Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in the Multilateral System: The German and European Information Management System on PGRFA

Frank Begemann, BLE, Bonn

The BLE.
For Agriculture and Food.

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in the Multilateral System: The German and European Information Management System on PGRFA

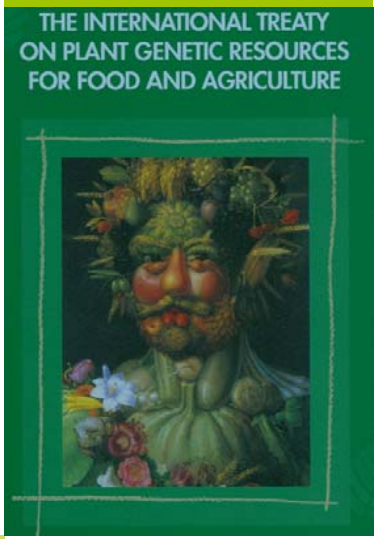
- Information Requirements under the Treaty
- Inclusion of Material in Germany
- Existing information infrastructure in Germany
- Existing information infrastructure in Europe
- Conclusions

The BLE.
For Agriculture and Food.

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Information requirements under the Treaty



Contracting Parties´ responsibilities

- Art 13.2(a): Exchange of information[1] as part of the BS in the MLS
  - ⇒ catalogues & inventories of PGRFA
  - ⇒ information on technologies, technical, scientific & socio-economic research
  - ⇒ characterization & evaluation & utilization - data

⬇

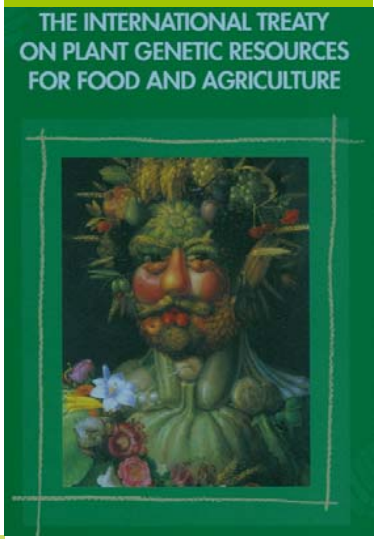
such information shall be made available through Article 17 Global Information System

[1]where non-confidential, subject to applicable law and in accordance with national capabilities

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Information requirements under the Treaty



Contracting Parties´ responsibilities

- Art 17: all PGRFA
  - ⇒ global information system on PGRFA in cooperation with CHM of CBD
  - ⇒ incl. early warning component
  - ⇒ serve update of SWPGR and Global Plan of Action (GPA)

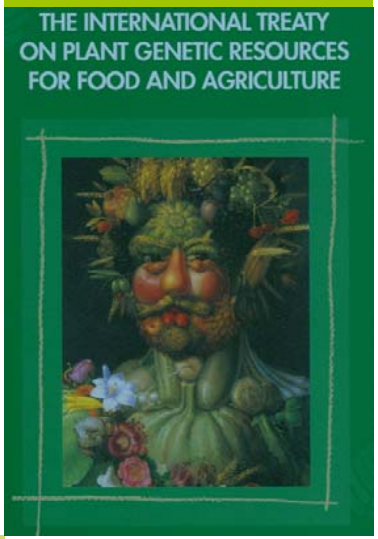
⬇

not yet existing...but to be developed based on **existing** information systems

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Information requirements under the SMTA of the Treaty



Providers´ and Recipients' responsibilities

- Provider reports to Governing Body
  - ⇒ Art 5(e): periodic reports on SMTA from Provider to Governing Body
- Recipient reports to Multilateral System
  - ⇒ Art 6.9: information on R&D-data from recipient to MLS via Art. 17 info system
  - ⇒ no direct reporting back from Recipient to Provider
- Third Party Beneficiary (FAO) needs information
  - ⇒ Art 4.4: TPB right to request appropriate information 5(e), 6.5(c), 8.3, Annex 2.3

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

Infrastructure for ex-situ conservation

- Genebank for Agricultural and Horticultural Crops, *Leibniz Institue of Plant Genetics and Crop Plant Research (IPK)*
- German Genebank for Fruit Crops, *network coordinated by Julius Kuehn Institute (JKI)*
- Tobacco Genebank, *Agricultural Technology Centre*
- German Genebank for Ornamentals, *network under development*
- German Genebank for Grapevine, *network under development*
- German Genebank for Crop Wild Relatives, *in planning*

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Coverage of the MLS: Annex 1 crops

- *...governments include material under their management and control and in the public domain...*(Art 11.2)
- *... governments invite all others to include their material...*(Art 11.2)
- *... governments take appropriate measures to encourage others to include their material ...*(Art 11.3)

The International Treaty
ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

Implementation steps

1. Information of relevant stakeholders
2. Introduction of the SMTA
3. Inclusion of Material in the MLS at genebank level
4. Inclusion of Material in the MLS by the Contracting Party

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

1. Information of relevant stakeholders

- Courtesy translation of the SMTA (agreed with Switzerland and Austria)
- Information of competent authorities and relevant public institutions as well as the private sector
  - by letters (December 2006)
  - through the National Programme / Committee
- Compilation of explanatory notes on the main elements of the SMTA (obligations, BS, TPB etc.)
- Website with above mentioned information and FAQs
- BLE & BMELV acted as contact points to provide information to all stakeholders, answering questions and / or giving support and advice

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

2. Introduction of the SMTA

- It has to be distinguished between PGRFA of Annex I species, that are under the direct control of the Contracting Parties (Art 11.2) and between PGRFA included in the MLS by natural and legal persons under the jurisdiction of the Contracting Parties (Art 11.3)
  - Collection holders under the direct control of the Federal Ministry were instructed to introduce the SMTA
  - Collection holders under the control of the *Laender* and / or local authorities were requested to introduce the SMTA
  - All other collection holders (mixed, private) were invited to use the SMTA as appropriate

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

2. Introduction of the SMTA

- The German Genebank for Fruit Crops, coordinated by JKI, introduced the SMTA for its *Malus* and *Fragaria* collections
- The genebank of the IPK introduced the SMTA for all Annex I species
  - Amendment of the IPK Genebank Statutes
  - Amendment of the Genebank Information System GBIS/I (SMTA, „click-wrap“ option etc.)

