

FoEE Biotech Mailout

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BELGIUM JOINS THE MORATORIUM Concerns focus on the environment and consumers, says Minister

Commission initiative falls at the first fence

Despite renewed efforts and pressure by the European Commission (*see Mailout Volume 7, Issue 5, 1.10.2001*), the Member States which support the GMO moratorium have remained firm in their opposition to re-starting the GMO authorisation procedure. The meeting organised by the Commission with technical experts from the Member States on 16th October to discuss the re-launch of the 'voluntary agreements' initiative was, according to some accounts, rather a waste of time. Several Member States indicated that they were sticking to the declarations they made in February 2001 when the revised deliberate release directive (2001/18/EC) was adopted by the European Parliament, i.e. they maintain their opposition to any further approvals until traceability and labelling of GMOs is in place. A number of Member States apparently considered as "premature" the Commission's proposal to re-start approvals based on voluntary agreements with the biotech industry. This is a view shared by many since the European Parliament has not even started to debate the Commission's proposals for future Regulations on Traceability/Labelling of GMOs and GM Food/Feed. Of the 15 EU countries, only the Netherlands, Spain and the United Kingdom are reported to have indicated any support for the Commission's initiative.

Some days later, at the 29th October EU Environment Council in Luxembourg, Ministers gave generally positive reactions to the Commission's Proposals for future Regulations on Traceability/Labelling and GM Food/Feed (*see separate article in this Mailout*). At the same time, however, the six moratorium countries* indicated that there was no change in their position to maintain a freeze on GMO approvals until further legislation is in place. According to some reports, two other Member States, Belgium and Germany, which have Green environment and/or consumer affairs/public health ministers (Magda Aelvoet and Renate Künast respectively) were also leaning in the same direction.

Belgium clarifies its position

Subsequently, at the beginning of December, Belgian Minister Aelvoet issued a press release clarifying her government's position and confirming that Belgium does, indeed, now support the moratorium. The English version of the press release (available on the web site www.eu2001.be) reads as follows:

Minister Aelvoet is satisfied with the Belgian position on the moratorium on GMO's

First firm regulation, only then can the moratorium be lifted

Since 1998 there has been a de facto moratorium on the use of genetically modified organisms (GMOs) in the European Union. Accordingly, all this time no new marketing of GMOs has been authorised. The moratorium is actively supported by France, Denmark, Greece, Austria and Luxembourg which together have enough votes to block any requests for fresh authorizations. For the first time, Belgium has clearly indicated that there can be no question of lifting the moratorium until there are clear regulations regarding traceability and labelling.

In recent months, the European Commission has vigorously defended the idea of lifting the moratorium. Each year the moratorium costs the US biotech industry a great deal of money and the United States is now threatening to have sanctions imposed by the World Trade Organisation.

No unconditional lifting of the moratorium

In response to the Commission's initiatives, Belgium has decided that two conditions will have to be met before any move can be made to lift the moratorium:

- The Belgian government must undertake to transpose EU directive 2001/18/EC (1) into its national legislation;
- regulations concerning traceability (2) and labelling (3) will have to be formally approved.

The government will discuss the issue once again in October 2002.

Positive sign

Minister Aelvoet sees this as a positive sign: "Belgium is focussing its concerns on the environment and consumers".

The directive will effectively provide for a stricter and more detailed assessment of the risks involved. The regulations will ensure that consumers in supermarkets can use products' labels to check whether they contain GMOs and then, on the basis of what they find, make a free and enlightened choice. What the minister actually said was this: "In fact it is only logical to first provide a good, coherent legislative framework and then take other measures. So we are very happy that Belgium is sending out such a clear signal to the Commission".

The minister stressed that it would be intellectually dishonest to deny that biotechnology has any potential. If we really intend to benefit from it, we must have such a framework as well as stringent checks on its application and we must bolster the research financed by the public which offers a social value added.

(1) This directive governs the deliberate release into the environment of genetically modified organisms. It was adopted in March 2001 and has to be transposed into national legislation before October 2002.

(2) Proposal for a Regulation of the European Parliament and of the Council concerning traceability and labelling of genetically modified organisms and traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC (COM(2001)182).

(3) Proposal for a Regulation of the European Parliament and of the Council on genetically modified food and feed (COM (2001)425)

"For the first time, Belgium has clearly indicated that there can be no question of lifting the moratorium until there are clear regulations regarding traceability and labelling".

Developments in other Member States

Since the elections earlier this year, Italy has not withdrawn its support for the moratorium despite some predictions that the new administration could lead to a change in the government's position. Public opposition to GMOs in food and agriculture has, however, certainly not softened which is probably instrumental in Italy maintaining the status quo concerning the moratorium.

