**ADVISORY COMMITTEE ON BIOTECHNOLOGY AND**

 **21ST CENTURY AGRICULTURE**

***Potential Compensation Mechanisms Working Group Conference call—January 13, 2012***

*Conference Call Summary*

A two-hour conference call was held, with Working Group (WG) members Douglas Goehring, Marty Matlock, Jerry Slocum, Brian Endres, and Michael Sligh participating, along with AC21 Chair Russell Redding. Michael Schechtman, Executive Secretary, AC21, facilitated the conversation. Three AC21 members who were not members of the working group, Angela Olsen, David Johnson, and Leon Corzine, also listened in on the conversation. Dr. Kent Lanclos, Risk Management Agency (RMA) participated as a USDA resource person for the discussions. The goals of call were to: review and discuss information provided by WG members evaluating characteristics of potential compensation mechanisms which had been compiled from them by Dr. Schechtman; and decide on next steps needed to complete the task.

The compiled information obtained thus far is provided as Appendix I.

At the outset of the call, Dr. Schechtman stressed the need to reconcile different views among committee members in the information provided and also to get additional views from WG members who had not yet provided written information. There was discussion of the fourth “Potential compensation mechanism,” agricultural mediation services, and WG members on the call agreed that it did not exactly meet the definition of a compensation mechanism. WG members all supported the idea of agricultural mediation services as an important tool that could bolster coexistence, and felt that any recommendations coming from the AC21 should include a paragraph noting their usefulness in supporting coexistence and whatever compensation tools may be agreed upon. They also agreed that further discussion on such services as a potential compensation mechanism was not warranted.

In beginning to discuss the costs and benefits of different potential compensation mechanisms with respect to farmers, it became clear that it is very difficult to separate analysis of individual mechanisms from discussion of who should pay for such compensation. Several WG members noted that it will be very difficult to find a mechanism and a funding approach that will satisfy all agricultural participants, and in fact that every group of stakeholders has some legitimate reasons for arguing why they should not be the ones made to contribute to compensation efforts. A number of WG members offered the opinion that “everyone needs to have some skin in the game” for a successful solution to the problem. The conversation continued for some time about the range of actors who might be required to ship in to help fund a compensation mechanism. There were a range of views offered about whether technology developers should be required to contribute to compensation if they are offering legal products for sale. One WG member noted that there are examples of other types of products, e.g., those covered under CERCLA, for which developers contribute to compensation funds. Another member offered the view that costs should be borne by those who benefit, which might include post-farm-gate involvement. It was noted that the greatest potential range of participant involvement would come through a crop insurance model, in which all taxpayers provide a portion of the funding via their taxes to administer such a program, which would probably be through the Risk Management Agency. However, getting all participants who need to do so to buy a new crop insurance product might be difficult. One member noted that for a new crop insurance product to be developed which would cover unintended GE presence-related losses, Congress would need to enact a new law, and public input in the process of developing such a law would influence whether a suitable bill was passed. One participant asked whether compensation could be offered as business interruption insurance. Another WG member likened such an approach to the risk retention group model.

One WG member expressed the concern that all the mechanisms would be in conflict with the U.S.’ traditional science-based approach, and noted that a number of AC21 members would be opposed to that. He worried that an arbitrary low-level presence threshold for GE materials would be set, and that schemes would be developed that would distort markets. In his view, no schemes should be put in place that would prevent products from entering the marketplace: the EU approach should not be adopted over the current North American model. He also pointed out that costs for covering compensation can be passed along to consumers much more efficiently for specialty products than for commodity products, so that specialty product producers need to be required to contribute for compensation. In contrast, another WG member noted that some who have farmed with other methods before the entry of GE crops in the marketplace see things differently, and that they may not have a much easier time passing costs along through their contracts. He also noted the difficulty of producing organic canola in South Dakota after the advent of GE varieties because of pollen movement. There was general interest in having a conversation in the full committee about what each industry sector does to mitigate the relevant risks, including what principles and management tools are involved. One member suggested that having certified practices and a mechanism to establish that they were followed would enable insurance coverage for claims.

Another participant noted that the concern over GE movement has arisen in part because it is easily detected, but pollen movement goes in all directions. De facto GE thresholds exist in the marketplace and organic and other crops are being managed to meet them. . One member noted that farmers are faced with basic decisions about the kinds of products they wish to produce and the level of risk they wish to insure with an insurance product. Farmers need to factor that risk and the cost of supply to a market into the premium they will ask for producing a product and then decide if they wish to service a particular market.