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

3. Inclusion of Material in the MLS at genebank level

a) Identification of accessions of Annex I species in the taxonomic part of the respective genebank documentation systems

b) Identification of accessions of Annex I species in the respective collections that are in the public domain

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

3. Inclusion of Material in the MLS at genebank level

a) Identification of accessions of Annex I species in the taxonomic part of the respective genebank documentation systems

- Annex I follows in general the broad genepool concept by defining a crop through the respective genus or genera
  - all species of the crop genepool and their infraspecific taxa marked with an ”Annex I flag”
  - Taking into account the specific exceptions, where certain species were excluded (e.g. *Musa textilis*) or only one species is included (e.g. *Manihot esculenta*)
  - Taking into account synonyms (n:m!) and other available taxonomic information

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

3. Inclusion of Material in the MLS at genebank level

b) Identification of accessions of Annex I species in the respective collections that are in the public domain

- Check of possible restrictions (e.g. black-box-arrangement)
- Varieties with existing variety protection were not included in the MLS (such varieties are available for further research and breeding from the respective protection holders of these varieties)
- Marking of all public domain accessions

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

3. Inclusion of Material in the MLS at genebank level

- The processes of step a) and step b) had been added to the standard genebank routines, to guarantee, that these procedures will be applied to new material entering the genebank or in cases the taxonomy of material is re-determined
- In a last step MLS Material then could be easily determined by matching the information gained by these two steps (”Annex I flag” and ”Public domain”) and flagged as MLS material in the genebank documentation systems such as GBIS/I in the case of IPK

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion of Material in Germany

4. Inclusion of Material the MLS by the Contracting Party

- Amendment of the data structure and the exchange format at national level
- Flag for MLS material in the National Inventory PGRDEU (April 2008)
- Through written communication, the Secretary of the Treaty was informed about the German contribution to the MLS (July 2008)

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Lessons learnt at national level (I)

- Early and comprehensive information of the relevant stakeholders on the national implementation of the MLS and the SMTA by the respective authorities is important
- Existing ”infrastructure” for cooperation such as a National Programme for PGRFA with a National Coordination Committee and a National Inventory (documentation system) should be used as much as possible

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Lessons learnt at national level (II)

- The text of the SMTA is not self-explanatory, especially for users not speaking UN languages. There is a need for assistance through experts giving guidance and / or a courtesy translation in the national language. Explanatory notes, FAQs etc. are useful in order to facilitate the implementation of the MLS and the SMTA at national level

- General guidelines on how to include material in the MLS at the collection level (e.g. identification of public domain accessions) could be helpful

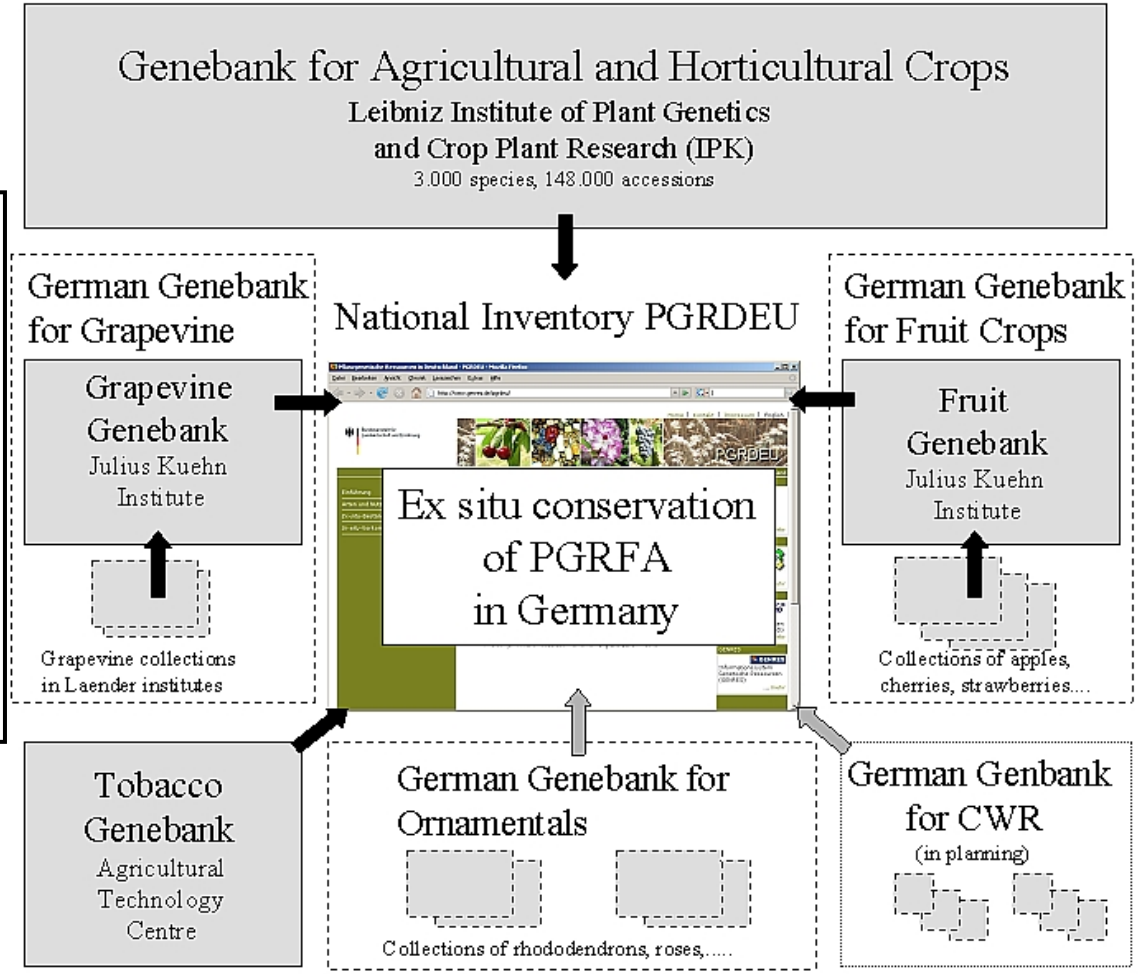
Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Existing information infrastructure in Germany

