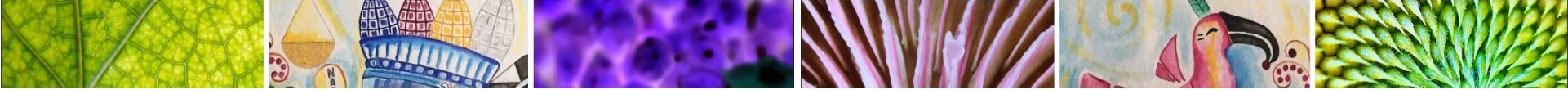


Introduction to the documents on digital sequence information on genetic resources (DSI)


WG2020 item 5

3 and 10 February 2022



Housekeeping



- This webinar is being recorded 
- Questions in the chat
 - Questions on process and clarifications
 - Substantial questions cannot be answered today
 - Not all questions might be answered
- Survey question at the end of the webinar

<https://www.cbd.int/conferences/post2020/wg2020-03/documents>

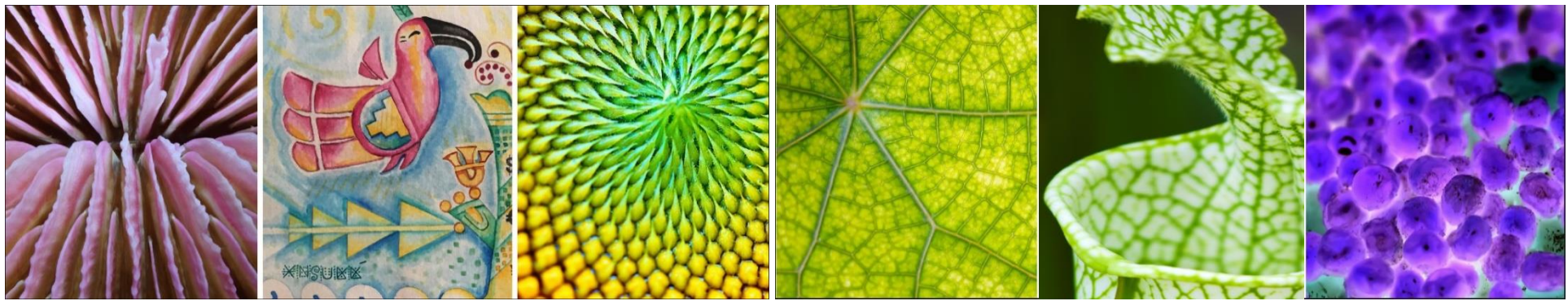
Agenda

- Opening remarks
 - Co-Chairs of the WG2020
 - Secretariat
- Introduction to DSI and the CBD process
- Co-Lead's report on the work of the informal Co-Chairs' advisory group on DSI
- Documents on DSI ahead of the resumed WG2020
- Q&A
- Closing remarks



Welcome remarks





Introduction to digital sequence information on genetic resources (DSI) and the CBD process

