

The International Plant Exchange Network (IPEN) and the Nagoya Protocol of the CBD

Michael Kiehn (University of Vienna)

for the IPEN Task Force (Maite Delmas, Andreas Gröger, Thierry Helminger, Matthew Jebb, Wolfram Lobin, Pierre-André Loizeau, Jan Rammeloo, Frank Schumacher, Bert van den Wollenberg & Andrew Wyatt)



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Dimension of seed exchange for the 95 BG's in Germany p.a.

receipt of seeds: 79.983

supply of seeds: 260.010

326.000 transactions
3.400 per garden

± 550 Botanic Gardens in Europe -> c. 1.9 Mio transactions

traditional seed exchange is the main source for BG's

➤ to be able to fulfil their tasks in research, teaching and public education, BG's depend extensively on regular access/exchange of plant material from ex-situ-conditions



Benefit Sharing

-> there is a long tradition of non-monetary and monetary Benefit Sharing by Botanic Gardens such as:

- twinning of Botanic Gardens
- staff exchanges
- training programmes
- technical / horticultural advice
- joint publication
- books, journals, equipment, etc.
- international seeds exchange for research, etc.
- funding of joint excursions / field trips / floristic work
- funding of elements of infrastructure



Benefit Sharing

Cooperation of the Botanic Garden University of Vienna with Tsimbazaza (Madagascar) in orchid research and conservation

Exchange of staff with the Botanic Garden Hamburg in a project on *Dahlia* in Mexico

Cooperation of the Botanic Gardens Bonn and Munich with Botanic Garden Tbilissi, Georgia; staff exchange, common excursions, labelling of plants

Support of Indonesian Botanic Gardens in conservation of *Amorphophallus titanum* by Bonn Botanic Gardens

Twinning of botanic gardens: the National BG in Meise and the Kinsanthu BG in Congo.



The Nagoya Protocol

- Will come into force in October, 2014
- High likelihood of **considerable impact** on the current practices for the **acquisition of new plant accessions** for research and teaching in Botanic Gardens as well as on the exchange of plant material
- Activities of the **IPEN Task Force** on behalf of the EU Consortium of Botanic Gardens to enable Botanic Gardens to cope with the new regulations, especially with the expected additional paperwork



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The International Plant Exchange Network (IPEN)

- developed by the Association of Botanic Gardens of the German speaking countries
- adopted, supported and promoted by the **European Consortium of Botanic Gardens**
(platform of official representatives of the national networks of BG's in EU)
- based on a “Code of Conduct” securing accord with CBD-regulations incl. the Nagoya Protocol, but also with other regulations (as CITES)
- serves for the exchange of plant material within botanic gardens and for non-commercial purposes only
(but can be used as basis for commercialization in accord with CBD-ABS regulations)
- open to botanic gardens of all countries
(not only to BG's of EU)



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The International Plant Exchange Network (IPEN)

Actually: 167 member gardens from 26 countries

<http://www.bgci.org/resources/IPEN/>



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The International Plant Exchange Network (IPEN)

An exchange system for botanic gardens for non-commercial exchange of plant material, based on the CBD

IPEN is a registration system open for botanic gardens that adopt a common policy (Code of Conduct) regarding access to genetic resources and sharing of the resulting benefits.

It has been developed by the Verband Botanischer Gärten (an association of gardens in German speaking countries) and was taken over by the European Consortium of Botanic Gardens (more about the [history of IPEN](#)).

The IPEN network facilitates the exchange of plant material between the member gardens while respecting the Access and Benefit-Sharing regulations of the CBD. It aims to create a climate of confidence between the countries owning the genetic resources and the botanic gardens (more about the [background](#) and [description of IPEN](#)).

Gardens that wish to join the network must sign and abide by a Code of Conduct that sets out gardens' responsibilities for acquisition, maintenance and supply of living plant material and associated benefit-sharing. Acquisition or supply of material with extra terms and conditions, or any use for commercial purposes, is not covered by the network and requires the use of appropriate Material Transfer Agreements (more about [criteria for IPEN membership and registration](#)).

List of (IPEN) registered botanic gardens (Institution, date of registration, BGCI / IPEN garden acronym)

Last update: 2012-04-17 17:32:17 BvdW

<http://www.bgci.org/resources/IPEN/>

Click here to [download](#) the list in csv format.

