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INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

THIRD MEETING OF THE *AD HOC* OPEN-ENDED WORKING GROUP TO ENHANCE THE FUNCTIONING OF THE MULTILATERAL SYSTEM

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IMPROVING THE STANDARD MATERIAL TRANSFER AGREEMENT TO INCREASE USER-BASED PAYMENTS AND TO MAKE IT MORE USER-FRIENDLY (MEASURE IV): BACKGROUND INFORMATION

Note by the Secretary

This document provides background information on ways of improving the SMTA, in order to increase user-based payments and make the SMTA more user-friendly. It considers the balancing of payment levels under different payment options, elements for making the SMTA more consistent with general commercial practice, and options for enhancing legal certainty for users, especially in the context of national and international access and benefit-sharing regulations.

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I. INTRODUCTION

1. The Working Group is reviewing the payment options provided for under the SMTA, in order to make the SMTA more user-friendly, and hence generate a more predictable and sustainable flow of income to the Benefit-sharing Fund. It can be assumed that the current form of the SMTA does not provide user-based income because after 27,000 SMTAs not one voluntary or mandatory contribution to the BSF has been received.

2. At its second meeting, the Working Group agreed to consider the following three key questions:

- Whether to delete any of Articles 6.7, 6.8 and 6.11;
- whether to adjust the relative payment levels specified in Articles 6.7, 6.8 and 6.11 , if retained; and
- Whether to make the current voluntary payment provided for under Article 6.8 mandatory, and, if so, at which level, or whether to revise Article 6.8 in other ways.

3. This document does not enter into the question of which payment options should be retained, or of how to structure or implement a potential Subscription System, whether through a revision of Article 6.11 or through a Protocol or Supplementary Agreement to the Treaty, or a combination of both. These matters are considered in other documents.[1]

4. This document addresses, instead, how the payment options that are set forth in the SMTA can be made more attractive to users, both through a balancing of payment levels, as well as through other possible amendments to the SMTA, including of Article 6.8. It considers, in particular, stumbling blocks to the use of the SMTA that have been identified by users over the years, and in the recent surveys of users and the simulation exercise, which were reported to the Working Group at its last session.[2]

5. There have been extensive discussions, both during the current biennium and the last, regarding the structural implications of retaining both voluntary and mandatory payments (Articles 6.7 and 6.8 respectively) in the SMTA. There have also been discussions as to balancing a Subscription System with the possible retention of an option for access and payment on a sample-by-sample basis. Moreover, a series of extensive technical studies have been carried out.[3] The arguments developed in these studies are not considered in this document, though their conclusions will be taken into account, in so far as they affect the attractiveness or otherwise of the SMTA.

II. ESTABLISHING AND BALANCING PAYMENT LEVELS UNDER THE OPTIONS RETAINED

6. The current SMTA provides for two basic payment options:

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[1] IT/OWG-EFMLS-3/15/Inf.4, *Modalities by which the Governing Body may expand the Access and Benefit-sharing provisions of the International Treaty: Analysis by the Legal Office*, and IT/OWG-EFMLS-3/15/Inf.5, *Development of a Subscription System for users of plant genetic resources for food and agriculture under the Treaty (Measure III): background information.*

[2] *IT/OWG-EFMLS-2/14/3, Synoptic Study 1: Estimating income to be expected from possible changes in the provisions governing the functioning of the Multilateral System, paragraphs 77–82, which draws on Research Study 7, Summary of user opinions; as well as IT/OWG-EFMLS-2/14/6, Synoptic Study 4 : Consultation with Stakeholder Groups; and IT/OWG-EFMLS-2/14/Research Study 4, An investigation of the preferences and behaviour of users of the SMTA when making decisions to use the alternative payment options of Articles 6.7 and 6.11 of the SMTA.*

[3] IT/OWG-EFMLS-2/14/3, *Synoptic Study 1: Estimating income to be expected from possible changes in the provisions governing the functioning of the Multilateral System*, paragraphs 77–82, which draws on Research Study 7, *Summary of user* opinions, and IT/OWG-EFMLS-2/14/4, *Synoptic Study 2: Policy And Legal Study On The Feasibility And Effects Of Changes To The Multilateral System*. The detailed supporting documents for these synopses are available at: http://www.planttreaty.org/content/second-meeting-ad-hoc-open-ended-working-group-enhance-functioning-multilateral-system-acces.

