

Pork is the only meat product that is not entirely GM(O)-free, as GM feed is used. Until 2006, Scan (Sweden's leading meat producer) did not accept any pork products produced from pigs that had been fed with GM feed. But Scan changed its policy following several complaints that GM(O)-free feed was more expensive. The policy changed again in 2011 following criticism from consumers who wanted GM(O)-free ham for Christmas. Since then, the Swedish pork meat producers have produced GM(O)-free fed pork.

[47] Deliveries from US, Canada, Mexico, Argentina, and Kina needs a batch certificate for each delivery.

[48] National food agency (2009) Rapport från GMO-projektet 2009. Undersökning av GMO-livsmedel - förekomst, spårbarhet och märkning. URL: http://www.slv.se/upload/dokument/rapporter/genteknik/2009_livsmedelsverket_21_undersokning_av_gmo_livsmedel_2009.pdf.

Table A5.1 GM(O)-free schemes operating in Sweden

Name	Developer / 'owner' / operator	Meaning of the label	GM(O)-free standards / specifications	Scope (products covered)	Users	Additional resources[49]
Svensk Sigil	LRF company Svensk Sigil Production and documentation is monitored and verified by a third party, SWEDAC	The product has been produced in Sweden and production is monitored and controlled by a third party. The product is traceable and documented.	GM(O)-free production is part of the safety requirements. GM inputs should not be used on farm or in animal feed. Motivated by the precautionary principle. Exceptions: GM(O)s in closed systems. Vitamins and feed additives produced by GMOs in closed systems (e.g. enzymes and bacterial culture)	Vegetables, animal products and flowers (milk, tomatoes, fish, meat)	N/A	GMO-Policy communication Labelling policy
KRAV	KRAV is an association of 26 members including farmers, processors, traders, and consumer, environmental and animal welfare interest associations. Five approved certification bodies carry out inspections according to KRAV standards	'Environmental' food labelling, built on organic farming and animal welfare standards. KRAV is well known amongst Swedish consumers with an estimated awareness of 98 per cent.	IFOAM Basic Standards. The KRAV standards also fulfil the EU standards for organic production under Regulations (EC) No 834/2007, (EC) No 889/2008 and (EC) No 967/2008.	5,500 KRAV-certified products	Around 3,000 farmers and approximately 450 companies in processing and trade are associated with KRAV	GMO risk guidance GMO rules

[49] Svenskt-Sigill (2013), 'GMO-policy', http://www.svensktsigill.se/Hem/Svenskt-Sigill/Saker-mat/GMO-policy/ ; Krav (2013) 'GMO risk', http://www.krav.se/Documents/gmo/risklista.pdf

A5.6 Problem definition and potential impacts of harmonisation

A5.6.1 Problems and potential impacts for consumers

There is no significant demand for GM(O)-free labelling in Sweden because customers trust that if a product contains GMOs, it will be labelled accordingly. Organic labels such as KRAV are well known, and consumers who choose to avoid products that may contain GMOs can choose to purchase organic labelled products. Stakeholders interviewed for this study suggested that if a harmonized GM(O)-free label were to be introduced, the wording 'GM(O)-free' and 'does not contain GMOs' are most appropriate for product labels.

A5.6.2 Problems and potential impacts for operators

Although GM(O)-free labelling and declarations are illegal in Sweden, this type of labelling can still be found on some products. A study conducted in 2009 found that out of 76 companies surveyed, 20 were using the non-authorised wording 'free from GMO.' GM(O)-free statements were often used in combination with labels declaring organic production and mainly used for soya milk and canned corn.

Despite the labelling requirements and the legal restrictions placed on 'misleading' food labels, there are no prescribed sanctions for companies who label or market their products as GM(O)-free. The Swedish Food Agency has, however, ordered the removal and amendment of such labelling and marketing messages. For instance, when the inspections carried out in 2009 found producers and distributors using the wording 'free from GMOs' on product labels, these companies were told to remove these claims and follow-up inspections were scheduled. Several producers also recalled their products from distributors.

Other examples include that of a food retail chain (City Gross), which launched a campaign in 2010 with the headlines 'choose GMO-free' and 'Guaranteed GMO-free - Always at City Gross' to signal that they only sold Swedish pork fed on non-GM feed. The Swedish Food Agency reported the campaign to the Consumer Ombudsman who then prohibited the retail chain from declaring the meat as being GM(O)-free.[50]

Although there is no regulation against retailers selling imported products which are labelled GM(O)-free, retailers are encouraged by authorities to conceal or cover these types of messages (e.g. with a sticker) to avoid misleading or misinforming consumers.

There is a strong and consistent view amongst all consultees for this study (including government, consumer associations, and retailers) that a GM(O)-free labelling scheme would be more harmful than beneficial, in that it would only serve to confuse consumers and create more burdens for authorities and producers. However, some stakeholders believe that the absence of GMOs in Swedish products compared to imported products should be able to provide a competitive advantage, and that this difference should be communicated in an appropriate manner. The only product category where consultees thought that GM(O)-free labelling may deliver added value is in the case of meat production (particularly pork), since animals fed with GM feed do not currently have to be labelled under EU positive GM labelling rules.

In Sweden, the monitoring and control procedures for products produced and/or processed with GMOs are well developed. There is an established system to monitor and document measures taken to prevent the presence of GMOs in organic labelled products and for products with Protected Designation of Origin labels. A similar system could be used if a GM(O)-free label was introduced without imposing significant monitoring costs.

[50] Miljötidningen (2011) Livsmedelskedja fick GMO-fodret på fal. URL: http://www.jordensvanner.se/2011/livsmedelskedja-fick-gmo-fodret-pa-fall

Annex 6 Netherlands case study

A6.1 Government-led Type I schemes: explicit GM(O)-free labelling rules and guidelines

A6.1.1 Legislative basis and historical context

GM(O)-free labelling in the Netherlands is governed by the Dutch Decision of 29 October 1999 amending the national Novel Food law, which regulates the use of a 'prepared without gene technology' label (Staatsblad, 1999).

The publication of the EU Novel Food Regulation (258/97) in 1997 was the result of many years of deliberation on GM labelling between industry and consumer organisations. It also initiated new debates about the impact that the Regulation would have on consumer choice. The phrasing of Article 8, 1c, which stated that 'labelling requirements shall.... ensure [that] the final consumer.... [is] informed of the presence in the novel food or food ingredient of material which is not present in an existing equivalent foodstuff and which gives rise to ethical concerns' meant that only products that contained detectable traces of GM DNA or proteins had to be labelled (European Commission, 1997). Products which did not contain detectable proteins from GM soya had to be labelled, whilst products which only contained oil from GM soya (and therefore did not contain any detectable GM proteins) did not have to be labelled. This has since changed under EU Regulation 1830/2003.

Over the next two years, pressure on authorities to take steps to address this issue increased. In February 1997, the Dutch Parliament adopted a proposal in which the government was called on to facilitate a lasting supply of 'GM(O)-free' products on the market (Tweede Kamer, 1997). In March 1998, the Dutch Retailers Association, several NGOs and 'Platform Biologica' (the organic sector association) sent a letter to the relevant authorities, asking for measures to be taken to safeguard a supply of 'GM(O)-free' products by introducing a system of compulsory registration for GMOs, coexistence regulation, and legal thresholds for GM(O)-free feed (Consument en Biotechnologie, 1999). In March 1999, Greenpeace Netherlands and the Dutch Consumers Association wrote a letter to Dutch supermarkets, urging them to guarantee that their own-brands would be GM(O)-free. The letter referred to the initiative implemented by Sainsbury's in the UK, which sought to create an alliance of 'GM(O)-free' own brands across six retailers in different European countries (Consumentenbond, 1999). They believed that the EU Regulation excluded a large number of products from GM labelling which should have been labelled, and therefore did not offer consumers a fair choice.

In 1999 organisations representing industry, retail, organic producers and consumers initiated a working group which discussed general principles of GM labelling, the German regulation on 'ohne Gentechnik' labelling, the need for, and inspection methods used in the organic sector and thresholds for adventitious or technically unavoidable authorised GM presence (Ministerie van VWS, 1999). The result was a proposal which was presented and further discussed in the 'Regulier Overleg Warenwet', a forum which regularly brought together national authorities and other stakeholders (industry, retail, consumers) to discuss issues related to novel foods regulation. This common industry/NGO proposal formed the basis for the national regulation.[51]

A6.1.2 Rationale

The proposal set out by stakeholders in 1999 was based on four principles:

- **Consumer choice should be facilitated**, especially to meet the needs of consumers with strong objections to the use of GMOs in food production. For this group of consumers the regulatory requirements for positive labelling of GMOs were considered insufficient because they excluded from compulsory positive GM labelling those products produced from animals fed with GM feed

[51] Decree on novel foods (29 October 1999) – *Houdende Wijziging Van Het Warenwetbesluit Nieuwe Voedingsmiddelen (WNV).*

and those produced with the use of GM processing aids. Therefore, an approach with stricter conditions, similar to the (1998) German approach, was proposed.

- **Information should not be misleading,** which meant that the wording on the label was important. For instance, a label using the phrase 'GM(O)-free' suggests a total absence of GMOs, which cannot be guaranteed. Therefore, 'prepared without gene technology' was considered to be more appropriate, given that it reflects what can realistically be guaranteed and what was thought to motivate consumer choice. The use of a label should also be limited to products that have an authorised GM equivalent on the market.
- **Additional administrative procedures (i.e. audit trails) for tracing GMOs would be needed**[52] given that analytical detection methods cannot not detect GMOs in products that used GMOs in their production or processing but which do not ultimately contain any GM DNA or proteins in the final product (e.g. animal products).
- **A harmonised European approach to labelling was supported by all stakeholders**, but national regulation was seen as appropriate if harmonisation at the EU level is unavailable.

Organic products were considered by many stakeholders to be 'the real alternative' to GM products. Some stakeholders cautioned against the use of an additional label (e.g. 'prepared without gene technology') that might confuse consumers. It was also noted that the incentive for non-organic food producers to use a separate label would be small.

A6.1.3 Labelling rules

In addition to the authorised wording 'prepared without gene technology', stakeholders interviewed for this study considered the use of the words 'fed with GM-free feed' to be acceptable for animal products (dairy, meat, eggs), but only if their production also excludes the use of GM additives.

A6.1.4 Product scope

The Dutch Decision states that labelling can be applied to food and drink products which:

- Do not consist of, or have not been derived from, GMOs, including preparation with the help of substances that consist of, or are derived from GMOs or are produced with the help of processing aids produced from GMOs;
- Are not produced from animals that:
  - Have been fed with GM feed or feed that contains GM additives;
  - Have been treated with veterinary medicines produced with 'modern biotechnology', unless comparable veterinary products are unavailable; and
  - Contain traces of adventitious or technically unavoidable authorised GM presence.

Moreover, the declaration that a product has been 'prepared without gene technology' may only be used on some food or food ingredients. Products or ingredients that are not listed in Article 1, sub 2 of EU Regulation No 258/97 may not apply the label.