In Denmark, elections in November have resulted in a complete change in the political situation. The new government consists of the Liberal Party and the Conservatives, a minority government supported by the very right-wing Danish People Party. The new Environment Minister is Hans Christian Schmidt (Lib), - replacing Svend Auken - and the new Agriculture/Food Minister is expected to be Mariann Fischer Boel (Lib) - replacing Ritt Bjerregaard (the former EU Environment Commissioner). While it is anticipated that the new government will take a less radical stance against GMO approvals, recent indications are that Denmark will not leave the moratorium. The government's demands, however, are expected to be severely weakened: no demand for labelling of products from animals fed with GM-feed, and acceptance of the European Commission's proposal to tolerate up to 1% "adventitious" contamination by unauthorised and unlabelled GMOs. It is also likely that Denmark will give up its demands under the previous administration for liability of GMO producers.

How it all adds up

The six moratorium countries* are often referred to in the press as having a 'blocking minority' in the Council (as they also do in the Regu-

David Byrne is on record as saying that he would "never go against the will of the Member States" on a political issue.

latory Committee) which enables them to prevent a 'qualified majority' vote in favour of a GMO approval. This is because there are a total of 87 votes between the Member States and 62 are required for a qualified majority. Between them, France (10), Italy (10), Greece (5), Austria (4), Denmark (3) and Luxembourg (2) have 34 votes, which makes it impossible for the others to achieve a qualified majority. Even if Denmark were to 'wobble' in the future and leave the moratorium, Belgium has 5 votes which actually makes the blocking minority even stronger than before.

Under the old Deliberate Release Directive 90/220/EEC, which remains in force until 17th October 2002, the Commission could, of course, override the Member States as it did in the case of the authorisation of Novartis Bt 176 maize. But that is political dynamite which the Commission knows very well will put it in a most unfavourable light and will incur the fury of EU governments, the European Parliament as well as EU citizens. Despite pressure from foreign governments and the biotech industry, it would therefore be very unwise for the Commission to go down that route, a fact recognised by Consumer Affairs Commissioner David Byrne who is on record as saying that he would "never go against the will of the Member States" on a political issue.

(* Austria, Denmark, France, Greece, Italy and Luxembourg.)

STATUS OF THE GM FOOD AND TRACEABILITY DEBATE

The Council and its Working Parties have started work on the Commission's proposal for an EU Regulation on Traceability/Labeling of GMOs and will present a document which shows at least some agreement between some Member States to EU Environment Ministers when they meet in Council on 12th December. On the other hand, the Internal Market Council, which is responsible for the Commission's proposed Regulation on GM Food/Feed has not yet really started working on the proposal. A first meeting of the so-called "friends of the Presidency" is scheduled for 4th December.

At its last meeting on 29th October, the EU Environment Council held an open debate on the Traceability proposal. The debate provided some guidance on the major questions of the proposal, notably in relation to the scope of the future Regulation, the establishment and transmission of the "unique identifiers", and the "adventitious" presence of GMOs.

In a note submitted by the Belgian Presidency to the other Member States, careful optimism is expressed with regard to the Traceability proposal. The document talks about the hope "that the work carried out will usefully contribute to the aim of setting up a traceability system at Community level by 17th October 2002 when Directive 2001/18/EC on the deliberate release into the environment of genetically modified organisms will enter into force". However, some observers in Brussels believe that it is highly unlikely that the proposal can be adopted and effectively implemented within the next ten months.

At this stage of the deliberations, it appears that substantial progress has been reached on the objectives of the Traceability proposal, some of the definitions (except for the crucial definition of "placing on the market"), on unique identifiers, and on inspection and control measures.

Scope: animal products?

No consensus has been reached so far by the Member States with regard to the scope of the Proposal which, according to the Commission, does not cover food products of animal origin produced from animals fed with genetically modified feed or feed derived therefrom. While most Member States seem to agree with the scope proposed by the Commission, Denmark and Luxembourg wanted the scope be extended to food products originating from animals fed with GMO-feed. Following recent legislative elections in Denmark, however, and the installation of a new administration consisting of right-wing Conservatives and the Liberal Party, the new Danish government's position will differ to that of the previous one (*see previous article in this Mailout*).

While other Member States want to see the issue of animal products addressed at a later stage, the UK government has taken a rather radical position. The UK wishes food and feed products derived from GMOs not be covered by the present proposal because of doubts about the effectiveness of controls for GMO-derived products whose genetic modification is not detectable. The British argument seems hardly tenable, however, given that traceability regimes exist for other food types,

AND that the key objectives of the Traceability Regulation are that: *"Retroactive tracking of the movement of GMOs and products produced from GMOs through the production and distribution chains will be facilitated by traceability requirements based on transmission and retention of relevant information for such products, at all stages of their placing on the market. Such a traceability system limits discontinuity of product specific information through the chains and thereby facilitates: - Withdrawal of products should an unforeseen risk to human health or the environment be established; - Targeted monitoring of potential effects on human health or the environment, where appropriate; - Control and verification of labelling claims."* (COM (2001) 182 final).

