The EIAG recommends that the national investing bodies should actively use their position as investors to encourage a careful and precautionary approach to genetic modification that supports the common good.

The EIAG recommends that the national investing bodies should avoid investment in:

(a) Companies developing and marketing GMOs if engagement does not lead to satisfactory assurance on, and confidence in, ethical standards

(b) Agricultural land that fails EIAG-recommended due diligence tests with regard to GMOs; and

(c) Timberland that fails the EIAG’s due diligence tests with regard to GMOs.

If, as a result of a change in use, agricultural land that had initially passed the EIAG-recommended due diligence tests with regard to GMOs would no longer pass them, then the investing body should consider with its trustees the appropriate way forward on a case-by-case basis. Advice may be sought from the EIAG.

There is no blanket requirement for a forced disposal but there may be occasions where the use of the land so violates the due diligence principles on GMOs that it is appropriate to seek a complete or partial sale of the land or to seek to negotiate a surrender of a new tenant’s lease.

Similarly, if, as a result of a change in silviculture practice, timberland that had initially passed the EIAG’s due diligence tests with regard to GMOs would no longer pass them, then the investing body should consider with its trustees the appropriate way forward on a case-by-case basis. Advice may be sought from the EIAG.

Again, there is no blanket requirement for a forced disposal but there may be occasions where the use of the land so violates the due diligence principles on GMOs that it is appropriate to seek a complete or partial sale of the timberland.
Introduction

1. The EIAG has reviewed how the national investing bodies should approach genetic modification (GM) with regard to their investments. GM is taken to mean modification of the DNA of plants, micro-organisms or animals.

Theological reflections

2. GM raises a number of theological and ethical issues which divide Christians.

Concerns about GM

3. Some Christians interpret the ‘differing kinds’ (i.e. species) mentioned in Genesis 1 as a bar to the transfer of DNA between species and the plant and animal kingdoms, believing that each species should retain a holiness and purity. GM may be regarded as ‘playing God’ or ‘tampering with nature’ – at a fundamental level – and give rise to fears that it fails to respect the integrity of creation at the species and plant or animal kingdom level or in terms of ecology of the Earth.

4. Some Christians fear genetically modified organisms (GMOs) may upset the balance of species and ‘natural’ controls that we do not understand. They note that we have seen negative effects when competition has been introduced from species from other ecosystems (e.g. grey squirrels, certain toads and Japanese knotweed).

5. There are concerns that GM represents the ‘industrialisation’ of nature and is the very opposite of the natural. There are myths and suspicions too (e.g. that eating GMOs might lead you to get foreign DNA in your cells or body).

6. GM may also arouse social concern that its practice will hand complete control of crop production to biotech firms and multinationals, creating dependency and potential for exploitation of farmers, particularly in the developing world. The use of the terminator gene (currently subject to a moratorium) may be particularly troubling in this instance as it prevents farmers saving seed year on year.

Positive views on GM

7. Other Christians hold the view that GM is compatible with a Christian outlook in that it relies on the fundamental relationship of all living things. DNA is a shared building block for life and similarity in the organisation and gene sequences of very different organisms and species has revealed a clear underlying relationship. They are wary of according DNA a quasi religious status or regarding it as inviolable. Under certain circumstances GM is both theologically defensible and an appropriate technology for Christians to support.

8. This strand of thinking holds that GM is not ‘playing God’ but flows from a proper sense of ‘being human’, in the sense that humans are creative beings and GM is an expression of that. Humans are also redemptive beings and GM can provide crops...
which yield ‘fruit’ (not necessarily literally) and benefit humanity. Potential benefits include pest resistance, vitamin supply, and improved resilience to drought, frost and saline conditions. Such benefits may be seen as enabling Christian moral action such as feeding the hungry, providing for the sick and releasing energy for economic and social transformation.

9. In this context GM may be seen as a powerful gift of comprehension and knowledge to be used and applied wisely. Its application should not be ruled out on account of fear but nor should it be exploited recklessly or frivolously (e.g. for crop ‘flavour enhancement’).

10. This more positive theological approach to GM continues to emphasise the need to respect the integrity of creation and steward creation wisely, responsibly and with good purpose, avoiding over-consumption of natural resources and exploitation of the earth. But it balances this with an emphasis on the deployment of human knowledge to make use of creation’s resources for the betterment and flourishing of creation.

