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Meeting of the Signatories to the  
Convention on Access to Information,  
Public Participation in Decision-making and  
Access to Justice in Environmental Matters

Working Group on Genetically Modified Organisms  
(First meeting, Geneva, 10 – 12 October 2001)

**ANALYSIS OF THE APPLICATION OF THE AARHUS CONVENTION TO  
GENETICALLY MODIFIED ORGANISMS (GMOs)\***

**I. ANALYSIS OF THE LEGAL MEANING OF THE PROVISIONS OF THE  
AARHUS CONVENTION RELATING TO PUBLIC PARTICIPATION IN DECISION-  
MAKING ON GENETICALLY MODIFIED ORGANISMS (GMOS), NOTABLY THOSE IN  
ARTICLE 6**

1. Article 6 of the Aarhus Convention deals with public participation in decisions on a range of specific activities. The Implementation Guide to the Aarhus Convention (ECE/CEP/72) states that, as a matter of principle, “there appears to be no fundamental difference between decisions relating to the release of GMOs and any decision-making with potential significant effects on the environment”. <sup>1/</sup> Nevertheless, the application of article 6 to decisions relating to GMOs raises specific legal issues because of the distinctive way in which the issue is addressed in the article. It is also the case that in interpreting some of the language of article 6 in this context, account needs to be taken of some of the distinctive features of activities involving GMOs.

\*This analysis was prepared by a consultant to the secretariat, pursuant to paragraph 16 of the report of the second meeting of the task force on GMOs (CEP/WG.5/AC.3/2001/3).

A. The scope of article 6 as it applies to activities involving GMOs

2. The general scope of article 6 is set out in its paragraph 1. This provides that each Party shall apply the provisions of article 6 to decisions on whether to permit the activities listed in annex I to the Convention (subparagraph (a)) and that each Party shall, in accordance with its national law, also apply the provisions of article 6 to decisions on proposed activities not listed in annex I “which may have a significant effect on the environment” (subparagraph (b)). Activities relating to genetically modified organisms (GMOs) are not currently listed in annex I to the Convention <sup>2/</sup> but paragraph 11 of article 6 goes on specifically to require each Party “within the framework of its national law” to apply “to the extent feasible and appropriate” the provisions of article 6 to “decisions on whether to permit the deliberate release of genetically modified organisms into the environment”.

3. Article 6, paragraph 1 (b), therefore also provides a basis on which to apply article 6 to activities involving GMOs in so far as these may have a significant effect on the environment. <sup>3/</sup> The possibility of such effects is confirmed by a number of international and regional instruments which refer to the possible environmental risks associated with activities involving GMOs (these instruments are considered further below). In particular, the 2000 Cartagena Protocol on Biosafety <sup>4/</sup> (fifth recital) refers to “growing public concern” over the potential adverse effects of modern biotechnology on biodiversity and Directive 2001/18/EC <sup>5/</sup> states that the protection of human health and the environment requires that “due attention be given to controlling risks from the deliberate release into the environment of GMOs” (fifth recital). General guidance as to the determination of “significance” in the context of article 6, paragraph 1 (b), may be found in the Implementation Guide to the Aarhus Convention (the Implementation Guide). <sup>6/</sup>

4. A further possible legal basis for applying the requirements of article 6 to activities involving GMOs might be paragraph 20 of annex I, which refers to any activity not covered by paragraphs 1-19 where “public participation is provided for under an environmental impact assessment procedure in accordance with national legislation”. The extent to which this language is apt to cover such activities depends upon the interpretation of “environmental impact assessment” <sup>7/</sup> and also on national law. For this reason its scope in this context is unclear.

5. At the first meeting of the task force on GMOs, it was generally agreed that paragraphs 2-5, 7-8 and 10 of article 6 could be applied without adjustment and potential problems were identified with the language of paragraphs 6 (a) and (c) (CEP/WG.5/2000/6, paras. 29-30). These issues are examined below. Before turning to the substantive application of article 6 to decision-making relating to GMOs however, it is worth comparing the potential scope of article 6, paragraph 11, with that of article 6, paragraph 1 (b), as it relates to GMOs. A comparison between these two provisions may assist the Parties in deciding which of the options considered in Chapter III of this study to adopt.

6. There are slight differences between the two provisions: whilst both provide a basis for applying the rules of article 6 to activities relating to GMOs, in the case of article 6, paragraph 11, this is “to the extent feasible and appropriate”, a qualification which does not appear in article 6, paragraph 1 (b). Article 6, paragraph 1 (b), on the other hand applies only where the proposed activity may have “a significant effect” on the environment, whereas article 6, paragraph 11, appears to apply more generally to all decisions on whether to permit the deliberate release of

GMOs (although this is subject to the qualification “to the extent feasible and appropriate”, which may in practice have a similar qualifying effect). There appears therefore to be less flexibility in the way in which article 6, paragraph 1 (b), applies to decisions relating to GMOs than in the way in which article 6, paragraph 11, applies. It is of course, at least in part, this very flexibility which has prompted calls to clarify the application of article 6, paragraph 11, to GMOs.

7. A further difference between the two provisions is that article 6, paragraph 11, applies specifically to “deliberate release” although the term is not defined in the Convention. In the absence of a definition, there may be some variation in the circumstances in which article 6, paragraph 11, is applied and for this reason the task force on GMOs has discussed the possibility of including in or elaborating under the Convention a definition of deliberate release. At the second meeting of the task force, the participants were generally in favour of using the definition contained in European Union (EU) legislation. <sup>8/</sup> Some expressed concern however that, under that definition, certain activities would be excluded from article 6, paragraph 11, in particular releases resulting from the contained use of GMOs.

8. One way to address those concerns, without formulating a wider definition of deliberate release than is found in EU legislation, would be expressly to apply article 6 not only to “deliberate release” but also to certain other releases resulting from the contained use of GMOs. Article 6, paragraph 1 (b), of the Convention already provides a legal basis for doing this to the extent that such releases may have a “significant effect on the environment”. Ways in which this approach could be clarified and reinforced are considered below in Chapter III, for example the Parties could adopt a decision setting out the approach to be taken to such releases under article 6 paragraph 1 (b). The concept of “triggers” by virtue of which the provisions of article 6 would apply could be further elaborated in such a decision. <sup>9/</sup> Alternatively, specific reference to this type of release could be included in annex I (which would bring the matter under article 6, paragraph 1 (a)). If the latter approach were to be adopted, article 6, paragraph 1 (b), would continue to provide an alternative basis for requiring public participation in relation to those activities involving GMOs not referred to in annex I which may have a significant effect on the environment. Thus (in the event that article 6, paragraph 11 were to be deleted as part of the amendment package) the only activities which would fall outside the scope of article 6 of the Convention altogether are those which are neither mentioned in annex I, nor appear to have significant environmental effects. At the second meeting of the task force, some participants expressed the view that they did not want to see “grey areas” as between deliberate release and contained use. <sup>10/</sup> In terms of certain activities falling outside the scope of the Convention altogether, this would appear to be less of a risk if the full potential scope of article 6 is taken into account.

9. It should be noted that the EU legislation on contained use applies only to genetically modified micro-organisms (GMMs). Some EU Member States and some non-EU countries apply similar requirements for the contained use of other organisms as well. The Parties could consider whether, for example, activities relating to the contained use of macro-organisms should be considered under article 6, paragraph 1 (b) of the Convention.

B. The application of the substantive requirements of article 6 to the deliberate release of GMOs

10. As already discussed by the task force at its first meeting, the language of article 6, paragraph 11, leads to a lack of clarity as to how article 6 will apply in the context of decisions

relating to the deliberate release of GMOs. In particular the phrases “within the framework of national law”, “to the extent feasible and appropriate”, and the reference to “provisions” of article 6 suggest that Parties have some degree of flexibility in applying article 6 to such decisions. In considering below the application of the substantive provisions of article 6 to decisions on the deliberate release of GMOs, the degree to which this language provides a basis for departing from the general requirements of article 6 will be considered.