Argentina

Jardín Botánico Lucien Hauman* Facultad de Agronoma Universidad Buenos Aires	Buenos Aires	dec-08	BAA
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Austria

Botanischer Garten, Universität Graz	Graz	jun-07	GZU
Botanischer Garten und Alpengarten Patscherkofel der Universität Innsbruck	Innsbruck	Oct 01	IB
Botanischer Garten des Kärntner Botanikzentrums Klagenfurt	Klagenfurt	dec-02	KL
Botanischer Garten der Stadt Linz	Linz	apr-03	LI
Botanischer Garten der Universität Salzburg	Salzburg	Oct 05	SZU
Botanischer Garten der Universität für	Wien	jul-03	BOKU

FAQ

Text: Wolfram Lobin & Marliese von den Driesch, Bonn University Botanic Gardens, Germany; Thierry Helmingier, Arboretum Kirchberg, Luxembourg; Andreas Gröger, Botanic Garden of Munich, Germany; Bert van den Wollenberg, Botanic Gardens Conservation International, Regional Office of The Netherlands, Utrecht, Frank Schumacher, Botanic Garden of Vienna University, Austria

Basic ideas of IPEN

UNIFIED POLICY (Code of Conduct)

- system transparent to the countries of origin to meet the provisions of the CBD in receiving, storing, and supplying plant material and on Benefit-Sharing
- including Material Transfer Agreements (MTA's) to be used for exchange with institutions NOT sharing IPEN
- potential to include pre-CBD-material
- > creation of confidence in the work of Botanic Gardens
- > reduction of bureaucracy
- > facilitation of access to plant resources incl. traditional seed exchange of BGs



International Plant Exchange Network (IPEN) as model for implementation of the CBD by Botanic Gardens, (EU Consortium of Botanic Gardens, November 2003)

IPEN Code of Conduct

for botanic gardens¹ governing the acquisition, maintenance and supply of living plant material²

The conservation of the Earth's biological diversity is the responsibility of all humankind. Throughout their history, botanic gardens have made an essential and indispensable contribution to preserving the diversity of plant life. The *Convention on Biological Diversity* (CBD, Rio de Janeiro, 1992) respects the sovereignty of individual countries over their own biological resources as elements of biological diversity.

**Code of Conduct: backbone of the IPEN;
ensuring the compliance with ABS regulations as
outlined in the Nagoya protocol**

In compliance with this Code of Conduct, botanic gardens and their employees contribute to implementing the goals of the Convention on Biological Diversity.

Under this Code of Conduct, the garden commits itself with regard to acquiring, maintaining, and transferring living plant material to act within the framework of the CBD and the Convention on International Trade in Endangered Species (CITES). In addition, the garden will endeavour to act in compliance with further national and international laws.

Member gardens of the International Plant Exchange Network will act under the following Code:

1. Acquisition: How plant material enters the International Plant Exchange Network

- a. To the best of its knowledge, the garden shall only accept plant material (including material derived from in-situ and ex-situ conditions) which has been acquired in accordance with the provisions of the CBD and further national and international laws related to the protection and sustainable use of biological diversity, access to genetic resources, associated knowledge, and benefit sharing, as far as can be ascertained.

IPEN Task Force activities:

- (a) informs about the Nagoya Protocol, incl. ABS-regulations, and their potential implications for Botanic Gardens**
- (b) contacts national CBD Focal Points to raise awareness for manageable provisions esp. for smaller gardens**
- (c) promotes IPEN as effective best practice example for plant material exchange in accord with ABS regulations**
- (d) participates in discussions on the EU-level, e.g., by responding to an EU-Impact Assessment of the Nagoya Protocol; emphasizing the need for a simplified procedure for material exchange between research institutions**
- (e) prepares necessary changes in IPEN procedures to fully cover the regulations of the Nagoya Protocol**



IPEN as best practice example for plant material exchange in accord with ABS regulations

- IPEN is mentioned **two times on the CBD Nagoya Protocol website** (<http://www.cbd.int/abs/instruments/>) in the *“overview of instruments, guidelines, codes of conducts, policies and other tools developed for different types of users of genetic resources to assist with the implementation of the access and benefit-sharing provisions of the Convention by responding to the particular needs of their constituents.”*



Implementation of IPEN

- gardens declaring the adoption of the Code of Conduct are checked (IPEN Task Force in consultation with national/regional BG-networks or nodes)



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[Resource centre](#) > Criteria for IPEN Membership and Registration

Criteria for IPEN Membership and Registration

Membership of IPEN is possible when the following criteria are met:

1. The institution applying for membership is a botanic garden according to the [definition of a botanic garden](#) by BGCI.
2. The botanic garden has to be a legal entity or part of a larger legal entity. That means that it is not possible to include private gardens or private individuals.
3. Within IPEN, no commercial use of the plants is allowed.
4. The botanic garden has to sign the IPEN Code of Conduct (see below) and thereby to commit itself to work according to the IPEN requirements.
5. A computer based documentation system is necessary to fulfil the documentation requirements of IPEN.