Policy reasoning

11. Humans have been manipulating plant and animal genes for agricultural purposes for thousands of years through selective breeding to produce crops and livestock with favourable characteristics. All crops and livestock have been manipulated at the genetic level in this way.

12. However, GM is fundamentally different because it allows genetic manipulation to take place in a laboratory through the direct transfer of genetic material. It allows for more far-reaching and faster changes both in species and agricultural practice. It represents a paradigm shift in plant and animal breeding. Because of the uncertainties about the effects of the application of the technology there should be a careful and precautionary approach.

13. In 2000 the EIAG advised the Church Commissioners to take a precautionary approach with regard to their landholdings in the UK and not allow the planting of GM crops on their agricultural land pending further research. The EIAG did not advise against investment in companies developing and marketing GMOs but recommended, in general terms, examination of the ethical standards to which they operated.

14. The time that has elapsed since 2000 has been exploited extensively for further research on the implications of GM. It is fair to say that GM is – rightly – one of the most tested forms of plant and animal breeding in history. The European Commission alone in the decade between 2001 and 2010 funded more than 130 research projects, covering a period of more than 25 years of research, and involving more than 500 independent research groups.
15. The nature of the environmental risks identified in the case of GM crops (e.g. the development of herbicide-resistant weeds, reduced biodiversity, gene transfer) appear to be consistent with conventional farming. However, GM may increase the magnitude and impact of the risks. The period of time over which GMOs have been researched still remains relatively short. Rigorous ongoing research, including on a case-by-case basis for new GMOs, continues to be required.

16. While the European Union and its member states, including the UK, continue to take a highly precautionary and restrictive approach to GM, the cultivation of GM crops elsewhere in the world has increased hugely since 2000. In 2011 GM crops were under cultivation on 160 million hectares across 29 countries. GM crops are an established, mainstream and regulated part of farming in much of the world. This is not to say that regulation always attends to the particular concerns and views of Christians.

17. The cultivation of GM crops extends to leading emerging markets (including Brazil, India and China); less so, at present, to developing countries (e.g. in Africa). The EIAG’s consultations with the Anglican Communion Environmental Network revealed widespread concern about economic justice and the dominant position and profit motive of multinational companies with respect to farmers in developing countries.

18. The investment practice of the national investing bodies has changed a great deal since 2000. Their investment universe is now very much global. Equity investments are made in countries across the world and shares are held in international companies developing and marketing GMOs. Agricultural land and timberland investments may also be made in a range of countries, and not just the UK.

19. This policy makes recommendations on what it means to take a robust precautionary approach to GM in 2012. The EIAG has sought to give advice that:

- Takes account of the divisions among Christians
- Is respectful of differences in national policy
- Acknowledges concerns about the position and activities of multinational companies, and lack of trust in them; and
- Actively seeks to use the position of the national investing bodies as investors to positive effect – to encourage care, caution and the service of the common good, including the wide sharing of any benefits arising from GM.

20. This is a fast changing area of scientific and commercial endeavour. We shall continue to monitor developments in GM and research on its effects closely with a view to ensuring that we maintain an appropriately precautionary approach.
Policy recommendations

Equities

21. Given the global equity investments of the national investing bodies, the EIAG wishes to offer detailed guidelines on how the investing bodies should judge whether a company developing and marketing GMOs is operating in an ethically appropriate and duly precautionary way.

22. Engagement with companies developing and marketing GMOs should seek to establish that a company:

- Approaches GM with good purpose and seeks to develop products that serve the common good
- Operates within an ethical framework, trains staff on it and has strong compliance systems
- Communicates and discloses its activities transparently, including any ‘negative’ research
- Monitors carefully scientific research on potential risks associated with GM
- Monitors carefully the environmental impact of its products (e.g. instances of herbicide-resistant weeds, pest mutation, increases of secondary pests, effects on non-target insects, biodiversity loss and gene transfer)
- Monitors carefully the health impacts of its products (e.g. allergenic)
- Has contingency plans and acts on evidence of potential problems quickly, responsibly and openly (e.g. withdrawing a GM seed)
- Respects the right of farmers to pursue organic farming if they wish
- Respects the right of farmers to have access to both GM and non-GM seeds
- Exercises patenting power responsibly
- If it markets in the developing world, approaches its relationships with farmers with sensitivity, avoids creating relationships of dependency and exploitation, and develops a product range that includes products targeted on the needs of smallholder farmers
- Conducts trials in a neighbourly fashion
- Interacts constructively with governments seeking to develop appropriate legislation and regulations
- If it markets or wishes to market in the developing world, helps less expert and poorly resourced governments to develop appropriate legislation and regulations
- Is sensitive to public opinion (including on labelling), open about the positions it takes on public policy issues and discloses its lobbying activities; and
- Complies with local legislation and regulations.