National Documentation of Plant Genetic Resources - PGRDEU
www.genres.de/pgrdeu

- National Inventory
- all plant genetic resources
- MoU
- data exchange standards



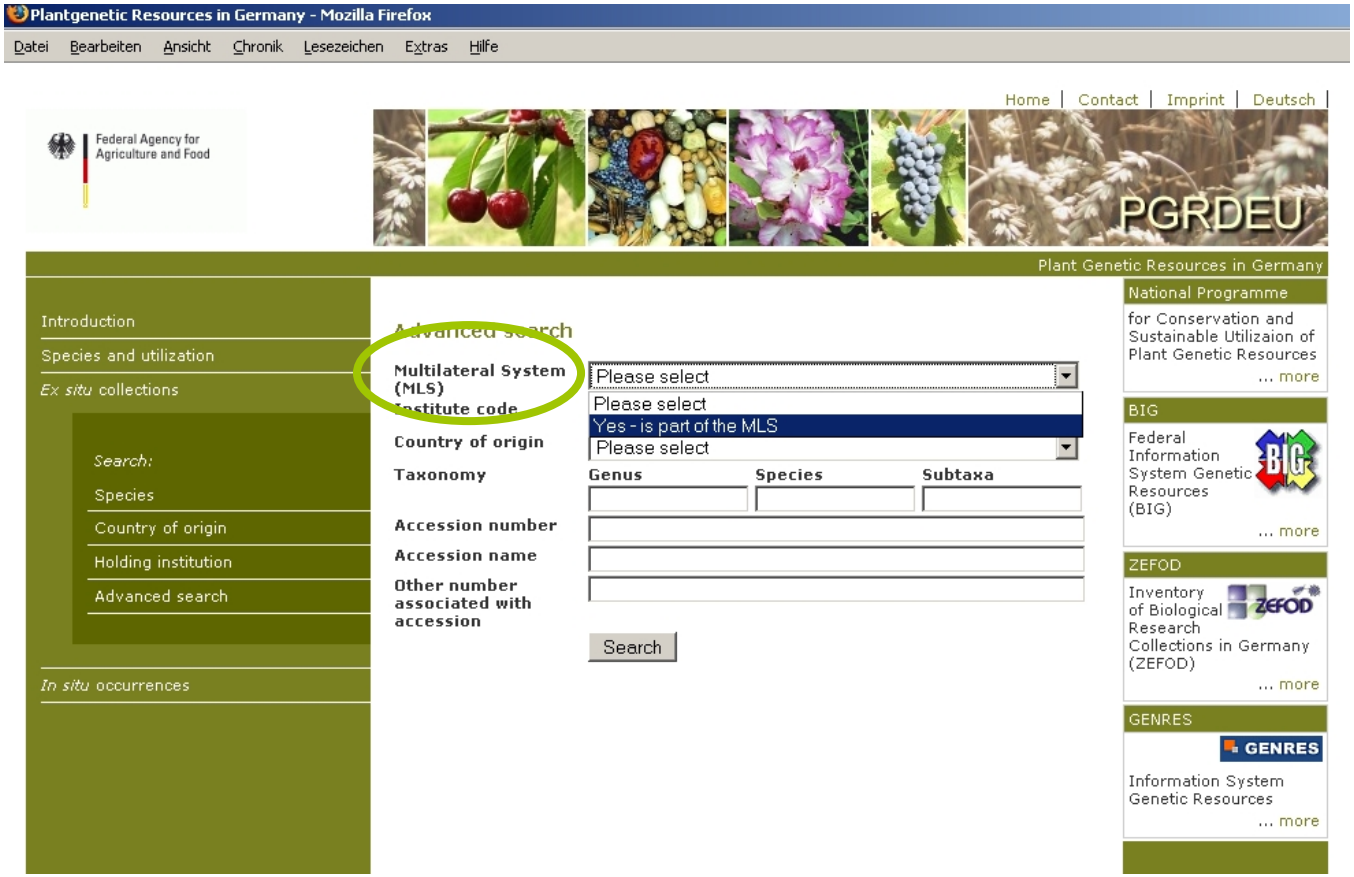
Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Existing information infrastructure in Germany