- An option providing for access to individual samples and requiring payment for individual commercial products bred from them, if not available without restriction to others for further research and breeding (Article 6.7); and
- An option providing for access to all available samples of a particular crop and requiring payment on all of the recipient's commercialized products belonging to the same crop (Article 6.11).

7. In describing what would make the SMTA more attractive to them, users have focused on

- the absolute levels of payment,
- the relationship between payment levels under the different payment options.

8. Users usually regard payment under both options as too high. There is also broad agreement that the level of payment under Article 6.11 of the SMTA needs to be significantly lower than under Article 6.7; this is currently not the case. Considerable technical work on balancing the two payment levels, through a parity point analysis has already been undertaken. However, the setting of absolute levels is rather a policy question, and not a technical question. The policy options in setting absolute levels may depend on:

- The volume of user-based income that the Governing Body wishes to target, and
- The volume of payment that the seed sector is willing to provide for access to the specific materials available under the Treaty.

9. In a commercial context, the decision as to whether or not to use any specific material is the outcome of the user's cost-benefit analysis. Users have repeatedly stated their willingness to pay for "interesting" or "useful" material. Users have especially highlighted that the material in the Multilateral System will be more useful and valuable to them, if it is accompanied by value-added characterization data. It has also been said that most materials available under SMTAs are not commercially potentially valuable enough to warrant substantial payments. There is as yet no information available on what proportion of the materials under the SMTA is seen as "useful" by the seed sector. Normal commercial practice usually involves paying for valuable materials that have already been the object of considerable investment and development and are accompanied by advanced characterization data, such as, for example, elite lines and competitors' materials, and the material available under SMTAs is seldom at this level. The most significant body of pre-bred and stabilized material consists of Plant Genetic Resources for Food and Agriculture under Development released by the CGIAR Centres.

10. It must be recognized that, in technical terms, the willingness to pay is defined by the attractiveness of the Treaty's materials and related data, so that the apparently small proportion of "useful" material sets the price for the overall potential income. This will drive acceptable payment levels down. For a Subscription System, the acceptable level will be defined by the proportion of "useful" material over the proportion of "less useful" material. For the sample-by-sample option, the level determines whether it is worthwhile "cherry-picking" particularly attractive materials.

11. Many of industry's perceived stumbling blocks to the use of the SMTA derive from the difficulty of managing a public good through a commercial model. Where materials are a public or pooled good so far from final commercial development, there is a very substantial risk of a market failure, that is, unwillingness by users, at any particular price level, to actually access sufficient quantities of material to provide an adequate income to maintain the Multilateral System.

12. Moreover, voluntary payments clearly make the use of the SMTA more attractive, but the Working Group has recognized that past experience shows that they have not generated any substantial income.

13. The most important revisions to the SMTA, in terms of payment levels, that could make its use more attractive to the seed sector, will therefore all tend to reduce the real potential to

generate income for the Treaty. In evaluating this potential, there remains one crucial factor about which there is no real information, namely the likely numbers of users of the SMTA at any price level, under either of the two access and payment options. Such information would be valuable in allowing the Working Group and the Governing Body to make an informed decision on whether and to what extent it is realistically possible to increase user-based income to the Benefit-sharing Fund through the SMTA.

III. NON-PAYMENT LEVEL MODIFICATIONS TO THE SMTA TO MAKE IT MORE USER-FRIENDLY

14. This section of the paper identifies the structural elements of the SMTA that might need revision in order to address the voluntary payment, and overcome the various stumbling blocks identified by industry.

The effects on user-friendliness of making mandatory payments that are currently voluntary

15. At its second meeting, the Working Group agreed to consider at this meeting:

- Whether payments under Article 6.8 should remain voluntary or be made mandatory;
- Whether a payment rate should be indicated under Article 6.8, regardless of such payment being voluntary or mandatory;
- Whether to introduce under Article 6.8 non-monetary obligations, such as provision of information and inclusion in the Multilateral System of any material developed, should payment under Article 6.8 remain voluntary.[4]

16. It is important to note that, if the Governing Body wishes to change voluntary payments into mandatory payments under the statutory in-built review in the second paragraph of Article 13.2d(ii) of the Treaty, by amending the SMTA accordingly, the text of the Treaty allows the Governing Body only one opportunity to do so, after which the decision to further alter the provision would require a revision to the Treaty.[5]

17. The retention of a voluntary payment possibility will undoubtedly lead to the SMTA being more used than if it is deleted or made mandatory, but, paradoxically, making the SMTA more “attractive” and “user-friendly” in this way is unlikely to generate any income. As the Working Group has recognized, there has in fact been not one voluntary payment resulting from more than 27,000 SMTAs; and there are strong theoretical considerations, based on games theory, why no user can afford to make voluntary payments, unless all competitors are constrained to do the same.[6] Thus voluntary payments may make the SMTA more attractive to users, but are unlikely to increase user-based income.