11. **Paragraph 2:** In the context of decision-making relating to the deliberate release of GMOs, the scope of the “public concerned”, as defined in article 2 of the Convention, 11/ is likely to be broader than simply those with particular interests in the locality of the release site. There are a number of reasons for this: in relation to the environmental impact of GMOs, the ability of organisms to reproduce in the environment once they are released means that the impact of the GMO and its offspring may eventually extend to areas well beyond the release site. There may be a lack of full scientific certainty as to the likely extent of such reproduction, for example through cross-pollination. This raises the question as to whether a precautionary approach should be taken to the identification of the public concerned. This may be addressed to a large extent by the way in which non-governmental organizations are expressly included within the definition of the public concerned but also has implications for the way in which the public directly affected by the release is identified.

12. The broad scope of the public concerned in the context of the deliberate release of GMOs also arises because of the potential impact of a deliberate release on consumer and producer interests. Those wishing to produce or consume organic foods, for example, clearly have an interest in and are likely to be affected by deliberate releases which may have adverse implications for the organic accreditation of organic producers near the release site, since such releases have implications for the availability of organic food to consumers generally, particularly when the cumulative effects of such releases are taken into account. The inherent flexibility in relation to the means by which the public concerned is to be informed of the matters set out in paragraph 2 means that appropriate means to inform the wider public concerned as well as those affected locally may be used.

13. The public concerned must be informed at an early stage (this is also a requirement under paragraph 4 of article 6). The Implementation Guide confirms that there is flexibility in setting time frames, which must be adequate, timely and effective. 12/ In the context of decisions on GMOs, the public concerned should presumably be informed soon after an application to release a GMO is made to the relevant regulatory authority.

14. Among the matters identified in paragraph 2, it should be noted that by virtue of subparagraph (e), the public concerned must be informed as to whether the activity is subject to a “national or transboundary environmental impact assessment”. This requirement raises a definitional question in the context of GMOs. It can be argued that the environmental risk assessments required under the Cartagena Protocol or Directive 2001/18/EC (as to which see further below) constitute environmental impact assessments, with the result that the public concerned must be informed about them.

15. The Aarhus Convention does not define the term ‘environmental impact assessment’ (EIA) but a definition is contained in article 1 of the 1991 UNECE Convention on Environmental Impact

Assessment in a Transboundary Context (the Espoo Convention), 13/ which defines “environmental impact assessment” as a “national procedure for evaluating the likely impact of a proposed activity on the environment”. “Impact” is also defined in article 1 of the Espoo Convention and includes the impact of the proposed activity on human health, flora, fauna, soil and so on. Given the environmental objectives of the risk assessments required for GMOs under the Cartagena Protocol and EU legislation and the similarities in approach between those assessments and EIA as generally understood, it would appear that these should also be treated as environmental impact assessments within the scope of subparagraph (e).

16. None of the other matters identified in paragraph 2 would appear to raise particular issues in the context of GMOs. As indicated in the Implementation Guide, the public may also rely on article 4 of the Convention in order to obtain information, 14/ but the scope of the two provisions is somewhat different since article 4 applies to environmental information whereas article 6, paragraph 2, simply refers specifically to certain types of information.

17. **Paragraph 3:** The requirement to include reasonable time frames for the different phases of the public participation procedures means that Parties will need to take account of the time frames provided for in other relevant instruments, including the Cartagena Protocol on Biosafety and European Union legislation.

18. **Paragraph 4:** The requirement for early participation does not appear to raise particular issues in the context of GMOs.

19. **Paragraph 5:** The scope of the “public concerned” needs to be carefully considered in the context of GMOs (see above in relation to paragraph 2). One way to encourage applicants to enter into dialogue at an early stage would be to require applicants to describe what steps they have already taken in this regard on the application form.

20. **Paragraph 6:** At the first meeting of the task force, a number of issues were raised in relation to the application of paragraph 6 to decisions on the deliberate release of GMOs. Its introductory sentences do not appear to raise any issue peculiar to the release of GMOs, but a number of the areas identified as relevant information may raise particular issues in this context. It should be noted that the information requirements of paragraph 6 are additional to those of article 4. The additional elements in article 6, paragraph 6, include the requirement that access to the relevant information should be provided free of charge by the competent authority to the public concerned. There may in principle be some “information relevant to the decision-making” which falls outside the definition of “environmental information” in article 4 but given the broad definition of environmental information in article 2, paragraph 3, this may not be the case to any great extent in practice. Subparagraphs (b), (d) and (f) do not appear to raise particular issues in the context of activities involving GMOs.

21. In relation to subparagraph (a), the reference to a description of the site may give rise to questions as to whether the exact geographical location of the site should be identified for reasons of security. 15/ The beginning of paragraph 6 refers to the possibility of refusal to disclose information under article 4. It is not clear which ground of article 4, paragraph 4, would be relevant in this context. Furthermore it should be noted that article 4, paragraph 4, requires Parties to interpret the grounds for refusal in a restrictive way, taking into account the public interest served

by disclosure and taking into account whether the information relates to emissions into the environment. If the release of a GMO constitutes an emission (as to which see paragraph 23 below) it may be argued that the exact location of the site must be disclosed. More generally, Parties would need to consider whether there can be effective public participation if the precise location of the site is withheld from the public and whether any steps needed to ensure the security of the site are a matter for the individual carrying out the release.

22. As indicated above, the inclusion or exclusion of information on GMOs under subparagraph (a) is primarily relevant to the additional information requirements of article 6, paragraph 6, not to the issue of whether the information is in the public domain or not, which is an article 4 issue.

23. In relation to subparagraph (c), which relates to a description of the measures envisaged to prevent and/or reduce the effects of the proposed activity, the reference to “emissions” may require consideration in the context of GMOs. An examination of the types of effects required to be considered during the risk assessment process under Directive 2001/18/EC indicates that a wide range of matters including the capability to transfer genetic material are addressed as well as information on waste treatment and so on (this consideration is also relevant to the implementation of subparagraph (b)). The question as to what aspect of the risk assessment process for GMOs equates to a description of “emissions” may need to be clarified by scientific experts: in the context of GMOs it may be argued that the release itself is an emission.

24. Subparagraph (e) requires an outline of the main alternatives studied by the applicant. There does not appear to be any inherent reason why this requirement cannot be applied in the context of GMOs. The question is whether it should be interpreted narrowly in terms of alternative locations for a release or more widely in terms of alternative technologies to achieve the benefit sought in the development of this particular GMO. Given that activities relating to GMOs are technologically specific, the latter approach may be less relevant in that the applicant may not have considered technological alternatives. 16/ Whichever approach is adopted, as pointed out in the Implementation Guide, the public can propose alternatives through its right to comment and may raise a broader range of alternatives than the applicant is in a position to do.

25. **Paragraph 7:** The public participation procedures must allow the public to submit comments in writing or at any hearing as appropriate. This requirement applies to the public as a whole and not just to the public concerned. Nevertheless, the extent to which the wider “public concerned” has been identified at an earlier stage is likely to have implications for the effective involvement of the public as a whole.

26. **Paragraph 8:** Parties must ensure that the relevant public authority takes “due account” of the outcome of consultations. It is pointed out in the Implementation Guide that this is not limited to public participation concerning the environmental aspects of the proposed activity, but applies to the outcome of all public participation. A recognition of this point may be particularly important in the context of GMOs where a wide range of concerns may have been raised during the process, including within the framework of legal requirements established by other instruments. It should be noted that the Cartagena Protocol permits effects on human health and, to a certain extent, socio-economic effects to be taken into account 17/ and that Directive 2001/18/EC provides for ethical issues to be addressed in the course of the authorization procedure. 18/

27. **Paragraph 9:** The public must be informed promptly of the final decision and given reasons for the decision. This obligation does not appear to raise any particular issue with regard to GMOs although at the first meeting of the task force one delegate considered that the requirement actively to inform the public of the decision might create legal difficulties when applied to GMOs.