How to Become an IPEN Member

Any individual botanic garden that wants to become member of IPEN has to take the following steps:

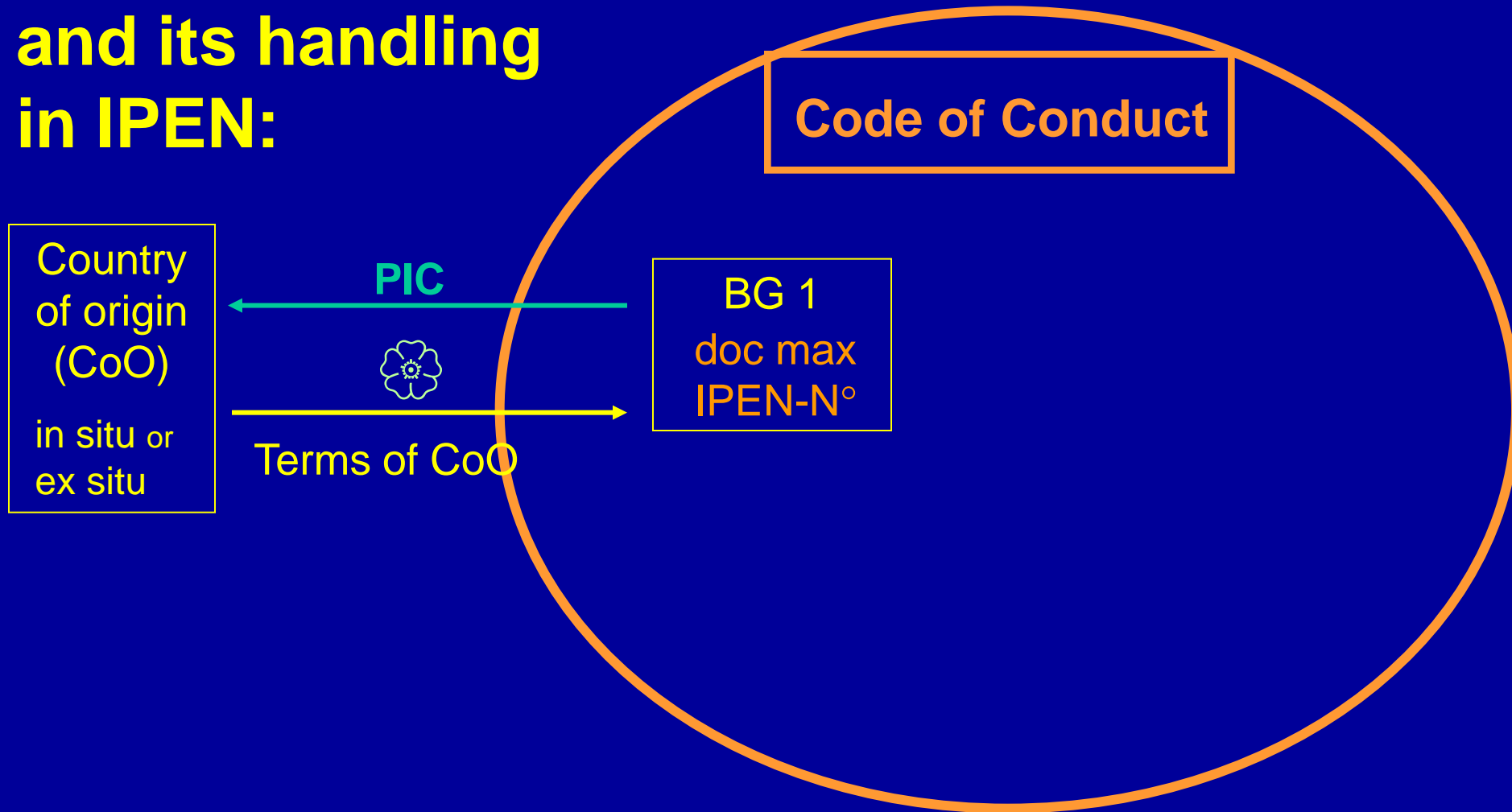
1. Read the [IPEN code of conduct](#)
2. Send a written declaration to BGCI that it complies with the IPEN code of Conduct: [Download registration form](#)
3. BGCI will ask the respective National Node (see [Organisation behind IPEN](#)), if the application of membership can be accepted. The National Node decides whether the applicant garden fulfils the IPEN criteria. According to the decision of the respective National Node and after consulting the IPEN task force (see [Organisation behind IPEN](#)), BGCI will add the names of accepted gardens to the list of IPEN members and make the list available via internet. After 5 years, the procedure of adoption must be renewed.
4. You will be informed about the acceptance of membership by BGCI or an IPEN task force member.
5. Now you have to implement the IPEN Code of Conduct: Most important is the introduction of IPEN numbers (see documentation and IPEN numbers) into your documentation system.