National Inventory PGRDEU

DEU included 108,000 accession in the MLS



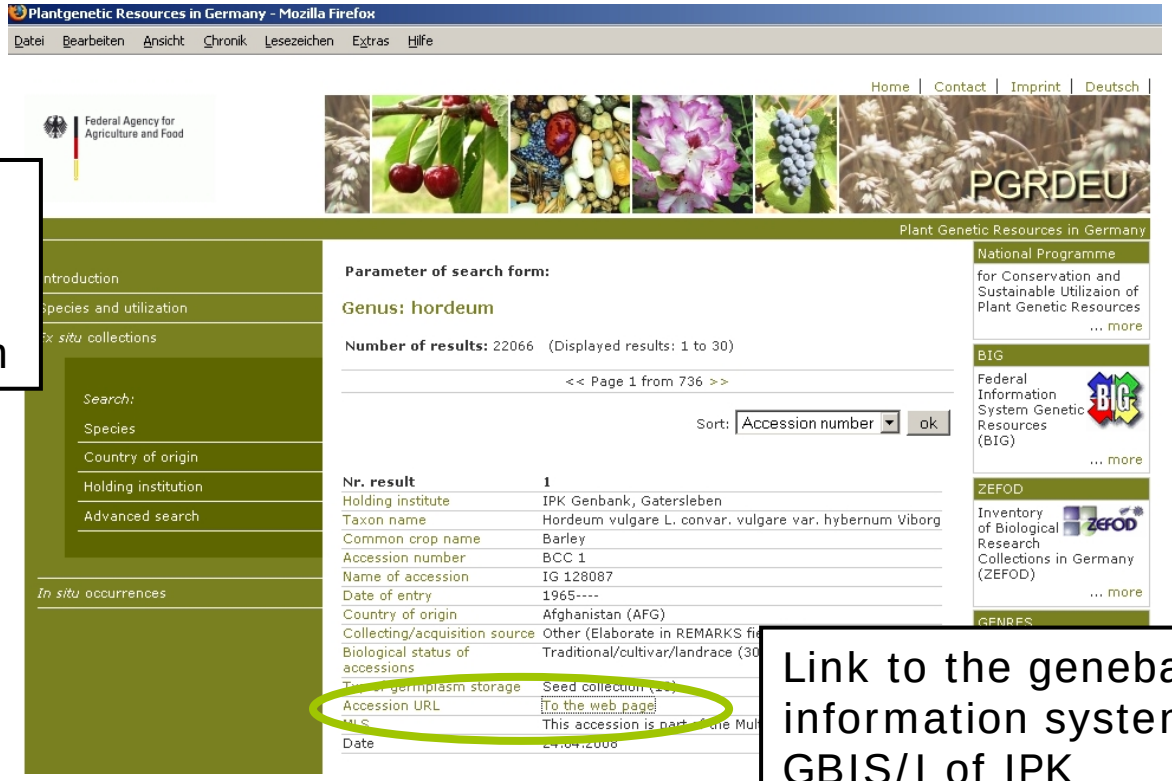
Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE
BIOLOGICAL DIVERSITY

Existing information infrastructure in Germany

National Inventory PGRDEU

Querry for
MLS = yes
&
Genus = Hordeum



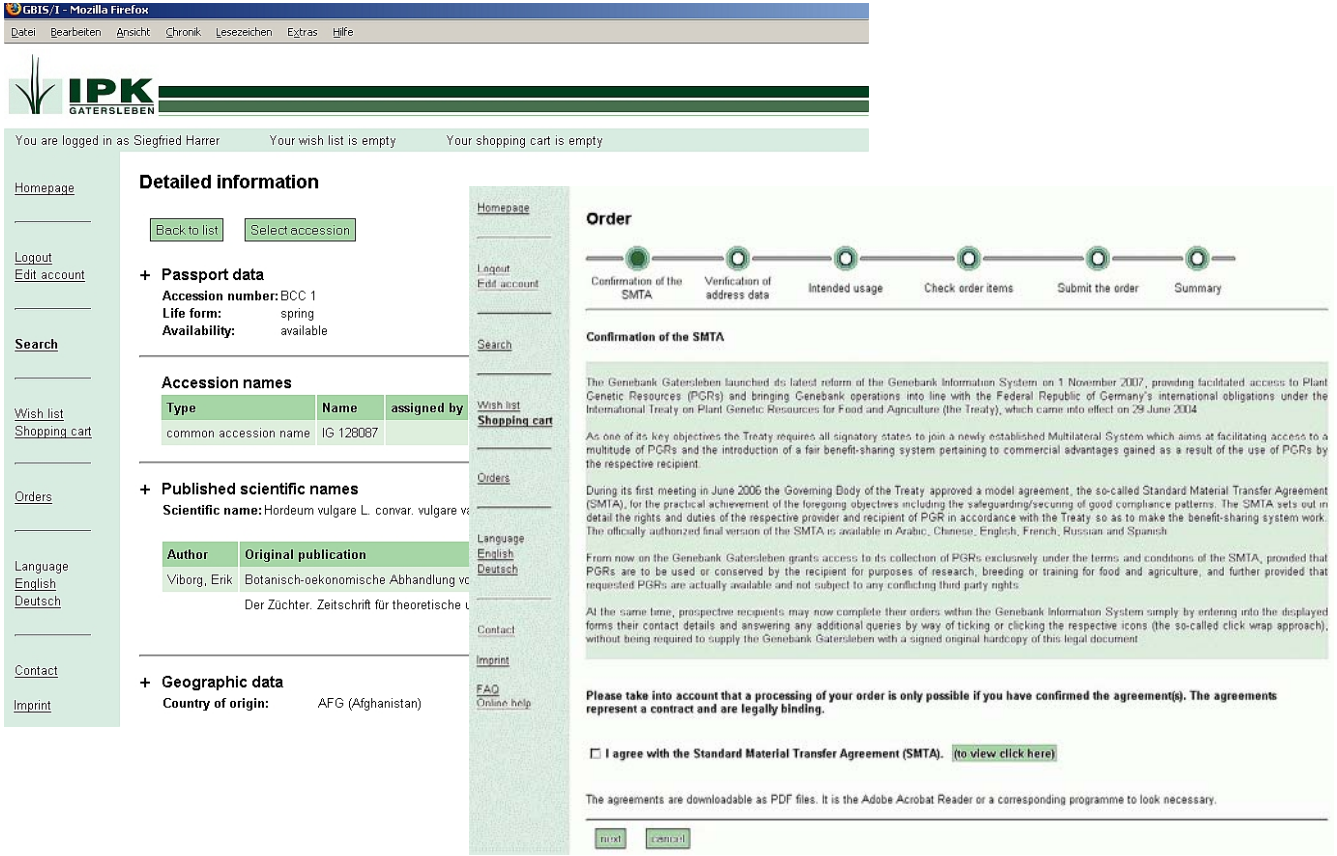
Link to the genebank information system GBIS/I of IPK