28. **Paragraph 10:** In general the requirement to apply paragraphs 2-9 of article 6 when updating or reconsidering operating conditions does not appear to raise particular issues in the context of GMOs. The Parties may wish to consider whether this requirement may need to be modified in circumstances where the reconsideration arises in the context of an emergency situation or enforcement measures, but this can be done within the scope of the existing language, which requires application “where appropriate” (this may also need to be considered in relation to other activities covered by article 6).

29. **The relationship between public participation, access to information and access to justice in the context of activities involving genetically modified organisms:** Article 3, paragraph 1, of the Convention requires the Parties to take the necessary measures to achieve compatibility between the information, public participation and access-to-justice provisions of the Convention. In the context of article 6 and decisions relating to GMOs, Parties may need to pay particular attention to rules on standing to challenge decisions or possible violations of article 6, for example where a member of the public living at some distance from the site of a release has an interest in a site which may be affected by cross-pollination.

## **II. ANALYSIS OF THE PUBLIC PARTICIPATION PROVISIONS IN THE MAIN INTERNATIONAL AND REGIONAL AGREEMENTS RELEVANT TO GMOs AND THEIR RELATIONSHIP TO THE PROVISIONS OF THE AARHUS CONVENTION**

### **A. The Convention on Biological Diversity**

30. The Convention on Biological Diversity <sup>19/</sup> contains a number of specific obligations (in articles 8 (g) and 19) relating to activities involving “living modified organisms”<sup>20/</sup> (LMOs) and biotechnology. These provisions do not themselves directly address the issue of public participation in decision-making relating to GMOs. Nevertheless, the Convention also contains a number of general provisions which are, to varying degrees, relevant to the issue of public participation in this area. These include, in particular, article 13 on public education and awareness and article 14 on impact assessment. <sup>21/</sup> When read together, these provisions indicate that the implementation of the specific provisions relating to LMOs should be carried out in a way which is consistent with the general obligations in articles 13 and 14.

31. Article 8 (g) of the Convention requires Parties “as far as possible and as appropriate” to establish and maintain means to regulate, manage or control the risks associated with the use and release of LMOs resulting from biotechnology which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, taking also into account the risks to human health. Although not specified in article 8 (g), it is clear that some form of permit or licensing system is likely to be established as a means to regulate, manage and control risks associated with the use and release of LMOs.

32. “Release” is not defined in the Convention but may be assumed to cover deliberate release as referred to in the Aarhus Convention. Article 8 (g) appears to be broad enough to cover contained use (see below) provided that it is likely to have adverse environmental impacts within the terms of article 8 (g): for example in respect of waste streams.

33. Article 19 is concerned with the handling of biotechnology and distribution of its benefits. Paragraph 4 requires Parties from which LMOs are to be exported to ensure that any available information about use and safety regulations in handling LMOs, as well as any available information on potential adverse impacts to the Party into which the organism is to be introduced, is provided. This provision may be considered to be generally supportive of public participation in relation to imports of LMOs (to the extent that the information transmitted to the country of import is made publicly available), but does not appear to require public participation in relation to decisions on import (but see discussion on the Cartagena Protocol below).

34. Article 13 of the Convention is concerned with public education and awareness and requires Parties to promote and encourage understanding of the importance of, and the measures required for, the conservation of biological diversity and to cooperate in developing educational and public awareness programmes concerned with the conservation and sustainable use of biological diversity. The implementation of this provision may be seen as supportive of effective public participation in decision-making relating to GMOs, as in other areas of environmental decision-making, but clearly does not directly provide for such participation.

35. More directly relevant to the issue of public participation is article 14, which concerns impact assessment and minimizing adverse impacts. Article 14, paragraph 1 (a), in particular requires Parties “as far as possible and as appropriate” to introduce appropriate procedures requiring environmental impact assessment of its “proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate, allow for public participation in such procedures”. <sup>22/</sup> The form that such public participation should take is not elaborated in the Convention although some guidance is provided in the IUCN Handbook on the Convention on Biological Diversity. <sup>23/</sup> In their decision IV/10, the Parties to the Convention referred to stakeholder participation in biodiversity conservation and sustainable use and called for the Parties to share experience of public participation relevant to the Convention (the matter is to be reviewed at the seventh Conference of the Parties). The decision also emphasized the need to enable the active participation by interested and affected stakeholders in the assessment process provided for in article 14. A number of decisions adopted under the Convention on Biological Diversity emphasize the need to ensure a wide spectrum of societal interest in the context of assessment (see for example recommendation VI/5 of the Subsidiary Body on Scientific, Technical and Technological Advice).

36. The Convention does not list or further specify the projects that are likely to have significant adverse effects on biological diversity covered by article 14, paragraph 1 (a), and thus at least some activities relating to GMOs appear likely to fall within its scope and thus require, within the terms of article 14, an impact assessment with appropriate public participation. The deliberate release of an LMO would appear susceptible to the type of assessment generally associated with environmental impact assessment in that an assessment could cover an examination of the proposed activity (the individual release or possibly a programme of releases), its impact on the receiving environment and so on.



37. In conclusion, there is clearly a potential overlap between obligations arising under article 8 (g) and article 14 of the Convention on Biological Diversity and article 6 of the Aarhus Convention in relation to public participation in decisions relating to GMOs/LMOs. There does not appear to be any clear inconsistency between the two instruments but the requirements for public participation are both more explicit and more precisely defined in the Aarhus Convention than in the Convention on Biological Diversity.

#### B. The Cartagena Protocol on Biosafety

38. The objective of the Cartagena Protocol on Biosafety (the Protocol) is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of LMOs 24/ that may have adverse effects on the conservation and sustainable use of biodiversity, specifically focusing on transboundary movements. To this end, the Protocol provides for an advance informed agreement procedure (AIA) in relation to the “first intentional transboundary movement of LMOs for intentional introduction into the environment. 25/ This does not cover LMOs intended for direct use as food, feed, or for processing, which are subject to separate requirements under article 11 of the Protocol. The Protocol does not define deliberate release (referring rather to “intentional introduction into the environment” - which is not positively defined), but does define contained use. The definition of the latter is similar but not identical to that contained in EU legislation.

39. The provisions setting out the AIA procedure do not specifically refer to public participation but there are general provisions on public awareness and participation in article 23 of the Protocol. In addition to requiring Parties to promote and facilitate public awareness concerning the safe transfer, handling and use of LMOs in relation to the conservation and sustainable use of biodiversity, article 23 requires Parties, in accordance with their respective laws and regulations, to consult the public in the decision-making process regarding LMOs and to make the results of such decisions available to the public, while respecting confidential information in accordance with article 21 of the Protocol. Article 23 has a broad scope which would appear to encompass both deliberate use and contained use (even taking into account article 6, paragraph 2, which provides that the AIA procedure will not apply in relation to the transboundary movement of LMOs destined for contained use undertaken in accordance with the standards of the Party of import). Article 23 also requires the Parties to endeavour to inform the public about the means of public access to the Biosafety Clearing-House.

40. Thus although, by virtue of article 23, the Protocol requires public participation in a broad range of activities concerning LMOs - presumably transfer, handling and use including transboundary movement - it does not elaborate the conditions for such public participation in as much detail as the Aarhus Convention. As with article 6 of the Aarhus Convention, the Protocol requires consultation, and that decisions be made publicly available. It does not, however, expressly require that authorities take due account of the outcome of public participation. In setting out the terms of the AIA procedure, the Protocol does provide for time frames for decision-making: a country of import must make a decision within 270 days for example. Clearly, in implementing article 23 of the Protocol, Parties will have to ensure that provision for public participation can operate effectively within the time frames set out in articles 10 and 11.

