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**TRANSBOUNDARY MOVEMENTS OF GENETICALLY MODIFIED ORGANISMS  
AND THE CARTAGENA PROTOCOL: KEY ISSUES AND CONCERNS****OJ Lim Tung\*****SUMMARY**

Biotechnology or the engineering of the genetic material of species can give way to avenues of possibilities for the benefit of people, fauna and flora but also has the potential of posing untold and undiscovered threats to human beings and other living organisms. One of the first attempts to legislate on international rules on biotechnology can be traced back to article 19 of the *Convention on Biological Diversity* (CBD) in 1992. The CBD is indeed the first international legal instrument apart from the then European Community's relevant directives to suggest that biotechnology is a matter of concern for the international community while providing a basis upon which more detailed procedures would be elaborated in the field of biosafety. While the CBD includes international rules on access to genetic resources, access to and the transfer of technology, the handling of biotechnology and the distribution of its benefits, it does not include a detailed regulation on genetically modified organisms (GMOs) and their possible adverse effects on the environment, human and animal health. It was only with the coming into existence of the *Cartagena Protocol on Biosafety* (Cartagena Protocol) to the CBD in 2000 that the safe transfer, handling and use of living modified organisms (LMOs) such as genetically engineered plants, animals, and microbes were at last being catered for, albeit leaving aside the broader categories of GMOs. Due to the need for the negotiators of this protocol to make compromises, there were still key issues on the international biosafety framework pertaining mainly to the scope of the GMOs to be covered by this protocol and by the Advanced Informed Agreement procedure; identification and traceability issues; and liability and redress issues.

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\* Odile J Lim Tung. *Licence en droit (Montpellier), Maîtrise en droit (Montpellier), DEA en droit (Montpellier), Doctorat en droit (Montpellier)*. Lecturer, Department of Law, University of Mauritius. Post-doctoral fellow, Faculty of Law, North-West University (Potchefstroom Campus). The author wishes to thank Professor W du Plessis, Professor A du Plessis and Dr E Lickindorff for their valuable comments. Email: odile.limtung@nwu.ac.za.

Nine years after the entry into force of the Cartagena Protocol the transboundary movements of GMOs have clearly increased with new categories of GMOs and genetically modified products to regulate. The debate on the safety of GMOs used for food and feed as well as the effects of GMOs on the receiving environment is still very lively throughout the world, amidst a lack of traceability of GMOs or epidemiological studies in the GMO-producing countries. However, there has been some progress on liability and redress with regard to damage resulting from the transboundary movement of LMOs with the adoption of rules and procedures for liability and redress in 2010 with the *Nagoya-Kuala Lumpur Supplementary Protocol* "(hereafter the Nagoya SP)" to the Cartagena Protocol, which is yet to enter into force. There are also concerns on the harmonisation of national biosafety regulation, risk assessment and risk management standards, the interpretation of socio-economic considerations, and the monitoring of compliance with the provisions of the Cartagena Protocol. The scope of the GMOs covered by the Cartagena Protocol is discussed first, which discussion is followed by the discussion of identification and traceability issues, the harmonisation of national biosafety regulation, the harmonisation of risk assessment and risk management standards, the scope of the relevant socio-economic considerations, implementation, and concerns about the settlement of disputes.

**KEYWORDS:** genetically modified organisms; transboundary movements; biosafety regulation; *Cartagena Protocol*; harmonisation.