Implementation of IPEN

- gardens declaring the adoption of the Code of Conduct are checked (IPEN Task Force in consultation with national/regional BG-networks or nodes)
- If accepted, they get registered (BGCI)
- the list of registered gardens is made available via internet (BGCI)
- after 5 years, the procedure of adoption must be renewed
- the overall idea is to establish a similar procedure as CITES with their “registered institutions”



Plant material and its handling in IPEN:



IPEN number:

All seeds/plants exchanged must have an IPEN number.

The IPEN number helps to:

- **track where seeds are sent to worldwide.**
- **identify seeds of identical gene pool**
- **show which garden introduced certain seeds into IPEN**
- **Show if limiting conditions apply (by MAT)**

IPEN numbers are used more and more in seed lists now.



IPEN number:

an example from Delft Botanic Garden Seed list 2008/9

seed list no. 27: *Canna humilis*

IPEN #=XX-0-DELF-47-27

XX no known wild origin
otherwise: 2-digit country code
(e.g. NL: known wild origin)

0 no restrictions in further
dissemination
otherwise: 1 (if restrictions apply)

DELF garden acronym (BGCI)

47-27 garden accession number

Cannaceae 47 27
Canna humilis Bouche
China



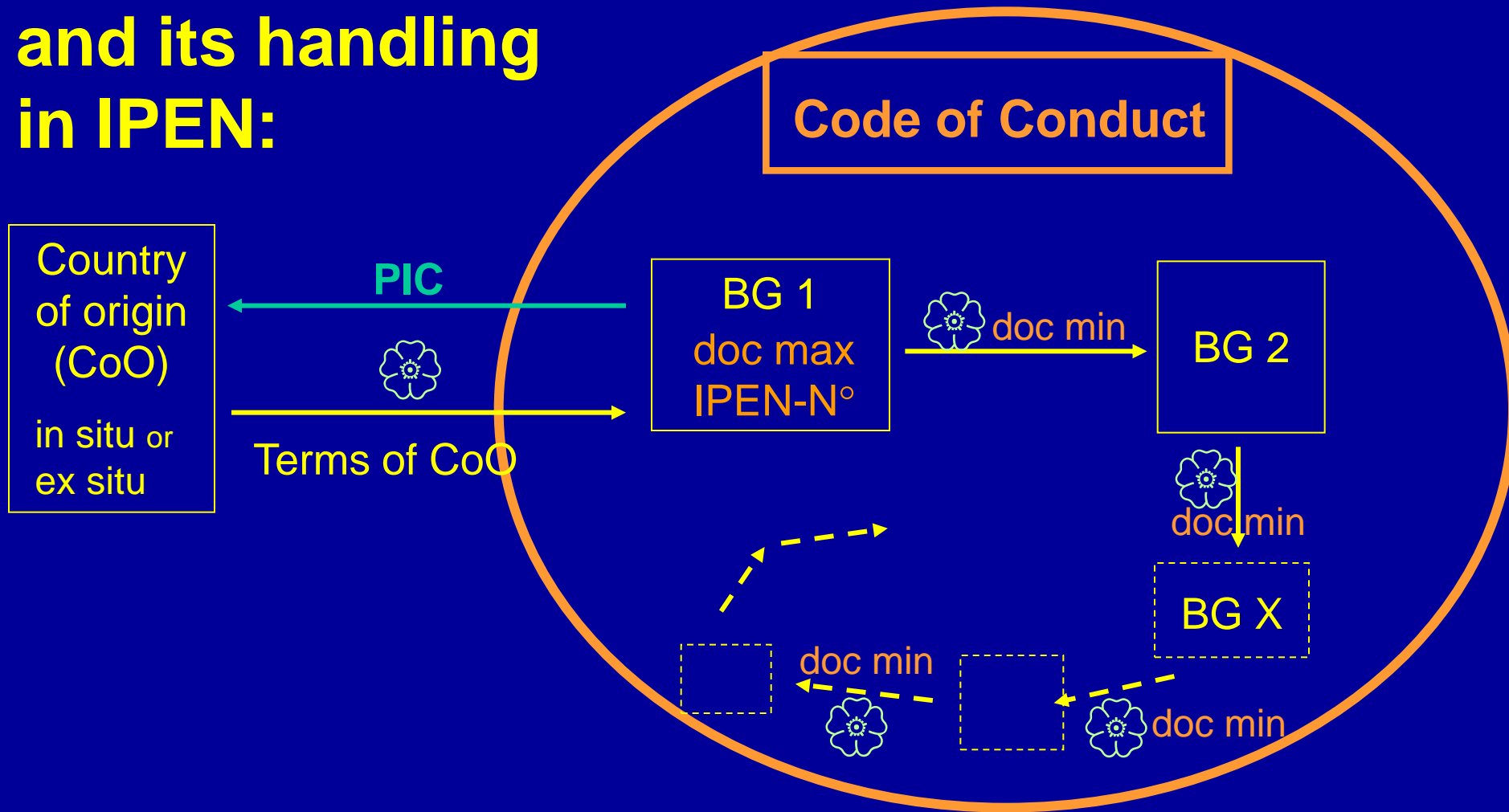
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Plant material and its handling in IPEN:



“doc max”

= documentation sheet for plant material entering the IPEN

- **IPEN-Number:** country code, acronym of inst., accession N°
- **taxonomic data**
- **type of material**
- **source** (collector, CoO etc.)
- **permits and restrictions** (PIC, MTA ...)
- **additional conditions of CoO or of other stakeholders**

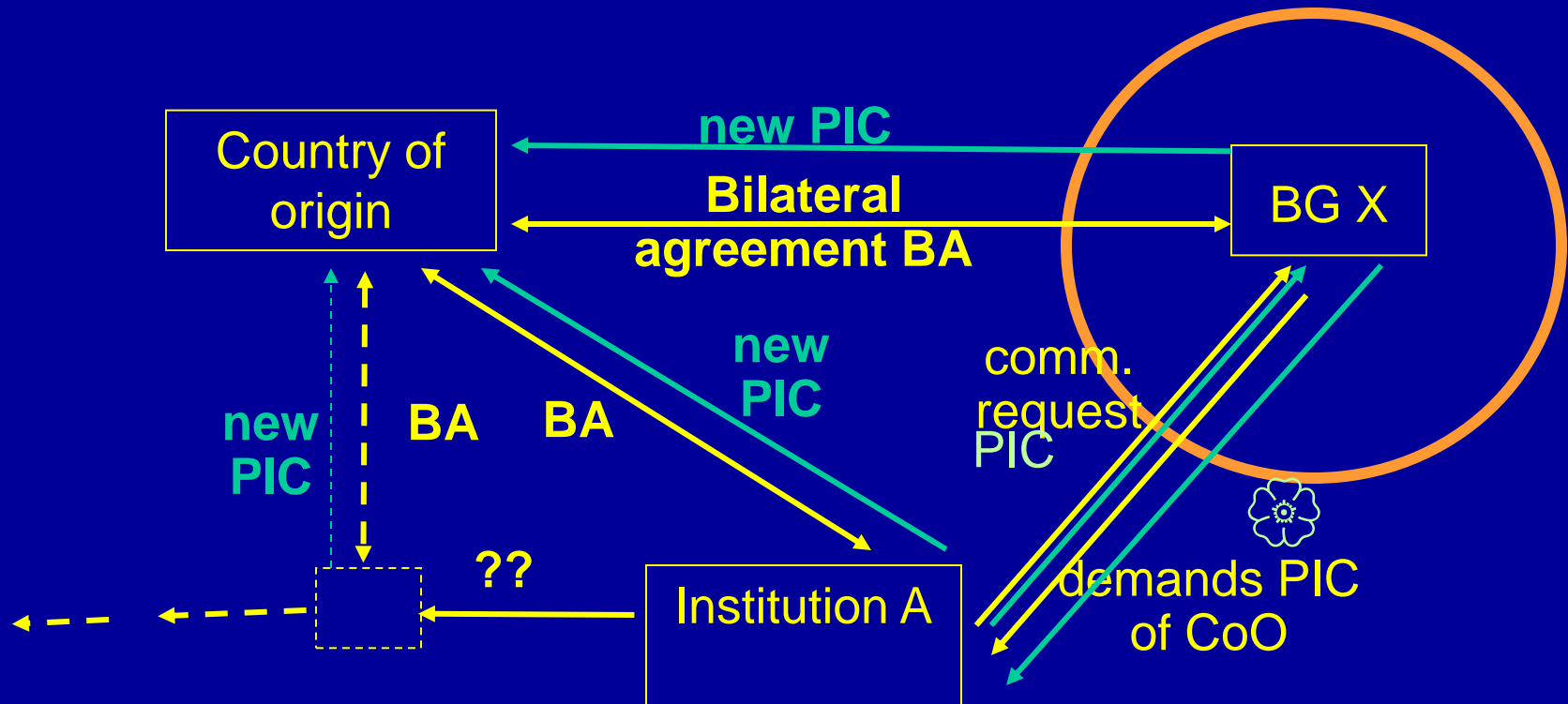
“doc min”