A6.1.5 Thresholds/detection levels for adventitious or technically unavoidable GM presence

No mention is made in the Decision of a threshold, which therefore in principle allows for the presence of adventitious or technically unavoidable GM presence according to EU law (<0.9 per cent). Nonetheless, 'zero' GM content is the target. The detection limit is set at <0.1 per cent due to analytical constraints although the Dutch authorities do not use analytical methods in practice because there is only one 'GM(O)-free' product on the market which is verified through certification documents.

[52] That is, certification such as through identity preservation.

A6.1.6 Input specifications and exemptions

The Dutch regulation prohibits the following for 'GM(O)-free' labelled products:

- Preparation aided by compounds or processing aids that contain or are derived from GMOs;
- Production from animals fed on GM feed;
- Production from animals fed on feed that contains GM additives; and
- Production from animals treated with veterinary pharmaceuticals produced with modern biotechnology.

An exception can be made for the use of GM veterinary pharmaceuticals where a non-GM alternative is unavailable.

A6.1.7 Conversion periods/minimum feeding times for animals fed on non-GM feed

There are no minimum feeding times for animals fed on non-GM feed; all animals must be fed non-GM feed from birth to qualify for the use of the label.

A6.1.8 Certification, controls and monitoring requirements

Operators must provide documents demonstrating compliance with the Dutch rules in order to use the 'prepared without gene technology' label. The Netherlands Food and Consumer Product Safety Authority (Nederlandse Voedsel- en Warenautoriteit) (NVWA) is responsible for carrying out occasional inspections to monitor compliance with these terms and conditions.

The NVWA generally supports a risk-based approach to GMO inspection activities. According to the NVWA the (low level) presence of GMOs is not associated with any health risk and is therefore not considered a priority (NVWA, 2008).

A6.1.9 Market share

Only one product, a soya protein isolate, is known to carry the Dutch GM(O)-free label declaring 'bereid zonder gentechniek' (i.e. 'prepared without gene technology'). The product is sold as a food supplement for athletes. According to a spokesperson of the trading company that imports the product, the protein is produced by a large overseas producer of soya isolate. The entire production chain is non-GM Identity Preserved (IP) and certified by SGS (www.sgs.com). Since soya protein isolation is a physical process and does not involve the use of GM-derived processing aids or GM additives, the product can be legally sold with the 'bereid zonder gentechniek' label.

A6.2 Private, Type III non-GM supply chain requirements

Although several producers claim to be 'gentechvrij' ('free from gene technology') in their general communication, they do not use the official 'bereid zonder gentechniek' label. For intance, Rondeel, an egg producer operating to high animal welfare standards, states that it uses non-GM Pro Terra soya feed.[53]

More widely, Bionext, the organisation for sustainable organic agriculture and food in the Netherlands, states in its promotional material that 'organic food is naturally free from gene technology' and encourages the development of 'gene-technology free zones'.[54] Inspection of the Dutch organic sector is conducted by the organisation Skal, which checks whether GM(O)-free statements provided by suppliers comply with EU Regulation No 834/2007/EC (SKAL, 2012). Skal also provides registered organic producers with guidance to check for the potential presence of GMOs or products produced with GMOs. Some restaurants also indicate that they do not serve GM(O)-food.

[53] Rondeel (2013) 'Meer informatie: Het voer', http://www.rondeeleieren.nl/de-kippen/het-voer/.

[54] Bionext (2012) 'Gentecvrije Zone', http://www.bionext.nl/content/ik-cre per centC3 per centABer-een-gentechvrije-zone.

A6.3 GM(O)-free production costs and price premia

The strict criteria for the use of the 'prepared without gene technology' label requires the application of IP (or similar) systems that can significantly affect production costs when applied to complex production chains in relatively small markets. This combined with the strictness of the criteria for GM(O)-free labelling in the Netherlands means that consumer choice for 'GM(O)-free' products has been largely restricted to organic foods (with the exception of one product, a soya protein isolate).

A6.4 GM(O)-free labelling outlook

Results of repeated Eurobarometer surveys suggest support for GM foods in the Netherlands is decreasing over time (Eurobarometer 1996, 1999, 2002, 2005, 2010), but the GM issue does not generally receive much attention. For instance, the website and news bulletin of Greenpeace Netherlands only reported on GM-related issues four times in 2011, and four times in the first half of 2012. Only three of these news items concerned specific events in the Netherlands.[55]

A national survey undertaken in 2008 suggests that consumers do not pay much attention to GM labels (King's College, 2008). This may be due to the small number of GM labelled products (about 16) on the Dutch market. The visibility of GM products is therefore very low. Moreover, information on the GM content of a product (where GMOs have been used or are present) is typically only included in small print as part of the ingredient list. Unless consumers actively seek out this information, they are unlikely to realise that a product may contain GMOs. The Consumers' Association view is that consumers have become more or less used to the idea of GM technology and seem less concerned about its application in food production, given the limited availability of GM products.

Studies that assess the issue of non-GM products have not been conducted in the Netherlands since 2004. Results from the most recent study (Tenbült, 2004) suggest that acceptance of GM products depends on the extent to which the product is perceived as being 'natural'. Factors influencing consumers' perceptions of a product's 'naturalness' include the presence/absence of additives (22 per cent), followed by the use of traditional/industrial production methods (20 per cent), taste and the use of pesticides (15 per cent each). The use of genetic modification is a relatively minor consideration (7 per cent) (LNV Consumentenplatform, 2004). In other words, the characteristics of a GM product are judged on its own merit, rather than by comparing it to alternatives.

No specific data were identified on the demand for 'GM(O)-free' foods in the Netherlands, but the demand for organic foods is a potentially useful indicator. A survey conducted in 2008 found that almost half of respondents (n=991) would not buy organic food if it was found to contain GM-ingredients (King's College, 2008).

Market data show that the Dutch market for organic products is still a niche market. While sales of organic produce over the past ten years have continually increased, on average market share is still relatively low (two per cent). The market share is highest in eggs (9.8 per cent), dairy products (not including butter and cheese) (6 per cent), and fruits and vegetables (3.3 per cent) (Ministerie EL&I, 2012).

The small number of products bearing the 'prepared without gene technology' label may also be partly due to the stricter requirements for GM labelling under EU Regulation 1830/2003 compared to the original EU Novel Food Regulation (258/97). Regulation 1830/2003 now specifies that ingredients made from non-detectable GMO-related DNA or protein, such as vegetable oil, must nonetheless be labelled as GM. It was the exclusion of this group of ingredients from the original GM labelling regime that drove NGOs in the Netherlands to promote a negative label in 1999.

Products produced from animals fed with GM feed, products which involve the use of GM processing aids and most GM additives are still excluded from the EU GM labelling rules. As a result, there is still a potential market for products which use the 'prepared without gene technology' label, although it is arguably smaller than it was in 1999.

[55] Greenpeace Netherlands website, http://www.greenpeace.nl/Nieuws/Nieuwsberichten/, accessed on July 5, 2012

Overall, the extended criteria under the EU positive GM labelling regime, combined with the strict criteria for applying a 'prepared without gene technology' label, means that producers have little incentive to use the label given the relatively small size of the market and the (potentially) high production costs. In practice the label is only applied to a product with high added value (a food supplement).

A6.5 Problem definition and potential impacts of harmonisation

A6.5.1 Problems and potential impacts for consumers

In 2004 the Dutch Commission on Genetic Modification commissioned research to assess the possibilities for GM(O)-free production chains. As part of this research, a qualitative survey was conducted in which focus group participants were asked to reflect and comment on GM(O)-free claims. The participants agreed that the motivation to choose 'GM(O)-free' foods is comparable with motivations for choosing 'organic' or 'vegetarian' products (i.e. 'GM(O)-free' food is considered to be 'fair' food that has not been tampered with). Although participants thought that the use of thresholds for adventitious or technically unavoidable GM presence does not meet consumers' expectations of what it means for a product to be 'GM(O)-free', they nonetheless understood the practical problems associated with guaranteeing purity and a '0.0 per cent' contamination level. They accepted the 0.9 per cent threshold level although they felt it was arbitrary and misleading. Participants also expressed doubts about the reliability of 'GM(O)-free' claims. Although participants understood that GM(O)-free production results in increased costs, most said they would not be prepared to pay a premium for such foods (de Vriend, 2004).

Nonetheless, more than 80 per cent of respondents to a survey from 2002 stated that the availability of GM(O)-free products is important to them (LNV Consumentenplatform, 2002). In the same year, about 65 per cent of 5,000 respondents taking part in a public debate on 'Food and Genes' agreed that labelling regulations should ensure that consumers can be absolutely certain that products do not contain GM ingredients. In the same survey 18 per cent of respondents indicated that foods produced with GMOs should be labelled, even if the products themselves do not actually contain any GM ingredients (e.g. through the use of GM feed and/or enzymes) (Terlouw, 2002).

A representative from the Consumers Association interviewed for this study stated that the needs of consumers must come first; whilst harmonisation may be important for trade, it would make little difference to consumers whether labelling is regulated at the national or EU level. If 'GM(O)-free' labelling were to be harmonised, then EU regulation should be as strict as the regulation in the Netherlands (i.e. the current criteria should not be weakened). If this was not possible then the option should remain for Member States to use national regulation to suit their needs.

The Consumers Association and the Food Information Center argued that the exclusion of meat, eggs and dairy products produced with GM feed from the EU GM labelling requirements contradicts the principle of informed consumer choice. They note that it would make more sense to treat these products in the same way as GM food and food ingredients, and to therefore require positive labelling of these products as well, rather than introducing a GM(O)-free label to address this issue.

A6.5.2 Problems and potential impacts for operators

Amongst stakeholders interviewed for this study, two interviewees (the Food Information Center and a retailer) noted that they were in favour of positive labelling. A few other interviewees (food and drinks industry association, consumers association, organic producers association) were clearly in favour of extending the scope of Regulation 1830/2003 to include products produced from animals fed with GM feed rather than relaxing conditions on the use of 'GM(O)-free' claims.

Currently, organic producers and importers do not use the 'prepared without gene technology' label on organic products, but they do state that organic products are 'free from gene technology' in their promotional materials and in general communication. Applying more relaxed criteria to the use of 'GM(O)-free' labels may give rise to an increased number of non-organic products with labels declaring the products to be GM(O)-free. If that were to happen, the organic sector would consider reviewing the organic labelling strategy to consider adding statements which, for instance, makes it

clearer to consumers that these produces have been 'produced without pesticides, artificial fertilizer and gene technology' in order to avoid losing value in the market place.

On the usefulness of having both an organic label and a GM(O)-free label, one stakeholder (BioNext) notes from its experience that some companies, especially those that supply directly to consumers, would like to include a 'GM(O)-free' label on their products. But companies that supply business-to-business products and that have to deal with non-organic inputs, such as the feed industry, prefer to limit the disclosure strategy to general communication about the absence of GMOs and their use in organic production, rather than communicating this through an additional GM(O)-free label.