41. At the first meeting of the Intergovernmental Committee for the Cartagena Protocol, the Signatories to the Protocol considered, among other items, decision-making procedures pursuant to

article 10, paragraph 7, of the Protocol. Article 10 relates to the decision-making procedure for the advance informed agreement procedure under the Protocol and paragraph 7 requires the Parties at their first meeting to decide upon “appropriate procedures and mechanisms” to facilitate decision-making by Parties of import. One delegation expressed its concern that the working group on this item had not touched on how the public could be involved in decision-making. <sup>26/</sup> The issue of decision-making will be addressed further at the second meeting in October 2001, with a view to formulating a recommendation to present to the Conference of the Parties to the Protocol at its first meeting. Thus far the discussion has focused on how to facilitate decision-making in countries lacking the necessary expertise and regulations, specifically in developing countries and those with economies in transition.

42. The extent to which information relevant to public participation may be withheld is clearly relevant to any comparison between the regime under the Protocol and that which would operate under the Aarhus Convention. Given the very different way in which the relevant provisions are formulated, it is however difficult to ascertain whether in practice there is likely to be a significant difference between the two regimes. Article 21 of the Protocol addresses the issue of confidential information but does not set out the precise substantive basis on which information is to be regarded as confidential. By contrast, article 4 of the Aarhus Convention contains a detailed code by which Parties are to determine whether or not a request for environmental information may or must be refused. Article 4, paragraph 4, in particular refers to the protection of various interests which are relevant to considerations of confidentiality such as commercial and industrial information and the confidentiality of the proceedings of public authorities. This difference in approach between the two provisions appears to mean that some countries might allow designation of information as “confidential” under article 21 of the Protocol which would not be so classified under the Aarhus Convention, although the Convention appears to specify the range of circumstances under which information may be regarded as confidential in most legal systems.

43. Paragraph 2 of article 21 of the Protocol provides for consultation which may lead to an internal review in circumstances where the Party of import decides that information identified as confidential by the notifier does not qualify for such treatment. By virtue of paragraph 6, the following information may not be kept confidential: the name and address of the notifier; a general description of the LMO; a summary of the risk assessment; <sup>27/</sup> and any methods or plans for emergency response. This is expressed to be subject to paragraph 5, which deals with the situation where a notifier withdraws a notification, in which case the Party of import must respect the confidentiality of commercial and industrial information where there is disagreement as to its confidentiality. Under the Aarhus Convention, the grounds for withholding information which would otherwise have to be made available for the purposes of public participation under article 6, paragraph 6, are those set out in article 4, paragraphs 3 and 4. It could be argued however that paragraphs 2 and 6 of article 6 of the Convention have a similar effect to article 21, paragraph 6, of the Protocol in that they positively list information which is to be made available subject only to the exceptions set out in paragraphs 3 and 4 of article 4.

44. In so far as any of the Convention’s exceptions could be used to withhold information which may not be considered confidential under the Protocol, a Party to the Convention would be free not to apply the Aarhus Convention’s exceptions (which are discretionary) and would not therefore be constrained from implementing article 21, paragraph 6, of the Protocol. It should also be borne in mind that article 4, paragraph 4 (d), of the convention provides that, in the context of the confidentiality of commercial and industrial information, “information on emissions which is

relevant for the protection of the environment” shall be disclosed. Furthermore, article 4, paragraph 4, of the Convention provides that “the aforementioned grounds for refusal shall be interpreted in a restrictive way, taking into account the public interest served by disclosure and taking into account whether the information requested relates to emissions into the environment”. Given the complexities involved in both sets of provisions, those under the Protocol and those under the Convention, this may be an area where the Parties would wish to undertake further work.

45. A key mechanism for the operation of the Protocol is the Biosafety Clearing-House established under article 20 of the Protocol (as part of the clearing-house mechanism under article 18, paragraph 3, of the Convention on Biological Diversity). Among its various functions, the Biosafety Clearing-House is to provide access to information made available by the Parties which is relevant to the implementation of the Protocol. Included in the information to be provided to the Biosafety Clearing-House is information provided by Parties for the AIA procedure, summaries of its risk assessments or environmental reviews of LMOs generated by its regulatory process and carried out in accordance with article 15, and final decisions regarding the importation or release of LMOs. The modalities of operation are to be considered and decided upon at the first meeting of the Parties to the Protocol. Pursuant to a decision of Intergovernmental Committee at its first meeting, the Biosafety Clearing-House has entered a pilot phase.

46. Clearly the Biosafety Clearing-House will hold information which is relevant to public participation under the Aarhus Convention. This may either be information which is required to be provided under the AIA procedure (and which thus relates to transboundary movement) or which has been generated solely in the course of a Party’s domestic regulatory process. The provisions of article 21 apply to the operation of the Biosafety Clearing-House.

C. European Community Directives 2001/18/EC and 90/219/EEC as amended by 98/81/EC

47. Directive 2001/18/EC 28/ on the deliberate release into the environment of GMOs entered into force on 17 April 2001. It is addressed to the EU Member States, which have until 17 October 2002 to implement it. From that date, Directive 90/220/EEC, which currently regulates the deliberate release of GMOs in the European Community, will be repealed. Directive 2001/18/EC applies both to “the deliberate release into the environment of GMOs for any other purposes than placing on the market” within the Community (governed by the procedure laid down in part B of the Directive) and also to “placing on the market GMOs as or in products” within the Community (governed by the procedure laid down in part C of the Directive).

48. Directive 2001/18/EC introduces, in article 2, a new definition of “deliberate release” which is to mean “any intentional introduction into the environment of a GMO or a combination of GMOs for which no specific containment measures are used to limit their contact with and to provide a high level of safety for the general population and the environment”. 29/ The Directive also introduces a new definition of “placing on the market” which means “making available to third parties, whether in return for payment or free of charge.” A number of operations are not to be considered to be placing on the market, in summary these are: making available GMMs for activities regulated under Directive 90/219/EEC on contained use; making available other GMOs to be used exclusively for activities where stringent contained use conditions are applied and making available GMOs for deliberate release under part B of the Directive (non-marketing releases).

49. Directive 90/219/EEC regulates the contained use of GMMs, which is defined as “any activity in which micro-organisms are genetically modified or in which such GMMs are cultured, stored, transported, destroyed, disposed of or used in any other way, and for which specific containment measures are used to limit their contact with the general population and the environment”. 30/

50. Article 31 of Directive 2001/18/EC on the exchange of information and reporting provides for the establishment of registers both by the Commission and by the Member States. In relation to the former, part is to be accessible to the public and in relation to the latter the register is to be a public register. The Member States’ registers are to record inter alia the location of part B releases and the location of GMOs grown under part C so that the possible effects of such GMOs on the environment may be monitored. These locations are to be made available to the public “in the manner deemed appropriate by the competent authorities and in accordance with national provisions”.

51. The directives on deliberate release and contained use form the general framework for the regulation of activities relating to GMOs in the European Union, although in certain cases where specific sectoral legislation, for example on medicinal products or novel foods, has been adopted, the sectoral legislation will apply if it provides for equivalent risk assessment. 31/ Under both the current regime and Directive 2001/18/EC, there are different authorization procedures for placing on the market and for other deliberate releases into the environment.

52. **Part B releases:** The current regime under Directive 90/220/EEC makes limited provision for public participation. In relation to releases governed by part B of Directive (those which do not relate to placing on the market of products containing GMOs), article 7 of Directive 90/220/EEC provides that, where a Member State considers it appropriate, it may provide that groups or the public shall be consulted on any aspect of the proposed deliberate release.