There was some discussion about the usefulness of current forms of crop insurance to address abnormal occurrences such as high winds, which might result in unintended GE presence in other crops. Dr. Lanclos noted in response that such presence is not an insured cause of loss. He noted that two types of insurance products are under discussion in the AC21. If a biotech farmer were to purchase insurance, it would in essence be liability insurance, unlike crop insurance, which is a property/casualty type product.

He offered to provide a paper to lay out the differences between the two models. The issue of how to assign liability if there is a GE-related loss and there are multiple GE farmers in area was also raised..

There was some discussion of the potential impacts of compensation mechanisms on litigation. Some members felt that any of the mechanisms would likely cut down on farmer-to-farmer litigation. Dr. Lanclos noted that using a liability model could increase risk of litigation but that increase could be addressed by incorporating a no-fault approach. Plus, mechanisms exist to resolve disputes with litigation as a last resort. It would all depend on how a new law is written. One WG member offered the view that since farmers using GE varieties are only in essence “renting” the seed from the technology providers, they are not the owners of the technology and shouldn’t bear the responsibilities if they are following acceptable protocols. The issue of who would bear responsibility when a trait goes off-patent was also raised.

At the end of the call, Dr. Schechtman noted the difficulty of separating the mechanism question from the who pays question, but requested that WG members go back to the information that they had provided (in Appendix I), putting aside the unresolved question of who pays, and think further about how the WG can have a productive discussion on that information which would enable the WG to provide useful input to the full committee.

**APPENDIX I:**

***Combined submissions received as of 1/12/12 for the potential compensation mechanism matrix***

*Please note: “MS” here is Michael Sligh, not Michael Schechtman*

*Also, Douglas Goehring’s submissions were numerical rather than text. They were circulated as a separate Excel file.*

 **Crop Insurance**

***Conflict avoidance:***

FROM LAST CONF CALL: Could be low or low-medium depending on who has to carry the insurance. Potential conflicts with insurance providers; possible lawsuits following by provider if a party responsible for harm is identified; not all types of harm might be insurable. potential use of no-fault model. Without no-fault, who would get sued? Based on nuisance or tort law, fault would likely be directed at farmer or shipper etc., not to tech company. Insurance companies would likely develop risk management (RM) principles to limit exposure. RM more effective if everyone is eligible for insurance. Incentives could be provided to obtain insurance in GE licensing agreements. Caveat that "regular" organic crop insurance isn't workable yet. If recommended practices are followed, unintended GE presence-related losses should be insurable if they occur as a result of hurricanes, high winds, etc. Would be underwritten by Federal government.

Plus:

JA:---

LB: low - med Conflict avoidance depending on whose insurance Bio farmer, IP farmer etc.

BE: ---

MS: Crop Insurance seems an inappropriate mechanism for resolving complex conflicts between multiple parties – i.e. farmer to farmer and farmers to technology owners. Also seems unlikely to address all of the potential types of conflicts associated with contamination and could increase conflict if, the grieving parties are required to pay these costs in perpetuity. Crop insurance is also historically and federally linked to natural disasters not product performance and liability issues.

JS: Pre incident creates conflict because of who pays . Post incident, avoids conflict.

***Costs/benefits to consumers:***

*JA:* Don't foresee any major costs or benefits to consumers as today they readily accept GE in their food.

LB: Cost to consumer is dependent on who pays and may not be able to be answered here.

BE: ----

MS: It depends on who pays and for what? High long-term costs if, this model would be taxpayer subsidized, lower if paid by technology owner. However, since these costs would be perpetual and could not cover long term or potentially major environmental harms to consumers the long-term costs to consumers could be high – either way.

JS: I am assuming that the farmers fund the compensation method, so very low cost/neutral on benefits

***Costs/benefits to developers:***

JA:----

LB: Presumably makes the problem the farmers’ and not the developers’. So low cost and a benefit to developers

BE:----

MS: If, they paid for the crop insurance product, it would be low as they could aggregate over global figures and could build these costs into their price structure.