18. If a decision is taken to retain the voluntary option, a formal statement in the SMTA of the level of payment expected may encourage some effective payment, because of the willingness of many companies to demonstrate corporate social responsibility, and to support the Treaty. However, it should also be noted that there is no reporting obligation in the current SMTA regarding the commercialization of any product for which a voluntary payment was made; the reputational risk being minimal, it might be advisable to require such reporting.

19. In fact, the SMTA, in Article 6.9 *already* encourages all users to share the “non-monetary benefits expressly identified in Article 13.2 of the Treaty that result from … research and development”. Once again, should the decision be taken to retain voluntary payment, it might be advisable to require a report of the commercialization of the relevant product, and of the non-monetary benefits shared.

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[4] IT/OWG-EFMLS-2/14/Report, paragraph 10.

[5] IT/OWG-EFMLS-1/14/3, *Background on the work undertaken by the* Ad Hoc *Advisory Committee on the Funding Strategy, and its further development*, paragraphs 55 and 56.

[6] IT/OWG-EFMLS-1/14/3, paragraph 42 and figure 4.

20. Finally, it is recalled that the Working Group, in discussing this article, considered the possibility of making payments mandatory only for *certain* products to which Article 6.8 currently applies, with some delegations citing Plant Variety Protection, and some hybrids, although there is, as yet, no consensus.

Differentiation of payment rates by crop, and by user-category

21. It has been pointed out that profit margins vary widely between crops, and that lower margin crops are unable to sustain high payment rates. For that reason, users have suggested that payment obligations should be differentiated by crop, in order to make the SMTA more equitable and effective.

22. Moreover, there is a general opinion that some categories of users—in particular, small commercial entities and non-commercial entities—should be exempt from payment obligations, in order to make the system fairer and thereby more attractive to users. No attempt has yet been made to analyse the implications on the generation of income to the Benefit-sharing Fund. Such analysis would require a thorough understanding of the international seed sector.

23. It has been suggested that such differentiation of payment rates by crop and user category could be effected by incorporating exemptions into the SMTA; by introducing crop and user multipliers applied to payment rates; or by establishing a tiered system, for example through the use of "bands", based on company turn-over. In this context, it should be noted that the World Health Organization (WHO) Pandemic Influenza Preparedness Framework, which provides for a Subscription System, is articulated in this way.[7]

Termination of an SMTA

24. A factor which industry believes not to be in line with normal commercial practice is that the current SMTA makes no provision for a user to terminate an agreement or opt out of or withdraw from an agreement unilaterally, and that it does not provide for an expiry date. It has been pointed out that this lack of a termination or opting out clause creates substantial transaction costs for users and providers, as well as a competitive disadvantage and legal uncertainty for those companies which access material from the Multilateral System.

25. Though termination provisions are normal commercial practice, it must be noted that the whole structure of the Multilateral System requires that chains of SMTAs are created as users transfer material amongst each other. The implications of providing for termination or opting out therefore need careful consideration, and are discussed in the document *Options for a Termination Clause*.[8]

Exhaustion of obligations on distance in crossing

26. Related to the concept of the "usefulness" of material is the common opinion that payment should be linked to value directly conferred by real incorporation of a substantial amount of material received under an SMTA, usually defined in terms of generations, or of traits of proven value.

27. While this may be normal practice in the seed sector, it should be noted that benefit-sharing obligations under the Treaty are not related to the immediate value of the material, but derive from chains, even long chains, of crossing. Moreover, when it is considered, as discussed above, that there may not be much material in the Multilateral System that is immediately "useful" in its current form, the implications of introducing an exhaustion of obligations on distance in crossing need careful consideration, particularly for likely income to the Benefit-sharing Fund. These questions have not yet been discussed by the Working Group in any detail.

28. Users often raised these matters in the context of transaction costs, as the tracking of long chains of crossing is held to increase such costs substantially.

[7] Pandemic Influenza Preparedness Framework: Distribution of Partnership Contribution among companies, at http://www.who.int/influenza/pip/PC_Distribution_22Nov2012u.pdf?ua=1.
[8] IT/OWG-EFMLS-3/15/Inf.7.

