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EXCHANGEABLE SOFTWARE

Document prepared by the Office of the Union

1. The purpose of this document is to report on developments concerning exchangeable software.

2. The structure of the document is as follows:

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3. The following abbreviations are used in this document:

CAJ:	Administrative and Legal Committee
TC:	Technical Committee
TC-EDC:	Enlarged Editorial Committee
TWA:	Technical Working Party for Agricultural Crops
TWC:	Technical Working Party on Automation and Computer Programs
TWF:	Technical Working Party for Fruit Crops
TWO:	Technical Working Party for Ornamental Plants and Forest Trees
TWV:	Technical Working Party for Vegetables
TWPs:	Technical Working Parties

I. REVIEW OF REQUIREMENTS FOR EXCHANGEABLE SOFTWARE

4. At its twenty-ninth session, held in Geneva, from June 7 to 10, 2011, the TWC considered document TWC/29/7 "Exchangeable Software" and received a presentation by Mrs. Hedwich Teunissen (Netherlands) on "Bionumerics Software for Databasing and Data Analysis" (document TWC/29/30). Copies of those documents are posted on the website of the forty-eighth session of the TC (http://www.upov.int/meetings/en/details.jsp?meeting_id=25503). The TWC agreed that the Bionumerics Software for Databasing and Data Analysis could be included in the exchangeable software subject to agreement by the Working Group on Biochemical and Molecular Techniques and DNA Profiling in Particular (BMT) at its thirteenth session, to be held in Brasilia, from November 22 to 24, 2011 (see document TWC/29/31, "Report", paragraphs 39 and 40). There was no presentation from the Russian Federation at the twenty-ninth session of the TWC. The next opportunity for the review of the additional software provided by the Russian Federation will be at the thirtieth session of the TWC in 2012.

5. The TWV, at its forty-fifth session, held in Monterey, United States of America, from July 25 to 29, 2011, noted the information provided in document TWV/45/7. The TWV agreed that information on the cost and intellectual property rights for the Bionumerics Software for Databasing and Data Analysis should be provided. The TWV suggested that the TC should consider the type of information to be included in document "Exchangeable Software" (see document TWV/45/26 "Report", paragraph 68).

6. The TWF, at its forty-second session, held in Hiroshima, Japan, from November 14 to 18, 2011, noted the information provided in document TWF/42/7. It agreed that information on the cost and intellectual property rights should be considered with regard to software proposed for inclusion in document "Exchangeable Software" (see document TWF/42/26 Rev. "Revised Report", paragraph 56).

7. The TWO, at its forty-fourth session, held in Fukuyama, Japan, from November 7 to 11, 2011, noted the information provided in document TWO/44/7. It agreed that information on the cost and intellectual property rights should be considered with regard to software proposed for inclusion in document UPOV/INF/16 "Exchangeable Software" (see document TWO/44/25 "Report", paragraph 49).

8. At its thirteenth session, held in Brasilia, from November 22 to 24, 2011, the BMT received a presentation by Ms. Hedwich Teunissen (Netherlands) on the Bionumerics Software for Databasing and Data Analysis, based on document BMT/13/31, which is provided in document BMT/13/31 Add. Copies of those documents are posted on the website of the forty-eighth session of the TC. In reply to a question from Mr. Tetsuya Kimura (Japan), Ms. Teunissen explained that the cost of purchasing the software varies depending on how many functions (plug-ins) are needed. The BMT noted that the Bionumerics Software had been proposed to be included in document UPOV/INF/16 "Exchangeable Software" by the TWC (see document BMT/13/36 "Report", paragraphs 64 to 66).

9. The TC, at its forty-eighth session, held in Geneva, from March 26 to March 28, 2012, considered the recommendation of the TWC at its twenty-ninth session concerning the inclusion of "Bionumerics Software for Databasing and Data Analysis" in document UPOV/INF/16, in conjunction with the comments of the TWV, TWF, TWO and BMT. The TC noted different views on whether commercial software should be considered in document UPOV/INF/16 and suggested that it would be appropriate to review the title of document UPOV/INF/16 "Exchangeable Software" and Section "1. Requirements for exchangeable software", before taking a view on the inclusion of the "Bionumerics Software for Databasing and Data Analysis" software. It agreed that the review should be included in the agenda for its forty-ninth session (see document TC/48/22 "Report on the Conclusions", paragraph 120).