3 February 2022

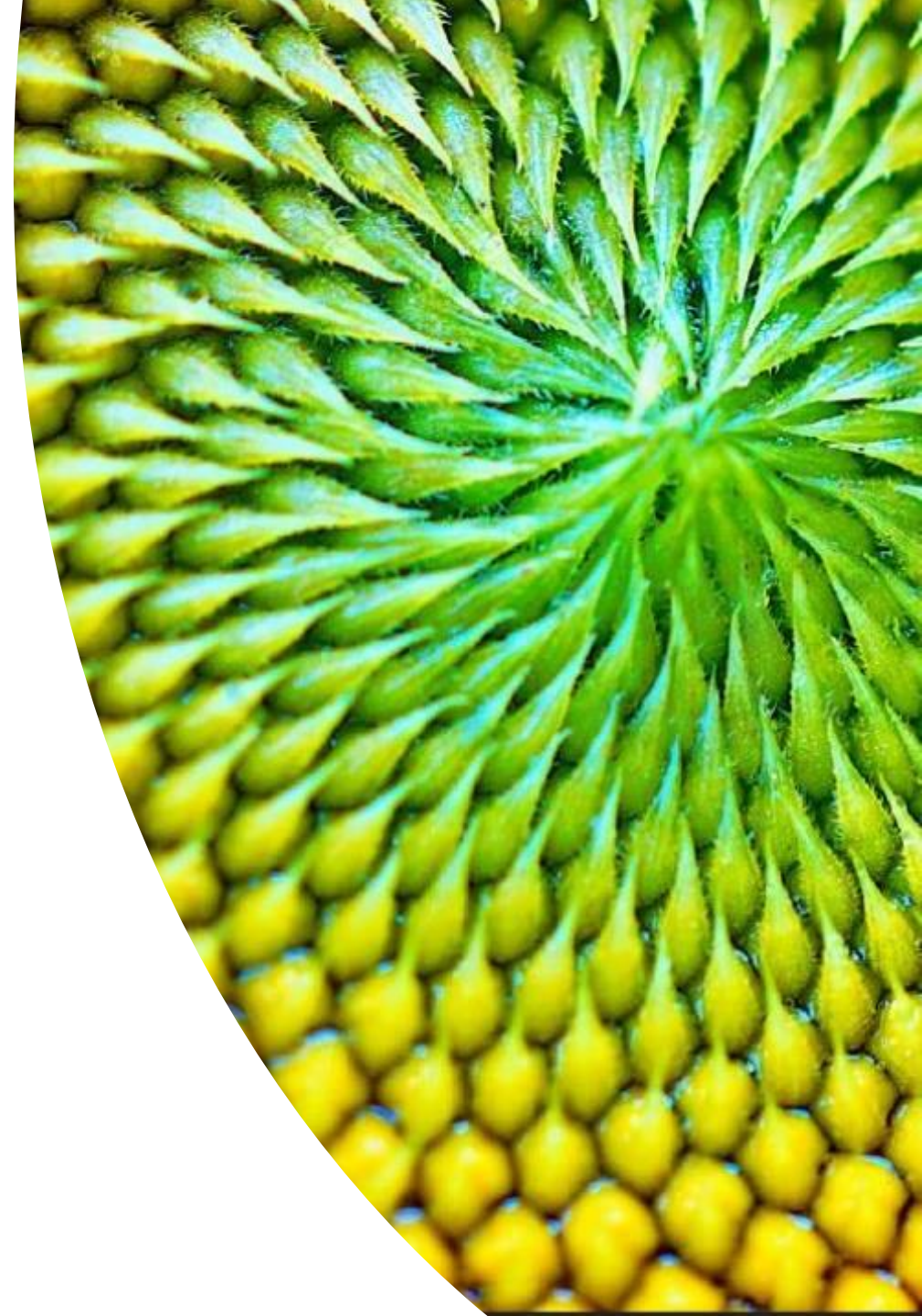
Taukondjo Shikongo
Senior Programme Management Officer,
Access and Benefit-Sharing

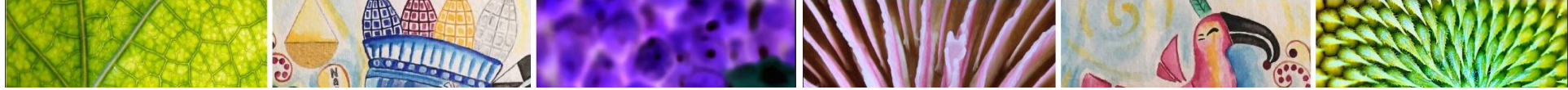
Charlotte Germain-Aubrey
Programme Management Officer
Digital Sequence Information

Secretariat for the Convention on Biological Diversity (CBD)