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Existing information infrastructure in Germany

IPK Genebank Information System GBIS/I



Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Existing information infrastructure

- FAO/WIEWS, CGIAR/SINGER, US/GRIN, EU/EURISCO and other regional systems
- CBD/CHM: Clearing House Mechanism (Techn. Transfer)
- Global Biodiversity Information Facility (Standards)

WIEWS

eurisco Finding seeds for the future

SINGER Knowledge makes the difference

USDA ARS United States Department Of Agriculture Agricultural Research Service

The BLE.
For Agriculture and Food.

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Existing information infrastructure in EUROPE

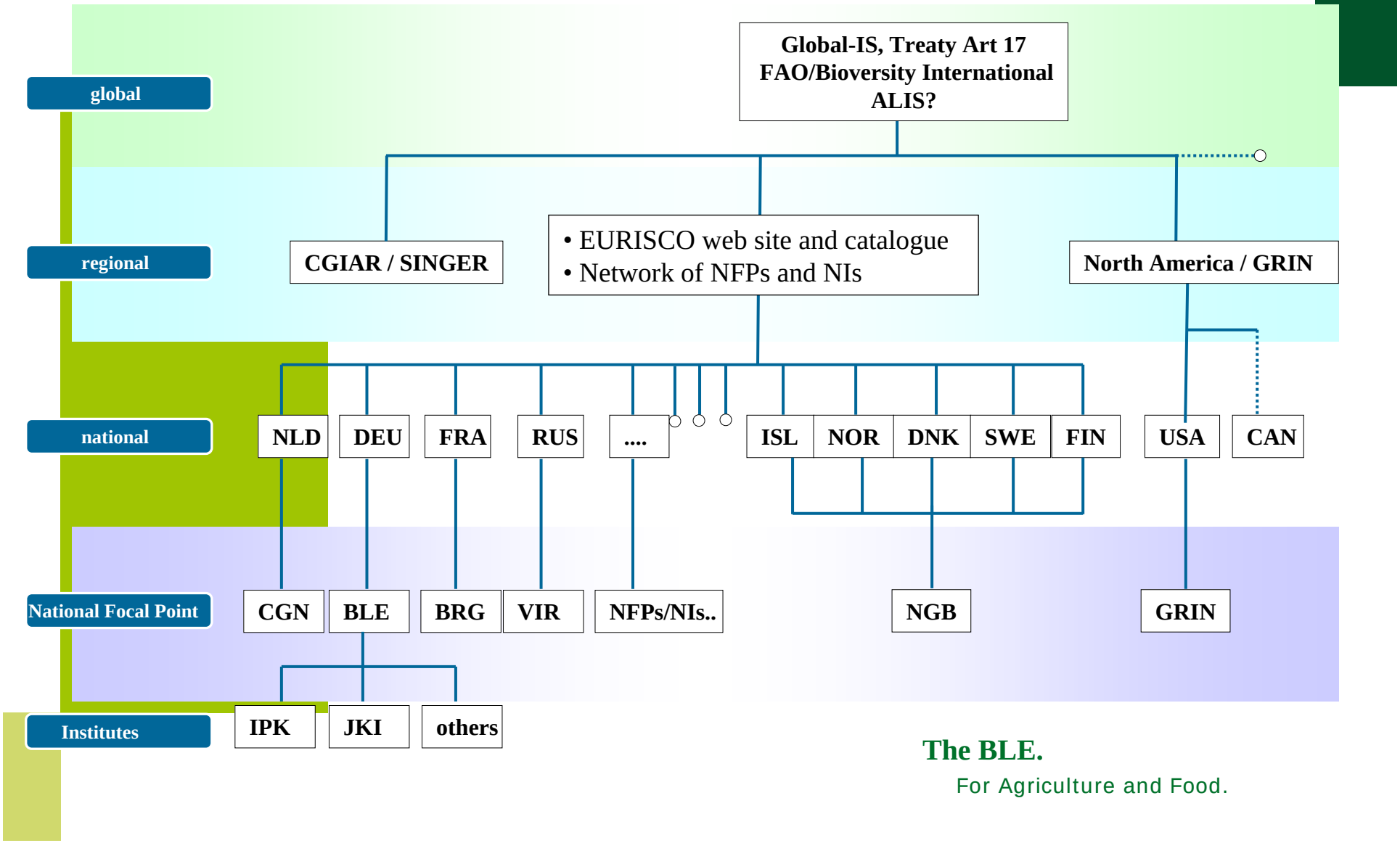
European Plant Genetic Resources Search Catalogue EURISCO