Traceability: for seeds only?

Article 4.3 of the Commission's proposal foresees that, in the case of GMOs as or in products to be used directly as food, feed or for processing (GMOs-FFP), operators may transmit to the next operator a list of the unique codes for the GMOs that the product "may contain", instead of transmitting information on the unique codes for the GMO(s) which the product actually does contain. With this derogation, the Commission obviously wishes to accommodate its trading partners and argues that it is in accordance with the (minimum requirements) of the Cartagena Protocol on Biosafety for transboundary movements of GMOs. Several Member States, however, - Austria, Belgium, Denmark, Greece, Spain and France - are insisting on stricter and unambiguous traceability conditions.

Unique identifier: not required for GM derivatives

While at least, in principle, the unique identifying code always has to be transmitted where GMOs are

transmitted, the Commission's proposal foresees that in the case of food and feed produced from GMOs, only an indication that the food or feed was produced from GMOs has to be transmitted to operators receiving the product. In these cases, therefore, transmission of information on the "unique identifier" is therefore not foreseen. Several Member States apparently want to see the unique codes transmitted whenever GMOs or GM derivatives are transmitted.

Adventitious presence of GMOs: legal contamination?

The Commission proposes to amend the Deliberate Release Directive (2001/18/EC) in order to exempt from the Traceability/Labeling provisions products to be used as food, feed or for processing when (authorised or unauthorised) GMOs are present as traces in a proportion no higher than 1% (or lower, to be established case-by-case), provided that these GMO-traces are "adventitious" or "technically unavoidable", and that the GMOs in question have been subject to a scientific risk assessment made by the relevant Scientific Committee, or the European Food Authority, which concludes that the GMO does not present a risk for human health or the environment.

The proposed exemption is particularly controversial when it comes to unauthorised GMOs or GMO derivatives. While France, Sweden and Greece appear to reject the proposal as such, others (Denmark, Austria, Belgium and Spain) have asked for time to study the provision's implications in detail.

SEE ALSO: GM THRESHOLDS - THE WRONG ANSWER TO THE WRONG QUESTION on page 7 of this Mailout

AVENTIS SUES THE UK GOVERNMENT

GM giant Aventis is taking the UK government to court to prevent it giving information to Friends of the Earth on the environmental and health effects of the herbicide it uses on GM crops, glufosinate ammonium (GA). FoE first requested the information from the then Ministry of Agriculture, Fisheries and Food (MAFF) in February 2000, after it changed the rules on the use of glufosinate ammonium. Previously, GA was only allowed to be sprayed on crops during the summer because of fears over the leaching of the herbicide into groundwater. However, following a request by Aventis, the UK Government allowed GA to be sprayed on GM crops during the winter on an experimental licence so it can be used on their controversial farm-scale trials, and has since applied for a commercial licence.

FoE asked to see the information that Aventis supplied to back up its requests. In January this year, the UK Pesticide Safety Directorate refused to disclose the information. However, following the threat of legal action from FoE, the government backed down and said FoE was entitled to see the documents under the Environmental Information Regulations of 1992. Aventis objected to this disclosure and notified the government on 28th June that it would go to court to stop the information being disclosed. The government refused to back down and Aventis has now filed papers with the court. A hearing is due to take place in March next year.

GMOs CONTAMINATE WILD MAIZE IN MEXICO

According to research published in a recent issue of the scientific journal "Nature" (Volume 414, 29 November 2001, pages 541-543, www.nature.com), extensive genetic pollution of wild maize varieties has been discovered in remote areas of Mexico. The contamination has consolidated fears about GMO pollution by genetically modified plants and is of particular significance given that Mexico is the centre of origin for maize.

The wild maize varieties, which were growing in areas more than 20 kilometres from the nearest main road, exhibited traits common to genetically modified Monsanto and Novartis lines - the p-35S promoter from the cauliflower mosaic virus. According to the two scientists who conducted the research, David Quist and Ignacio H. Chapela from the University of California at Berkeley, the results demonstrate a "high rate of gene flow from industrially produced maize towards populations of progenitor landraces. As our samples originated from remote areas, it is to be expected that more accessible regions will be exposed to higher rates of introgression".

The findings are "very serious because the regions where our samples were taken are known for their diverse varieties of native corn which is something that absolutely needs to be protected".

The origin of the GMO pollution remains unclear since growing of GM maize has been banned in Mexico since 1998. However, two theories exist:

- the contamination is from field trials of Bt maize that were allowed in Mexico until 1997;
- it originates from GM maize imported to Mexico from the US as food aid but planted by poor farmers who cannot afford commercial seed.