23. It is worth noting that the responsible use of GM is desirable for investors on commercial as well as ethical grounds; it is not in the interests of companies or their investors for a business to lose the trust of its stakeholders.
24. The EIAG advises that the national investing bodies should avoid investment in companies developing and marketing GMOs if engagement does not lead to satisfactory assurance on, and confidence in, ethical standards.

**Agricultural land**

25. Given the global options for investment in agricultural land open to the national investing bodies, the EIAG wishes to offer clear guidelines for scenarios in which (a) they encounter land under GM cultivation when seeking to acquire agricultural land or (b) find that farmers on land they already own wish to commence cultivation of GM crops.

26. Due diligence with regard to GMOs before the purchase of agricultural land should ensure that any farming involving GMOs:

- Involves well established GMOs that are broadly accepted in the country concerned
- Is neighbourly, transparent and not a matter of serious and ongoing local dispute
- Is part of a diverse mix of farming rather than mono-cropping
- Complies with local legislation and regulations, and has a history of doing so; and
- Is monitored by agents who have instructions on how to act if problems associated with GMO farming arise.

27. If farming involving GMOs involves the use of GMOs supplied by companies who have been judged to breach the equity investment criteria, this should be a cause for very careful consideration of the suitability of the investment on ethical grounds.

28. The EIAG advises that the national investing bodies should avoid investments in agricultural land that fail the EIAG’s due diligence tests with regard to GMOs.

29. Agricultural land investments are different in character from equity investments. If a company changes the way it conducts its business after an investment has been made, the national investing body can readily, if necessary, sell its holding. Agricultural land is a less liquid investment and may not readily be sold if a tenant changes their farming practice.

30. If, as a result of a change in use, agricultural land that had initially passed the EIAG’s due diligence tests with regard to GMOs would no longer pass them, then the investing body should consider with its trustees the appropriate way forward on a case-by-case basis. Advice may be sought from the EIAG. There is no blanket requirement for a forced disposal but there may be occasions where the use of the land so violates the due diligence principles on GMOs that it is appropriate to seek a complete or partial sale of the land or to seek to negotiate a surrender of a new tenant’s lease.
Timberland

31. A similar approach should be taken with timberland. Due diligence with regard to GMOs before the purchase of timberland should ensure that use of GMOs:

- Involves well established GMOs that are broadly accepted in the country concerned
- Is neighbourly, transparent and not a matter of serious and ongoing local dispute
- Is part of a diverse mix of forestry rather than mono-culture
- Complies with local legislation and regulations, and has a history of doing so; and
- Is monitored by Timber Investment Management Organisations who have instructions on how to act if problems associated with GMOs arise.

32. If silviculture involving GMOs involves the use of GMOs supplied by companies who have been judged to breach the equity investment criteria, this should be a cause for very careful consideration of the suitability of the investment on ethical grounds.

33. The EIAG advises that the national investing bodies should avoid investments in timberland that fail the EIAG’s due diligence tests with regard to GMOs.

34. Timberland is also an illiquid investment and silviculture practices may change after timberland has been purchased.

35. If, as a result of a change in silviculture practice, timberland that had initially passed the EIAG’s due diligence tests with regard to GMOs would no longer pass them, then the investing body should consider with its trustees the appropriate way forward on a case-by-case basis. Advice may be sought from the EIAG. There is no blanket requirement for a forced disposal but there may be occasions where the use of the land so violates the due diligence principles on GMOs that it is appropriate to seek a complete or partial sale of the timberland.

Church of England Ethical Investment Advisory Group
February 2013