10. The CAJ, at its sixty-fifth session, held in Geneva, on March 29, 2012, considered the recommendation of the TWC, at its twenty-ninth session, concerning the inclusion of "Bionumerics Software for Databasing and Data Analysis" in document UPOV/INF/16, in conjunction with the comments of the TC. The CAJ noted that different views on whether commercial software should be considered in document UPOV/INF/16 had been expressed at the TC session and that the TC had suggested that it would be appropriate to review the title of document UPOV/INF/16 "Exchangeable Software" and Section "1. Requirements for exchangeable software", before taking a view on the inclusion of the "Bionumerics Software for Databasing and Data Analysis" software (see paragraph 61 of the Annex to document CAJ/65/11). The CAJ agreed that a review of document UPOV/INF/16 should be included in the agenda for its October session in 2013 (see document CAJ/65/12 "Report on the Conclusions", paragraph 59).

11. The TC, at its forty-ninth session, held in Geneva, from March 18 to 20, 2013, reviewed the title of document UPOV/INF/16 "Exchangeable Software" and Section "1. Requirements for exchangeable software" and agreed that these texts should remain unchanged on the basis that the document concerned software that had been developed or customized by a member of the Union for UPOV purposes. However, it agreed that it would be useful to develop a separate information document that would allow members of the Union to provide information on the use of non-customized software and equipment (e.g. data loggers) that was used by members of the Union. (see document TC/49/41 "Report on the conclusions", paragraph 105)

12. The CAJ, at its sixty-seventh session, held in Geneva, on March 21, 2013, noted that the TC had reviewed the title of document UPOV/INF/16 "Exchangeable Software" and Section "1. Requirements for exchangeable software" and had agreed that those texts should remain unchanged on the basis that the document concerned software that had been developed or customized by a member of the Union for UPOV purposes (see document CAJ/67/14 "Report on the conclusions", paragraph 55).

13. The TWO is invited to note that the TC concluded that the title of document UPOV/INF/16 "Exchangeable Software" and Section "1. Requirements for exchangeable software" should remain unchanged, but that it would be useful to develop a separate information document that would allow members of the Union to provide information on the use of non-customized software and equipment that was used by members of the Union.

II. SOFTWARE PROPOSED FOR INCLUSION IN UPOV/INF/16

14. The procedure for considering proposed inclusions of software is set out in document UPOV/INF/16 "Exchangeable Software", as follows:

"2. Procedure for inclusion of software

"Software proposed for inclusion in document UPOV/INF/16 by members of the Union is, in the first instance, presented for review by the Technical Working Party on Automation and Computer Programs (TWC). On the basis of such presentations and the experience of members of the Union, the TWC makes a recommendation to the Technical Committee on whether to include that software in document UPOV/INF/16. In the case of a positive recommendation by the TC and by the Administrative and Legal Committee (CAJ), the software will be listed in a draft of document UPOV/INF/16, to be considered for adoption by the Council. Document UPOV/INF/16 is adopted by the Council."

15. The TWC, at its thirtieth session, held in Chisinau, Republic of Moldova, from June 26 to 29, 2012, considered documents TWC/30/7 "Exchangeable software" and TWC/30/35 "Information System (IS) Used for Test and Protection of Plant Varieties in the Russian Federation" (see document TWC/30/41 "Report", paragraph 68).

16. The TWC, at its thirtieth session, noted information in document TWC/30/7 and commented that the conditions of availability of exchangeable software should be clarified, such as the need for translation, training, maintenance and costs for potential users before taking a view on its inclusion to the list (see document TWC/30/41 "Report", paragraph 69).

17. The TWC, at its thirtieth session, agreed that the title of the document "Exchangeable Software" should remain unchanged (see document TWC/30/41 "Report", paragraph 70).

18. The TWC, at its thirtieth session, noted document TWC/30/35 "Information System (IS) used for Test and Protection of Plant Varieties in the Russian Federation". In the absence of experts from the Russian Federation, an expert of Belarus reported on the experience of use of this software in Belarus (see document TWC/30/41 "Report", paragraph 71).

19. The TWC, at its thirtieth session, agreed that the software presented by the Russian Federation in document TWC/30/35 was suitable for inclusion in the list of document UPOV/INF/16/2 "Exchangeable Software", with a remark that it would be available in the Russian language (see document TWC/30/41 "Report", paragraph 72), the proposal of which is presented in the Annex I to this document.

20. The TWC, at its thirtieth session, received a presentation on the AIM software on management of image analysis, made by an expert from France, as reproduced in document TWC/30/31 and in document TC/49/33, Annex II. It noted that the features of the AIM software was available in French and that it could be made available free of charge by its developer (GEVES). The TWC suggested that training on use of this software and its translation into English would be essential for wide use. It also agreed that this software could be included in the list of exchangeable software, the proposal of which is presented in the Annex I to this document. The TWC requested the Office of the Union to help translate the software into English (see document TWC/30/41 "Report", paragraphs 77 and 78).