Findings "very serious" for biological diversity

Interviewed by the BBC, Dr. Quist indicated that he believed food aid imports were probably to blame for the contamination. "A lot of it comes from the United States and a lot of it is transgenic", he said. Measures should be taken to counter the spread of GMO genes, according to Quist, who said he was surprised and concerned by the results and was "hoping it wasn't true". "Once the DNA is in the population, you can't just go and fish it out", he said, indicating that a well-enforced ban on imported GM maize and a programme to encourage traditional exchanging and testing of wild seeds could help to dilute the influence of GM genes. His fellow researcher, Dr. Chapela, shared Quist's concern that they had found GMO pollution in the centre of biological diversity for maize, since wild varieties are relied upon to improve crops in the face of future changing climatic and other conditions. Chapela said the findings were "very serious because the regions where our samples were taken are known

for their diverse varieties of native corn which is something that absolutely needs to be protected".

The Mexican government is now conducting its own tests in the states of Puebla and Oaxaca. A government statement reported by Reuters said that "an exhaustive investigation is ongoing at different sites in Puebla and Oaxaca to collect representative samples from different corn parcels for molecular analysis to determine whether or not transgenics exist in those areas". "This analysis will also allow for the definition of types of transgenics and evaluation of the risks and facilitate reaction to any eventuality", according to the Intersecretarial Commission for Biosecurity and Genetically Modified Organisms.

Environmentalists' fears confirmed

Environmental groups which oppose the introduction of genetically modified crops were quick to point out that the Mexican findings confirm the long-term risks associated with GMOs. "Today's report in "Nature" shows evidence of GM contamination of wild maize in Mexico, the origin of all maize varieties, posing a potential threat to vital diversity essential for future global food security", said Claire Devereux, Coordinator of the UK's Five Year Freeze, a broad coalition of more than 50 organisations which support a GMO moratorium. Pete Riley of Friends of the Earth (England/Wales/Northern Ireland) said that the findings were deeply disturbing and highlight the huge gamble the biotech industry is taking with nature. "The long-term implications of allowing GM crops to contaminate wild plants are unknown and will be almost impossible to reverse", he said. "That is why governments around the world

AVENTIS T25 MAIZE

The scientists were surprised and concerned and "hoping it wasn't true". Food aid imports are "probably to blame".

should halt the dangerous experiment of growing GM crops outside". Greenpeace published a statement by more than 80 scientists and plant breeders calling upon "all governments to employ all means possible to prevent the contamination of Mexican maize and its wild relatives by genetically engineered corn varieties" (www.greenpeace.org).

1000 mile separation distances?

The UK-based group CropGen played down the significance of the Mexican study. Questioned during a radio interview on BBC radio, its chair Vivian Moses said that organic farmers who fear contamination by GM crops face a problem "of their own making" because they set standards of 0% content (of GMOs) which are "unrealistic and unnecessary".

Separation distances to avoid GMO pollution are a difficult question, he said. In absolute terms "you need separation distances of 1000 miles", adding that he believed "we should be realistic not absolute".

CropGen was set up in early 2000 with the mission to "provide a voice for crop biotechnology". According to media reports (BBC article 25.02.2000), during its first year, it received nearly 500,000 GB£ funding from a consortium including Aventis CropScience, Dow AgroScience, Monsanto and Novartis Seeds.

A new debate is beginning in Europe and it's been initiated by the EU's the Scientific Committee on Plants (SCP). On 19th November, for the first time, the SCP found itself unable to comment on an Article 16 notification. Instead, it highlighted that this was a "management" issue between the co-existence of GM and non-GM crops and the "wider interpretation of existing guidelines".

The Article 16 notification was invoked by the UK and restricts the marketing of Aventis' T25 maize in Wales. The National Assembly of Wales had previously formed the opinion that the unrestricted growing of GM maize would be a "risk to the environment" for growing organic and other non-GM maize. In doing so, the National Assembly introduced legally enforceable separation distances between T25 and non-GM crops. In Wales, planting of T25 maize is prohibited within:

- 200 m of organic farms
- 200 m of farms growing non-GM sweet corn, and
- 80 m of non-GM forage maize, except where notice of any proposed planting of T25 is given to farms and the neighbouring farmers have not responded or confirmed that they will be planting maize varieties.

The UK (which is the national competent authority representing Wales) has used Article 16 to notify the restriction of growing and have argued that the combined effect of:

- the unrestricted use of T25 maize throughout the European Union under the authority of the current Part C marketing consent;
- the Community regime governing organic production (Council

Regulation 2092/91/EC of 24 June 1991 on organic production of agricultural products and indications thereto on agricultural products and foodstuffs, as amended by Council Regulation 1804/1999/EC); and

- Regulation 258/97/EC of the European Parliament and of the Council and Council Regulation 1139/98/EC (as amended by Commission Regulation 49/2000/EC) leads to the "creation of conditions in which it will be difficult, if not impossible, to produce maize which can be lawfully described as organic or as non-GM maize. The purpose of the provisional measures adopted by the National Assembly for Wales is to secure an environment in which organically pure crops can be grown as well as to protect the integrity of non-GM crops."