When the Dutch regulation was discussed amongst stakeholders in 1999, the majority supported a harmonised approach to 'GM(O)-free' claims at the EU level. At the time, however, the use of national regulation was accepted as an interim solution (VWS, 1999). The 'prepared without gene technology' label and EU harmonisation was discussed again at a meeting in 2009 which brought together the Ministries of Agriculture (LNV), Health (VWS) and Environment (VROM), industry (Dutch Food Federation, Dutch Biotechnology Association and Agriculture Marketing Board) and retail (CBL). All stakeholders supported the strict approach currently in place under the national Dutch regulation (VWS, 2009).

Most stakeholders consulted for this study (e.g. the Dutch food industry, grain traders, the organic supply chain and a number of retailers who supply markets in different EU member states) favour EU harmonisation given the advantages for cross-border trade. It was noted that harmonisation would benefit food industries, farmers, organic producers and retailers such as ALDI, LIDL and Albert Heijn who would be able to apply the same conditions and criteria in Germany, Belgium , the Netherlands, and the rest of the EU. The grain traders consulted for this study noted that they would prefer to have 'realistic thresholds' for GMOs.

Competent authorities in the Netherlands also support harmonisation given its importance for trade, provided that any potential effects of EU regulation of GM(O)-free labelling on international trade (and WTO rules) are taken into consideration. As noted above, however, some stakeholders would prefer the Dutch approach so that GM(O)-free products are labelled based on strict criteria if the alternative was a harmonised EU approach with less strict criteria.

Consumer choice is the priority for other stakeholders (e.g. Greenpeace), but choice could be provided either through a GM(O)-free label, or requiring that products that have used GM-feed in their production must be labelled as such (e.g. by revising Regulation (EC) No 1830/2003).

Almost all stakeholders (except for Greenpeace) prefer the strict approach adopted in the Dutch regulation and criticise the more 'relaxed' approach taken by Germany and France, given that:

- 'GM(O)-free' suggests a total absence of GM material (i.e. total purity), which cannot be guaranteed;
- 'GM(O)-free' is already offered by organic products. The industry and trade organisations specifically noted that the creation of an additional niche market should be avoided. Other stakeholders (the Consumentenbond and the retailers' association) prefer to have a GM(O)-free option, provided that consumers are willing to pay a premium; and
- According to retailers and the Dutch Biotechnology Association, a GM(O)-free label might signal to consumers that conventional products or GM products are inferior, which might lead consumers to avoid these products.

Some stakeholders prefer the Dutch approach which is based on strict criteria over a harmonised EU approach with less strict criteria. But Greenpeace noted that the German approach is more pragmatic. For instance, the approach has allowed Landliebe to increase its turnover by 15 per cent, which demonstrates that there is a market for GM(O)-free products. Moreover, another stakeholder (the Dutch Farmers Association LTO-Zuid) noted that strict criteria make it very difficult for producers to comply with the requirements given the risks related to the lack of effective control and monitoring.

Annex 7 United Kingdom case study

A7.1 Government-led Type I schemes: explicit GM(O)-free labelling rules and guidelines

The United Kingdom (UK) government has not developed a policy position regarding the use of GM(O)-free labels, although the UK supports an approach which provides for consumer choice with regard to GMOs in food products. Consequently, the UK has not developed legislation or guidelines on GM(O)-free labelling. There are, however, a variety of private operator initiatives described below.

A7.2 Type II schemes: 'GM(O)-free' is one attribute of a quality label

The UK Department for Environment, Food and Rural Affairs (Defra) is responsible for administering organic schemes, with multiple organisations providing certification schemes. The most popular in the UK is the Soil Association's organic standard although there is also the standard offered by the Organic Farmers & Growers.

The Soil Association has an 'identity preserved' system for checking products at all stages of the supply chain. Where products are not validated through the supply chain, the products themselves are tested for the presence of GMOs at the lowest possible threshold (0.1 per cent). If GM ingredients are found, producers risk having their organic status rescinded (Soil Association, 2012). Whilst policies towards GMOs are included in the criteria of the standards, this element is not identified on the product label.

A7.3 Type III schemes: 'GM(O)-free' is a supply chain requirement, but no labels appear on product packages

During the 1990s, UK supermarkets took the decision to eliminate GM ingredients as far as possible in their own branded products, which includes the use of GM feed in the production of animal products. This information is not conveyed through a label, and most retailers do not actively communicate this position to customers, although information on their positions can be found on the relevant company websites. Operators are required to provide evidence that they comply with the policy if they want to supply a specific retailer. Products are typically checked through a supply chain verification system.

Large supermarkets' and manufacturers' own brand products including meat, fish, chicken, eggs, and milk have been produced through non-GM supply chains since 1999. Participating retailers include Marks & Spencer, Tesco, Sainsbury's, Iceland, Morrisons, and Asda, although Morrisons and Asda have recently decided to allow GM feed in the production of poultry products. Table A7.1 below summarises the policies of most UK retailers.

Table A7.1 GM(O)-free schemes operated by major UK retailers.

Organisation	Scheme/label	Products covered	Scope
Most UK supermarket retailers and selected egg products	Own branded products	Fresh chicken and turkey Most supermarket own branded eggs are classified as non-GM	The UK poultry industry generally uses non-GM feed in animal rations, and as such a large proportion of poultry is GM free
J Sainsbury plc	'Taste the Difference' range of products	Beef and pork	Beef and pork in this range is not fed on feed containing GM ingredients
Marks & Spencer	General sourcing policy	All food products	Marks and Spencer are the only UK retailer which have a policy of not using GM ingredients in any of their food products in response to consumer demand
Waitrose	General sourcing	All own brand food products	Waitrose do not allow the use of GM crops,

	policy		ingredients or additives from GM crops in Waitrose brand food.
Tesco	General sourcing policy	All own brand food products	Tesco do not allow GM inputs in their own branded products and animals are reared on non-GM feed.
Morrisons	General sourcing policy	All own brand food products except poultry products	Morrisons does not allow GM ingredients in any of its own brand products with the exception of poultry, which may be fed on GM feed.
Asda	General sourcing policy	All own brand food products except poultry products	ASDA does not allow the use of GM ingredients in any of its own brand products with the exception of poultry, which may be fed on GM feed.

Table A7.2 summarises the product scope of non-GM supply chains in the UK for each operator or organisation.

Table A7.2 Product scope

Product category	Applicability by operator/organisation				
	British Poultry Council	Sainsbury's*	Marks & Spencer	Waitrose + Tesco*	Asda + Morrisons*
Vegetables	×	×	✓	✓	✓
Oils / fats	×	×	✓	✓	✓
Meat	✓ (poultry)	✓ (beef & pork)	✓	✓	✓ (except poultry)
Processed meat products	×	?	✓	✓	✓
Eggs	✓	×	✓	✓	✓
Milk	×	×	✓	✓	✓
Other dairy products	×	×	✓	✓	✓
Other animal products	×	×	✓	✓	✓

**Own-branded products only*

The British Retail Consortium and the Food and Drink Federation have issued a joint identity-preservation standard to source conventional (i.e. non-GM) soya and maize and exclude GM varieties from the supply chain, using a threshold for adventitious or technically unavoidable authorised GM presence of <0.9 per cent. This standard is considered a basis for 'best practice'.

The British poultry industry also has a history of not using GM ingredients in its supply lines. The British Poultry Council (BPC) has informed major retailers of its position that it does not use GM feed in poultry and egg production, although this position is not publicised on any label nor is it advertised to consumers.

A7.4 GM(O)-free production costs and price premia

Most own branded products in supermarkets are cheaper than other brands, and are marketed as 'everyday value', 'basics' or 'smart price'. The extent to which retailers are able to provide GM(O)-free products largely depends on the availability and price of non-GM soya, or alternative non-GM feed. Sourcing costs are rising over time, however, which creates challenges for producers to maintain non-GM supply chains.

A7.5 GM(O)-free labelling outlook

Supplies of GM(O)-free soya have become harder to source and verify. The poultry industry, which has historically maintained non-GM supplies chains has recently tried to retract this policy. Whilst most retailers have resisted this change, British supermarket Asda stated in 2010 that they would allow their poultry producers to source GM feed. Morrisons also released a similar statement in the spring of 2012. Moves by ASDA and Morrisons to allow GM feed in poultry production followed both a rise in the cost of non-GM soya and declining concern amongst the public about GMOs as evidenced by customer surveys. It is unclear whether other UK supermarkets will follow Asda and Morrisons.

A7.6 Problem definition and potential impacts of harmonisation

A7.6.1 Problems and potential impacts for consumers

Various surveys have been conducted within the UK to assess the demand for products that do not contain GMOs. The FSA's biannual public attitudes tracker monitors public opinion on key issues of relevance to the agency. Respondents are asked to select from a prescribed list all the main food issues of concern to them. In 2001, over 40 per cent of consumers selected GMOs as an issue of significant concern. This has steadily decreased to 22 per cent in the latest survey conducted in May 2012. The most significant issues in that survey were food prices (chosen by 63 per cent of respondents); salt content of food (chosen by 49 per cent of respondents) and fat content (chosen by 45 per cent of respondents) (FSA, 2012). This suggests that other issues such as the price of food outweigh issues such as GMOs. This finding was also substantiated through interviews with stakeholders as part of this study.

A 2010 survey conducted in the UK by Gfk/Nop on behalf of Friends of the Earth (FoE, 2010) found that 66 per cent of individuals would rather buy meat and dairy products produced from animals fed on a non-GM diet. The survey also found that 72 per cent of consumers were willing to pay a price premium of 2p/kg or 0.5p/litre for meat and dairy fed on a non-GM diet. A similar survey was undertaken by the food and grocery research organisation IGD in October 2008, with a sample of almost 6,000 people. The results indicated that 53 per cent of consumers did not think about the issue of GMOs in their food when making food purchasing decisions. Twenty-one per cent of respondents claimed to check food labels to ensure the food is GM(O)-free. Overall, 52 per cent of respondents neither supported nor opposed the presence of GMOs in food products (IGD, 2010).

When the European legislation on GM labelling (Regulation EC 1829/2003) was negotiated in 2002, the official position of the UK Government was that it did not favour labelling food products with messages that could not be substantiated (e.g. because the contents could not be measured).[56] Nonetheless, the Government did support the use of negative labelling (e.g. 'GM(O)-free') so long as the operator could justify and verify the claim.

This position was also made clear in a UK parliamentary 'Postnote' on the labelling of GM foods which was released in February 2002. The note suggests that the UK supported an option whereby GM labelling was maintained, but that this could be supplemented by a GM(O)-free label allowing consumers to avoid GMOs in their food if they so wished (POST, 2002).