- web-based catalogue
- provides information about ex situ plant collections maintained in Europe
- based on a European network of *ex situ* National Inventories (NIs)
- current content: passport data on > 1.1 million samples from 1,450 genera and 8,665 species from 38 countries

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Existing information infrastructure



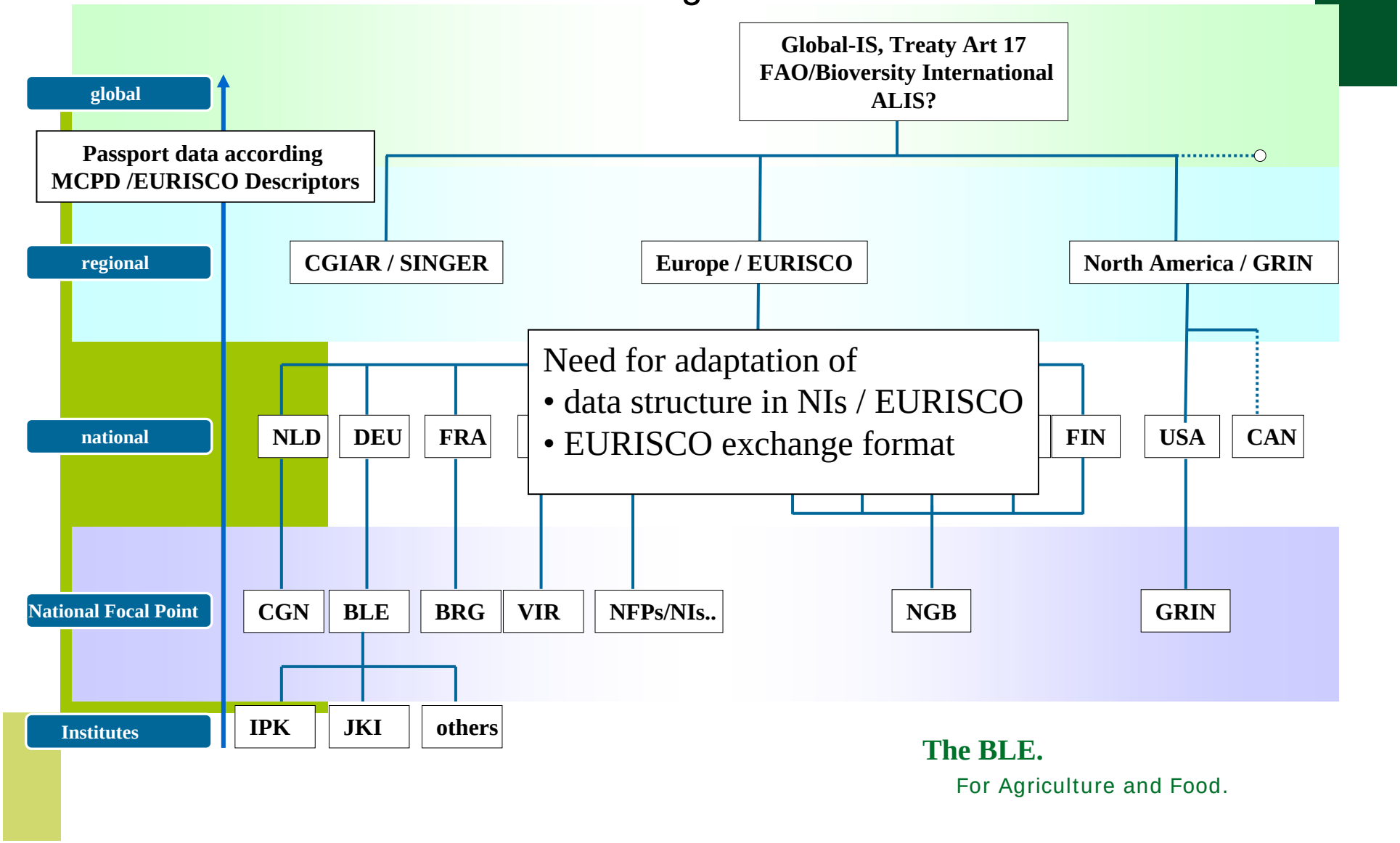
The BLE.

For Agriculture and Food.

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion procedure for European Material under the MLS of the ITPGR based on existing information infrastructure



Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Inclusion procedure for European Material under the MLS of the ITPGR

New approved MLS status descriptor for EURISCO

34. MLS Status	(MLSSTAT)
The coded status of an accession with regard to the Multilateral System (MLS) of the International Treaty on Plant Genetic Resources for Food and Agriculture. Provides the information on whether the accession is included in the MLS. 0 - not part of the MLS 1 - part of the MLS If the MLS status is unknown, the field stays empty	

Approved by the ECPGR Steering Committee in September 2008

The BLE.
For Agriculture and Food.