In its justification the UK argues an interesting line, in particular:

"There is no clear mechanism in the [90/220] Directive to allow for the amendment of such a consent. It cannot have been the legislators' intention that Part C consent should be fixed for all time."

"Article 16 states that where a Member State has justifiable reasons that a product constitutes a risk to human health and the environment it may provisionally restrict or prohibit the use and/or sale of that product on its territory. "Justifiable reasons" in this context not only includes new scientific evidence, but also situations brought to the attention of Member States which had not been considered (for whatever reason) during the Part C consent procedure. The proper question is does a Member State have justifiable reasons to consider there is a risk to human

health or the environment? If yes, it may invoke Article 16. "

"... the phrase "risk to human health or the environment" must be read broadly so that legitimate concerns about the risks to the environment can be dealt with within the Article 21 procedure. A narrow reading of "protection of the environment" would frustrate this objective and obligation....A broad reading is also required so that Directive 90/220/EEC and other Community legislation concerning organic crops and be read together in a consistent manner."

"A broad interpretation of Article 16 allows 'protection of the environment' under the Directive to include protection of an environment where organically pure crops can be grown (at least to the minimum legal requirements). This is consistent with other relevant Community legislation. On the contrary, a narrow reading of protection of the environment would contradict other Community legislation which could not have been the intention of the legislators."

With the SCP unable to issue an opinion, the Welsh decision to implement legally-binding separation distances has inadvertently started a whole new debate about growing GM crops. FoE has long argued that the co-existence of GM and non-GM crops is almost impossible in the case of many GMOs. The SCP, in an earlier opinion on seed purity, already made it clear that if widespread growing of GM crops is permitted then contamination of seed stocks would increase and eventually the 1% threshold would have to be raised. In other words, consumer choice would be lost as well as any environmental or human safeguards. With only a small amount of GM crops currently being grown in Europe, the debate over co-existence is urgently needed. If widespread growing were to be permitted, the debate will be too late.

GM THRESHOLDS - THE WRONG ANSWER TO THE WRONG QUESTION

No doubt the threshold issue will continue to dominate the discussion about the Commission's Proposals on GM Food/Feed and Traceability of GMOs. Although, the problem of GMO contamination has been known for a long time - since 1999 several cases were reported where conventional seeds contained unauthorised GMOs - neither the Commission nor any of the Member States treated the problem sufficiently seriously to make it an issue during the revision of the Deliberate Release Directive. The new Directive of 12th March 2001 (2001/18/EC) only addresses the adventitious presence of authorised GMOs in conventional products: a threshold may be introduced through comitology for authorised GMOs. However, no such possibility exists with regard to unauthorised GMOs. In fact, the new Deliberate Release Directive states unambiguously that "in the event of a release of GMO(s) or placing on the market as or in products for which no authorisation was given, the Member State concerned shall ensure that necessary measures are taken to terminate the release or placing on the market."

1 out of 100 tomatoes could be transgenic, neither labelled nor authorised. Buying a fresh vegetable would become a game of chance - it could be 100% transgenic or not.

Proposed revision of Directive 2001/18/EC

However, four months later in July this year when two new GM Proposals were finally adopted, the Commission suddenly proposed to amend Directive 2001/18/EC. The Commission proposed to set a threshold for traces of unauthorised GMOs in products intended for direct use as food or feed, or for processing. Such products shall not require an authorisation under the Deliberate Release Directive, nor shall they require a label, if:

- 1) their proportion is no higher than 1%,
- 2) their presence is "adventitious" or "technically unavoidable", and
- 3) the GMO in question has been subject to a scientific risk assessment which concludes that the GMOs do not present a risk for human health or the environment.

The Commission's Proposal implies that 1 out of 100 tomatoes, 10 out of 1.000 fish, 500 tons of a ship load of 50.000 tons of soya beans, could be transgenic and would have to be neither authorised nor labelled if their presence is "adventitious" or "technically unavoidable". The transgenic fish and the transgenic tomato would be 100% transgenic, not 1%. The Commission's Proposal would transform the labelling scheme into a lottery - buying a fresh vegetable would become a game of chance, it could be 100% transgenic or not. While safety concerns would be accommodated by the requirement

that a scientific risk assessment must have concluded that the GMO is without risk, it is this requirement which - by taking the scientific opinion as a positive decision - blurs the difference between risk assessment and management (and thus contradicts an important feature of the Precautionary Principle as defined by the Commission itself).

Thresholds - the way out of the moratorium?

The Commission usually defends the threshold by reference to the pending applications that are stuck in the pipeline due to the de facto moratorium. However, if the moratorium ends when the new Proposals become law, there would obviously be no need anymore to accommodate not-yet-approved GMOs. They could simply be approved, even though it is clear that they would have to be re-assessed in the light of new Deliberate Release Directive which also applies to product applications received under the old Directive if the whole approval procedure was not completed before the new Directive has to be applied. Currently, no-one seriously expects the European Union to approve GMO marketing applications before that deadline (17th October 2002), even though the Commission may try to force Member States to take up the responsibility for the de facto moratorium for which currently the Commission bears the sole responsibility.