53. Provision for public participation is strengthened in Directive 2001/18/EC. In relation to the deliberate release of GMOs for any purpose other than placing on the market (part B releases), article 9 of the Directive, concerning consultation of and information to the public, requires Member States, without prejudice to the provisions concerning differentiated procedures and confidentiality, to consult the public and, where appropriate, groups on the proposed deliberate release. Under the standard authorization procedure, the normal 90-day period within which the competent authority must respond to the notifier may be extended by up to 30 days for the purposes of carrying out a public inquiry or consultation under article 9. In making provision for public participation, Member States are to lay down arrangements for this consultation, including a reasonable time period, in order to give the public or groups the opportunity to express an opinion. In addition, and without prejudice to the provisions concerning confidentiality in article 25 of the Directive, Member States are required to make available to the public the information contained in the system of exchange of information between competent authorities and the Commission (summaries of notifications, final decisions, etc).

54. Under article 7 of Directive 2001/18/EC, what are termed “differentiated procedures” may be adopted if sufficient experience has been obtained of releases of certain GMOs in certain ecosystems and the GMOs concerned meet the criteria set out in annex V to the Directive. These procedures are adopted under the committee procedure provided for in article 30, paragraph 2, of

the Directive. There is a requirement on the Commission to make any proposal available to the public, which may within 60 days make comments (art. 7 para. 2(b)). It appears that where such procedures are adopted, the consultation and information requirements of article 9 may be waived to some extent since article 9 is expressed to be without prejudice to the provisions of article 7. The degree to which any such procedures derogated from the requirements of article 9 of Directive 2001/18/EC would clearly have implications for the implementation of article 6 of the Aarhus Convention in the European Union.

55. Where new information which could have significant consequences for the environment or for human health is made available under article 8 of the Directive, the competent authority is required to evaluate the information and make it available to the public. If the authority modifies the conditions for, suspends or terminates the deliberate release, it must also inform the public. This provision thus goes some way towards implementing paragraph 10 of article 6 of the Convention, but does not appear to allow for the submission of comments by the public or require due account to be taken of the outcome of public participation. Parties to the Aarhus Convention may wish to consider whether or not it would, in the terms of article 6, paragraph 10, of the Convention, be “appropriate” for the public participation requirements of article 8 of Directive 2001/18/EC to extend further.

56. **Part C releases:** Part C authorization differs from that provided for in part B. Under article 13 of Directive 2001/18/EC, the notification is submitted to the competent authority of the Member State where the product is to be placed on the market for the first time but it is forwarded to the Commission and to the competent authorities of the other Member States. If objections are raised to the notification, the matter is decided at the Community level either by agreement or by a committee procedure (art. 18 in connection with art. 30). Thus there is clearly a stronger Community-wide dimension to issues of public participation, not least since any GMO authorized under part C will then circulate freely throughout the Community in so far as the specific conditions of use are strictly adhered to (art. 19).

57. In relation to the placing on the market of GMOs as or in products, the provisions for public participation do not go so far as to expressly require consultation as such. Article 24 of the Directive requires the Commission to make available to the public the summary of the notification and the assessment report prepared by the competent authority. Article 24 then goes on to provide that “the public may make comments to the Commission within 30 days” and requires that the Commission immediately forward those comments to the competent authorities. Without prejudice to the provisions on confidentiality, assessment reports for all GMOs which have either received written consent to be placed on the market, or have been rejected must be made available to the public (art. 24 para. 2). For each product, the GMO or GMOs contained therein and the use or uses must be clearly specified.

58. Thus there is no express duty actively to consult the public (in contrast to art. 9’s requirements for part B releases) or to take any comments received into account (which is not expressly required under either regime). It may be argued that it is implicit that the competent authority/Member States and the Commission must take into account any comments received from the public since otherwise the duty to forward these comments (art. 24) or to consult (art. 9) would be meaningless.

59. Article 19, paragraph 4, of the Directive requires Member States to take all necessary measures to ensure that the written consent and any decision taken in the light of Community objections under article 18 of the Directive are made accessible to the public. Where a proposal is made under article 16 of the Directive to derogate from the criteria and information requirements of article 13, it must be made available to the public who may make comments to the Commission. Any such comments are forwarded to the committee which is to decide on the proposal. The results of monitoring are also to be made available to the public (art. 20, para. 4).

60. Provision is made under article 17 for the renewal of part C consents (which are issued for a time period not exceeding 10 years). Renewal is subject to a procedure similar to that which applies to the original notification but there is no express requirement for information to be made available to the public or for them to comment, as article 24 does not apply to decisions under article 17. The renewal of such consents may be considered to fall within article 6, paragraph 10, of the Aarhus Convention, in which case the question is whether the absence of any requirement for public participation in this context is “appropriate”.

61. **Conclusion:** In comparing the requirements of article 6 of the Aarhus Convention with these various provisions of Directive 2001/18/EC a number of points arise. In relation to paragraph 2 of article 6, it is not clear that the Directive meets all the requirements. In particular, it is not clear whether the summary and the assessment report cover all the matters referred to in paragraph 2 of article 6, for example as to the nature of possible decisions or draft decision (sub-para. (b)) or as to the envisaged procedure (an indication of what environmental information relevant to the proposed activity is available) (subpara. (d)). Nor is it clear that 30 days is a “reasonable time frame” for the purposes of paragraph 3 of article 6. There does not appear to be any provision which equates to paragraph 5. Nor is it clear from the Directive whether its requirements fully meet the obligation to provide access to the information referred to in paragraph 6 in particular as to the matters referred to in sub-paragraphs (c), (e) and (f).

62. The language of articles 9 and 24 of the Directive does not clearly meet the requirements of article 6, paragraph 8, of the Convention that due account be taken of the outcome of public participation. This requirement may however be implicit in those provisions. So far as article 6, paragraph 9, of the Convention is concerned, it is not specified in the Directive that the public must be informed promptly of the decision on the notification, nor of the reasons and considerations on which the decision is based. The Directive does require that the assessment reports for all those GMOs which have either received consent or been rejected must be made available but this will not fulfil all the requirements of paragraph 9.

63. In relation to paragraph 10 of article 6 (update or vary the operating conditions B or C), the question is whether the absence of provision for full public participation in articles 8 and 19 of Directive 2001/18/EC is appropriate.

64. It should be noted that article 32 of the Directive relates to the implementation of the Cartagena Protocol and invites the Commission to bring forward a proposal for its implementation. “The proposal shall complement and, if necessary, amend the provisions of this Directive.” This means that to the extent that there is any discrepancy between the EU rules on public participation and those applying under the Protocol, the European Community will bring its rules into line with those under the Protocol. This appears likely to mean for example that a stronger requirement for

public participation in relation to decisions concerning the marketing of GMOs (to the extent that these fall within the scope of the Protocol) will be required.

65. **Confidential information:** In relation to confidentiality, article 25 of Directive 2001/18/EC provides that the Commission and the competent authorities shall not divulge to third parties any confidential information notified or exchanged under the Directive. The notifier may indicate the information in the notification, the disclosure of which might harm his competitive position and which should therefore be treated as confidential. In such cases, “verifiable justification” must be provided. As in the Cartagena Protocol (see above), certain information may not be kept confidential: the general description of the GMO or GMOs; the name and address of the notifier; the purpose of the release, the location of the release and intended uses; the methods and plans for monitoring of the GMO and for emergency response and the environmental risk assessment.

66. Again it is arguable that in the light of paragraph 4 of article 25, certain information would have to be disclosed under Directive 2001/18/EC which could otherwise be protected from disclosure under the Aarhus Convention.

67. **Contained use:** The contained use of genetically modified micro-organisms (GMMs) is governed by Directive 90/219/EEC as amended. In relation to public participation, article 13 of Directive 90/219/EEC provides that a Member State, if it considers it “appropriate”, and without prejudice to the article 19, which provides for the protection of confidential information, may provide that the public shall be consulted on aspects of the proposed contained use. In a similar way to article 25, paragraph 4, of Directive 2001/18/EC, article 19, paragraph 3, provides that certain information may not be treated as confidential. 32/

68. Thus in so far as activities involving the contained use of GMOs may be caught by article 6 of the Aarhus Convention, the Directive does not require, though it does appear to permit in general terms, public participation. Whilst Member States would appear to be free to apply the types of requirements set out in article 6, they are not obliged to do so, for example in relation to an obligation to take due account of the outcome of public participation or to provide promptly the decision made and the reasons for it.