Seed multiplication companies and the problem of the end-payer

29. The current SMTA, in Annex 2, paragraph 1, requires that payment obligation always devolve on the company that actually commercializes the final product, i.e. seeds for sale. Some companies—often the bigger companies—both breed varieties, and multiply seed for sale. Others only breed varieties and license their products out to seed multiplication specialist companies, who multiply and sell seed, and pay the breeder a royalty for the right to do so. Seed breeders report that, in real market situations, they are unable to negotiate royalty contracts with multiplication companies, if they also have to impose on them to make payments, as provided for in the SMTA. Nor, under the SMTA, can a breeder company make payments for a multiplier company. Clarifying this issue would align the SMTA further with commercial practice, and may improve user acceptance. This technical stumbling block, which would probably mean, in certain cases, basing payments on breeders' royalties, rather than on sales volumes, would require substantial redrafting of the SMTA.

The transfer of Plant Genetic Resources for Food and Agriculture under Development from an Article 6.11 user to a non-Article 6.11 user

30. Paragraph 3 of *Annex 3* to the SMTA, specifying payments under Article 6.11, provides that:

When the Recipient transfers Plant Genetic Resources for Food and Agriculture under Development, the transfer shall be made on the condition that the subsequent recipient shall pay into the mechanism established by the Governing Body under Article 19.3f of the Treaty zero point five percent (0.5 %) of the Sales of any Product derived from such Plant Genetic Resources for Food and Agriculture under Development, whether the Product is available or not without restriction.

31. This, in effect, creates a third payment regime, which requires, like Article 6.7, mandatory payment on an individual product basis, for an individual sample, yet at a lower payment level than Article 6.7, and irrespective of whether such product is available without restriction to others for further research and breeding. The seed sector has drawn attention to the inconsistency of this provision, which they state creates legal uncertainty, and hinders cooperation between companies. This is often cited by users as an example of how complicated it is for them to understand the implications of the various provisions of the SMTA.

32. This experience also points to the need for very careful drafting of the provisions of any Subscription System, whether based on a revised Article 6.11 or otherwise, which regulate transfers between subscribers, and from subscribers to non-subscribers.

The importance of traits in modern breeding and commercial practice

33. At the time the Treaty was developed, the isolation, description and use of traits, identified at molecular level, was in its infancy, but is now of a much clearer importance in plant breeding and in intellectual property protection. Users feel that the SMTA is old fashioned, and does not adequately cover these technological developments. Amongst the questions asked are:

- The relationship of a "trait", as an immaterial object, to physical materials accessed from the SMTA;
- What a user's obligations are when a trait identified in a crop covered by the Treaty, from material received under an SMTA, is transferred into a non-Treaty crop; and
- What a user's obligations are when value in a product derived from an SMTA material is contributed by a trait from a non-Treaty crop.

34. These are very complex questions, including because they involve the growing "dematerialization" of value in plant breeding, as well as changing patterns in the acquisition and exercise of intellectual property rights and commercial practice. Dealing with these coherently when improving the SMTA, and other non-SMTA based measures that may be recommended, will therefore be crucial for the success of the enhancements of the Treaty's access and benefit-

sharing system, and in making the SMTA attractive to users. Whatever decisions are made in this regard, they should be based on a sound technical and legal understanding.

35. Extension of the Treaty's crop coverage to all plant genetic resources for food and agriculture may go some way toward resolving at least the question of transfer of traits between crops.

The importance of legal certainty

36. The seed sector has stressed the importance of legal certainty, and that the greatest probable increase in attractiveness will come from creating greater legal certainty. Two types of legal certainty are mentioned:

- Clarity and consistency of drafting, and conformity of the terms and condition of the SMTA, or of any other legal instrument developed, to commercial law and practice;
- Clarity in the role of the Treaty's systems, including the SMTA, in the national and international regulatory frameworks for access and benefit-sharing for genetic materials.

37. Most of the matters discussed above relate to clarity and consistency of drafting, and are often inextricably intertwined one with another, such that, to be successfully amended, they require the entirety of the Treaty's systems to be taken into account. In this context, the coherence of the current SMTA, as a whole, self-contained standard contract, may need review. For example, user's reporting provisions are currently contained, not in the SMTA, but in Part III of Annex 2 of Governing Body Resolution 5/2009, *Information to be provided to the Governing Body by parties to the SMTA*, as is also the case for the crop to which an Article 6.11 subscription applies. Legal consistency would be enhanced by updating the text of the SMTA to resolve such inconsistencies.[9]

38. Users have stated that the single most important factor in making the Treaty's systems—including the SMTA—more attractive is an extension of the Treaty's crop coverage to all plant genetic resources for food and agriculture, in such a way that the Treaty plays its role as the governance structure for exchange, use and benefit-sharing of plant genetic resources used in agriculture.