JS: I am assuming that the farmers fund the compensation method, so very low cost/neutral on benefits

***Costs/benefits to farmers:***

JA:----

LB: benefit to organic/ IP farmers ONLY if the gmo farmers/see developers pay for it

BE:----

MS: Depends on what the actual costs are and what types of loses would be covered, however costs could be much higher in “high risk” or multiple claim areas and would not cover all types of costs, so the costs/benefits ratio could be high to some farmers. This insurance would also be an on-going yearly costs regardless of whether claims were made and thus long term perpetual costs borne potentially by parties not responsible for the contamination.

JS: moderate cost / potentially high benefit

***Potential impacts on litigation and potential litigants:***

JA: Would likely cut down on litigation

LB: none

BE:----

MS: Insurance providers would seek to recoup payments for damages from responsible parties. Farmer and others who are harmed but not made whole or for damages not covered would still seek litigation.

JS: should minimize litigation

***Incentives for development of upstream technologies and practices to prevent risk:***

JA:---

LB: does nothing for risk prevention especially if IP farmer is responsible for purchasing insurance

BE:---

MS: It would depend on the levels of costs being absorbed. However, I unaware of any meaningful near future or safe technologies to prevent market-set contamination thresholds that would cover all current and future GMO crop contamination problems?

JS: should incentivize development

***Impacts on trade relations:***

JA: None obvious

LB:---

BE:---

MS: If, farmers were required to pay this it would exacerbate on-going unfair trade and market concentration practices and pressures. If contamination or the perception of contamination remains then trade will continue to be affected.

JS: neutral

***Impacts on rate of technology development and use:***

JA:---

LB: Could curtail adoption of technology if farmers (all farmers) need to carry insurance directly.

BE:---

MS: Could shift technology development toward lower risk products, and would increase costs of renting these products if farmers would be required to bear these insurance costs. The developers would build these costs into their profit structures. Could create a more transparent and accurate pricing of products to reflect fuller costs and potential risks for parties involved.

JS: neutral

***Type and scale of risk most appropriate to address:***

JA:---

LB: known risks with verifiable price elections. Not ideal for accommodating future risks or a system that will account for IP- Bio and Bio-Bio and less than precise data

BE:---

MS: immediate market losses and costs of prevention. Would probably not cover catastrophic or perpetual costs of potential environmental or societal harms.

JS: any and all

***Who would be responsible for implementing?***

JA: Suggest USDA or private entities

LB: public/private

BE:---

MS: I would assume the technology owner would require technology renter through license agreements to buy this insurance or incorporate this as an incentive to continue to rent this technology? I also assume that non-GMO farmers would not wish to be forced or required to buy this insurance and would see this as increasing unfair market pressures.

JS: existing federal crop insurance

***Is there existing authority to implement?***

JA: yes

LB: No - per RMA risk is man made and inevitable OGC assessed

BE:---

MS: Depends on who is required to pay for this? If, all farmers were required, then I would say there is not authority to require this. If, companies and GMO technology renters and agree to buy insurance then they could require this in their license agreements.

JS: No

**Compensation fund**

***Conflict avoidance:***

FROM LAST CONF CALL:One view: High for farmer to farmer if fund is paid for by tech providers. Another view: more problems will be created because farmers will ultimately pay if costs pass to tech providers. May offer best conflict avoidance post-incident, but pre-incident can create conflicts. Could set a precedent which might "get people up in arms." May encourage relaxation of stewardship efforts such a fund exists, which could in turn create conflict (by creating a moral hazard?).

Plus:

JA:---

LB: High Conflict avoidance farmer to farmer

BE: high avoidance of conflict between farmers as remedy is via fund rather than neighbor

MS: Seems an appropriate mechanism for resolving some of the immediate conflicts between farmers and technology owners caused by market rejections or losses due to crop contamination. Also seems likely to avoid conflicts between farmers if the technology owner is paying for the fund.

JS: Pre incident creates even greater conflict because pool of participants is smaller and cost greater per participant . Post incident, avoids conflict.

***Costs/benefits to consumers:***

JA: Potential to increase food prices in a down economy. Would be another drag on the average American's (the "99%") wallet.

LB: Cost to consumer is dependent on who pays and may not be able to be answered here. Benefit to consumer in that choice is preserved w/out litigation. Agricultural diversity encouraged.

BE: potentially lower consumer costs for no-GM products due to reduced risk of uncompensated loss

MS: Low costs if paid by technology owner and they assume on-going liability for any of their products that contaminate or cause harm.