21. The TC, at its forty-ninth session, held in Geneva, from March 18 to 20, 2013, agreed with the recommendation of the TWC concerning the inclusion of "Information System (IS) used for Test and Protection of Plant Varieties in the Russian Federation" in document UPOV/INF/16, as set out in paragraph 18 of document TC/49/12. The TC also requested the Office of the Union to investigate the possibility of the translation into English of the user interfaces and user manual, on the basis that the Russian Federation would verify the translation provided by the Office of the Union (see document TC/49/41 "Report on the conclusions", paragraph 106).

22. The TC, at its forty-ninth session, agreed with the recommendation of the TWC concerning the inclusion of the AIM software from France in document UPOV/INF/16, as set out in paragraph 19 of document TC/49/12. The TC requested the Office of the Union to translate the software to English of the user interfaces and user manual, on the basis that France would verify the translation provided by the Office of the Union (see document TC/49/41 "Report on the conclusions", paragraph 107).

23. The CAJ, at its sixty-seventh session, held in Geneva, on March 21, 2013, noted that it would be invited, at its sixty-eighth session, to be held in Geneva in October 2013, to consider a proposed revision of document UPOV/INF/16 "Exchangeable Software" (see document CAJ/67/14 "Report on the conclusions", paragraph 56).

24. *The TWO is invited to note that the TC:*

(a) agreed with the inclusion of "Information System (IS) used for Test and Protection of Plant Varieties in the Russian Federation" and the AIM software from France in document UPOV/INF/16;

(b) requested the Office of the Union to investigate the possibility of the translation of "Information System (IS) used for Test and Protection of Plant Varieties in the Russian Federation" into English on the basis that the Russian Federation would verify the translation provided by the Office of the Union; and

(c) requested the Office of the Union to translate the AIM software to English on the basis that France would verify the translation provided by the Office of the Union.

III. INFORMATION ON USE BY MEMBERS

25. Section 4 of document UPOV/INF/16 "Exchangeable Software", provides the following:

"4. Information on use by members of the Union

"4.1 A circular is issued to members of the Union on an annual basis, inviting them to provide information on their use of the software included in document UPOV/INF/16.

"4.2 The information on software use by members of the Union is indicated in the columns 'Member(s) of the Union using the software' and 'Application by user(s)'. With regard to the indication of 'Application by user(s)', members of the Union can indicate, for example, crops or types of crop for which the software is used."

26. On February 5, 2013, the Office of the Union issued Circular E 13/023 to the designated persons of the members of the Union in the TC, inviting them to provide or update information regarding the use of the

software included in document UPOV/INF/16 by March 4, 2013. The information received from Czech Republic, Estonia and Viet Nam in response to the Circular is presented in Annex II to this document.

27. The TC, at its forty-ninth session, held in Geneva, from March 18 to 20, 2013, agreed with the inclusion of the information contained in Annex II to this document for a revision of document UPOV/INF/16 by the Council at its forty-seventh session, to be held in Geneva on October 24, 2013 (see document TC/49/41 "Report on the conclusions", paragraph 108).

28. The CAJ, at its sixty-seventh session, held in Geneva, on March 21, 2013, noted that it would be invited, at its sixty-eighth session, to be held in Geneva in October 2013, to consider a proposed revision of document UPOV/INF/16 "Exchangeable Software" (see document CAJ/67/14 "Report on the conclusions", paragraph 56).

29. The TWO is invited to note that the TC agreed with inclusion of the information contained in the Annex II to this document for a revision of document UPOV/INF/16 by the Council at its forty-seventh session, to be held in Geneva on October 24, 2013, as set out in paragraph 27 of this document.

IV. NEW SOFTWARE PROPOSED TO BE INCLUDED IN DOCUMENT UPOV/INF/16

30. On February 25, 2013, Mexico provided information on exchangeable software in addition to that included in document UPOV/INF/16 "Exchangeable Software". The information provided by Mexico is presented in Annex III to this document.

31. The procedure for considering such proposed inclusions is set out in document UPOV/INF/16 "Exchangeable Software", as follows:

"2. Procedure for inclusion of software

"Software proposed for inclusion in document UPOV/INF/16 by members of the Union is, in the first instance, presented for review by the Technical Working Party on Automation and Computer Programs (TWC). On the basis of such presentations and the experience of members of the Union, the TWC makes a recommendation to the Technical Committee on whether to include that software in document UPOV/INF/16. In the case of a positive recommendation by the TC and by the Administrative and Legal Committee (CAJ), the software will be listed in a draft of document UPOV/INF/16, to be considered for adoption by the Council. Document UPOV/INF/16 is adopted by the Council."