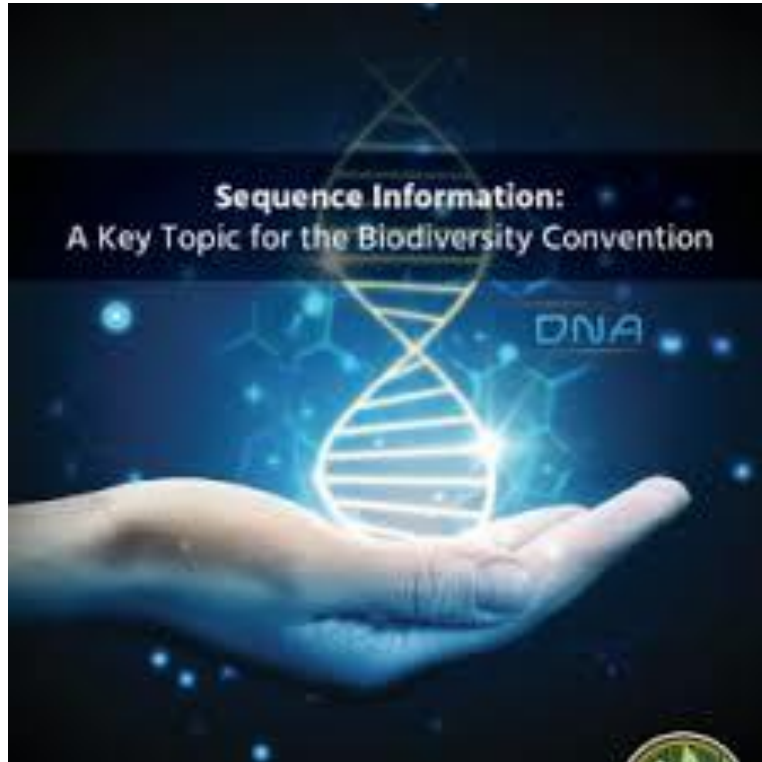
Introduction

- **Overview of presentation:**
 - Digital Sequence Information (DSI)
 - The international DSI process under the CBD
 - Question and Answers

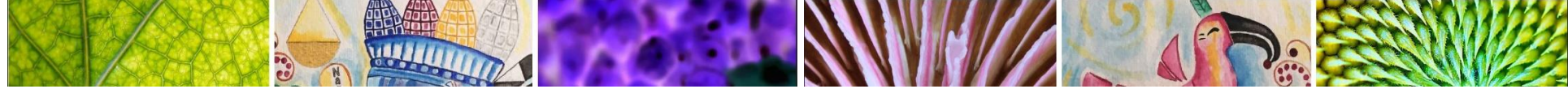




What is DSI?



- The term does not have an internationally agreed meaning and is not the only term used
- Emerged in CBD discussions (COP 13) on synthetic biology
- It is a placeholder
- It refers to information on the basic building blocks of life



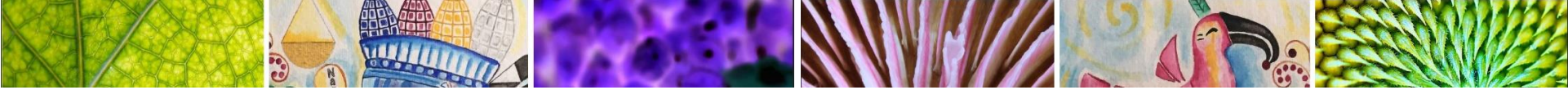
Digital Sequence Information under the CBD and the Nagoya Protocol

“Digital sequence information” on genetic resources first emerged as an issue under the CBD and the Nagoya Protocol in 2016.

In 2018, COP-14 recognized:

- The importance of DSI for the 3 objectives of the CBD
- That access to and use of DSI contributes to scientific research as well as to other non-commercial and commercial activities
- That further capacity to access, use, generate and analyse DSI is needed in many countries