JS: ditto assumption above, so higher, but still low, cost/ neutral on benefits

***Costs/benefits to developers:***

JA: Significant costs to developers and would be disincentive to innovate, thereby dragging down competitiveness and productivity of US agricultural economy - and, thus, jobs, the overall economy and the trade balance.

LB: presumably a cost to developers but also a benefit in that it reduces conflict, improves reputation.

BE: potentially higher costs to GM seed developers if they are required to "fund" the compensation fund. This is similar to CERCLA funding or even grain elevator insurance funding, this, depending on market conditions and competition, may or may not be passed on to farmers (seed purchasers)

MS: If, they paid for the fund, it could be low long-term as they could aggregate over global figures and could build these costs of doing business into their price structure.

JS: ditto assumption, so very low cost / neutral on benefits

***Costs/benefits to farmers:***

JA: Costs could be passed on to farmers. Also farmers might not get access to the latest technology, thereby dragging down competitiveness and productivity of US agricultural economy - and, thus, jobs, the overall economy and the trade balance.

LB: Low to no cost to farmer and benefit of resolution without conflict. Preserves choice and market stability.

BE: See comment above. If developers, depending on market conditions and compentation, are able to pass on costs to farmers as seed purchasers, then there could be higher costs to GM farmers, but not for those that select non-GM practices

MS: If paid for by technology owner, they would seek to recoup some of the costs on to the renters, but would not be significant over time if the product price were to be competitive. The impact on non-GMO farmers would depend on what type of loses would be covered. If, the long-term perpetual costs were borne by parties responsible for the contamination, this would be the most rational costs benefit scenario.

JS: higher cost / potentially high benefit

***Potential impacts on litigation and potential litigants:***

JA: Could actively increase litigation as no precedent for this action occurs in any other sector.

LB: may reduce litigation overall

BE: Strong decrease in litigation and impacts on famers as compensation from fund

MS: Covered parties that are harmed would reduce their need to seek immediate litigation. Farmers and others who are harmed for damages not covered would still seek litigation.

JS: should minimize litigation

***Incentives for development of upstream technologies and practices to prevent risk:***

JA: Significant costs to developers and would be disincentive to innovate, thereby dragging down competitiveness and productivity of US agricultural economy - and, thus, jobs, the overall economy and the trade balance.

LB: dependent on the mechanisms tie or prerequisite for mandatory stewardship; if yes then it incentivizes risk prevention

BE: Strong incentive to develop technology if developers are responsible for funding the program

MS: Could increase incentives but unaware of any meaningful or safe technologies to prevent market contamination threshold levels that would cover all current and future GMO crop contamination problems?

JS: should greatly incentivize development

***Impacts on trade relations:***

JA: No other countries that have GE currently do this so are we creating a trade barrier for the US farmer?

LB: Potentially positive as it is a mechanism employed elsewhere.

BE: no clear if any impact

MS: If contamination or the perception of contamination remains then trade will continue to be affected. This could lead to a more rational market.

JS: neutral

***Impacts on rate of technology development and use:***

JA: Significant costs to developers and would be disincentive to innovate, thereby dragging down competitiveness and productivity of US agricultural economy - and, thus, jobs, the overall economy and the trade balance.

LB: low impact

BE: may accelerate development as may mitigate opposition to new technology

MS: Could potentially shift development targets to those products, which have lower risks. Could create a more transparent and accurate pricing of products to reflect true costs and potential risks for all parties involved.

JS: neutral

***Type and scale of risk most appropriate to address:***

JA: No other countries that have GE currently do this so are we creating a trade barrier for the US farmer? There is no policy precedent for this kind of pre-emptive action - is not market based and could lead to serious negative impacts to the economy during a time when jobs and growth are the most important issues on the mind of American citizens.

LB: works best to address future risks and accommodate those needs by establish market stability. Fault determination not required

BE:---

MS: immediate market losses and costs associated with prevention. Would not cover catastrophic or all perpetual costs or potential environmental and other socio-economic harms.

JS: low level presence of gm of any size if the risk is properly identified

***Who would be responsible for implementing?***

JA: No one as this doesn't seem to be a market based solution predicated upon real risk, but one that poses significant potential economic damage.

LB: likely public

BE: GM industry

MS: I would assume technology owner would pay into a third party publicly managed fund.