= Minimum set of data to be documented

- **IPEN - Number**
- **restrictions**
- **additional conditions of CoO or of other stakeholders**



IPEN and Commercialisation: within the IPEN no commercialisation



Scope of IPEN (up to now)

- aiming on small gardens with limited staff capacity
- with non-commercial basic research
- which obtain most of their material through the traditional (ex-situ) seed exchange
- small gardens with limited resources might have better access to plant material collected in-situ, if IPEN is established for most botanic gardens



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Urgent needs for BGs – Support on EU-level

Provider countries shall i.a. ensure:

- Legal certainty, clarity and transparency of ABS legislation
- Fair and non-arbitrary rules and procedures on access to genetic resources
- Information on how to apply for Prior Informed Consent (PIC)
- Clear, cost-effective and timely decision-making
- Clear rules and procedures how to require and establish MATs (mutually agreed terms) and MTAs (material transfer agreements)



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Urgent needs for BGs – Support on EU-level

First step: measure listed in the draft of the new Austrian Biodiversity Strategy:

- **On the basis of the corresponding EU-regulation establishment of framework conditions, structures and mechanisms enabling Austrian research institutions to carry out international work related to species and nature conservation in the context of the Nagoya-protocol.**

(Auf der Basis der entsprechenden EU-Verordnung Schaffung von Rahmenbedingungen, Strukturen und Mechanismen, die österreichischen Forschungseinrichtungen internationale arten- und naturschutzbezogene Arbeiten im Rahmen des Nagoya-Protokolls ermöglichen)



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IPEN as best practice example for plant material exchange in accord with ABS regulations

Perhaps of interest in this regard:

The CBD Nagoya Protocol says

4. *“Where a specialized international access and benefit-sharing instrument [as IPEN] applies that is consistent with, and does not run counter to the objectives of the Convention and this Protocol, this Protocol [the Nagoya Protocol] does not apply for the Party or Parties to the specialized instrument in respect of the specific genetic resource covered by and for the purpose of the specialized instrument.”*

<http://www.cbd.int/abs/instruments/>



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Many thanks



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Botanic Gardens and Benefit Sharing

Evanson Chege Kamau, Bevis Fedder and Gerd Winter, 2010: *The Nagoya Protocol on Access to Genetic Resources and Benefit Sharing: What is New and what are the Implications for Provider and User Countries and the Scientific Community?*. Law, Environment and Development Journal 6/3, 246-262. <http://www.lead-journal.org/content/10246.pdf>

p. 257: “*Networks of ex situ collections exist that exchange biological material among themselves and with researchers fostering taxonomic research, but excluding commercialisation and, in consequence, the regulation of benefit sharing.*”

There seems to exist a general misperception of the activities of BGs as regards Benefit Sharing, especially in the context of IPEN !!!



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