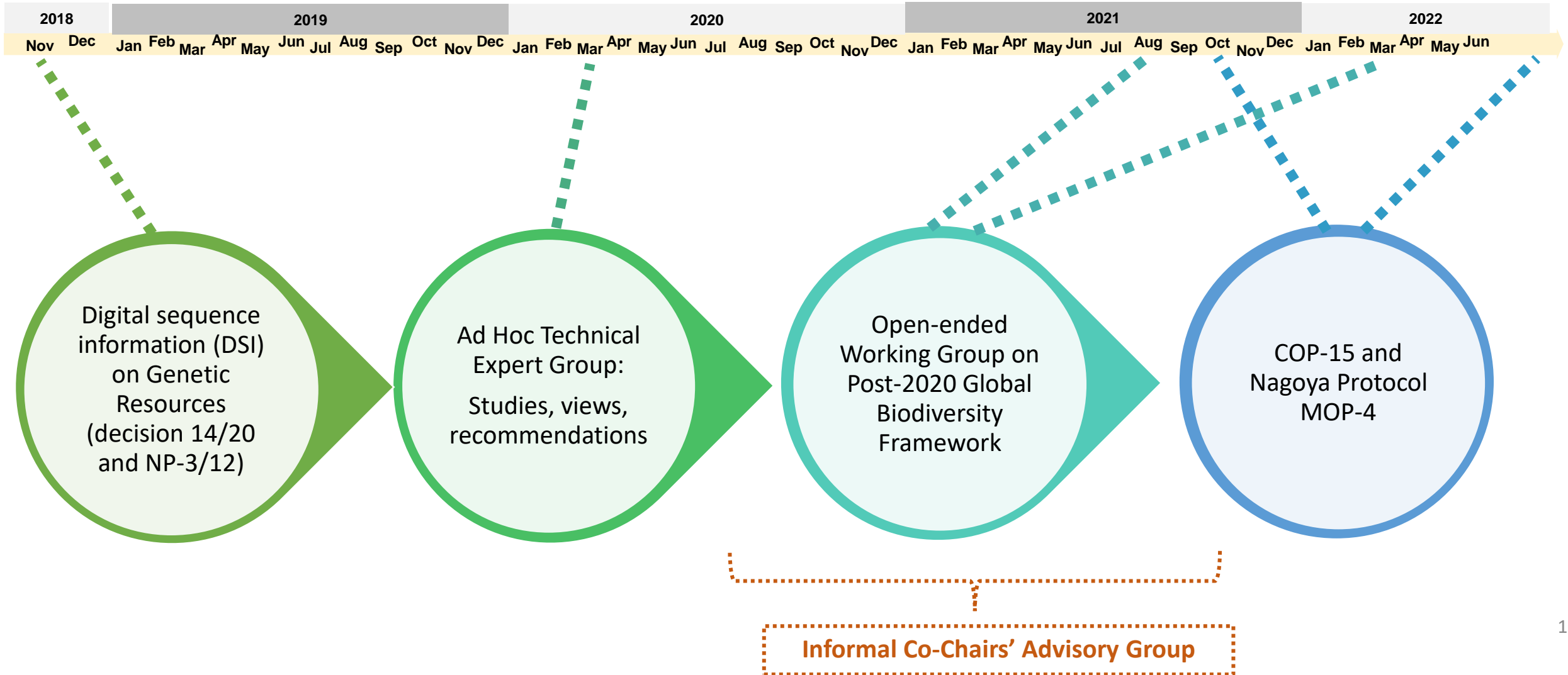
As there is a divergence of views among Parties regarding benefit-sharing from the use of DSI, Parties committed to working towards resolving this divergence through the process established in decision 14/20.



Why is it important?

- Technological advances and falling sequencing costs are producing a massive amount of biological data that is being shared
- This data is being increasingly used for research and development, and commercial purposes
- Questions have been raised about the impact of the conditions of this exchange of information on the 3rd objective of the CBD and the objective of the Nagoya Protocol