Federal Agency for Agriculture and Food

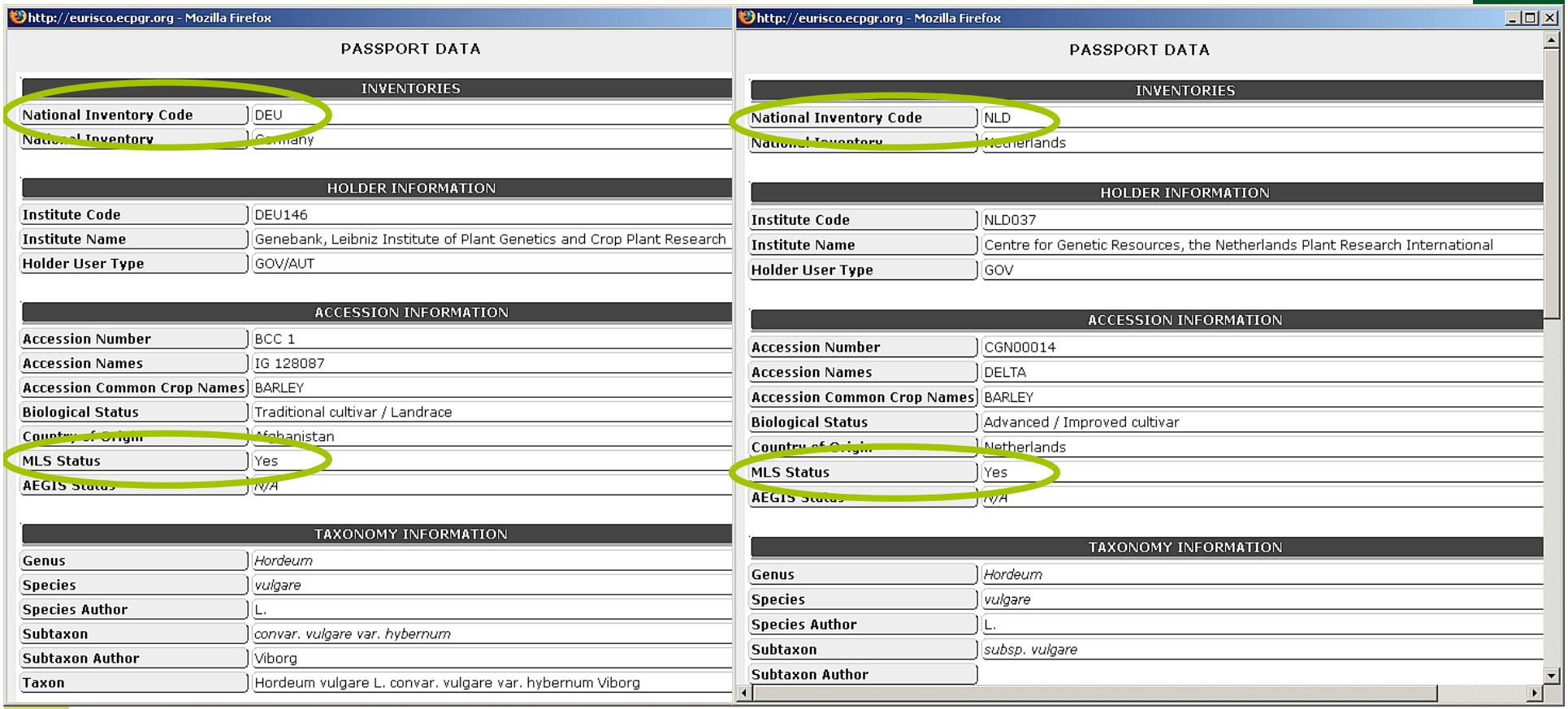
INFORMATION AND COORDINATION CENTRE
BIOLOGICAL DIVERSITY

European MLS Material included in EURISCO

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

European MLS Material included in EURISCO



http://eurisco.ecpgr.org - Mozilla Firefox

PASSPORT DATA

INVENTORIES	
National Inventory Code	DEU
National Inventory	Germany
HOLDER INFORMATION	
Institute Code	DEU146
Institute Name	Genebank, Leibniz Institute of Plant Genetics and Crop Plant Research
Holder User Type	GOV/AUT
ACCESSION INFORMATION	
Accession Number	BCC 1
Accession Names	IG 128087
Accession Common Crop Names	BARLEY
Biological Status	Traditional cultivar / Landrace
Country of Origin	Afghanistan
MLS Status	Yes
AEGIS Status	N/A
TAXONOMY INFORMATION	
Genus	*Hordeum*
Species	*vulgare*
Species Author	L.
Subtaxon	*convar. vulgare var. hybernum*
Subtaxon Author	Viborg
Taxon	Hordeum vulgare L. convar. vulgare var. hybernum Viborg

