



EAF/8/2

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# INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

## MEETING ON THE DEVELOPMENT OF A PROTOTYPE ELECTRONIC FORM

### **Eighth Meeting Geneva, October 24, 2016**

#### DEVELOPMENTS CONCERNING THE PROTOTYPE ELECTRONIC FORM PROJECT

*Document prepared by the Office of the Union*

*Disclaimer: this document does not represent UPOV policies or guidance*

1. The purpose of this document is to report on developments since the seventh meeting on the development of a prototype electronic form (EAF), held in Geneva on March 16, 2016, and to present proposals for future developments.

2. The structure of this document is as follows:

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## BACKGROUND

3. The background to the development of a prototype electronic form and previous developments are provided in document EAF/7/2 "Developments concerning the prototype electronic form project".

4. The aim of the electronic application form (EAF) project is to develop a multilingual electronic form containing questions relevant for plant breeders' rights (PBRs) applications (see document CAJ/66/5 "Electronic Application Systems", paragraph 2).

## DEVELOPMENTS AT THE SEVENTH MEETING ON THE DEVELOPMENT OF A PROTOTYPE ELECTRONIC FORM

5. At the Seventh Meeting on the Development of a Prototype Electronic Form ("EAF/7 meeting"), held in Geneva on March 16, 2016, the participating members considered document EAF/7/2 "Developments concerning the prototype electronic form project" and received a presentation from the Office of the Union. The EAF/7 meeting agreed (see document UPOV/EAF/7/3 "Report", paragraphs 4 to 16):

- (a) on the release of PVP-XML Version 2 (Version to be used for the Prototype\_PV2);
- (b) on the plan presented for the test campaign for PV2 and had noted that participating members should:
  - create WIPO Accounts to access and use the prototype (PVP Offices & Breeders)
  - provide terms and conditions when needed (PVP Offices)
  - check mapping files: mandatory/optional elements (PVP Offices)
  - provide bank account details and PVP Office application fee (amount and currency) to be used (PVP Offices)
  - develop the client interface to interact with EAF in form of system-to-system communication (if requested) (PVP Offices);
- (c) that the Eighth Meeting on the Development of a Prototype Electronic Form ("EAF/8 meeting") would be held in Geneva on Monday October 24, 2016, starting at 6 p.m.

6. In relation to the possible implementation of an operational system, the EAF/7 meeting agreed the following:

- (a) all legal requirements of the PVP Offices concerned would need to be met
  - e.g. to clarify that the EAF does not represent an intermediary in the application process. The application would be made by the user with the PVP Office concerned;
- (b) all questions would be available in the languages of the participating UPOV members;
- (c) users would be required to provide information (answers) in a language accepted by the authority concerned (as indicated in the form);
- (d) the following two options in relation to integration with PVP Offices systems:
  - (i) Case 1: In the case of PVP Offices with no electronic system or who do not wish to integrate their existing system with the EAF, they would receive the submitted application data via:
    - e-mail or
    - regular mail/hand delivery
  - (ii) Case 2: System-to-System communication
    - Synchronization for submitted application data
    - Validation of submitted application data and authorization through Web application;
- (e) all data would be encrypted and considered confidential;
- (f) that the EAF system should allow, if requested, for PVP Office fees to be collected by UPOV and distributed to the PVP Offices in a form and currency determined by the PVP Office concerned;

- (g) that the implementation of the EAF would not affect the fees that PVP Offices would receive per application;
- (h) for payment to cover the costs of the EAF, including UPOV charge per application, as follows:
  - CHF 150 / submitted application in 2017/2018
  - CHF 250 / submitted application from 2019 on;
- (i) that financial and administrative regulations and rules should be presented for approval at the EAF/8 meeting;
- (j) on the development of a program of training for PVP Offices and users, to be arranged in conjunction with the launch of the EAF;
- (k) on a program of publicity on the availability of the system for breeders to be organized in conjunction with the launch of the EAF;
- (l) on the need to develop an approach to add new crops more rapidly, for consideration at the EAF/8 meeting;
- (m) to make an initial assessment of the feasibility of including information for official variety list purposes, for consideration at the EAF/8 meeting.