The implementation of Regulation (EC) No 1829/2003 on genetically modified food and feed in 2003, which includes requirements for any food or feed consisting of GMOs to be positively labelled irrespective of detectable DNA or protein resulting from genetic modification was a significant

[56] Personal communication. UK government agency.

departure from the previous regulation, which only required labelling if the product contained detectable GM DNA or protein. Given this new requirement, the position of the UK Government towards negative labelling changed. The UK Government believes that having positive labelling as well as negative labelling for GM products could lead to confusion (FSA, 2009). The Government neither discourages nor encourages the use of GM(O)-free labels within the UK other than to state that if an operator wishes to implement such a scheme the product should be completely GM(O)-free (i.e. absolute purity), with no thresholds or allowances so that the consumer can be completely confident of what the label means.[57]

A7.6.2 Problems and potential impacts for operators

Retailers foresee that sourcing non-GM food will become more difficult in the future and ideally would prefer not to do so indefinitely.[58] Speaking at a conference in February 2009, the then chief executive of the retailer Tesco indicated that Tesco would like to reopen the debate on GMOs with British consumers, since GM(O)-free schemes in UK supermarkets have been based on the premise that consumers have negative attitudes towards GMOs (Food Manufacture, 2012). The UK farming union (NFU) believes it will become more difficult for farmers to remain financially competitive if they must continue to purchase non-GM feed for their livestock. Nonetheless, some industry stakeholders believe that a harmonised 'GM(O)-free' scheme in the EU may allow retailers to charge a price premium for these products, which could serve to offset the cost of importing and using non-GM feed.

[57] Per comms. UK Government Agency

[58] Based on personal communication with a retailer representative.

Annex 8 Legislation

A8.1 Austria

- Federal ministry of health, family and youth (BMGF) (2007), IV. Edition of the Austrian Food Book (Codex Alimentarius Austriacus): Guidelines for the definition of 'GM-free production' of food and the labelling of it. (BMGF-75210/0014-IV/B/7/2007 vom 6.12.2007 and BMG-75210/0009-II/B/13/2010 vom 9.9.2010) http://www.bmg.gv.at/cms/home/attachments/3/6/0/CH1252/CMS1228301104683/gentechnikfrei_rl.pdf (18.10.2012)
- Federal ministry of health, family and youth (BMGF) (2007), IV. Edition of the Austrian Food Book (Codex Alimentarius Austriacus): Guidelines for the definition of 'GM-free production' of food and the labelling of it.
- Codex Expert group „Gm-free production': Recommendations referred to paragraph 5 of the guideline (BMGFJ-75210/0014-IV/B/7/2008 vom 16.11.2008, BMG-75210/0002-II/B/7/2009 vom 19.5.2009 and BMG-75210/0001-II/b/7/2010 vom 20.4.2010) http://www.bmg.gv.at/cms/home/attachments/3/6/0/CH1252/CMS1228301104683/gentechnikfrei_rl,__empfehlungen_abs._5.pdf (18.10.2012)
- BMGFJ Federal Ministry of Economy, Family and Youth (2008): Leitfaden zur risikobasierten Kontrolle auf Gentechnikfreiheit (Guideline for risk-based control of absence of gmos). Released December 2008 http://www.bmwfj.gv.at/TechnikUndVermessung/Akkreditierung/Documents/Leitfaden per cent20L25 per cent20Risikobasierte per cent20Kontrolle per cent20Gentechnikfrei_V1.pdf

A8.2 France

JORF n°0026 du 31 janvier 2012 page 1770
texte n° 27

DECRET

Décret n° 2012-128 du 30 janvier 2012 relatif à l'étiquetage des denrées alimentaires issues de filières qualifiées « sans organismes génétiquement modifiés »

NOR: EFIC1115781D

Publics concernés : opérateurs de l'agroalimentaire souhaitant valoriser des denrées alimentaires issues de filières qualifiées « sans OGM », consommateurs.
Objet : règles facultatives d'étiquetage pour les denrées alimentaires issues de filières qualifiées « sans OGM ».
Entrée en vigueur : le texte entre en vigueur le 1er juillet 2012.
Notice : trois catégories d'ingrédients pourront faire l'objet d'une mention du type « sans OGM » : les ingrédients d'origine végétale (ceux contenant moins de 0,1 per cent d'OGM), les ingrédients d'origine animale (avec des mentions distinctes selon que les animaux sont nourris avec des aliments contenant moins de 0,1 per cent ou moins de 0,9 per cent d'OGM) et les ingrédients apicoles (lorsqu'ils sont issus de ruches situées à plus de 3 km de cultures génétiquement modifiées).
Le décret prévoit également la possibilité de reprendre « en face avant » (dans le champ visuel principal de l'emballage), en plus des indications figurant dans la liste des ingrédients, une mention du type « sans OGM » pour tout ingrédient qui représente plus de 95 per cent de la denrée alimentaire.
Références : le texte est pris pour l'application de l'article L. 531-2-1 du code de l'environnement

introduit par la loi n° 2008-595 du 25 juin 2008 relative aux organismes génétiquement modifiés.
Le présent décret peut être consulté sur le site Légifrance (http://www.legifrance.gouv.fr).
Le Premier ministre,
Sur le rapport du ministre de l'économie, des finances et de l'industrie,
Vu le règlement (CE) n° 1829/2003 du Parlement européen et du Conseil du 22 septembre 2003 modifié concernant les denrées alimentaires et les aliments pour animaux génétiquement modifiés ;
Vu le règlement (CE) n° 852/2004 du Parlement européen et du Conseil du 29 avril 2004 modifié relatif à l'hygiène des denrées alimentaires, notamment son article 2 ;
Vu le règlement (CE) n° 834/2007 du Conseil du 28 juin 2007 modifié relatif à la production biologique et à l'étiquetage des produits biologiques et abrogeant le règlement (CEE) n° 2092/91, notamment ses articles 9 et 22 ;
Vu le règlement (CE) n° 764/2008 du Parlement européen et du Conseil du 9 juillet 2008 établissant les procédures relatives à l'application de certaines règles techniques nationales à des produits commercialisés légalement dans un autre Etat membre et abrogeant la décision n° 3052/95/CE ;
Vu la directive 98/34/CE du Parlement européen et du Conseil du 22 juin 1998 modifiée prévoyant une procédure d'information dans le domaine des normes et réglementations techniques et des règles relatives aux services de la société de l'information, notamment son article 8 ;
Vu le code de la consommation, notamment ses articles L. 214-1 et L. 214-2 ;
Vu le code de l'environnement, notamment son article L. 531-2-1 ;
Vu les avis du Haut Conseil des biotechnologies en date du 26 octobre 2009 et du 1er février 2011 ;
Vu l'avis de l'Agence nationale chargée de la sécurité sanitaire de l'alimentation, de l'environnement et du travail en date du 26 août 2011 ;
Vu la notification n° 2011/0256/F adressée le 27 mai 2011 à la Commission européenne et la réponse du 29 août 2011 de cette dernière ;
Le Conseil d'Etat (section des finances) entendu,
Décrète :

Article 1 En savoir plus sur cet article...

Le présent décret fixe les mentions particulières d'étiquetage qui peuvent être utilisées pour la mise sur le marché des denrées alimentaires destinées au consommateur final en ce qui concerne leurs ingrédients issus de filières de production et commerciales qualifiées « sans organismes génétiquement modifiés » mentionnées à l'article L. 531-2-1 du code de l'environnement.

Article 2 En savoir plus sur cet article...

Il est interdit de détenir en vue de la vente ou de la distribution à titre gratuit, de vendre, de mettre en vente ou distribuer à titre gratuit des denrées alimentaires portant les mentions prévues par le présent décret et ne satisfaisant pas à ses dispositions.

- Chapitre Ier : Ingrédients d'origine végétale

Article 3 En savoir plus sur cet article...

La mention : « sans OGM » est réservée aux ingrédients non génétiquement modifiés et aux ingrédients obtenus à partir de matières premières contenant au maximum 0,1 per cent d'organismes génétiquement modifiés, à condition que cette présence soit fortuite et techniquement inévitable.

Cette mention ne peut pas être utilisée pour désigner des ingrédients issus de végétaux dont aucune espèce génétiquement modifiée n'a fait l'objet d'une autorisation de mise sur le marché de l'Union européenne.

- Chapitre II : Ingrédients provenant d'animaux d'élevage

Article 4 **En savoir plus sur cet article...**

La mention : « nourri sans OGM (¸ 0,1 per cent) » est réservée aux ingrédients non transformés au sens du règlement du 29 avril 2004 susvisé, qui proviennent d'animaux d'élevage, à l'exception des œufs et du lait provenant d'animaux nourris exclusivement avec des aliments obtenus à partir de matières premières contenant au maximum 0,1 per cent d'organismes génétiquement modifiés, à condition que cette présence soit fortuite et techniquement inévitable.
La mention : « issu d'animaux nourris sans OGM (¸ 0,1 per cent) » est réservée aux ingrédients transformés au sens du règlement du 29 avril 2004 susvisé, aux œufs et au lait provenant d'animaux d'élevage nourris exclusivement avec des aliments obtenus à partir de matières premières contenant au maximum 0,1 per cent d'organismes génétiquement modifiés, à condition que cette présence soit fortuite ou techniquement inévitable.
Ces mentions peuvent être utilisées pour désigner des ingrédients provenant d'animaux nourris avec des végétaux, dont aucune espèce génétiquement modifiée n'a fait l'objet d'une autorisation de mise sur le marché de l'Union européenne.

Article 5 **En savoir plus sur cet article...**

La mention : « nourri sans OGM (¸ 0,9 per cent) » est réservée aux ingrédients provenant d'animaux d'élevage non transformés au sens du règlement du 29 avril 2004 susvisé, à l'exception des œufs et du lait provenant d'animaux nourris exclusivement avec des aliments non soumis aux obligations d'étiquetage du règlement du 22 septembre 2003 susvisé.
La mention : « issu d'animaux nourris sans OGM (¸ 0,9 per cent) » est réservée aux ingrédients transformés au sens du règlement du 29 avril 2004 susvisé, aux œufs et au lait provenant d'animaux d'élevage nourris exclusivement avec des aliments non soumis aux exigences d'étiquetage du règlement du 22 septembre 2003 susvisé.
Pour les ingrédients d'origine animale issus de l'agriculture biologique, cette mention peut être apposée sous réserve qu'elle soit complétée par les termes : « conformément à la réglementation relative à la production biologique ».

Article 6 **En savoir plus sur cet article...**

L'utilisation des mentions prévues aux articles 4 et 5 est réservée aux ingrédients provenant d'animaux d'élevage qui, pendant toute la durée de leur vie, ont reçu une alimentation conforme aux exigences définies par ces mêmes articles.
Toutefois, ces mentions peuvent être utilisées lorsque les conditions et durées minimales d'alimentation suivantes sont respectées :
a) Pour les animaux destinés à la production laitière, au moins six mois avant la production du lait destiné à être étiqueté ;
b) Pour les volailles de chair, toute la durée d'élevage à compter du stade poussin de trois jours ;
c) Pour les volailles destinées à la production d'œufs, la durée d'élevage à compter du stade poussin de trois jours ou au moins six semaines avant la période de production des œufs destinés

à être étiquetés ;
d) Pour les autres animaux d'élevage, pendant l'année précédant l'abattage ou la pêche ou, pour ceux dont la durée de vie est inférieure à un an, les trois quarts de leur vie précédant l'abattage ou la pêche.