The Commission's proposals do not address the most relevant and prominent cases of GMO contamination – contamination of seeds and conventional products by GMOs released as part of experimental releases.

Thresholds - for the sake of practicality?

The Commission also frequently also refers to the need for "practicality". "We have to accept reality" - which means that if we do not legalise releases of GMOs which are currently illegal the whole system will simply break down. This justification confirms, of course, that there is nothing to control GMOs once they have been released anywhere in the world in substantial amounts. It also raises the question how much sense it makes to set up a system to trace GMOs if there is, in fact, no possibility to really control them anyway.

Thresholds for GM seeds - contamination through Part B releases?

While current discussions tend to focus on the question whether or not any threshold should be introduced, or at which level the threshold should be set, it seems that even if there were clear answers to these questions, the answers would not really help. This is because the Commission's Proposals do not address the most relevant and prominent cases of GMO contamination - contamination of seeds and contamination of conventional products by GMOs released into the environment as part of experimental releases. The Commission's thresholds only apply to "products intended for direct use as food or feed, or for processing"; they do not apply to seeds. The Commission's threshold does not apply either to products contaminated by GMOs that have only been authorised for experimental purposes. These GMOs are, by definition, not approved for placing on the market and the proposed thresholds will only very rarely apply to such GMOs since a risk assessment required for placing the GMO on the market will

Discussing thresholds while omitting to discuss measures necessary to meet those thresholds does not make much sense. Similarly, thresholds for 'adventitious' presence doesn't make sense as long as there are no agreed standards.

usually not have been carried out before it is released for experimental purposes. So forget questions of "practicality" - it is quite clear that even if the Commission's Proposals become law, they would not address the issues at stake; they would not legalise whole categories of GMO contamination.

There is clearly a risk that interested parties will push to have the scope of the Commission's threshold proposal extended so as to cover seeds and products contaminated by 'experimental GMOs'. The Council's Working Party's recent decision to move the exemption for unauthorised GMOs from the GM Food/Feed Proposal (which applies to food and feed only) to the Traceability Proposal (which also includes non-food/feed GMOs such as GM seeds) speaks a clear language. Once the exemption is moved to the Traceability Proposal, the question will, of course, arise: why then the exemption should not apply to all GMOs, including GM seeds, covered by the Traceability Regulation? It should be noted, however, that as one could learn from the way the authorities handled the StarLink case, even the law of the United States does not know any thresholds for unauthorised GMOs.

"Adventitious" - precautionary measures to avoid contamination

The Commission's concept of thresholds, even though it is limited to "products intended for direct use as food or feed, or for processing", is nonetheless unacceptable. However, this has little to do with the thresholds as such. It has more to do with the fact that the Commission's Proposal places the entire burden on the shoulders of those producers and processors who do not wish to use GMOs or GM derivatives. According to the Commission's Proposal, they will have to demonstrate that they took the appropriate steps to avoid contamination.

Discussing thresholds while omitting to discuss measures necessary to meet those thresholds does not make much sense. Similarly, thresholds for the adventitious presence of GMOs do not make much sense either as long as there are no agreed standards for what is or is not "adventitious". Finally, setting thresholds for GMO contamination and requiring those who do not use GMOs to meet those thresholds is simply unfair and contradicts the 'polluter pays' principle. What is clear, however, is that thresholds as such do not cause all the problems. As soon as those who use GMOs have to take all necessary steps to avoid contamination of conventional or organic products, thresholds for contamination that may exceptionally occur might become much less controversial than they currently are.

(This article is a personal commentary by Dan Leskien, Genetic Engineering Advisor to the Greens in the European Parliament)

EU OPINION SURVEY CONFIRMS DEEP OPPOSITION TO GMOs

The results of a recent Eurobarometer Survey carried out this summer by DG-Research of the European Commission make uncomfortable reading for the biotech industry. The survey on "Europeans, science and technology" was conducted among more than 16,000 people aged 15 and above throughout the 15 Member States. Below is part of the report that deals with GMOs.