7. The EAF/7 meeting agreed with the plan to make a presentation of PV2 to the CAJ and the Consultative Committee at their sessions in October 2016, and to seek the approval by the Council at its fiftieth ordinary session, to be held in Geneva on October 28, 2016, for the launch of the EAF at the end of 2016 or beginning of 2017.

#### DEVELOPMENTS SINCE EAF/7

##### Developments in the Consultative Committee

8. The Consultative Committee, at its ninety-first session in Geneva on March 17, 2017, noted the developments concerning the development of a prototype electronic form and considered the plans for the development of the prototype electronic application form Version 2 (PV2) (see document C(Extr.)/33/3 "Report by the President on the work of the ninety-first session of the Consultative Committee", paragraph 15).

9. The Consultative Committee noted the oral report by the Vice Secretary-General of the Seventh Meeting on the Development of a Prototype Electronic Form ("EAF/7 meeting"), held on March 16, 2016, and agreed with the proposal made by the EAF/7 meeting in relation to the possible implementation of an operational system, as reproduced in paragraph 6 of this document (see document C(Extr.)/33/3 "Report by the President on the work of the ninety-first session of the Consultative Committee", paragraphs 16 and 17).

10. The Consultative Committee agreed, subject to approval by the participants to the EAF project, the Administrative and Legal Committee (CAJ) and the Consultative Committee, to seek the approval by the Council at its fiftieth ordinary session, to be held in Geneva on October 28, 2016, for the launch of the EAF at the end of 2016 or beginning of 2017 (see document C(Extr.)/33/3 "Report by the President on the work of the ninety-first session of the Consultative Committee", paragraph 18).

##### Developments in the Council

11. The Council at its thirty-third Extraordinary session in Geneva on March 17, 2016, noted the work of the Consultative Committee at its ninety-first session, as reported in document C(Extr.)/33/3 "Report by the President on the work of the ninety-first session of the Consultative Committee", which included information concerning the EAF (see document C(Extr.)/33/3 "Report", paragraph 7).

##### Developments concerning PV2 since March 2016

12. At the EAF/7 meeting, participating members were informed they would be invited to test the system in stages, through different interim releases, in order to obtain regular feedback. Comments would be taken into consideration for the development of following releases in order to have a full, functioning prototype by

August 2016, for a final test campaign in September 2016. The following timetable was agreed (see document UPOV/EAF/7/3 "Report", paragraph 10):

Test Campaign	From/To	Milestone Release (MR) Contents/ Functionalities to be tested
Release 3	11/04/2016 to 22/04/2016	Authentication/Authorization, Multi-language feature, Add new participants, user feedback from MR2
Release 4	09/05/2016 to 20/05/2016	Manage forms interface, Add crops (Rose+Lettuce), user feedback from MR3
Release 5	06/06/2016 to 17/06/2016	Reuse TQ, Payment, user feedback from MR4
Release 6	04/07/2016 to 29/07/2016	Add Soya Bean, Office/Breeder Preference Interface, integration with CPVO authorization service, user feedback from MR5
Release 7	16/08/2016 to 26/08/2016	Add Apple Fruit Varieties*, Encryption, Secure RESTful services, user feedback from MR6
Release 8	12/09/2016 to 30/09/2016	Add potato*, user feedback from MR7
Final Release	10/10/2016 to 21/10/2016	User feedback from MR8 and Full prototype

\*if time permits

13. Participating members in the development of an electronic application form have been invited to test the prototype through different releases during the test campaign, from March 2016 to October 2016, as follows:

Test Campaign*	Web Ex	From/To	Milestone Release (MR) Contents/ Functionalities to be tested
Release 3	11/04/2016	21/04/2016 to 05/05/2016	Authentication/Authorization, Multi-language feature, Add new participants, user feedback from MR2
Release 4	09/05/2016	09/05/2016 to 20/05/2016	Manage forms interface (EAF Admin), Add crops (Rose+Lettuce), user feedback from MR3 Part 1
Release 5	06/06/2016	06/06/2016 to 17/06/2016	Reuse TQ, Payment, user feedback from MR3 Part 2, user feedback from MR4
Release 6	04/07/2016	04/07/2016 to 29/07/2016	Add Soya Bean, Office/Breeder Preference Interface, Integration with PVP Offices system (Export Web service) (e.g. NL), user feedback from MR5
Release 7	16/08/2016	16/08/2016 to 26/08/2016	Add Apple Fruit Varieties, Encryption, user feedback from MR6
Release 8	12/09/2016	12/09/2016 to 30/09/2016	Add Potato, Secure Web Services, user feedback from MR7
Final Release	10/10/2016	10/10/2016 to 21/10/2016	User feedback from MR8 and Full Prototype

\* The first two releases (1 and 2) have been done in February and March 2016.

#### ITEMS TO BE ADDRESSED FOR IMPLEMENTATION OF AN OPERATIONAL SYSTEM

14. The following section reports on the items that participating members, at the EAF/7 meeting, agreed should be addressed for a possible implementation of an operational system:

##### Legal requirements

15. It was clarified at the ninety-first session of the Consultative Committee that the EAF does not represent an intermediary in the application process.

16. The Office of the Union will consult with individual participating members of the Union to ensure that their legal requirements are addressed in the operational EAF.

17. The EAF will display a suitable disclaimer, when entering the system to inform applicants that they are responsible for information provided in the system and application data submitted to selected authorities.

### Languages

#### *Questions*

18. As agreed by the CAJ and the Consultative Committee (see document CC/91/4, paragraph 6), the EAF will present all items (questions) in English, French, German and Spanish. Translations for all items (questions) in other languages will be made available if provided by the participating members of the Union, with a suitable disclaimer.

#### *Answers*

19. Users will be required to provide information (answers) in a language accepted by the PVP Office concerned, which will be indicated in the form.

### Integration with PVP Offices systems

#### *Manual transmission of data to PVP Office*

20. PVP Offices with no electronic application system, or who do not wish to integrate their electronic application system with the EAF, will choose whether to receive the submitted application data via:

- (i) e-mail or
- (ii) paper copy (regular mail/hand delivery)

#### *Automatic transmission of data to PVP Office*

21. Where requested by PVP Offices, submitted application data will be transferred automatically via Web services.

### Confidentiality of data

22. A system of data encryption that meets the requirement of the participating members of the Union will be provided, subject to approval of the system at the EAF/8 meeting.

### Payment

#### *Payment to PVP Offices*

23. The EAF will not affect the fees that PVP Offices receive per application.

24. Payment of the application fee will be made directly by the applicant to the relevant PVP Office unless otherwise agreed with the Office of the Union. However, the EAF system will allow, if requested, for application fees to be collected via the EAF and distributed to the PVP Offices in a form and currency agreed by the PVP Office concerned.

#### *EAF payment*

25. The EAF charge per application will be as follows:
- CHF 150 / submitted application in 2017/2018
  - CHF 250 / submitted application from 2019.

### Training

26. A program of training for PVP Offices and users will be introduced in conjunction with the launch of the EAF and will be included in the work of the staff identified in the operation of the EAF, as well as other relevant staff of the Office of the Union. The program of training will be developed in consultation with the participating members at the EAF meetings.

### Operations

27. A program of users support and routine maintenance provisions for PVP Offices and users will be developed in consultation with the participating members at the EAF meetings.

### Publicity

28. A program of publicity of the availability of the system for breeders will be introduced in conjunction with the launch of the EAF and will be included in the work of the staff identified in the operation of the EAF, as well as other relevant staff of the Office of the Union. The program of training will be developed in consultation with the participating members at the EAF meetings.

### Financial and administrative regulations and rules

29. The proposed financial and administrative regulations and rules will be presented to the participating members at the EAF/8 meeting for their consideration.