32. On that basis, the TWC will be invited to consider the proposals by Mexico, as presented in Annex III to this document, at its thirty-first session, to be held in Seoul, from June 4 to 7, 2013.

33. The TWO is invited to note that the TWC will be invited to consider the software proposed by Mexico for inclusion in document UPOV/INF/16 "Exchangeable software", as presented in Annex III to this document, at its thirty-first session, to be held in Seoul, from June 4 to 7, 2013.

[Annexes follow]

SOFTWARE PROPOSED FOR INCLUSION IN DOCUMENT UPOV/INF/16 "EXCHANGEABLE SOFTWARE"

INFORMATION SUBMITTED BY:	Russian Federation
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(d) DUS trial design and data analysis

Date added	Program name	Programming language	Function (brief summary)	Source & contact details	Condition for supply	Member(s) of the Union using the software	Application by user(s)
	ZAJVKA	SQL Windows	Information on applications (name and address of applicants, proposed denomination, date of application etc) and registration (denomination, date of registration)	Russian Federation, State Commission of the Russian Federation for Selection Achievements Test and Protection Valentin Sherbina, Chief of IT Department e-mail: gossort@gossort.com	Only available in Russian	RU	all crops

INFORMATION SUBMITTED BY:	France
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(f) Image analysis

Date added	Program name	Programming language	Function (brief summary)	Source & contact details	Condition for supply	Member(s) of the Union using the software	Application by user(s)
	AIM	Windows	Image processing software	France: E-mail: christophe.chevalier@geves.fr		FR	rapeseed, sunflower, hydrangea, flax, peas, carrot, maize, winter wheat, orchids

[Annex II follows]

PROPOSED REVISION TO DOCUMENT UPOV/INF/16 "EXCHANGEABLE SOFTWARE"

(Information regarding the use of the software provided by Czech Republic, Estonia and Viet Nam in reply to Circular E_13/023: appears highlighted)

(d) DUS trial design and data analysis

Date added	Program name	Programming language	Function (brief summary)	Source & contact details	Condition for supply	Member(s) of the Union using the software	Application by user(s)
	DUSTNT	FORTRAN 90	General program for analysis of data from DUS trials. Includes facilities for COY analysis and a wide range of multivariate analysis techniques	United Kingdom: Dr. Sally Watson Email: sally.watson@afbini.gov.uk		GB	Herbage, Pea (Field & Veg), Parsnip, Swede, Onion, Brussels Sprout, Winter Oilseed Rape, Sugar Beet, Faba Beans, Spring Oilseed Rape, Kale, Linseed
						CZ	Oilseed Rape, Grasses and Luzerne
						EE	Grasses and Legumes
						VN	Maize, Flowers, Rice, Tomato, Potato, Soybean, Vegetables, and other species
	GAIA	Windows	Computes comparisons of varieties for management of reference collections	France: Email: christophe.chevalier@geves.fr		FR	Sorghum, Sugar Beet, Maize, Wheat, Barley, Oat, Rape, Sunflower, Triticale, Pea
						HR	Barley, Maize, Wheat
						CZ	Maize, Wheat, Barley, Oat, and Pea

[Annex III follows]

NEW SOFTWARE PROPOSED TO BE INCLUDED IN DOCUMENT UPOV/INF/16 "EXCHANGEABLE SOFTWARE"
(Information provided by Mexico on February 25, 2013)

(a) Administration of applications

Date added	Program name	Programming language	Function (brief summary)	Source & contact details	Condition for supply	Member(s) of the Union using the software	Application by user(s)
	SISNAVA	Microsoft Office Access	Allows for variety groupings according to morphological characteristics, making it possible to identify the pair or small subgroup of confusingly similar varieties.	Mexico: E-mail: enriqueta.molina@snics.gob.mx / eduardo.padilla@snics.gob.mx	Written application and justification of need for use.	MX	All crops
	SIVAVE	Database: Mysql 5.1 PHP Version 2.5.9 Ajax. Javascript. Routines are integrated with Java Applets and several Java Archives (JARS). Complements: Zend Optimizer 3.3 Compilers: Zend Studio ScriptCase	Allows for the real-time dissemination of the status of proceedings concerning applications for breeder's certificates in Mexico.	Mexico: E-mail: enriqueta.molina@snics.gob.mx / eduardo.padilla@snics.gob.mx	Written application and justification of need for use.	MX	All crops

[End of Annexes and of document]