http://eurisco.ecpgr.org - Mozilla Firefox

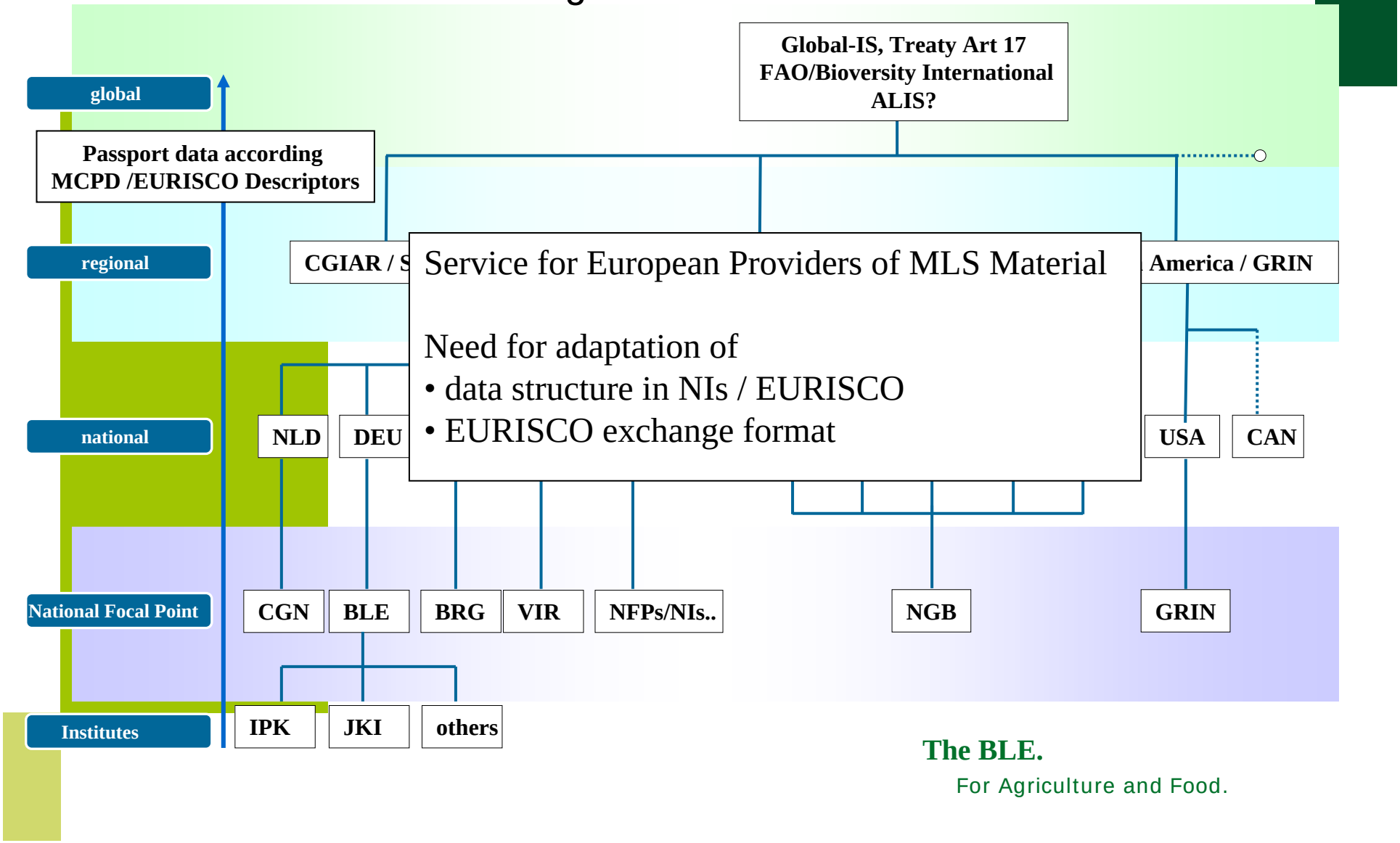
PASSPORT DATA

INVENTORIES	
National Inventory Code	NLD
National Inventory	Netherlands
HOLDER INFORMATION	
Institute Code	NLD037
Institute Name	Centre for Genetic Resources, the Netherlands Plant Research International
Holder User Type	GOV
ACCESSION INFORMATION	
Accession Number	CGN00014
Accession Names	DELTA
Accession Common Crop Names	BARLEY
Biological Status	Advanced / Improved cultivar
Country of Origin	Netherlands
MLS Status	Yes
AEGIS Status	N/A
TAXONOMY INFORMATION	
Genus	*Hordeum*
Species	*vulgare*
Species Author	L.
Subtaxon	*subsp. vulgare*
Subtaxon Author	

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Reporting procedure under the SMTA of the MLS of the ITPGR for European Providers based on existing information infrastructure



The BLE.

For Agriculture and Food.

Federal Agency for Agriculture and Food

Reporting procedure under the SMTA of the MLS of the ITPGR for European Providers

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Interim procedure approved by the ECPGR Steering Committee in September 2008 for additional and voluntary reporting on concluded SMTA.

SMTA reporting descriptors for EURISCO	
35. SMTA Institute Code	**(SMTAINST)**
FAO Institute Code [or another official code] for the institute acting as Provider. Example: DEU146	
36. SMTA Number	**(SMTANUMB)**
This number serves as a unique identifier for the SMTA contract within an institute, and is assigned by the institute acting as Provider. Example: IPK00724	
37. SMTA Date	**(SMTADATE)**
Exact date on which the SMTA contract was concluded as YYYYMMDD. No missing data (YYYY, MM or DD) allowed. Leading zeros are required. Example: 20020620	
38. SMTA Total Quantity of Accessions	**(SMTACCE)**
Total quantity of accessions transferred by the SMTA. Example: 345	
49. SMTA Quantity of Accessions per Genus	**(SMTAGENUS)**
The field is used to elaborate on the number of accession per genus transferred by the SMTA. Prefix genus name in Latin, initial uppercase letter required, and a colon followed by the number of transferred accessions for the genus without space. Separate entries referring to different genera by semicolons without space. Example: Allium:120;Beta:25;Hordeum:200	
40. SMTA Category of recipient	**(SMTARECIP)**
The coded category of the Recipient of the accessions transferred by the SMTA. 1 – genebank 2 – botanical garden 3 – public research institute 4 – private breeder 5 – private individual, non-profit association 6 – education 9 – other (Elaborate in REMARK field)	
41. SMTA Remarks	**(SMTAREMARK)**
The remarks field is used to add notes or to elaborate on descriptor(s) with value 9 (=Other). Prefix remarks with the field name they refer to and a colon. Separate remarks are separated by semicolons without space. Example: `SMTARECIP:museum`	

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Conclusions

- Effective and efficient implementation of the MLS will be crucial for the success of the Treaty
- Implementation must imply information exchange and cooperation of stakeholders at national and international levels (e.g. in the framework of national programmes as well as in regional and international collaborative networks)
- With regard to documentation and reporting aspects, a regional system such as EURISCO could and should play a key role (cost-effective!)

Federal Agency for Agriculture and Food

INFORMATION AND COORDINATION CENTRE BIOLOGICAL DIVERSITY

Thank you

The BLE.

For Agriculture and Food.