### Addition of new crops

#### *Order of priority*

30. The following crops/species are currently included in the EAF project:

Botanical Name	English	French	German	Spanish	UPOV Test Guidelines
Rosa L.	Rose	Rosier	Rose	Rosal	TG/11
Glycine max (L.) Merill	Soya Bean; Soybean	Soja	Sojabohne	Soja	TG/80
Lactuca sativa L.	Lettuce	Laitue	Salat	Lechuga	TG/13
Malus domestica Borkh.	Apple (fruit varieties)	Pommier (variétés fruitières)	Apfel (Fruchtsorten)	Manzano (variedades frutales)	TG/14
Solanum tuberosum L.	Potato	Pomme de terre	Kartoffel	Papa; Patata	TG/23

31. On the basis of the information provided by EAF participating members of the Union and breeders, and information in the PLUTO Database, the following order of priority for addition of further crops will be considered at the EAF/8 meeting:

	Botanical Name	English	French	German	Spanish	UPOV Test Guidelines
1	Zea mays L.	Corn; Maize	Maïs	Mais	Maíz	TG/2
2	Chrysanthemum spec.	Chrysanthemum; Daisies	Chrysanthème; Marguerite	Chrysantheme; Margerite	Crisantemo; Margarita	TG/26
3	Triticum aestivum L.	Wheat	Blé	Weizen	Trigo	TG/3
4	Solanum lycopersicum L.	cherry tomato; Tomato; tomato	Tomate; tomate; tomato cerise	Kirschtomate; Tomate	Tomate; tomate; tomatera; tomatillo	TG/44
5	Prunus persica (L.) Batsch	Peach	Pêcher	Pfirsich	Durazno; Melocotonero	TG/53
6	Phalaenopsis Blume	Moth Orchid	Orchidée papillon	Phalaenopsis; Schmetterlingsorchidee		TG/213
7	Brassica napus L. oleifera	Oilseed Rape; Rapeseed; Swede Rape	Colza	Raps	Colza	TG/36
8	Lilium L.	Lily	Lis	Lilie	Lirio	TG/59
9	Capsicum annum L.	Sweet Pepper, Hot Pepper, Paprika, Chili	Piment; Poivron	Paprika	Ají, Chile, Pimiento	TG/76
10	Hordeum vulgare L. sensu lato	Barley	Orge	Gerste	Cebada	TG/19

	Botanical Name	English	French	German	Spanish	UPOV Test Guidelines
11	<i>Helianthus debilis</i> Nutt.	Common Sunflower	Soleil; Tournesol	Sonnenblume	Girasol	TG/81
12	<i>Fragaria</i> L.	Strawberry	Fraisier	Erdbeere	Fresa; Frutilla	TG/22
13	<i>Cucumis melo</i> L.	Melon	Melon	Melone; Zuckermelone	Melón	TG/104
14	<i>Petunia</i> Juss.	Petunia	Pétunia	Petunie	Petunia	TG/212
15	<i>Pelargonium zonale</i> hort. non (L.) L'Hérit. ex Ait., <i>P. peltatum</i> hort. non (L.) L'Hérit. ex Ait.	Geranium; Pelargonium	Géranium; Pelargonium	Pelargonie	Geranio; Pelargonia	TG/28
16	<i>Vaccinium angustifolium</i> Aiton, <i>V. corymbosum</i> L., <i>V. formosum</i> Andrews, <i>V. myrtilloides</i> Michx., <i>V. myrtillus</i> L., <i>V. virgatum</i> Aiton, <i>V. simulatum</i> Small	Blueberry	Myrtille	Heidelbeere	Arándano americano	TG/137
17	<i>Anthurium</i> Schott	Anthurium; Tail Flower	Anthurium	Flamingoblume	Anthurium	TG/86
18	<i>Hydrangea</i> L.	Hydrangea	Hortensia	Hortensie	Hidrangea; Hortensia	TG/133
19	<i>Pisum sativum</i> L. sensu lato	Field Pea; Garden Pea; Green pea; Pea	Petit pois; Pois; Pois de jardins; Pois fourrager	Erbse; Futtererbse; Gemüseerbse; Speiseerbse	Arvejo; Guisante; Guisante de campo; Guisante de verdeo; Guisante forrajero	TG/7
20	<i>Cucumis sativus</i> L.	Cucumber; Gherkin	Concombre; Cornichon	Gurke	Cohombro; Pepino	TG/61
21	<i>Vitis</i> L.	Common grapevine; European grape; Grape; Grapevine	Vigne	Echter Weinstock; Rebe	Vid	TG/50
22	<i>Rubus idaeus</i> L.	Raspberry	Framboisier	Himbeere	Frambueso	TG/43
23	<i>Calibrachoa</i> Cerv., <i>Calibrachoa</i> Lave & Lex.	Calibrachoa				TG/207
24	<i>Phaseolus vulgaris</i> L.	French Bean	Haricot	Buschbohne; Gartenbohne	Alubia; Judía común; Poroto	TG/12
25	<i>Alstroemeria</i> L.	Alstroemeria; Herb Lily	Alstroemère; Lis des Incas	Inkalilie	Alstromeria	TG/29
26	<i>Oryza sativa</i> L.	Rice	Riz	Reis	Arroz	TG/16