69. The contained use of GMOs other than GMMs is not covered by the current EU legislation. In relation to GMMs, provision for public participation is at the discretion of the Member State and the Directive does not prescribe the form which it should take. This would appear to be an area where the standards set by article 6 of the Convention are not required as a matter of law.

D. Codex Alimentarius Commission (and its Intergovernmental Task Force on Foods Derived from Biotechnology)

70. The scope of the work undertaken by the Codex Alimentarius Commission (the Codex Commission) and in particular its Task Force on Foods Derived from Biotechnology (the Task Force) is related to food standards and consumer safety and thus does not encompass environmental issues arising from the deliberate release of GMOs into the environment. Some of the work on food derived from biotechnology has a potential overlap with the decision-making addressed by the

Aarhus Convention however, since GM foods may be released into the environment for marketing purposes for example.

71. The Codex Commission established the Task Force to develop standards, guidelines or recommendations, as appropriate, for foods derived from biotechnology or traits introduced into foods by biotechnology. 33/ The Task Force agreed an overall work programme involving the drawing-up of general principles for the risk analysis of foods derived from biotechnology, specific guidance on the risk assessment of foods derived from biotechnology; and a list of available analytical methods including those for the detection or identification of foods or food ingredients derived from biotechnology. A number of other Codex Committees are also dealing with issues relating to biotechnology including traceability and labeling. 34/

72. The Task Force submitted its Proposed Draft Principles for the Risk Analysis of Foods Derived from Modern Biotechnology and Proposed Draft Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants to the Codex Commission at its 24<sup>th</sup> session. 35/

73. The purpose of the Draft Principles is to provide a framework for undertaking risk analysis on the safety and nutritional aspects of foods derived from modern biotechnology. It is expressly stated that the document does not address environmental, other ethical, moral and socio-economic aspects of the research, development, production and marketing of these foods. 36/ The Draft Principles go on to address the issues of risk assessment, risk management and risk communication. There is no explicit reference to public participation, but in the context of risk communication it is stated that risk communication should include “transparent safety assessment and management decision-making processes” (para. 23). The Draft Principles go on to provide that these processes should be fully documented at all stages and “open to public scrutiny”. Reports on safety assessments and others aspects of the decision-making process should be made available to all interested parties.

74. Whilst the Draft Principles do not state in terms that the public should be consulted in the course of decision-making in this area, the principles do state that “Effective risk communication should include responsive consultation processes” (para. 24) and that the views “of all interested parties” should be sought and that relevant food safety and nutritional issues that are raised during consultation should be addressed during the risk analysis process (para. 24).

75. The Draft Guideline is intended to support the Draft Principles and states that it does not address environmental risks (para. 2). It addresses technical issues relating to food safety assessment and does not deal with public participation in the decision-making process.

76. The Codex Commission is responsible for making proposals to the Directors-General of the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) on the implementation of the Joint FAO/WHO Food Standards Programme. Among the purposes of the Programme are the protection of the health of consumers and the coordination of food standards work undertaken by international governmental and non-governmental organizations. Following acceptance by governments, food standards are published in the Codex Alimentarius either as regional or worldwide standards. The Commission has established various committees with responsibility for what are known as general subjects and for specific commodities.



77. So far as public participation is concerned, the Codex Commission has expressed general support for the involvement of consumer groups in decision-making at the national level <sup>37/</sup> and consumer groups have been involved in the work of the Commission itself. It does not appear to have issued any general guidance on public participation. There appears to be some limited overlap between the work undertaken by the Codex Task Force in so far as GM food is concerned and the scope of the Aarhus Convention, but given the non-environmental focus of this exercise there does not appear to be any direct conflict.

### **III. THE IMPLICATIONS OF A NUMBER OF LEGALLY BINDING OPTIONS FOR FURTHER DEVELOPING THE PUBLIC PARTICIPATION PROVISIONS OF THE AARHUS CONVENTION**

78. Article 10, paragraph 2, of the Convention places the Parties under a general duty, at their meetings, to keep under continuous review the implementation of the Convention. More specifically, the Parties are to review the policies for and legal methodological approaches to, inter alia, public participation in decision-making in environmental matters (subpara. (a)). Subparagraphs (b)-(g) then go on to provide for more specific powers and duties in this regard. These provisions, together with article 14 of the Convention, which lays down the procedure for amending the Convention, provide the legal basis for the further development of the public participation provisions of the Aarhus Convention. In general terms it may be said that article 10, paragraph 2, provides the Parties with a broad range of mechanisms by which the implementation of the Convention may be furthered.

79. The report of the second meeting of the task force on genetically modified organisms (CEP/WG.5/AC.3/2001/3, para. 8) lists procedural options for extending the application of the Convention to decision-making on GMOs. This study addresses options (a), (b), (d) and (e).

#### **A. Option (a)**

80. Article 10, paragraph 2, does not specifically refer to “decisions” but the general reference to “additional action” is clearly broad enough to provide a legal basis for action in the form of a decision of the Parties. The terms of reference for this study refer to legally binding options: the wording of article 10, paragraph 2 (g), does not expressly provide that additional action taken may or will be legally binding. There is no reason in principle why a treaty may not provide for the Parties to have the power to take legally binding decisions. One example would be the Charter of the United Nations, Article 25 of which provides that “Members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter.” However, given the importance of knowing whether or not a decision is legally binding, one might expect clear language to indicate that decisions taken under the provisions of a treaty are to be legally binding on the Parties, particularly if they are to be adopted by a majority vote. In this case the language does not clearly suggest that legally binding decisions are included within the range of additional action that may be taken by the Parties to the Convention. It should be noted however that a consistent practice of adopting decisions treated as binding by the Parties could in time substitute for the lack of clear language providing for this. In this context article 31, paragraph 3 (a)

and (b), of the Vienna Convention of the Law of Treaties may be relevant. Article 31, paragraph 3, provides that, in interpreting a treaty, there shall be taken into account, together with the context, “any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions” (subpara. (a)) and “any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation” (subpara. (b)).

81. Given the lack of express provision for binding decisions and in the absence of any consistent practice to that effect at this stage, it is assumed for the purposes of this study therefore that any decisions taken pursuant to article 10, paragraph 2 (g), of the Aarhus Convention will not be legally binding. This means that the disadvantage of option (a) would be that it would not be binding on the Parties. It should be noted, however, that under a number of environmental treaties such as the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), decisions or resolutions are adopted which, although not formally binding, are treated as authoritative interpretations of the treaty or which provide for steps to be taken by the Parties which are generally regarded as mandatory. In this case, the type of decision envisaged is one which would set out the views of the Parties on how article 6, paragraph 11, should be construed. Clearly Parties are free to adopt either a very detailed text which provides specific guidance on paragraph 11 and refers to all the requirements of article 6 in this context or they could decide to adopt a decision which addresses a few key issues.

82. The types of issues which such a decision might address are indicated in chapters I and II of this study and include some or all of the following: the meaning of “deliberate release”; the approach to take in determining the public concerned under article 6, paragraph 2; the interpretation of “environmental impact assessment” in article 6, paragraph 2 (e) - that is to say, does it include environmental risk assessments carried out for deliberate release; the approach to take to providing information about the release site under article 6 paragraph 6 (a); the meaning of “emissions” in this context, taking into account article 4 of the Convention. In addition, the Parties may wish to include guidance on the disclosure of information in this context, taking into account in particular the requirements of the Cartagena Protocol.