JS: public-private partnership

***Is there existing authority to implement?***

JA: no

LB: unknown

BE: ---

MS: Yes, I would think that the companies and GMO technology licensees could require this fee in their license agreements and/or pricing structures. USDA and state DOA’s administers many existing indemnification funds, such as current fertilizer and pesticide products registration fees.

JS: no

**Risk retention fund**

***Conflict avoidance:***

FROM LAST CONF CALL: Different views, from low-high. Information needed on who is currently using RRGs. Need to go to Act to see who can use it. Can bypass States to put together private insurance, underwritten by members and linked to reinsurance companies. Would be voluntary. Could biotech growers be included too? If potential members had no liability or need to protect investment, they would be unlikely to join. Attorneys, doctors form RRGs for malpractice insurance.

Plus:

JA:---

LB: low - med Conflict avoidance

BE: high avoidance of conflict between farmers as remedy is via fund rather than neighbor, but potential conflict with other members of risk retention group for repeat claimants

MS: Seems an inappropriate mechanism for resolving complex conflicts between multiple parties – i.e. farmer to farmer and farmers to technology owners. Also seems unlikely to resolve all of the potential types of costs associated with contamination and could increase conflict if, the grieving parties are required to pay these costs.

JS: Pre incident creates even greater conflict because the pool of participants is smaller and cost greater per participant. Post incident, avoids conflict.

***Costs/benefits to consumers:***

JA: Don't foresee any major costs or benefits to consumers as today they readily accept GE in their food.

LB: Cost to consumer is dependent on who pays and may not be able to be answered here.

BE: potentially lower consumer costs for no-GM products due to reduced risk of uncompensated loss

MS: It again depends on who pays and for what? High long-term costs if, this model would be taxpayer subsidized, low if paid by technology owner. However, since these costs would be perpetual and would not cover long term or potentially major environmental harms to consumers the long-term costs to consumers could be high – either way.

JS: ditto assumption, so higher, but still low, cost / neutral on benefits

***Costs/benefits to developers:***

JA: ---

LB: Presumably makes the problem the farmers and not the developers. So low cost and a benefit to developers

BE: If risk retention group is funded by GM seed developers, then same as compensation funds…but it is my understanding that risk retention groups are formed by those that wish to self-insure against their own loss, which implies that it would be non-GM farmers that fund this compensation mechanism and if so, then no cost to developers

MS: If, they paid for the risk retention product, it would be low as they could aggregate over global figures and could build these costs into their price structure.

JS: ditto assumption , so higher, but still low, cost / neutral on benefits

***Costs/benefits to farmers:***

JA: ---

LB: benefit to organic/ IP farmers ONLY if the gmo farmers/see developers pay for it

BE: See comment above. If funded by non-GM farmers, then potentially higher cost to those farmers, but if funded by developers, then no cost to non-GM farmers, but potential cost to GM farmers to extent market conditions allow developer to pass on costs (see comment to the left)

MS: Depends on what the actual costs are, what types of loses would be covered and which farmers are required to join, however costs could be much higher in “high risk” or multiple claim areas and would not cover all types of costs so the costs/benefits ratio would be high. These would be yearly costs regardless of whether claims were made and thus long term perpetual costs borne potentially by parties not responsible for the contamination.

JS: higher benefit / potentially high benefit.

***Potential impacts on litigation and potential litigants:***

JA: Would likely cut down on litigation

LB: none

BE: Strong decrease in litigation and impacts on farmers as compensation from group, but could be litigation

MS: Risk retention providers could seek to recoup payments for damages from responsible parties. Farmers and others who are harmed but not made whole or for damages not covered would still seek litigation.

JS: should minimize litigation

***Incentives for development of upstream technologies and practices to prevent risk:***

JA: Could incentivize better stewardship, but that said if you look at industry track record over the past decade there is an excellent record of stewardship on the part of the technology providers, farmers and grain handlers.

LB: does nothing for risk prevention especially if IP farmer is repsonsible for paying in

BE: Depends on who funds…if non-GM farmers, then no incentive, if GM-farmers or developers, then strong incentive

MS: Not sure, it would depend on level of prevention achieved. I am unaware of any meaningful or safe technologies to prevent contamination that would cover all current and future GMO crop contamination problems?