#### *Approaches for adding new crops/species*

32. Participants in the EAF agreed that it would be beneficial for the system to cover the maximum number of crops as soon as possible. Therefore, at the EAF/7 meeting, the Office of the Union was requested to find a way to develop an approach to add new crops more rapidly and to increase the number of crops to be included in the EAF (see document EAF/7/3 "Report", paragraph 13).

33. The main part of the application form is normally the same for all crops for a particular authority. However, the crop-specific technical information, typically provided in the technical questionnaire, differs between crops. Therefore, the challenge in adding new crops more rapidly is to address the technical crop-specific part of the application.

34. It is proposed to use the following three approaches, in parallel, for adding crops to the EAF:

#### Approach 1: Customized technical questionnaire (crop and country specific):

35. The crop-specific technical questionnaire, customized for each participating member of the Union, is included in the EAF. This approach requires the maximum effort in term of capturing all specific information provided by each authority. This is the approach that has been used in the EAF until now.

Approach 2: Technical questionnaire based on the UPOV Test Guidelines (crop specific – not country specific):

36. In this approach, for crops that are not covered by Approach 1, it is proposed to add the technical questionnaire from the adopted UPOV Test Guidelines (UPOV TQ), for the crops to be supported in the EAF. Participating members of the Union that would be able to accept this information as the basis for an application would be covered by the EAF for that crop. Participating members of the Union that needed more or different information to that covered in the UPOV TQ would not be covered by this approach but could be covered by Approach 3.

Approach 3: Generic technical questionnaire:

37. In order to be able to cover all crops, it is proposed to create a non-crop-specific “generic” technical questionnaire for each authority. Such an approach would mean that re-use of data from different authorities would not be as complete as for Approaches 1 and 2. However, this approach would use components based on the web-based Test Guidelines template (TG Template), to allow users to provide crop-specific information, in a standardized way. As a result, the information provided in the following TQ chapters would be partially reusable in other applications: breeding scheme; method of propagating the variety; TQ characteristics; similar varieties and differences from these varieties.

38. Based on the anticipated resources, and on allocating equal resources to each of the three approaches above, the addition of crops/species would be possible at the following rate:

Year	Customized technical questionnaire	Technical questionnaire based on the UPOV Test Guidelines	Generic technical questionnaire
	Number of crops included in the EAF		
January 2017	5	5	-
January 2018	10	30	All crops
January 2019	20	60	All crops
January 2020	30	90	All crops

39. It would be a matter for each participating member of the Union to decide which of the three approaches to apply on a crop-by-crop basis.

Information for official variety list purposes

40. An initial assessment of the feasibility of including information for official variety list purposes will be presented for consideration by the participating members at the EAF/8 meeting, on the basis of ongoing discussions with participating members of the Union that have expressed a wish to include such information.

User’s Guide to the EAF

41. User guides to the EAF, for breeders and for PVP Offices, will be presented (in English only) for consideration by the participating members at the EAF/8 meeting. Versions in other relevant languages will be produced for the launch of the EAF.