83. Option (a) refers only to article 6, paragraph 11 - to the extent that deliberate release does not cover other activities associated with GMOs, in particular contained use, the decision could also clarify what is potentially covered by article 6, paragraph 1 (b), of the Convention, for example contained use in so far as waste streams are concerned. 38/

84. One advantage of option (a) would be that, in contrast to the procedure for amendment, the procedure for adoption would be relatively straightforward and the decision would presumably bind all Parties automatically in a political if not in a legal sense. This would facilitate adaptation to take account of future changes.

## B. Option (b)

85. Option (b) is that the Convention be amended so as to include a reference to GMO-related activities in annex I, and that article 6, paragraph 11, would be amended accordingly (presumably by deleting it to the extent that its scope would be covered by the reference to annex I). The detailed procedure for amending the Convention is laid down in article 14. If it is not possible to reach agreement on a proposed amendment by consensus, the amendment shall “as a last resort” be adopted by a three-fourths majority vote of the Parties present and voting at the meeting

(para. 3). <sup>39/</sup> Such amendments shall then be communicated by the Depositary to all Parties for ratification, approval or acceptance.

86. The process by which amendments enter into force under article 14 differs according to whether the amendments are amendments to an annex or not. In relation to an amendment to an annex, any Party which cannot accept the amendment must notify the Depositary in writing to this effect within 12 months from the date of the communication of adoption. The Depositary must then without delay notify the Parties of all such notifications received. In relation to those Parties which have not submitted a notification (which can be replaced by an acceptance at any time), an amendment to an annex becomes effective 12 months from the date of its communication by the Depositary provided that not more than one third of the Parties have submitted a notification under paragraph 4.

87. Option (b) appears to combine both an amendment to an annex and an amendment to the main text of the Convention (namely the deletion or modification of art. 6, para. 11) and would thus appear to require both amendment procedures to be applied. The Parties would need to ensure that one part of the amendment does not come into force without the other (for example the deletion of art. 6, para. 11, without the addition to annex I), perhaps by framing the former as being contingent on the latter's entry into force (for the Party concerned).

88. The time frame for entry into force would be, in the case of the amendment to annex I, 12 months from the date of communication by the Depositary (except for those Parties entering a notification). The amendment to article 6, paragraph 11, would enter into force on the ninetieth day after receipt by the Depositary of notification of the ratification, approval or acceptance of the amendment by at least three fourths of the Parties.

89. In terms of the elements to be included, some possible alternatives for amending the Convention's provisions providing for public participation in decision-making on GMOs were circulated to the task force at its second meeting and annexed to the report of the meeting (CEP/WG.5/AC.3/2001/3, annex II). In relation to option 1 (amendment to art. 2 and art. 6, para. 11) as set out at annex II, the implications of including in article 2 of the Convention a definition of deliberate release are discussed above, in particular at paragraphs 7-8. The implications of applying the various paragraphs of article 6, paragraph 6, to activities relating to GMOs are also discussed at paragraphs 11-28 above (see in particular para. 24 in relation to art. 6, para. 6 (e), and para. 27 in relation to art. 6, para. 9). In summary, it may not be necessary to insert a new definition into article 2 (see the alternative approaches discussed at para. 8 above). An additional point which may merit further examination is that of the scope of the language in subparagraphs (a) and (c) of article 6, paragraph 6. Parties may wish to interpret the scope of "expected residues and emissions" and "measures" to prevent/reduce effects more widely than simply "expected waste" or "waste treatment" as suggested in the proposed article 6, paragraph 11 (b), under this option (see further para. 23 above).

90. In relation to option 2 (amendment to art. 2, art. 6, para. 11, and annex I), so far as article 2 is concerned the same comments apply as in relation to option 1. In relation to the amendment of article 6, similar considerations apply as in relation to option 1 save that it might be possible to include the qualification to paragraph 21 bis of annex I as an annotation within the annex itself. Another approach would be to insert a reference to decisions on whether to permit the deliberate release of GMOs as a new paragraph in annex I (as with option 2) and accompany this by a proposal

to delete article 6, paragraph 11. In relation to activities other than deliberate releases, either additional language to cover these could be inserted into the new paragraph of annex I or else reliance could be placed on article 6, paragraph 1 (b), possibly with further guidance from the Parties. It would be possible to annotate and define terms in annex I, as has been done already in relation to the meaning of “airport” for example.

91. It is difficult to predict what the effect of option (b) would be on the process of ratification. Existing Parties to the Convention will be able to choose whether or not to accept the amendments (see above) but by virtue of article 40, paragraph 5, of the Vienna Convention on the Law of Treaties, any State which becomes a Party to the Convention after the entry into force of the amendments will be considered as a Party to the Convention as amended unless it expresses a different intention (it will be considered as a Party to the unamended Convention in relation to any Party to the Convention not bound by the amendment).

92. In terms of the flexibility of this option with respect to future changes, the amendment procedure renders this option less flexible than option (a), as flexible as option (e) (given the need to combine amendments to annex I with amendments to the Convention itself) and perhaps more flexible than option (d) depending on the procedure prescribed for amending any new protocol.

#### C. Option (d)

93. Option (d) consists of the adoption of a protocol to the Convention. The general power of the Meeting of the Parties to “prepare” protocols to the Convention is provided for in article 10 paragraph 2 (e). The negotiating States could consider whether to adopt the protocol as a free-standing instrument, which would be generally open to ratification, even by States which are not Parties to the Convention, or whether to provide that the protocol would be open only to those States which are Parties to the Convention (this matter should be addressed in the protocol itself).

94. For the reasons stated below in relation to option (e), it is not clear that a protocol is required to achieve the objective of applying the requirements of article 6 to decision-making in relation to GMOs. The time frame for adopting such an instrument is likely to be considerably more protracted than in the case of options (a), (b) or (e). The flexibility of any such protocol would depend on the rules for amendment contained within it.

#### D. Option (e)

95. Under option (e), the Convention would be amended so as to include a new annex dealing with GMO activities. Annexes are an integral part of the Convention (art. 13). So far as the procedure for adoption of a new annex is concerned, article 14, paragraph 5, of the Convention refers to “an amendment to an annex”, which suggests an amendment to an existing annex. This appears to mean that the correct amendment procedure for this option is the procedure laid down in article 14, paragraph 4.

96. For the purposes of implementing article 6 of the Convention, there does not appear to be any reason why the text to be included in a new annex would be any different to what could be inserted into annex I under option (b). In which case there would be no great advantage in adopting option (e) over option (b) - which in so far as it amends annex I is subject to the lighter procedure (see above - although any accompanying amendment to the Convention would need to be governed

by the more onerous procedure in art. 14, para. 4). Only if the Parties wished to elaborate in much greater detail the way in which article 6 applies to decisions involving GMOs or if they wished to address the implementation of the Convention in the context of GMOs (arts. 4, 5, 7 and 9, for example) would option (e) appear to provide a distinct benefit. Elaboration could also be achieved, albeit in non-binding form, through the adoption of guidance or an interpretative decision (see discussion of option (a) above).

97. The time frame for entry into force would be ninety days after ratification etc. by three fourths of the Parties. As to flexibility, this option would be similar to option (b) (given that the deletion or modification of art. 6, para. 11, is subject to exactly the same procedure). It should be noted that the conditions for entry into force of an amendment to an annex are less onerous than those which apply in relation to other amendments such as this (the creation of a new annex). A number of features contribute to this difference. First, in order for an amendment to an annex not to enter into force for a particular Party, that Party must take active steps to submit a notification. In contrast, in relation to any other amendment, all a Party has to do to ensure that the amendment will not apply to it is to do nothing, since the amendment will only enter into force for those Parties which have actively ratified, approved or accepted it. Second, in relation to amendments to annexes, one third of the Parties must actively block entry into force at all (by submitting notifications). Whereas in relation to other types of amendments, entry into force can only occur if at least three fourths of the Parties act so as to ratify, accept or approve the amendment (art.14, para.4). Of course once a new annex has been adopted, the lighter procedure for amendment would apply to it. It could perhaps be argued that the adoption of a new annex would be inappropriate unless the application of article 6 to GMOs required detailed elaboration. It is not clear, on the basis of the analysis set out in chapter I, that this could not be equally well achieved through guidance or an interpretative decision (option (a)). As with option (d) above, until it is clearer what the additional content of a new annex (or, in the case of (d), a new protocol) would be, it is difficult to assess the justification for pursuing either of these options.

