Risk dialogue in genetic engineering*

How the insurance sector found its voice

by Rolf Tanner and Thomas Epprecht**

Genetic engineering remains a hot political issue in Switzerland five years after the public vote on the "Gene Protection Initiative".[1] The latest chapter in this saga was written by the Federal Supreme Court in Lausanne, which recently stopped a field trial of genetically modified crops from being conducted by the Swiss Federal Institute of Technology in Zurich (ETHZ) at its research station in Lindau. Surprisingly, when poring over the ordinance on the release of genetically modified plants with a magnifying glass, the chief justices discovered loopholes in the legal text as well as procedural irregularities. They thus provisionally rejected the field experiments on the formal grounds. However, the key question remained unresolved: would the Federal Supreme Court follow the decision of the Swiss ministry responsible for environmental affairs and permit in principle a field trial with wheat resistant to smut, a fungal disease?

Unrealisable demands

This episode makes one thing clear: as long as people continue to debate acrimoniously about whether a plot of land the size of a flower bed poses dangers so great as to require a safety zone almost one kilometre in diameter, there is not much chance of a meaningful risk dialogue – a discussion on which risks individuals and society as a whole are willing to assume and which they are not. Many people still believe that a blanket rejection of genetic engineering is the only way to avoid the risks that this technology may entail. But agreement is unlikely to be reached as long as the unrealisable demand for absolute safety, controllability and reversibility persists. Such demands are a reflection of society's growing inability to deal with risk. Acceptance or rejection of a given new technology depends less and less on whether that technology can proven to be dangerous in scientific terms. Instead, it is the *perception* of the potential dangers of this particular technology that increasingly alone determines its acceptance and rejection, also by such institutions as parliaments and courts.

[1] According to Switzerland's direct democracy rules, any proposal for a constitutional amendment securing the signatures of 1.5% of the population must be put to a vote in a national referendum.

Just one day after the aforementioned court ruling, the Swiss parliament signed and sealed the stringent Genetic Engineering Act. To some, the Act is still not stringent enough, and in addition a moratorium on the use of genetically modified organisms (GMOs) in agriculture has been decided by the Swiss parliament recently.

Notwithstanding this, the new Act at least clarifies the framework conditions within which genetic engineering must operate. By aiming to prevent abuse, in effect it implies that "responsible" handling of GMOs is permitted. At the same time, the Act ensures the comprehensive monitoring of the product chain and protecs the GMO-free part of agriculture. The Act may not offer a market-friendly solution. But legal clarity and predictability in this matter turned out to be more important than a liberal solution that might give ample room for interpretation and endless legal proceedings, as it already happened in the ETHZ field trial example, now pending for four years. Legal risk in particular is a source of constant worry to the insurance industry.

Risks must be calculable

Insurance companies in the OECD countries are increasingly confronted with demands and operating conditions that make it difficult for them to apply their core skills of risk transfer and risk management in a cost-effective manner. In theory, ever-growing prosperity produces a parallel rise in the demand for insurance. Since risk is the bread and butter of the insurance industry, one might expect insurers to welcome this trend. But risks can only be insured if they are calculable and accepted by the majority of the public. If legislators or society are unable to reach agreement on how to define a loss or damage, and how to compensate it in monetary terms, insurance cannot be applied. The same is true if society insists on "zero risk" and clamours for compensation in case of any 'damage' or 'loss' incurred, however ill-defined or perception-driven.

The situation becomes particularly problematic when regulations and laws compel the insurance sector to provide cover for the potential losses of new technologies whose ramifications, however, are still not known in their entirety. Increasingly, insurance companies in the OECD countries find themselves bound by a kind of moral obligation to accept risks indiscriminately, even if they are hardly quantifiable, and data on which to assess future claims are non-existent. The tripling of the statutory periods of limitation from 10 to 30 years, as envisaged in the Swiss Genetic Engineering Act , is a reflection of this

trend and serves as a disincentive for parties to reduce risk of their own accord. Although conditions do vary from country to country, this general trend looks set to develop further, as long as OECD governments continue to run up budgetary deficits and abdicate their role as "insurers of last resort".

Public debate

Insurance companies have for many years kept a low public profile. Insurance was considered to be a "gentlemen's business" that went on quietly behind the scenes. Insurance business depends – to a greater extent than most other commercial activities – on a relationship of trust between the insurer and the insured. In contrast to a conventional goods transaction, where the customer generally receives an instantly usable product for his or her money, the payment of an insurance premium "merely" gives the customer the right to a legal claim. The insured individual must therefore be confident not only that he or she will be able to exercise this legitimate right at the appropriate time, but also that the insurer will be in a position to fulfil its contractual obligations when a loss occurs. Consequently, key to insurers is to ascertain confidence in their solvency. The best way to do so is by demonstrating on a daily basis their competence in risk management and transfer. Yet, this presupposes a risk dialogue on what the risks are – and how they should be managed and transferred. Moreover, closely related to this, is the need to highlight to the public what insurers are able and willing to do. At the same time they have to show the limits of insurability – and that such limits are not cast in stone, but also subject to society's willingness to balance risk and price appropriately.

When debating the liability article in the new Genetic Engineering Act of Switzerland, the nation's insurance industry finally managed to overcome its traditionally reserved posture and regularly engaged in the discussion with other political, economic and social interest groups from early on. The dialogue and debate was not always easy, and it did not yield quick results. But there was no alternative – and the same will apply to any other emerging risk.

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