**PARTICIPATION IN LAUNCH OF EAF**

42. The Office of the Union has received the necessary information and application forms for the EAF from the following 29 members of the Union: African Intellectual Property Organization (OAPI), Argentina, Australia, Bolivia (Plurinational State of), Brazil, Canada, Chile, China, Colombia, Czech Republic, European Union, France, Germany, Georgia, Japan, Kenya, Mexico, Netherlands, New Zealand, Norway, Republic of Korea, Republic of Moldova, South Africa, Sweden, Switzerland, Tunisia, United States of America, Uruguay and Viet Nam.

43. Participating members in the development of an electronic application form have been invited to test the prototype through different releases during the test campaign, from March 2016 to October 2016. Subject to their validation, PV2 will be the basis for the launch of an operational system.

44. At their sessions in October 2016, the EAF/8, CAJ and Consultative Committee will receive a report on the feedback received by participating members for PV2. At this stage the EAF is made available in English, Spanish, German and French for participating members, for the following crops:

- 1) Rose
- 2) Soya Bean
- 3) Lettuce
- 4) Apple fruit varieties
- 5) Potato

45. The table below illustrate, for the participating PVP Offices, the crops supported in PV2:

	GLYCI_MAX	LACTU_SAT	MALUS_DOM	ROSAA	SOLAN_TUB	Total
	Soya Bean	Lettuce	Apple fruit varieties	Rose	Potato	
AR	1		1	1	1	4
AU	1	1	1	1	1	5
BO	1					1
BR	1	1	1	1	1	5
CA	1	1	1	1	1	5
CH	1	1	1	1	1	5
CL	1	1	1	1	1	5
CN*						
CO	1	1	1	1	1	5
CZ	1	1	1		1	4
DE*						
FR	1	1	1	1	1	5
GE	1	1	1	1	1	5
JP		1				1
KE	1		1	1	1	4
KR		1				1
MD*						
MX	1	1	1	1	1	5
NL	1	1	1	1	1	5
NO	1	1	1	1	1	5
NZ		1	1	1	1	4
OA	1	1				2
QZ	1	1	1	1	1	5
SE*						
TN	1	1	1	1	1	5
US	1	1				2
UY	1		1			2
VN	1	1	1	1	1	5
ZA	1	1	1	1	1	5
Grand Total	21	20	19	17	18	95

\* to be implemented and tested after the October sessions (approval of PV2) and before the launch of an operational system, if all needed information is provided.

46. Subject to approval of the launch of the EAF by the Council on October 28, 2016, those 29 members of the Union would be requested to indicate their willingness to participate in the EAF, and an announcement will be made to inform users accordingly.

47. Any other member of the Union wishing to join the EAF would need to provide their forms for the selected crops (application form and technical questionnaire) in a UPOV language and, if appropriate, to provide translations of the questions of the applications forms and technical questionnaires of the other participating members of the Union. The timetable for addition of new members of the Union would be subject to available resources and would vary according to the content of the applications forms and technical questionnaires.

#### TENTATIVE TIMETABLE FOR THE LAUNCH OF THE EAF

48. Subject to approval by the participants to the EAF project, the CAJ and the Consultative Committee, it is proposed to seek the approval by the Council at its fiftieth ordinary session, to be held in Geneva on

October 28, 2016, for the launch of the EAF in January 2017 for rose, soya bean, lettuce, apple fruit varieties and potato.

*49. Participating members in the development of a prototype electronic form are invited to:*

*(a) note the developments concerning the development of a prototype electronic form as set out in this document;*

*(b) consider the items to be addressed for implementation of an operational system for electronic application form, as set out in paragraphs 14 to 41;*

*(c) consider the proposals for a launch of the EAF, as set out in paragraphs 42 to 48.*

*(d) note that a report of the eighth meeting on the development of a prototype electronic form, to be held in Geneva on October 24, 2016, will be made to the CAJ at its seventy-third session and to the Consultative Committee at its ninety-second session.*

[End of document]