#### E. Relationship with other instruments

98. All of the above options, with the exception of option (a), would be legally binding on entry into force. Thus, depending on their precise formulation, any of the above options, except (a), might conflict with existing instruments in the ways considered in chapter II. It does not appear, however, that the scope for conflict is any greater than at present, given the extent to which article 6 already applies to decisions involving GMOs. Parties may, of course, be able to minimize the degree of conflict in areas such as the scope of deliberate release by the way in which they frame proposed options. Even in relation to a non-binding decision adopted under option (a), it would clearly be preferable to avoid conflict with existing agreements.

99. The implications for Parties' other international obligations would clearly need to be borne in mind when drafting any of the above options, taking into account the issues identified in chapter II of this study and also the principles of public international law as these govern relationships between treaties.

100. Article 30 of the Vienna Convention on the Law of Treaties sets out the way in which the rights and obligations of States Parties to successive treaties relating to the same subject matter are to be determined. In the absence of any specific provision in the Aarhus Convention which states that it is or is not to be considered as compatible with an earlier or later treaty, the rules in

paragraphs 3-5 of article 30 of the Vienna Convention apply. In summary, in relation to Parties to both treaties the earlier treaty only applies to the extent that its provisions are compatible with those of the later treaty. As between States only one of which is Party to the Aarhus Convention, the rules of the treaty to which both are Party governs their mutual rights and obligations.

101. To the extent that the Aarhus Convention (including any amendment to it) is later in time than existing instruments, the rules of articles 30 and 59 of the Vienna Convention on the Law of Treaties may come into play. Given the broad scope of the Aarhus Convention however, it might be argued that instruments focusing exclusively on GMOs are *lex specialis* and are not to be affected by a later and more general treaty. Ways for mutual support could include cooperation with the Biosafety Clearing-House to be established under the Cartagena Protocol (including reference to the Biosafety Clearing-House in implementation guidance); participation at meetings of the Parties to the Convention on Biological Diversity and the Cartagena Protocol in order to present the agreed approach of the Parties to article 6 in the context of GMOs; and discussions with a view to reaching an understanding on the scope of protection for confidential information in this context, considering the apparent discrepancies in the language used in the various instruments. Generally, the Aarhus Convention appears to require greater public participation than is provided for elsewhere. This is particularly so in comparison with EU legislation, where specific discussions may be required in order to clarify the extent to which EU legislation does not meet the requirements of article 6.

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1/ See “The Aarhus Convention: An Implementation Guide”, page 112.

2/ But see the discussion at paragraph 4 as to the scope of paragraph 20 of annex I.

3/ See, for example, the discussion as to the application of the Convention to the contained use of GMOs in CEP/WG.5/AC.3/2001/3, para. 27.

4/ The Protocol’s web site is available at [www.biodiv.org/biosafety/](http://www.biodiv.org/biosafety/)

5/ Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC, Official Journal L 106, 17/04/2001 P. 0001-0039.

6/ See “The Aarhus Convention: An Implementation Guide”, page 94.

7/ See discussions at paragraph 15.

8/ See CEP/WG.5/AC.3/2001/3, para. 21.

9/ This approach would appear to be consistent with the view that there are fundamental differences between deliberate release and contained use (CEP/WG.5/AC.3/2001/3 paras. 26-27). 10/ See CEP/WG.5/AC.3/2001/3, para. 22.

11/ Article 2, paragraph 5, of the Convention defines the public concerned as the public affected or likely to be affected by, or having an interest in, the environmental decision-making and provides

that, for the purposes of this definition, non-governmental organizations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest.

12/ See the Implementation Guide, page 102.

13/ The Convention web site is at [www.unece.org/env/eia/](http://www.unece.org/env/eia/)

14/ See the Implementation Guide, page 99.

15/ The Implementation Guide refers simply to location, page 105. It should be noted that risk assessment under the Cartagena Protocol on Biosafety takes into account the relevant characteristics of the receiving environment including “information on the location” (annex III, para. 9 (h)).

16/ The Espoo Convention refers to locational or technological alternatives, see the Implementation Guide, page 107.

17/ See articles 1 and 26.

18/ See article 29 of Directive 2001/18/EC, which provides for consultation by the Commission of a committee on ethics.

19/ The web site of the Convention on Biological Diversity is available at [www.biodiv.org/convention](http://www.biodiv.org/convention).

20/ The term “living modified organism” is not defined in the Convention but is defined in the Cartagena Protocol, which is discussed separately below. In the light of the definition adopted for the purposes of the Protocol it appears that the scope of “LMOs” is similar to the scope of GMOs in European Union legislation.

21/ In addition to these provisions, the thirteenth preambular paragraph refers to the need for the full participation of women at all levels of policy-making and implementation.

22/ Article 14, paragraph 1 (b), makes provision for Parties to ensure that the environmental consequences of plans and programmes likely to have significant adverse effects on biological diversity are taken into account - there is no express reference to public participation in this provision.

23/ “A Guide to the Convention on Biological Diversity”, Environmental Law and Policy Paper No. 30, 1994 IUCN, page 72. A handbook to supplement the guide is under preparation.

24/ An LMO is defined in article 3 of the Protocol as “any living organism that possesses a novel combination of genetic material obtained through the use of modern technology.”

25/ By virtue of article 5, the Protocol does not apply to pharmaceuticals and by virtue of article 6, it only applies in a qualified way to transit and contained use of LMOs.

26/ See the Report of the Intergovernmental Committee for the Cartagena Protocol on Biosafety on the work of its first meeting, UNEP/CBD/ICCP/1/9, 3 April 2001, page 12, at paragraph 85, available at [www.biodiv.org/doc/meetings/iccp](http://www.biodiv.org/doc/meetings/iccp).

27/ The scope of what is included in the summary may require further clarification in order to determine the relationship between this provision and the requirements of the Convention.

28/ Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC, OJ L 106, 17/04/2001, P1 0001-0039.

29/ The current definition as set out in article 2 of Directive 90/220/EEC is similar but refers to intentional introduction into the environment “...without provisions for containment such as physical barriers or a combination of physical barriers together with chemical and/or biological barriers used to limit their contact with the general population and the environment”.

30/ Article 2, paragraph (c), of the Directive as amended.

31/ Article 12, paragraph 3, of Directive 2001/18/EC provides for a regulation to be adopted which will introduce procedures equivalent to those contained in the Directive, including in the area of the provision of information to the public. This regulation will be referred to in subsequent sectoral legislation.

32/ This information includes the general characteristics of the GMM, the name and address of the notifier, the location of use, the class of contained use and measures of containment and the evaluation of foreseeable effects.

33/ The Task Force was established at the Codex Commission's 23<sup>rd</sup> session held in June/July 1999 and is to complete its work within four years producing a full report in 2003, see the Preliminary Report of the Task Force available at [www.codexalimentarius.net/](http://www.codexalimentarius.net/).

34/ See the second report of the Task Force available at [www.codexalimentarius.net](http://www.codexalimentarius.net) at paragraphs 7-8.

35/ The outcome of this meeting was not yet available on the Codex web site at the time of writing.

36/ See paragraph 7 of the Draft Principles at appendix II to the second report of the Task Force.

37/ Reportedly at the 20<sup>th</sup> session of the Commission - see "Understanding Codex - Codex and Consumers" available at the Codex web site.

38/ See CEP/WG.5/AC.3/2001/3, paras. 27-28.

39/ In this context, "present and voting" means present and casting an affirmative or negative vote, article 14, paragraph 7, of the Convention.