GMOs: AN IMPORTANT ISSUE

Would you say that you are more inclined to agree or disagree with each of the following propositions on genetically modified food:

| | Inclined to agree | Inclined not to agree | DNK* |
|--|-------------------|-----------------------|------|
| I want to have the right to choose | 94.6 | 2.5 | 2.8 |
| I want to know more about this kind of food before eating it | 85.9 | 9.3 | 4.8 |
| They should only be introduced if it is scientifically proven that they are harmless | 85.8 | 8.0 | 6.1 |
| I do not want this type of food | 70.9 | 16.9 | 12.2 |
| They could have negative effects on the environment | 59.4 | 11.9 | 28.7 |
| The dangers have been exaggerated by the media | 33.1 | 44.3 | 22.6 |
| This kind of food does not present any particular danger | 14.6 | 54.8 | 30.6 |

The survey reports that the "knowledge/education effect" has little significance concerning the answers to questions about GMOs, although it is generally observed that the more knowledge people have the more favourable they are to scientific and technological progress. "This is not true with GMOs. People interviewed could have a high level of knowledge and still believe that biotechnologies should be subject to more control and demand more safety studies. In this case, information is not enough and could even be counter-productive". In other words, the results are not based on a lack of understanding - on the contrary, people's distrust about GMOs increases in proportion to their level of knowledge about the topic.

"GMOs could have negative effects on the environment", according to

| level of knowledge: | Inclined to agree | Inclined not to agree | DNK* |
|---------------------------|-------------------|-----------------------|------|
| Level of Knowledge | | | |
| 0 to 4 (lowest) | 47.7 | 9.4 | 43.0 |
| 5 to 6 | 57.1 | 11.9 | 31.0 |
| 7 to 8 | 60.3 | 11.6 | 28.1 |
| 9 to 10 | 61.1 | 13.2 | 25.6 |
| 11 to 13 (highest) | 66.0 | 11.9 | 22.1 |
| Total | 59.4 | 11.9 | 28.7 |

The full text of the Eurobarometer survey is available on the Commission's web site: <http://europa.eu.int/comm/research/press/2001/pr0612en-report.pdf>

(*DNK = do not know.)

DG-RESEARCH ROUND TABLE ON GMO SAFETY RESEARCH – ONLY A COINCIDENCE OR JUST BAD COMMUNICATION?

Launch of a Commission Round Table

On 9th October, the European Commission DG-Research initiated a “European Round Table on GMO safety research” by organising a launch meeting which was opened by Commissioner Busquin. During the morning workshop, several scientists from different European countries presented results of EC-funded research on the environmental benefits and risks of growing Bt maize. In the afternoon, findings from research on the benefits and risks for human and animal health of using Bt were on the agenda. In its invitation letter, the Commission had indicated that the Round Table would aim at establishing a true dialogue between all stakeholders. Every effort would be made to ensure that this would not be perceived as a ‘propaganda’ exercise in favour or against GM technology. It should, instead, provide an opportunity for all stakeholders to examine the facts.

Launch of a Commission press statement

At noon, in between the workshops which were specifically focussed on one GM crop, Bt maize, Commissioner Busquin explained to the press that the ongoing Round Table would bring together European biosafety researchers and other stakeholders such as consumer organisations, national administrations and industry. The aim was to discuss the research results and to jointly outline a future research agenda. “This is an exercise in reconciling science and society”, said

Commissioner Busquin. At the same time, the Commissioner and Dr. Phil Dale, a plant geneticist from the John Innes Institute of Plant Science Research, UK, also presented a review of the results of biosafety research which the Commission has supported by providing 70 million Euro to 81 projects over the last fifteen years. In the wording of the Commission, this was ‘coinciding’ with the launch of the Round Table. At the press briefing, however, Dr. Dale was nonetheless introduced as a *member* of the Round Table.

The overall conclusion from the review of EC-funded biosafety research as communicated to the press was that the research on the GM plants and derived products developed and marketed to date had not found any new risks to human health or the environment, beyond the usual uncertainties of conventional plant breeding. “Indeed, the use of more precise technology and the greater regulatory scrutiny probably make them even safer than conventional plants and foods”. This quite strong state-

ment was subsequently widely quoted by many media across Europe.

Content of a Commission Round Table

Both morning and afternoon workshops on Bt maize were attended by a wide variety of representatives of interested parties including several environmental and consumer organisations. In my capacity as a consultant, I also attended the workshops. In the morning, the focus was on the agronomic and environmental impacts of growing Bt maize. If I were a *member* of the Round Table (although the rules for membership have never been clarified), I would have communicated other things to the press, for instance: “The empirical evidence for the potential environmental impacts of growing Bt maize available so far has, at last, been put on the agenda of a European stakeholder debate. But the workshop showed that a coordinated European research effort on potential non-target effects of Bt maize and on the genetics of the potential for the emergence of insect resistance has only just begun. Nonetheless, several Bt maize varieties have already been authorised for the market in the EU”. Or, I would have told the press that “several stakeholders identified scientific and regulatory controversies over an appropriate application of the concept of substantial equivalence in the food safety evaluation of Bt maize by EU regulators and the data required to establish whether Bt maize would be as safe for food and feed use as conventional maize”.

The workshop showed that a coordinated European research effort on potential non-target effects of Bt maize and on the genetics of the potential for the emergence of insect resistance has only just begun.