- Chapitre III : Ingrédients issus de l'apiculture

Article 7 **En savoir plus sur cet article...**

La mention : « sans OGM dans un rayon de 3 km » est réservée aux ingrédients issus de l'apiculture qui, tout à la fois :
1° Proviennent de ruches situées de telle façon que, dans un rayon de 3 km autour de leur emplacement, les sources de nectar et de pollen soient constituées d'espèces végétales non génétiquement modifiées ;
2° Proviennent de ruches dans lesquelles les aliments complémentaires pour les abeilles, utilisés le cas échéant, répondent aux exigences mentionnées à l'article 3 ;
3° Ne sont pas soumis aux exigences d'étiquetage du règlement du 22 septembre 2003 susvisé.
L'emploi de cette mention est réservé aux produits issus de l'apiculture pour lesquels les règles de production définies aux alinéas précédents ont été respectées pendant au moins un an.

- Chapitre IV : Dispositions communes

Article 8 **En savoir plus sur cet article...**

La publicité, l'étiquetage et la présentation des denrées alimentaires portant l'une des mentions définies au présent décret ne peuvent pas faire état de propriétés organoleptiques ou nutritionnelles ou de qualités sanitaires ou environnementales particulières du seul fait qu'elles sont issues de filières qualifiées « sans OGM ».

Article 9 **En savoir plus sur cet article...**

Dès lors qu'elles sont produites à partir de ou à l'aide d'organismes génétiquement modifiés, les substances suivantes ne peuvent pas être utilisées dans le processus de fabrication des ingrédients portant les mentions prévues aux articles 3, 4 et 7 :
1° Auxiliaires technologiques ;
2° Supports d'additifs ou d'arômes ;
3° Toute autre substance qui n'est pas soumise à une obligation d'étiquetage.
Toutefois, lorsqu'elles ne sont pas disponibles sur le marché autrement que produites à partir de ou à l'aide d'organismes génétiquement modifiés, les substances figurant sur la liste établie par la Commission européenne en application du g du 2 de l'article 22 du règlement du 28 juin 2007 susvisé ou fixées par arrêté du ministre chargé de la consommation peuvent être utilisées à titre dérogatoire.

Article 10 **En savoir plus sur cet article...**

Pour les denrées alimentaires préemballées, les mentions prévues aux articles 3, 4, 5 et 7 figurent soit dans la liste des ingrédients, lorsqu'elle est prévue par la réglementation en vigueur, immédiatement après le nom de l'ingrédient concerné, soit dans une note au bas de cette liste. La

mention est apposée dans une taille, une couleur et une police de caractères qui ne sont pas différentes de celles utilisées pour la liste des ingrédients.

Article 11 En savoir plus sur cet article...

Lorsque la réglementation en vigueur ne prévoit pas l'indication de la liste des ingrédients, les mentions prévues aux articles 3, 4, 5 et 7 apparaissent sur la denrée alimentaire préemballée à la suite de l'indication du ou des ingrédients concernés, dans les mêmes taille, couleur et police de caractères.

Article 12 En savoir plus sur cet article...

Pour les denrées alimentaires non préemballées, les mentions prévues aux articles 3, 4, 5 et 7 sont apposées en caractères indélébiles et apparents, à la suite de l'indication du ou des ingrédients concernés, sur une étiquette placée sur chaque denrée ou sur chaque lot de denrées, un lot ne pouvant contenir que des denrées auxquelles s'applique la même mention.

Article 13 En savoir plus sur cet article...

Lorsqu'une denrée alimentaire est composée de plusieurs ingrédients, les mentions prévues aux articles 3, 4, 5 et 7 peuvent être reprises dans le champ visuel principal de l'emballage ou de l'étiquetage de la denrée non préemballée si, tout à la fois :
1° Elles sont apposées à la suite de la mention de l'ingrédient concerné et si celui-ci représente au moins 95 per cent en poids de la denrée au moment de la mise en œuvre de cet ingrédient. L'eau et le sel ajoutés ne sont pas pris en considération pour le calcul ;
2° Les autres ingrédients ne sont pas soumis aux obligations d'étiquetage prévues par le règlement du 22 septembre 2003 susvisé ;
3° Les ingrédients provenant d'animaux d'élevage satisfont aux conditions fixées aux articles 4 ou 5.
La mention est apposée dans une taille de caractères qui n'est pas supérieure à celle de la dénomination de vente, commerciale ou de fantaisie qui apparaît dans le même champ visuel.

Article 14 En savoir plus sur cet article...

Les animaux servant à la production des ingrédients portant les mentions prévues aux articles 4 et 5 peuvent être issus d'exploitations dans lesquelles sont présents des animaux nourris selon d'autres pratiques, pour autant qu'ils soient élevés dans des unités séparées, que les aliments pour animaux soient stockés séparément et qu'il s'agisse d'espèces animales différentes.
En l'absence d'unités de production séparées pour la fabrication des ingrédients et aliments pour animaux sans organismes génétiquement modifiés, les mentions prévues aux articles 3, 4 et 5 ne peuvent être utilisées que si sont mises en place, après la fabrication de produits contenant des organismes génétiquement modifiés, des procédures de nettoyage des installations et du matériel utilisés ou toute autre mesure alternative permettant d'éviter la présence de traces de ces organismes génétiquement modifiés.
Les systèmes et procédures permettant de justifier de la conformité de l'étiquetage des denrées alimentaires ou aliments pour animaux utilisés sont tenus à la disposition des agents chargés du contrôle pendant une période de cinq ans. Dans le cas de produits issus de l'apiculture, les

localisations précises des ruches au cours de la production sont conservées pendant la même durée.

Article 15 En savoir plus sur cet article...

Les produits légalement fabriqués ou commercialisés dans un autre Etat membre de l'Union européenne ou en Turquie, ou légalement fabriqués dans un autre Etat partie à l'accord sur l'Espace économique européen ne sont pas soumis aux exigences du présent décret.
Sans préjudice de l'application du règlement du 9 juillet 2008 susvisé ou du respect d'une procédure analogue pour les autres Etats parties à l'accord sur l'Espace économique européen ainsi que pour la Turquie, les produits légalement fabriqués ou commercialisés dans un autre Etat membre de l'Union européenne ou en Turquie, ou légalement fabriqués dans un autre Etat partie à l'accord sur l'Espace économique européen peuvent être importés et commercialisés en France avec une mention « sans OGM » ou une mention analogue.

Article 16 En savoir plus sur cet article...

Le présent décret entre en vigueur le 1er juillet 2012.

Article 17 En savoir plus sur cet article...

La ministre de l'écologie, du développement durable, des transports et du logement, le ministre de l'économie, des finances et de l'industrie, le ministre de l'agriculture, de l'alimentation, de la pêche, de la ruralité et de l'aménagement du territoire et le secrétaire d'Etat auprès du ministre de l'économie, des finances et de l'industrie, chargé du commerce, de l'artisanat, des petites et moyennes entreprises, du tourisme, des services, des professions libérales et de la consommation sont chargés, chacun en ce qui le concerne, de l'exécution du présent décret, qui sera publié au Journal officiel de la République française.

Fait le 30 janvier 2012.

François Fillon

Par le Premier ministre :

Le ministre de l'économie,
des finances et de l'industrie,
François Baroin
La ministre de l'écologie,
du développement durable,
des transports et du logement,
Nathalie Kosciusko-Morizet
Le ministre de l'agriculture, de l'alimentation,
de la pêche, de la ruralité
et de l'aménagement du territoire,
Bruno Le Maire
Le secrétaire d'Etat
auprès du ministre de l'économie,

des finances et de l'industrie,
chargé du commerce, de l'artisanat,
des petites et moyennes entreprises,
du tourisme, des services,
des professions libérales et de la consommation,
Frédéric Lefebvre

A8.3 Germany

Gesetz zur Durchführung der Verordnungender Europäischen Gemeinschaft oder der Europäischen Union auf dem Gebiet der Gentechnik und über die Kennzeichnung ohne Anwendung gentechnischer Verfahren hergestellter Lebensmittel (EG-Gentechnik-Durchführungsgesetz - EGGenTDurchfG)

EGGenTDurchfG

Ausfertigungsdatum: 22.06.2004

Vollzitat:

'EG-Gentechnik-Durchführungsgesetz vom 22. Juni 2004 (BGBl. I S. 1244), das zuletzt durch Artikel 2 des Gesetzes vom 9. Dezember 2010 (BGBl. I S. 1934) geändert worden ist'

Stand: Zuletzt geändert durch Art. 2 G v. 9.12.2010 I 1934

Fußnote

(+++ Textnachweis ab: 26.6.2004 +++)

Das G wurde als Artikel 1 d. G. v. 22.6.2004 I 1244 vom Bundestag beschlossen. Es ist gem. Art. 5 dieses G am 26.6.2004 in Kraft getreten.
Überschrift: IdF d. Art. 2 Nr. 1 iVm Art. 5 Abs. 2 Satz 1 G v. 1.4.2008 I 499 iVm Bek. v. 27.5.2008 I 919 mWv 1.5.2008 u. d. Art. 2 Nr. 1 G v. 9.12.2010 I 1934 mWv 15.12.2010
(+++ Amtlicher Hinweis des Normgebers auf EG-Recht: Durchführung der EGV 1946/2003 (CELEX Nr: 32003R1946) EGV 178/2002 (CELEX Nr: 32002R0178) EGV 1829/2003 (CELEX Nr: 32003R1829) +++)

§ 1 Aufgaben des Bundesamtes für Verbraucherschutz und Lebensmittelsicherheit

(1) Das Bundesamt für Verbraucherschutz und Lebensmittelsicherheit ist zuständig für

1. die Entgegennahme, Bearbeitung und Weiterleitung von Anträgen nach Artikel 5, 6 Abs. 2, Artikel 9 Abs. 2, Artikel 17, 18 Abs. 2 oder Artikel 21 Abs. 2 der Verordnung (EG) Nr. 1829/2003 des Europäischen Parlaments und des Rates vom 22. September 2003 über genetisch veränderte Lebensmittel und Futtermittel (ABl. EU Nr. L 268 S. 1), soweit die Mitgliedstaaten im Rahmen des Zulassungsverfahrens zuständig sind,

2. die Stellungnahme nach Artikel 6 Abs. 3 Buchstabe b oder Artikel 18 Abs. 3 Buchstabe b der Verordnung (EG) Nr. 1829/2003,

3. die Stellungnahme nach Artikel 6 Abs. 3 Buchstabe c oder Artikel 18 Abs. 3 Buchstabe c der Verordnung (EG) Nr. 1829/2003,

4. die Stellungnahme nach Artikel 6 Abs. 4 Satz 3 oder Artikel 18 Abs. 4 Satz 3 der Verordnung (EG) Nr. 1829/2003 und

5. das Ersuchen nach Artikel 10 Abs. 1 Satz 1 oder Artikel 22 Abs. 1 Satz 1 der Verordnung (EG) Nr. 1829/2003 an die Europäische Behörde für Lebensmittelsicherheit.
(2) Das Bundesamt für Verbraucherschutz und Lebensmittelsicherheit kann bis zum Erlass einer Entscheidung oder eines Beschlusses der Europäischen Gemeinschaften oder der Europäischen Union unter den Voraussetzungen des Artikels 34 der Verordnung (EG) Nr. 1829/2003 in Verbindung mit Artikel 54 der Verordnung (EG) Nr. 178/2002 des Europäischen Parlaments und des Rates vom 28. Januar 2002 zur Festlegung der allgemeinen Grundsätze und Anforderungen des Lebensmittelrechts, zur Errichtung der Europäischen Behörde für Lebensmittelsicherheit und zur Festlegung von Verfahren zur Lebensmittelsicherheit (ABl. EG Nr. L 31 S. 1) das vorläufige Ruhen einer im Rahmen der Verordnung (EG) Nr. 1829/2003 erteilten Zulassung ganz oder teilweise anordnen.