JS: should greatly incentivize development

***Impacts on trade relations:***

JA: none obvious

LB: ---

BE: not clear if any impact

MS: If contamination or the perception of contamination remains then trade will continue to be affected. If, those who do not own this technology are required and pressured to pay this it would continue to distort trade and exacerbate market concentration concerns.

JS: neutral

***Impacts on rate of technology development and use:***

JA: ---

LB: Could curtail adoption of technology if farmers (all farmers) need to participate directly.

BE: no clear impact if funded by non-GM farmers as there still may be opposition to new GM varieties and increase in GM varieties would force formation of additional groups

MS: Could potentially shift development targets to those products, which have lower risks. Could create a more transparent and accurate pricing of products to reflect true costs and potential risks for all parties involved. Would raise farmers cost if they were required to pay for the risk retention product.

JS: neutral

***Type and scale of risk most appropriate to address:***

JA: ---

LB: known risks with verifiable price elections. Not ideal for accommodating future risks or a system that will account for IP- Bio and Bio-Bio and less than precise data

BE:---

MS: immediate market losses. Would not cover catastrophic or perpetual costs and potential environmental harms.

JS: LLP of gm of any size if the risk is properly identified .

***Who would be responsible for implementing?***

JA: private entities

LB: member shareholders

BE: group seeking protection--most likely based on my understanding this would be the non-GM farmers

MS: I would assume technology owner could build this into their incentive package or require technology renter through license agreements to obtain this product?

JS: private RRGs

***Is there existing authority to implement?***

JA: yes

LB: does RMA assessment apply here?

BE: 15 U.S.C. sec. 3901; but unsure if this would apply in the intended context of agriculture

MS: Depends on who is required to pay for this? If, all farmers are required then I would say there is not authority to require this. If, companies and GMO technology renters and companies pay then they could require this in their license agreements.

JS: yes

**Agricultural mediation services**

***Conflict avoidance:***

JA: Low based on previous experience as shared by those who have participated in this vehicle. Mediation is typically a very positive alternative to litigation - both in cost to society and successful resolution.

LB: low conflict avoidance in that every claim is mediated and this assumes fault is determined in each specific case.

BE: Low conflict avoidance as mediation requires a formal dispute between parties and that dispute may or may not be settled amicably.

MS: To be very clear I assume that you are referring to the current network of mediation services that are offered in many states. I also assume that no binding agreements or arbitration clauses would be included. Potentially could avoid some forms of conflicts between parties. However, this would require the development and support for training a new group of mediators to hear such technical challenges and the need for new group of farmer advocates and/or lawyers to help prepare and advise farmers on such interventions. Also seems unlikely to address complicated cases associated with contamination and could increase conflict if, the grieving parties are required to pay these costs, especially for data collection testing and legal counsel and still feel the need to seek additional redress to be made whole.

JS: Purpose is to resolve conflict that may arise. Pre incident , no conflict. Post incident , creates conflict

***Costs/benefits to consumers:***

JA: No negative cost to consumers as individuals who are going through it would pay their own mediation fees. Could be significant upside to consumers if handled via mediation vs. costly litigation.

LB: Cost to consumer is dependent on who pays and may not be able to be answered here.

BE: potentially lower consumer costs for no-GM products due to reduced risk of uncompensated loss

MS: It again depends on who pays and for what? High long-term costs if, this model would be taxpayer subsidized, lower if paid by technology owner. However, since these costs would be perpetual and would not cover long term or potentially major environmental harms to consumers the long-term costs to consumers could be high – either way.

JS: ditto assumption, so very low cost/ neutral on benefits

***Costs/benefits to developers:***

JA: ---

LB: depends if mediation is farmer to developer or farmer to farmer

BE: no cost to developer unless brought into mediation

MS: If, they paid into a publically managed fund for mediation - it would be low as they could aggregate over global figures and could build these costs into their price structure.

JS: ditto assumption, so very low cost/ neutral on benefits

***Costs/benefits to farmers:***

JA: ---

LB: ---

BE: Costs/benefits allocated according to result of mediation, but may result in higher costs for thoses cases that do not result in successful mediation and proceed to court process; also costs of mediation may be higher than a compensation or risk retention scheme for the individuals due to need to hire professionals to assist with mediation (e.g, attorney/advisor and experts for valuation purposes); and thus even successful party in mediation will have awards offset by mediation costs

MS: Depends on what the actual costs are and what types of loses would be covered, however costs could be much higher in “high risk” or multiple claim areas and would not cover all types of costs so the costs/benefits ratio would be high. Farmers would need to pay for representation, case preparation and testing to make their claims unless these costs were built into the technology owner fees. These farmer costs could be yearly costs regardless of whether claims were successful and thus long term perpetual costs borne potentially by parties not responsible for the contamination.