39. The recognition of the SMTA as an *internationally recognized certificate of compliance* with the Nagoya Protocol to the CBD is seen by users to be of crucial importance within overall regulation of access and benefit-sharing. As one of the recent technical studies concludes:

- *The SMTA would need to be accepted as the internationally recognized certificate of compliance, for all products [derived from material accessed under an SMTA], and*
- *An accompanying declaration of non-use of materials accessed under [the provisions of the CBD and its Nagoya Protocol] should fully suffice for the market approval of new plant varieties of subscribers to the Article 6.11 option.*[10]

40. Addressing current weaknesses of the SMTA, and overcoming the stumbling blocks identified by industry in order to generate acceptable, sustainable and predictable income for the Benefit-sharing Fund is most likely to be achieved through a package of provisions, some of which are in the SMTA, and others of which may best be carried in, for example, a Protocol or Supplementary Agreement to the Treaty.

IV. CONCLUSIONS

[9] IT/AC-SMTA-MLS 2/10/4, *Updating of the Standard Material Transfer Agreement.*
[10] IT/OWG-EFMLS-2/14/3, *Synoptic Study 1: Estimating income to be expected from possible changes in the provisions governing the functioning of the Multilateral System*, paragraphs 72–74.

41. Three sets of stumbling blocks, of a different nature, have been identified in this document. The first relates to payment levels; the second to consistency with normal commercial practice; and the third to the need for legal certainty in the context of national and international access and benefit-sharing.

42. The industry's identification of payment levels as being too high, particularly because it is easy to avoid using materials from the Multilateral System, and find the same materials or alternatives elsewhere, does not raise technical questions, but requires a policy decision by the Governing Body. The biggest difficulty is extrapolating from any payment level the probable income to the Treaty, because it is impossible to predict actual use of the Treaty's systems. In this context:

> *a solution to the need to generate acceptable, sustainable and predictable income for the Benefit-sharing Fund cannot be found by manipulating the rates alone.*[11]

43. Some stumbling blocks, related to normal commercial practice, which have been identified by industry, concern the very structure of the Treaty's access and benefit-sharing provisions. These need to be addressed at a conceptual and policy level, in the measures that will be proposed to the Governing Body, including measures going beyond the SMTA. Others require textual improvement for clarity and legal certainty. Any modification to the SMTA will need textual formulation, and it will be crucial to ensure legal consistency and drafting accuracy across all instruments developed.

44. In order to improve legal certainty, in the context of access and benefit-sharing regulatory frameworks, of which the CBD and its Nagoya Protocol, and the Treaty, are the main pillars, some textual clarifications to the SMTA may be useful. But adequate legal certainty will need to be provided by more than the SMTA itself, for example, in any Protocol or Supplementary Agreement to extend the Treaty's crop coverage to its full scope. From the point of view of users, this is the single most important factor in improving the attractiveness of the Treaty's systems.

45. However, improving the user-friendliness of the SMTA will not, in itself, guarantee its use, or a predictable and sustainable income stream. One matter, not considered in this paper in any detail is the fact that users will always gravitate to the cheapest option, when different options are available. Moreover, the Working Group has recognized that it is relatively easy to avoid use of the SMTA altogether, and it is likely that users will continue to do so. This would mean that measures which are based exclusively on improvements to the SMTA will only be able to increase income to the Benefit-sharing Fund to a limited extent.

46. There remains also a policy question regarding the balance of incentive for the use of a Subscription System that the Governing Body wishes to promote, and disincentives for the use of other options that may parasitize the Subscription System. Making the other options in the SMTA relatively more attractive will weaken the attractiveness of a Subscription System.

47. The Treaty's current revenue-generation model is based on private law and a private contract between free parties. In the end, any decisions by the Working Group to modify the Treaty's access and benefit-sharing systems must take into account the fact that users are rational economic agents, whose decisions will be made through a cost-benefit analysis, as normal commercial practice dictates.

[11] IT/OWG-EFMLS-2/14/3, *Synoptic Study 1*, paragraph 81.