(3) Das Bundesamt für Verbraucherschutz und Lebensmittelsicherheit ist Kontaktstelle im Sinne des Artikels 17 Abs. 2 des Protokolls von Cartagena über die biologische Sicherheit zum Übereinkommen über die biologische Vielfalt vom 29. Januar 2000 (BGBl. 2003 II S. 1508) und des Artikels 15 Abs. 1 Buchstabe b der Verordnung (EG) Nr. 1946/2003 des Europäischen Parlaments und des Rates vom 15. Juli 2003 über grenzüberschreitende Verbringungen genetisch veränderter Organismen (ABl. EU Nr. L 287 S. 1). Es nimmt außerdem die Aufgaben nach Artikel 5 Abs. 2, Artikel 6, 9, 14 Abs. 2 und Artikel 15 Abs. 1 der Verordnung (EG) Nr. 1946/2003 wahr und erfüllt sonstige Mitteilungspflichten nach dem Protokoll von Cartagena über die biologische Sicherheit zum Übereinkommen über die biologische Vielfalt gegenüber der Informationsstelle für biologische Sicherheit nach Artikel 20 des Protokolls von Cartagena über die biologische Sicherheit zum Übereinkommen über die biologische Vielfalt, soweit die Mitgliedstaaten zuständig sind.

§ 2 Aufgaben des Bundesministeriums für Ernährung, Landwirtschaft und Verbraucherschutz

Das Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz ist Anlaufstelle im Sinne des Artikels 19 Abs. 1 Satz 1 des Protokolls von Cartagena über die biologische Sicherheit zum Übereinkommen über die biologische Vielfalt und des Artikels 17 Abs. 2 der Verordnung (EG) Nr. 1946/2003.

§ 3 Beteiligung anderer Behörden des Bundes

(1) Stellungnahmen nach § 1 Abs. 1 Nr. 2 ergehen im Benehmen mit dem Robert Koch-Institut und dem Bundesinstitut für Risikobewertung.

(2) Stellungnahmen nach § 1 Abs. 1 Nr. 3 und 4 ergehen im Benehmen mit dem Bundesamt für Naturschutz und dem Robert Koch-Institut. Vor der Abgabe einer Stellungnahme nach Satz 1 ist eine Stellungnahme des Bundesinstituts für Risikobewertung, des Julius Kühn-Instituts, Bundesforschungsinstitut für Kulturpflanzen, und, soweit gentechnisch veränderte Wirbeltiere oder gentechnisch veränderte Mikroorganismen, die an Wirbeltieren angewendet werden, betroffen sind, des Friedrich-Loeffler-Instituts, Bundesforschungsinstitut für Tiergesundheit, einzuholen.

§ 3a Voraussetzungen für die Kennzeichnung ohne Anwendung gentechnischer Verfahren hergestellter Lebensmittel

(1) Ein Lebensmittel darf mit einer Angabe, die auf die Herstellung des Lebensmittels ohne Anwendung gentechnischer Verfahren hindeutet, nur in den Verkehr gebracht oder beworben werden, soweit die Anforderungen der Absätze 2 bis 5 eingehalten worden sind. Es darf nur die Angabe „ohne Gentechnik' verwendet werden.

(2) Es dürfen keine Lebensmittel und Lebensmittelzutaten verwendet werden, die nach
1. Artikel 12 und 13 der Verordnung (EG) Nr. 1829/2003 oder

2. Artikel 4 oder 5 der Verordnung (EG) Nr. 1830/2003 gekennzeichnet sind oder, soweit sie in den Verkehr gebracht würden, zu kennzeichnen wären.

(3) Es dürfen keine Lebensmittel und Lebensmittelzutaten verwendet werden, die in den Anwendungsbereich der Verordnung (EG) Nr. 1829/2003 fallen, aber nach Artikel 12 Abs. 2 der Verordnung (EG) Nr. 1829/2003 oder Artikel 4 Abs. 7 oder 8 oder Artikel 5 Abs. 4 der Verordnung (EG) Nr. 1830/2003 von den Kennzeichnungsvorschriften ausgenommen sind.
(4) Im Falle eines Lebensmittels oder einer Lebensmittelzutat tierischer Herkunft darf dem Tier, von dem das Lebensmittel gewonnen worden ist, kein Futtermittel verabreicht worden sein, das nach
1. Artikel 24 und 25 der Verordnung (EG) Nr. 1829/2003 oder
2. Artikel 4 oder 5 der Verordnung (EG) Nr. 1830/2003 gekennzeichnet ist oder, soweit es in den Verkehr gebracht würde, zu kennzeichnen wäre. Für den Zeitraum vor Gewinnung des Lebensmittels, innerhalb dessen eine Verfütterung von genetisch veränderten Futtermitteln unzulässig ist, gelten für die in der Anlage genannten Tierarten die dort geregelten Anforderungen.

(5) Zum Zubereiten, Bearbeiten, Verarbeiten oder Mischen eines Lebensmittels oder einer Lebensmittelzutat dürfen keine durch einen genetisch veränderten Organismus hergestellten Lebensmittel, Lebensmittelzutaten, Verarbeitungshilfsstoffe sowie Stoffe im Sinne des § 5 Abs. 2 der Lebensmittel-Kennzeichnungsverordnung in der Fassung der Bekanntmachung vom 15. Dezember 1999 (BGBl. I S. 2464), die zuletzt durch Artikel 1 der Verordnung vom 18. Dezember 2007 (BGBl. I S. 3011) geändert worden ist, verwendet worden sein. Satz 1 gilt nicht für Lebensmittel, Lebensmittelzutaten, Verarbeitungshilfsstoffe sowie Stoffe im Sinne des § 5 Abs. 2 der Lebensmittel-Kennzeichnungsverordnung, für die auf Grund einer Entscheidung oder eines Beschlusses der Europäischen Kommission nach Artikel 22 Abs. 2 Buchstabe g in Verbindung mit Artikel 37 Abs. 2 der Verordnung (EG) Nr. 834/2007 des Rates vom 28. Juni 2007 über die ökologische/biologische Produktion und die Kennzeichnung von ökologischen/biologischen Erzeugnissen und zur Aufhebung der Verordnung (EWG) Nr. 2092/91 (ABl. EU Nr. L 189 S. 1) eine Ausnahme zugelassen ist.

(6) Für die Begriffe
1. *‘durch einen genetisch veränderten Organismus hergestellt’* gilt die Begriffsbestimmung in Artikel 2 Buchstabe v der Verordnung (EG) Nr. 834/2007 und

2. *‘Verarbeitungshilfsstoff’* gilt die Begriffsbestimmung in Artikel 2 Buchstabe y der Verordnung (EG) Nr. 834/2007.

§ 3b Nachweise für die Kennzeichnung ohne Anwendung gentechnischer Verfahren hergestellter Lebensmittel

Derjenige, der Lebensmittel mit der Angabe nach § 3a Abs. 1 in den Verkehr bringt oder bewirbt, hat nach Maßgabe des Satzes 2 über das Zubereiten, Bearbeiten, Verarbeiten oder Mischen der Lebensmittel oder das Füttern der Tiere Nachweise zu führen, dass die für das Verwenden der Angabe vorgeschriebenen Anforderungen eingehalten worden sind. Geeignete Nachweise sind insbesondere

1. verbindliche Erklärungen des Vorlieferanten, dass die Voraussetzungen für die Kennzeichnung erfüllt sind,
2. in den Fällen des § 3a Abs. 2 und 4 Etiketten oder Begleitdokumente der verwendeten Ausgangserzeugnisse oder
3. im Fall des § 3a Abs. 3 Analyseberichte oder eine Dokumentation, aus der mit hinreichender Sicherheit hervorgeht, dass die Voraussetzung für die Kennzeichnung erfüllt ist.

Die Kennzeichnung eines Lebensmittels mit einer Angabe im Sinne des § 3a Abs. 1 ist unzulässig, soweit die Nachweise nach Satz 1 nicht geführt werden können.

§ 4 Überwachung

(1) Soweit in diesem Gesetz nichts anderes bestimmt ist, obliegt die Überwachung der Einhaltung der

1. Verordnung (EG) Nr. 1829/2003,

2. Verordnung (EG) Nr. 1830/2003 des Europäischen Parlaments und des Rates vom 22. September 2003 über die Rückverfolgbarkeit und Kennzeichnung von genetisch veränderten Organismen und über die Rückverfolgbarkeit von aus genetisch veränderten Organismen hergestellten Lebensmitteln und Futtermitteln sowie zur Änderung der Richtlinie 2001/18/EG (ABl. EU Nr. L 268 S. 24),
3. Verordnung (EG) Nr. 1946/2003 der nach Landesrecht zuständigen Behörde.

(2) Die nach Landesrecht zuständige Behörde kann bis zum Erlass einer Entscheidung oder eines Beschlusses der Europäischen Gemeinschaften oder der Europäischen Union oder bis zum Erlass einer Anordnung der zuständigen Bundesbehörde nach § 1 Abs. 2 unter den Voraussetzungen des Artikels 34 der Verordnung (EG) Nr. 1829/2003 in Verbindung mit Artikel 54 der Verordnung (EG) Nr. 178/2002 vorläufige Schutzmaßnahmen im Sinne des Artikels 54 Abs. 1 Satz 1 der Verordnung (EG) Nr. 178/2002 treffen. Sie kann insbesondere das Inverkehrbringen eines genetisch veränderten Lebensmittels oder Futtermittels oder eines zur Verwendung als oder in Lebensmitteln oder Futtermitteln bestimmten genetisch veränderten Organismus vorläufig ganz oder teilweise untersagen.

(3) Im Übrigen gelten für die Überwachung von
1. in
a) Artikel 3 der Verordnung (EG) Nr. 1829/2003 genannten Lebensmitteln,
b) Artikel 15 der Verordnung (EG) Nr. 1829/2003 genannten Futtermitteln und
c) Lebensmitteln, die mit einer Angabe im Sinne des § 3a Abs. 1 in den Verkehr gebracht oder beworben werden, § 38, § 39 Abs. 1, 2 und 7, § 40 sowie die §§ 42 bis 44 des Lebensmittel- und Futtermittelgesetzbuches,

2. anderen als den in Nummer 1 bezeichneten gentechnisch veränderten Organismen die §§ 25, 26 und 28a des Gentechnikgesetzes entsprechend.

§ 5 Mitwirkung von Zollstellen

Im Falle der Einfuhr, der Ausfuhr oder der Durchfuhr von Erzeugnissen, die in den Anwendungsbereich der in § 4 Abs. 1 genannten Rechtsakte fallen, wirken das Bundesministerium der Finanzen und die von ihm bestimmten Zolldienststellen bei der Überwachung in entsprechender Anwendung des § 55 des Lebensmittelund Futtermittelgesetzbuches mit.