JS: low cost unless u r the offender / potentially high benefit if u r the offended

***Potential impacts on litigation and potential litigants:***

JA: Would likely cut down on litigation

LB: may reduce litigation overall

BE: clarifies issues for litigation which may speed or simplify litigation, but unhappy parties may nonetheless continue on to litigation. There are studies on the effectiveness of mediation that we should investigate and also need to look at the potential negative effects of mandatory mediation such as in the grain industry and adhesion contracts that force farmers to mediate claims against elevators

MS: Mediation could reduce some litigation if the technology owners covered the total costs of the mediation through a publically managed fund. Farmer and others who are harmed but not made whole or for damages not covered would still seek litigation.

JS: should take the place of litigation

***Incentives for development of upstream technologies and practices to prevent risk:***

JA: Could incentivize better stewardship, but that said if you look at industry track record over the past decade there is an excellent record of stewardship on the part of the technology providers, farmers and grain handlers.

LB: none unless a farmer to farmer fault system

BE: Moderate incentive as potentially liable parties (e.g, GM-farmer) may demand this technology from seed developer to prevent potential liability

MS: Not sure, it would depend on level of prevention achieved. I am unaware of any meaningful or safe technologies to prevent contamination that would cover all current and future GMO crop contamination problems?

JS: may incentivize development

***Impacts on trade relations:***

JA: none obvious

LB: ---

BE: not clear if any impact

MS: If contamination or the perception of contamination remains then trade will continue to be affected. If, parties other than the technology owners were required to pay or subsidize this then the market would continue to be distorted.

JS: neutral

***Impacts on rate of technology development and use:***

JA: ---

LB: ---

BE: no impact

MS: Could shift technology development toward lower risk products. The developers would build these costs into their profit structures. Could create a more transparent and accurate pricing of products to reflect truer costs and potential risks for parties involved, but would increase costs of doing business if farmers would be required to bear these mediation costs.

JS: neutral

***Type and scale of risk most appropriate to address:***

JA:---

LB:---

BE: ---

MS: immediate market losses. Would not cover catastrophic or perpetual costs and potential environmental or social harms.

JS: depends if the source of the LLP of gm can be identified , ie , which farm did it come from

***Who would be responsible for implementing?***

JA: State Depts of Ag

LB: public?

BE: private parties with potential assistance from state-sponsored mediation groups

MS: I would assume technology owner could voluntarily make fee payments into a publically managed mediation fund for this product?

JS: existing mediation services

***Is there existing authority to implement?***

JA: yes

LB: unknown

BE: In some states. I'm aware of a program in Texas (Texas Agricultural Mediation Services)

MS: Depends on who is required to pay for this? If, all farmers are required then I would say there is not authority to require this. If, companies and GMO technology renters pay then they could require this in their license agreements.

JS: yes

*Plus additional comments:*

On conflict avoidance, from last WG session: Conflict considered thus far among ag producers/ within farm community; other types of conflict may also be relevant. Which conflicts are avoided may depend on who is paying.

Most common GE threshold in non-GE and organic commodity is 0.9%, but this doesn't apply to seed. There are other standards depending on the market. Most local supply chain standards are lower except feed to Japan --5%. Could more than one of the options be put in place at the same time? Desire for mechanism(s) to incentivize prevention of economic harms.

Also, LB did an analysis in her table on two additional options, “courts and “none.”

These are her conclusions:

**Courts**

Conflict avoidance: low

Costs/benefits to developers: High cost - benefit unknown depends on court decision.

Incentives for development of upstream technologies to prevent risk: none

Impacts on trade relations: negative –created uncertainty

Who would be responsible for implementing: litigants

Is there existing authority to implement?: exists

**None**

Potential impacts on litigation and potential litigants: Increases potential litigation if no mechanism is established

Incentives for development of upstream technologies to prevent risk: none

Impacts on trade relations: depends on your impression of how the status quo is impacting trade relations. Will result in further export market loss due to unchecked AP.