Submission

Technical Review of the Gene Technology Regulations 2001

Discussion paper: Options for regulating new technologies

Author W.Godson 16/12/2016

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1. General

There is a world wide push by Multi National agriculture corporations to deregulate emerging GM techniques such as: oligodirected mutagenesis (ODM), site-directed nucleases (SDNs), zinc-finger nucleases (ZFN) and CRISPR.

These Industries argue that these new GM techniques are an improvement in the proven older genetic engineering techniques - or even that they are not really genetic engineering at all. However I believe that Industry regulation of these risky new genetic ('gene editing') modification (GM) techniques are required

2. Cons for not recommending: Option 1: no amendment to the GT Regulations, Option 3: regulate some new technologies based on the process used, Option 4: exclude certain new technologies from regulation on the basis of the outcomes they produce

The Options 1, 3, 4 presented in this discussion paper advocates the deregulating a host of new genetic modification (GM) techniques

I do not support any of these deregulation measures (Options 1,3,4)as if they are adopted there will be no assessment, licensing ,monitoring , safety testing and no labelling of the organisms they are used to create.

Moreover, deregulation means little or no surveillance and as a result anybody would be able to use these new GM techniques to genetically modify plants, animals and microbes. Moreover the failure to properly regulate these new GM techniques could result in production of new diseases and poisons which could enter our food chain and environment.

3. Pros for recommending Option 2: regulate certain new technologies

3.1. International -Europe

- The Austrian government agencies considered (after #3 separate, reviews [1] of the biosafety risks) concluded that there were bio-safety risks posed by new GM techniques and concluded , that there is insufficient knowledge regarding the risks posed by these techniques. On this basis, they argue that products derived from ***new GM techniques should be regulated in the same way as those created using older GM techniques and require a comprehensive case-by-case risk assessment.***

- The Norwegian Environment and Development Agencies also recently commissioned a review of these techniques [2]. and concluded that ***further bio-safety research needs to be performed before these techniques are commercialised.***

- The European Union has yet to make a decision on whether it will regulate these techniques as GM. The question has been taken to the European Court of Justice which will rule in 18 months whether or not new GM techniques, including ODM, ZFN1, TALENs, and CRISPR-Cas, fall under EU GMO law. http://www.conseil-etat.fr/Actualites/Communiques/Organismes-obtenus-par-mutagenese .European Court of Justice will rule whether new GMO techniques fall under GMO law http://gmwatch.org/news/latest-news/17257

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3. Pros for recommending:
Option 2: regulate certain new technologies
Cont
3.2 Australia [4]
These new GM techniques pose unknown risks and need to be regulated by adopting Option 2 and including the following measures that:

- These new GM techniques and the products derived from them to be subject to a comprehensive case-by-case risk assessment, including full molecular characterisation and independent safety testing to minimise any potential risks to human health and the environment.

- All products derived from new GM techniques to be labelled to protect choice for farmers, producers and consumers.

- The precautionary principle to be enshrined in both the Gene Technology Act and the Food Standards Australia New Zealand Act, given the experimental nature of these technologies and the risks associated with them.

- The Government to impose strict liability on all dealings with GMOs licensed by the OGTR, so that liability for GM contamination and the resultant losses and costs rests fully on the licensees and the owners of GM patents.

- A moratorium on the commercialisation of these new GM techniques until our regulatory system for GMOs is adapted to deal with the potential risks posed by them.

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