§ 5a Erlass von Rechtsverordnungen

(1) Das Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz wird ermächtigt, im Einvernehmen mit dem Bundesministerium für Wirtschaft und Technologie durch Rechtsverordnung mit Zustimmung des Bundesrates, soweit es zur Durchführung der Verordnung (EG) Nr. 1829/2003, insbesondere zur Überwachung der Verbote des Artikels 4 Abs. 2 und des Artikels 16 Abs. 2 der Verordnung (EG) Nr. 1829/2003, erforderlich ist,
1. das Inverkehrbringen von bestimmten Lebensmitteln oder Futtermitteln oder
2. das Verbringen von bestimmten Lebensmitteln oder Futtermitteln in das Inland oder die Europäische Union, in eine Freizone, in ein Freilager oder in ein Zolllager auf Dauer oder vorübergehend zu verbieten oder zu beschränken sowie die hierfür erforderlichen Maßnahmen vorzuschreiben.

(2) Rechtsverordnungen nach Absatz 1 können bei Gefahr im Verzuge oder, wenn ihr unverzügliches Inkrafttreten zur Durchführung von Rechtsakten der Europäischen Gemeinschaft oder der Europäischen Union erforderlich ist, ohne Zustimmung des Bundesrates erlassen werden. Rechtsverordnungen nach Satz 1 bedürfen nicht des Einvernehmens mit dem Bundesministerium für Wirtschaft und Technologie. Die Rechtsverordnungen treten spätestens sechs Monate nach ihrem Inkrafttreten außer Kraft. Ihre Geltungsdauer kann nur mit Zustimmung des Bundesrates verlängert werden.

(3) § 73 des Lebensmittel- und Futtermittelgesetzbuches gilt entsprechend.

§ 6 Strafvorschriften

(1) Mit Freiheitsstrafe bis zu drei Jahren oder mit Geldstrafe wird bestraft, wer gegen die Verordnung (EG) Nr. 1829/2003 verstößt, indem er
1. entgegen Artikel 4 Abs. 2 einen dort genannten genetisch veränderten Organismus oder ein dort genanntes Lebensmittel in den Verkehr bringt oder
2. entgegen Artikel 16 Abs. 2 ein dort genanntes Erzeugnis in den Verkehr bringt, verwendet oder verarbeitet.

(2) Mit Freiheitsstrafe bis zu drei Jahren oder mit Geldstrafe wird bestraft, wer gegen die Verordnung (EG) Nr. 1946/2003 verstößt, indem er
1. ohne Zustimmung nach Artikel 5 Abs. 1 Satz 2 einen genetisch veränderten Organismus grenzüberschreitend verbringt oder
2. entgegen Artikel 10 Abs. 3 Satz 2 einen genetisch veränderten Organismus ausführt.

(3) Mit Freiheitsstrafe von drei Monaten bis zu fünf Jahren wird bestraft, wer durch eine
1. in Absatz 1 oder Absatz 2 Nr. 2 oder
2. in Absatz 2 Nr. 1 bezeichnete Handlung Leib oder Leben eines anderen, fremde Sachen von bedeutendem Wert oder Bestandteile des Naturhaushalts von erheblicher ökologischer Bedeutung gefährdet.

(3a) Mit Freiheitsstrafe bis zu einem Jahr oder mit Geldstrafe wird bestraft, wer entgegen § 3a Abs. 1 Satz 1 ein Lebensmittel in den Verkehr bringt oder für ein Lebensmittel wirbt.

(4) In den Fällen der Absätze 1 bis 3 ist der Versuch strafbar.

(5) Wer in den Fällen des Absatzes 1 oder des Absatzes 2 Nr. 2 fahrlässig handelt, wird mit Freiheitsstrafe bis zu einem Jahr oder mit Geldstrafe bestraft.

(6) Wer in den Fällen des Absatzes 3 die Gefahr fahrlässig verursacht, wird mit Freiheitsstrafe bis zu fünf Jahren oder mit Geldstrafe bestraft.

(7) Wer in den Fällen des Absatzes 3 Nr. 1 fahrlässig handelt und die Gefahr fahrlässig verursacht, wird mit Freiheitsstrafe bis zu drei Jahren oder mit Geldstrafe bestraft.

(8) Das Gericht kann die Strafe nach seinem Ermessen mildern (§ 49 Abs. 2 des Strafgesetzbuches) oder von Strafe absehen, wenn der Täter nicht zu erwerbswirtschaftlichen Zwecken handelt.

§ 7 Bußgeldvorschriften

(1) Ordnungswidrig handelt, wer eine der in § 6 Abs. 3a bezeichneten Handlungen fahrlässig begeht.

(2) Ordnungswidrig handelt, wer gegen die Verordnung (EG) Nr. 1829/2003 verstößt, indem er vorsätzlich oder fahrlässig

1. entgegen Artikel 8 Abs. 1 Buchstabe a oder b, jeweils in Verbindung mit Abs. 2 Satz 1, oder Artikel 20 Abs. 1 Buchstabe a oder b, jeweils in Verbindung mit Abs. 2 Satz 1, für ein dort genanntes Erzeugnis die erforderliche Meldung nicht, nicht richtig, nicht vollständig oder nicht rechtzeitig macht,
2. entgegen Artikel 9 Abs. 1 Satz 2 oder Artikel 21 Abs. 1 Satz 2 nicht sicherstellt, dass eine Beobachtung durchgeführt wird, oder einen Bericht nicht, nicht richtig oder nicht rechtzeitig vorlegt,
3. entgegen Artikel 9 Abs. 3 Satz 1 oder Artikel 21 Abs. 3 Satz 1 eine dort genannte Information nicht, nicht richtig, nicht vollständig oder nicht rechtzeitig übermittelt,
4. ein in Artikel 12 Abs. 1 genanntes Lebensmittel, bei dem eine Kennzeichnungsanforderung nach Artikel 13 Abs. 1 oder Abs. 2 Buchstabe a nicht erfüllt ist, in Verkehr bringt oder
5. entgegen Artikel 25 Abs. 2 Satz 1 in Verbindung mit Satz 2 Buchstabe a, b oder c ein dort genanntes Futtermittel in Verkehr bringt.

(3) Ordnungswidrig handelt, wer gegen die Verordnung (EG) Nr. 1830/2003 verstößt, indem er vorsätzlich oder fahrlässig

1. entgegen Artikel 4 Abs. 1 oder Abs. 2 oder Artikel 5 Abs. 1 nicht gewährleistet, dass dem Beteiligten, der das Produkt bezieht, die dort genannten Angaben übermittelt werden,
2. entgegen Artikel 4 Abs. 4 oder Artikel 5 Abs. 2 nicht über ein dort genanntes System oder Verfahren verfügt oder
3. entgegen Artikel 4 Abs. 6 Satz 1 nicht sicherstellt, dass eine dort genannte Angabe auf dem Etikett, dem Behältnis oder im Zusammenhang mit der Darbietung des Produkts erscheint.

(4) Ordnungswidrig handelt, wer gegen die Verordnung (EG) Nr. 1946/2003 verstößt, indem er vorsätzlich oder fahrlässig

1. entgegen Artikel 6 Satz 1 eine dort genannte Unterlage nicht oder nicht mindestens fünf Jahre aufbewahrt oder eine Kopie der dort genannten Unterlagen nicht oder nicht unverzüglich nach Eingang der Entscheidung des Einfuhrstaats dem Bundesamt für Verbraucherschutz und Lebensmittelsicherheit oder der Europäischen Kommission übermittelt oder
2. entgegen Artikel 12 Abs. 1 in Verbindung mit Abs. 2 Satz 1, Abs. 3 oder Abs. 4 nicht sicherstellt, dass die dort genannten Informationen und Erklärungen in den Begleitpapieren enthalten sind und dem Importeur übermittelt werden.

(5) Ordnungswidrig handelt, wer einer Rechtsverordnung nach § 5a Abs. 1 oder einer vollziehbaren Anordnung auf Grund einer solchen Rechtsverordnung zuwiderhandelt, soweit die Rechtsverordnung für einen bestimmten Tatbestand auf diese Bußgeldvorschrift verweist.

(6) Ordnungswidrig handelt, wer vorsätzlich oder fahrlässig

1. entgegen § 3a Abs. 1 Satz 2 eine Angabe verwendet,
2. entgegen § 3b Satz 1 einen dort genannten Nachweis nicht, nicht richtig oder nicht vollständig führt oder
3. entgegen § 3b Satz 3 ein Lebensmittel kennzeichnet.

(7) Die Ordnungswidrigkeit kann in den Fällen der Absätze 1 und 6 Nr. 2 und 3 mit einer Geldbuße bis zu zwanzigtausend Euro, in den übrigen Fällen mit einer Geldbuße bis zu fünfzigtausend Euro geahndet werden.

Anlage (zu § 3a Abs. 4 Satz 2)
Zeitraum vor Gewinnung des Lebensmittels, innerhalb dessen eine Verfütterung von genetisch veränderten Futtermitteln unzulässig ist

Fundstelle des Originaltextes: BGBl. I 2008, 506 lfd. Nr. Tierart Zeitraum
1 bei Equiden und Rindern (einschließlich Bubalus und Bison-Arten) für die Fleischerzeugung zwölf Monate und auf jeden Fall mindestens drei Viertel ihres Lebens
2 bei kleinen Wiederkäuern sechs Monate
3 bei Schweinen vier Monate
4 bei milchproduzierenden Tieren drei Monate
5 bei Geflügel für die Fleischerzeugung, das eingestallt wurde, bevor es drei Tage alt war zehn Wochen

6 bei Geflügel für die Eierzeugung sechs Wochen.

A8.4 The Netherlands

Staatsblad van het Koninkrijk der Nederlanden, Jaargang 1999

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Besluit van 29 oktober 1999, houdende wijziging van het Warenwetbesluit Nieuwe voedingsmiddelen

Wij Beatrix, bij de gratie Gods, Koningin der Nederlanden, Prinses van Oranje-Nassau, enz. enz. enz.

Op de voordracht van Onze Minister van Volksgezondheid, Welzijn en Sport van 23 juli 1999, nr. GZB/VVB/993224, gedaan in overeenstemming met Onze Minister van Economische Zaken en de Staatssecretaris van Landbouw, Natuurbeheer en Visserij;
Gelet op artikel 8, onder c, van de Warenwet;
De Raad van State gehoord (advies van 16 augustus 1999, no. W13.990421/III);
Gezien het nader rapport van Onze Minister van Volksgezondheid, Welzijn en Sport van 25 oktober 1999 met nummer GZB/VVB/2005806, uitgebracht in overeenstemming met Onze Minister van Economische Zaken en de Staatssecretaris van Landbouw, Natuurbeheer en Visserij;

Hebben goedgevonden en verstaan:

ARTIKEL I

Het Warenwetbesluit Nieuwe voedingsmiddelen1 wordt als volgt gewijzigd:

A

Aan artikel 2 wordt een lid toegevoegd, luidende:

3. Het is verboden eet- of drinkwaren te verhandelen anders dan met inachtneming van de bij dit besluit gestelde voorschriften met betrekking tot het bezigen van vermeldingen of voorstellingen betreffende de samenstelling van de waar en de wijze waarop de waar is bereid of behandeld.