Content of a Commission press statement

All attendants of the launch meeting could take home an example of the publication about EC-sponsored research on the safety of GMOs. I started reading this booklet with great interest during the train journey home. The first thing I did was to look at whether there had been a research project which had specifically focussed on the issue of whether genetic modification of plants is a more precise technology than conventional plant breeding. I could not find such a project. The second thing I did was to look at whether the research projects on the biosafety of GM plants presented in two of the total eight chapters of this review had been finalised or were still in progress. This was quite a simple exercise. In Chapter I, I counted a total of 17 research projects in the area of environmental impacts of GM plants, of which 9 had been completed. One of the research projects in progress focussed on potential non-target and food web impacts of growing Bt

No projects focus on the issue of whether genetic modification of plants is a more precise technology than conventional plant breeding. Of the 17 projects on the environmental impacts of GM plants, 9 have been completed.

maize. This project, I realised, had also been presented in the morning workshop as "in its very beginning". Of the total 12 research projects on the food safety evaluation of GM plants (Chapter 4), I identified 5 projects in progress, of which three were also presented that day in Brussels. Of the 7 projects that had indeed been completed, one had studied consumer attitudes and decision-making on GM food products.

Based on the above, if I were a *member* of the Round Table and would have been 'coincidentally' invited to

assist Commissioner Busquin at the press conference, I would probably have said different things, for example: "The Commission at last discloses and reviews what has actually been done with 70 million Euro of taxpayers' money spent on GMO biosafety research". Or: "The review of results of GM plant biosafety research seems to suggest a review of the science-base of EU regulatory approvals of GM plants so far".

Recommendations from a consultant in a nutshell

Commission: it is probably better to avoid such coincidences in the future, for example by reviewing the current organisational, scientific and public communication capabilities of the Commission services with the aiming of restoring a consultant's confidence and trust in the Round Table on EC-supported GMO biosafety research.

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GM "WEEDS" DESTROYED AT UK TEST SITE

Aventis has been forced to destroy thousands of flowering GM "weeds" after FoE complained to the UK government about their presence.

FoE has called for an investigation into whether Aventis, the consent holder for the GM oilseed rape, was in breach of their consent after the roots and stubble from an earlier farm-scale trial were not destroyed. If it is found that they were in breach, they could be prosecuted.

Subsequent mild weather led to the roots re-sprouting and eventually the plants producing flowers. FoE believes that this breaches the consent given to Aventis. At the same time, FoE is concerned that wild relatives are also flowering in the vicinity, notably charlock and volunteer oilseed rape in neighbouring fields. Honey bees have also been seen to be active.

FIVE YEAR FREEZE

The Five Year Freeze in the UK has published an analysis of the government's record on GM foods. The report looks at nine areas of concerns to members of the alliance: environmental impact, human health, consumer choice, liability, public involvement, patenting, global food supply, GM animals, and the impact on farmers. It assesses the problems and examines the government's action (or lack of action) in each area. Targets are set for the gov-

(continued on page 12, column 2)

BIOSAFETY PROTOCOL NEGOTIATIONS IN NAIROBI

The second meeting of the Intergovernmental Committee for the Cartagena Protocol on Biosafety (ICCP) was held in Nairobi on 1st - 5th October 2001. The main issues discussed were capacity building; the roster of experts; guidance to the financial mechanism; decision-making procedures; liability and redress; and compliance. In general the discussions focused more on the processes to implement the Protocol rather than on substantial matters. Key questions regarding liability, compliance and identification were side-stepped.

Ratification

Only 6 countries have ratified the Protocol so far: Bulgaria, Fiji, Lesotho, Norway, Saint Kitts and Nevis, and Trinidad and Tobago. Fifty ratifications are required in order for the Protocol to enter into force and it is therefore necessary to push as much as possible at national level to get the Protocol ratified as soon as possible.

Next meeting

If the Protocol is ratified by April 2002, the First Meeting of the Parties (MOP 1) will take place in The Hague after the COP 6 on Biodiversity. This will almost certainly not happen so it was decided that another Intergovernmental Committee (ICCP 3) would take place in The Hague if the Protocol was not ratified yet by the required 50 countries.

MAILING NAME AND ADDRESS:

ernment to achieve, e.g. regulatory requirements for labelling all foods based on origin and method of production, introducing statutory consultations on individual GM trial sites within the UK, as well as more overarching objectives, e.g. the need to make an assessment of the compatibility of GM agricultural systems with non-GM or organic, and public consultation on whether there is a need for GM in the UK at all.

Although aimed at the UK government, the report will be useful to

interested parties in other EU countries, and beyond. The report lays down a benchmark for the steps all governments should be taking to ensure safety and assess public acceptability of GMOs in agriculture. It also helps set out the broad public concerns in relation to GMOs beyond the environmental or safety implications. The report is available for 5GB£ from the Five Year Freeze, 94 White Lion Street, London N1 9PF, enquiry@fiveyearfreeze.org or downloadable from: www.fiveyearfreeze.org

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