B
Na artikel 3 wordt een artikel ingevoegd, luidende:

Artikel 3a
1. De vermelding bereid zonder gentechniek wordt uitsluitend gebezigd voor eet- of drinkwaren die:
a. niet bestaan uit of zijn afgeleid van genetisch gemodificeerde organismen;
b. niet bereid zijn met behulp van stoffen die:
– bestaan uit of zijn afgeleid van genetisch gemodificeerde organismen; of
– zijn geproduceerd met gebruikmaking van technische proces- hulpstoffen die zijn verkregen uit genetisch gemodificeerde organisme; en
c. niet afkomstig zijn van dieren die: gevoederd zijn met genetisch gemodificeerd diervoeder of met diervoeder dat genetisch gemodificeerde additieven bevat; of medicijnen toegediend hebben gekregen die zijn geproduceerd met behulp van moderne biotechnologie, tenzij vergelijkbare medicijnen met een zelfde werking niet beschikbaar zijn; en die geen sporen van genetisch gemodificeerd desoxyribonucleïnezuur (DNA) bevatten tenzij dat onbedoeld en onvermijdelijk is.
2. De verhandelaar van een in het eerste lid bedoelde eet- of drinkwaar beschikt over documenten waaruit blijkt dat die waar voldoet aan het eerste lid, en stelt die documenten desgevraagd ter beschikking van de ambtenaren die belast zijn met het toezicht op de naleving van de bij of krachtens de Warenwet gestelde voorschriften.
3. Onverminderd het eerste lid worden bij eet- of drinkwaren geen vermeldingen gebezigd waaruit blijkt dat de desbetreffende waar:
a. bereid is zonder gentechniek; of
b. geen voedingsmiddel of voedselingrediënt is zoals bedoeld in artikel 1, tweede lid, onder a tot en met c, van verordening (EG) 258/97.

ARTIKEL II

Dit besluit treedt in werking met ingang van de dag na de datum van uitgifte van het Staatsblad waarin het geplaatst wordt.
Lasten en bevelen dat dit besluit met de daarbij behorende nota van toelichting in het Staatsblad zal worden geplaatst.

's-Gravenhage, 29 oktober 1999

Beatrix

De Minister van Volksgezondheid, Welzijn en Sport,
E. Borst-Eilers

Uitgegeven de tweede december 1999
De Minister van Justitie,
A. H. Korthals

1 Stb. 1997, 205, gewijzigd bij besluit van 5 juli 1999, Stb. 327.

Het advies van de Raad van State is openbaar gemaakt door terinzagelegging bij het Ministerie van Volksgezondheid, Welzijn en Sport. Tevens zal het advies met de daarbij ter inzage gelegde stukken worden opgenomen in het bijvoegsel bij de Staatscourant van 11 januari 2000, nr. 7.
STB5288 ISSN 0920 - 2064 Sdu Uitgevers 's-Gravenhage 1999

A8.5 Sweden

Table A8.1 Relevant parts of the national legislation and official guidance documents

Legislation/ Guidance	Original text
LIVSFS 2004:27	**5.3.1.7 Fritt från.., utan ...** När det gäller påståenden på livsmedel för särskilda näringsändamål, som t.ex. laktosfri och glutenfri, se särskilda föreskrifter, bilagan. De ingredienser som har använts vid tillverkningen av ett livsmedel ska enligt huvudregeln alltid deklareras. Det finns i allmänhet inget skäl att dessutom tala om vad som inte ingår. Förutom för livsmedel för särskilda näringsändamål, se ovan, gäller att uttryck av typen 'fri från…' och 'utan…' bör användas med stor försiktighet. I de fall de används bör de kunna motiveras sakligt. De måste också vara korrekta. Det är vilseledande att påstå att ett livsmedel är 'fritt från ...' eller 'utan ...' om alla liknande livsmedel har sådana egenskaper. Det innebär, att uttrycken inte får användas för ett ämne som normalt inte finns i en viss typ av livsmedel, inte heller om användningen av en tillsats inte är tillåten eller för att ange avsaknad av kontaminanter. *Exempel på vilseledande 'fri från'-märkning:* *1. 'Utan färgämne' på saft, eftersom saft (enligt tillsatsföreskrifterna) inte får tillföras färgämne(n).* *2. 'Kolesterolfri' på vegetabilisk olja, eftersom ingen vegetabilisk olja innehåller kolesterol.* *3. 'GMO-fri' matolja, eftersom livsmedel med medveten inblandning av GMO ska märkas med uppgift om detta (enligt GMO-förordningen).*

Vägledning Genetiskt modifierade livsmedel (GMO)[59]

4.4.2.1 Kontroll av dokumentation

När godkända GMO används

GMO får finnas i livsmedel, förutsatt att den är godkänd för saluhållande inom EU och att livsmedlet är korrekt märkt (märkningskraven – se avsnitt 4.3). Information om GMO ska finnas ett led bakåt och ett led framåt i livsmedelskedjan. Informa-tionen om GMO ska sparas i fem år. Därutöver ställs inga andra krav på företagen som rör användningen av GMO.

Vid undvikande av GMO

Vid kontakter med företag har det visat sig att många väljer att försöka undvika pro-dukter som måste GMO-märkas. Oftast har företaget en GMO-policy, som säger att det inte säljer produkter framställda av GMO. Företaget har då tagit på sig att i sitt egenkontrollprogram visa att man har rutiner för att undvika GMO i sina produkter. Av förordningen framgår att företaget måste kunna bevisa för kontrollmyndigheten att det vidtagit lämpliga åtgärder för att undvika förekomsten av GMO, dvs. att in-blandningen är oavsiktlig eller teknisk oundviklig (artikel 12.3 i förordning (EG) nr 1829/2003). Vilken dokumentation som anses vara tillräcklig och visar att företaget har vidtagit '***lämpliga åtgärder***' (artikel 12.3) kan skilja sig mellan olika företag och måste avgöras från fall till fall. Det är den behöriga kontrollmyndigheten som gör bedöm-ningen om dokumentationskravet är uppfyllt i det enskilda företaget.
Då GMO inte används i ett företags produkter bör följande kontrollpunkter ingå i egenkontrollen.

1. Företaget måste känna till vilka råvaror som kan innehålla GMO

Det kan vara svårt att se direkt på produkten om den härstammar från t.ex. majs eller soja. Vissa produkter, t.ex. modifierad stärkelse och fruktos, kan framställas både av GMO och av produkter som inte är GMO (se även bilaga 1 och 2). Egenkontrollen ska säkerställa att uppgifterna är riktiga.
Exempel:
Modifierad stärkelse (GMO kan ej påvisas genom analys) kan framställas av bl.a. potatis, vete, ris eller majs. Förekomst av GMO kan då bara visas genom dokumen-tation.

2. Inhämtning av relevant dokumentation

Det förekommer flera olika typer av dokument, som kan verifiera att företaget inte använder GMO, t.ex.
• leverantörsförbindelse
• certifikat och råvaruspecifikation
• analysresultat från leverantör eller egen provtagning

Leverantörsförbindelse

Det vanligaste är att företag skickar ut en ansvarsförbindelse, som innehåller en försäkran om 'fri från GMO', till sina leverantörer enligt följande exempel.
Exempel:
En kravspecifikation (t.ex. ansvarsförbindelse) skickas till råvaruleverantören med uppgifter om att företaget X endast önskar produkter som inte innehåller eller har framställts av GMO. Specifikationen skickas tillbaka till företaget underskriven av leverantören för att visa att denne har läst och accepterat villkoren.

Certifikat och råvaruspecifikation

En annan typ av försäkran som förekommer, är att leverantören skickar med ett certi-

[59] http://www.slv.se/upload/dokument/livsmedelsforetag/vagledningar/V%C3%A4gledning%20GMO.pdf

fikat eller information om GMO i råvaruspecifikationen. Vid inspektion har följande texter påträffats.
• 'Vi garanterar att produkten inte innehåller, består av eller är framtagen från GMO.'
• 'Produkten kan innehålla GMO under 0,9 %.'
• 'Fri från GMO'

Den första certifikattexten kan endast vara giltig om man följer upp på vilket sätt företaget garanterar att produkten inte innehåller GMO. De andra två texterna är inte tillåtna eftersom de uppfattas som vilseledande. Ett skäl är att 'fri från GMO'-märk-ing ger intryck av att andra liknande livsmedel (utan märkning) skulle kunna vara eller innehålla GMO. Lagstiftningen är mycket tydlig på att det är GMO eller ingre-dienser från GMO som ska märkas. Om 'fri från GMO-'-märkning var tillåten skulle det medföra att de flesta produkter skulle behöva märkas, något som inte främjar konsumenternas fria val.

Analysresultat från leverantör eller egen provtagning

En leverantörsförbindelse eller certifikat är dock inte tillräcklig i sig. Leverantören måste kunna svara på frågan på vilket sätt de undviker GMO och hur de verifierar detta. Det enklaste för företagen är att uppvisa analysresultat från leverantören eller att företaget tar ut egna stickprov för analys. Detta gäller särskilt för riskprodukter, t.ex. soja, majs, raps och ris.

4.4 Kontroll av genetiskt modifierade livsmedel

4.4.1 Vem ansvarar för kontroll av genetiskt modifierade livsmedel?

Det är företagets ansvar att se till att gällande regelverk följs. Att reglerna för GMO i livsmedel följs kontrolleras precis som andra regler på livsmedelsområdet. Kontroll-ansvaret för GMO-förordningarna är på central nivå delat mellan Livsmedelsverket (livsmedel) och Jordbruksverket (foder).

Den offentliga kontrollen av livsmedel ligger på den myndighet som enligt livsme-delsförordningen har ansvaret för kontrollen i den anläggning där de genetiskt modi-fierade livsmedlen handhas, vilket är Livsmedelsverket eller den kommunala nämnden. Som stöd för kommunerna har Livsmedelsverket tagit fram en hjälpreda för GMO-inspektioner som finns att läsa på verkets hemsida och på livsteck.net.

4.4.2 Offentlig kontroll av genetiskt modifierade livsmedel

Hittills har inte så många kommuner prioriterat kontroll inom området GMO i livs-medel. Orsaken till detta är att godkända GMO inte utgör någon risk för människors hälsa och att märkning av GMO är en redlighetsfråga. Hur mycket resurser detta område bör ta i anspråk kan också bero på vilka företag som finns i kommunen.

Vid planering av offentlig kontroll kan det därför vara bra att som första steg inven-tera vilka verksamheter som finns inom kommunens gränser och som kan tänkas handha GMO. Om företaget hanterar majs, soja, raps eller ris (som är de GMO som det i praktiken är mest troligt att man stöter på) eller produkter som härrör från dessa (t.ex. lecitin, olja, majsstärkelse, sojamjöl, glukossirap) är rekommendationen att se över företagets rutiner för GMO. En sammanställning över produkter som kan framställas av majs respektive soja finns i bilaga 1 och 2. På Livsmedelsverkets webbplats finns en länk till kommissionens lista över de GMO, som är godkända inom EU.

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