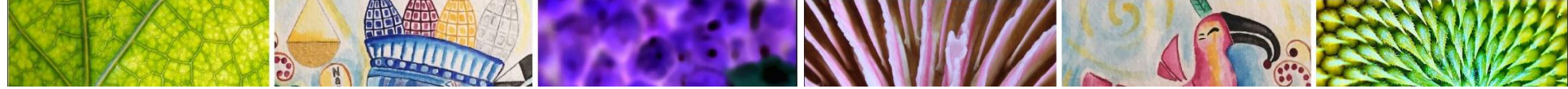
2018-2020/21 process on DSI



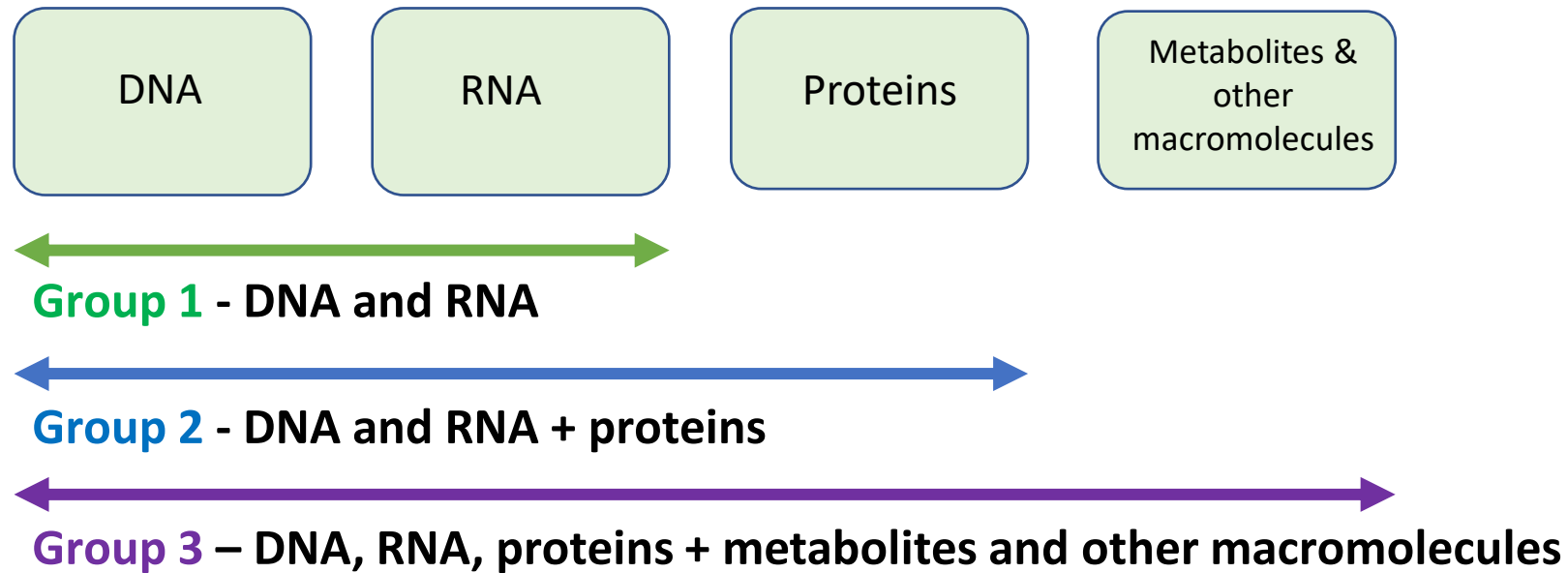
AHTEG work and report

- 4 studies
 - Concept and scope
 - Traceability
 - Databases
 - Domestic Policy Measures
- Synthesis of views from Parties and other international fora on DSI
- Developed options for operational terms
- Identified key areas for capacity building





Concept and scope of DSI as considered by 2020 AHTEG



AHTEG agreed these three groups could be considered as DSI.

AHTEG noted the relevance of associated information – including traditional knowledge associated with genetic resources, ecological interactions, etc.

Co-chairs' informal process

- Webinar series
 1. Understanding DSI: technical overview of its production, distribution and use
 2. Process and recent outcomes related to DSI under the CBD
 3. Policy options for ABS and DSI
 4. Criteria to consider policy options on DSI
- Online forum open to all
- Other informal webinars, activities and dialogs in parallel



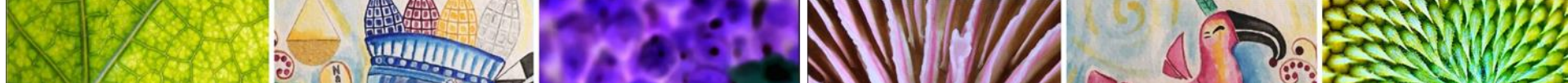
DSI policy options - updated

Access regulated			0	Status Quo - divergence remains regarding benefit-sharing from the use of DSI		Tracing of country of origin	Bilateral mechanism
	PIC		1	DSI fully integrated into domestic ABS measures – DSI subject to each Party’s ABS legislation	BS linked to DSI data		
Access not regulated	MAT		2.1	Standard MAT/ Licence at the national level – each Party established its own policy system		BS NOT linked to DSI data	No tracing of country of origin
			2.2	Standard MAT/ Licence at the International level – Parties adopt one or more internationally-standardized MAT			
	No MAT		3.1	Payment for access to DSI – payment for access to the sequence itself			
			3.2	Other Payments and Contributions – agreement with external entities on payment for service, levy, bonds, etc...			
			4	Enhanced technical and scientific capacity and cooperation – systematic and mandated capacity development for developing countries			
			5	No benefit sharing from DSI – international agreement that no explicit BS is necessary from the use of DSI			
No PIC		6	One percent levy on retail sales of genetic resources payment on retail sales into a multilateral mechanism				



Issues to note

- Parties differ on whether the definition of “genetic resources” includes DSI
- Parties can combine different options
- Bilateral sharing requires being able to trace DSI back to the country of origin (tagging in databases)
- A multilateral approach requires a governance structure and a system for receiving and distributing benefits
- Proposals to change existing practices in DSI databases are dependent on those databases and their users adhering to those changes
- Ensuring compliance by users of DSI can be difficult for some options
- Some options can have a high transaction cost
- Upfront cost/access fees could impact innovation and research



Key criteria

WEBINAR 3: *“Criteria to consider policy options on DSI”*

Several key criteria emerged

- on the **WHAT**: goals and objectives of the policy
- on the **HOW**: tools, processes and approaches to reach these goals

This work has evolved greatly since:

See co-leads’ report on the work of the informal Co-Chairs’ advisory group on DSI

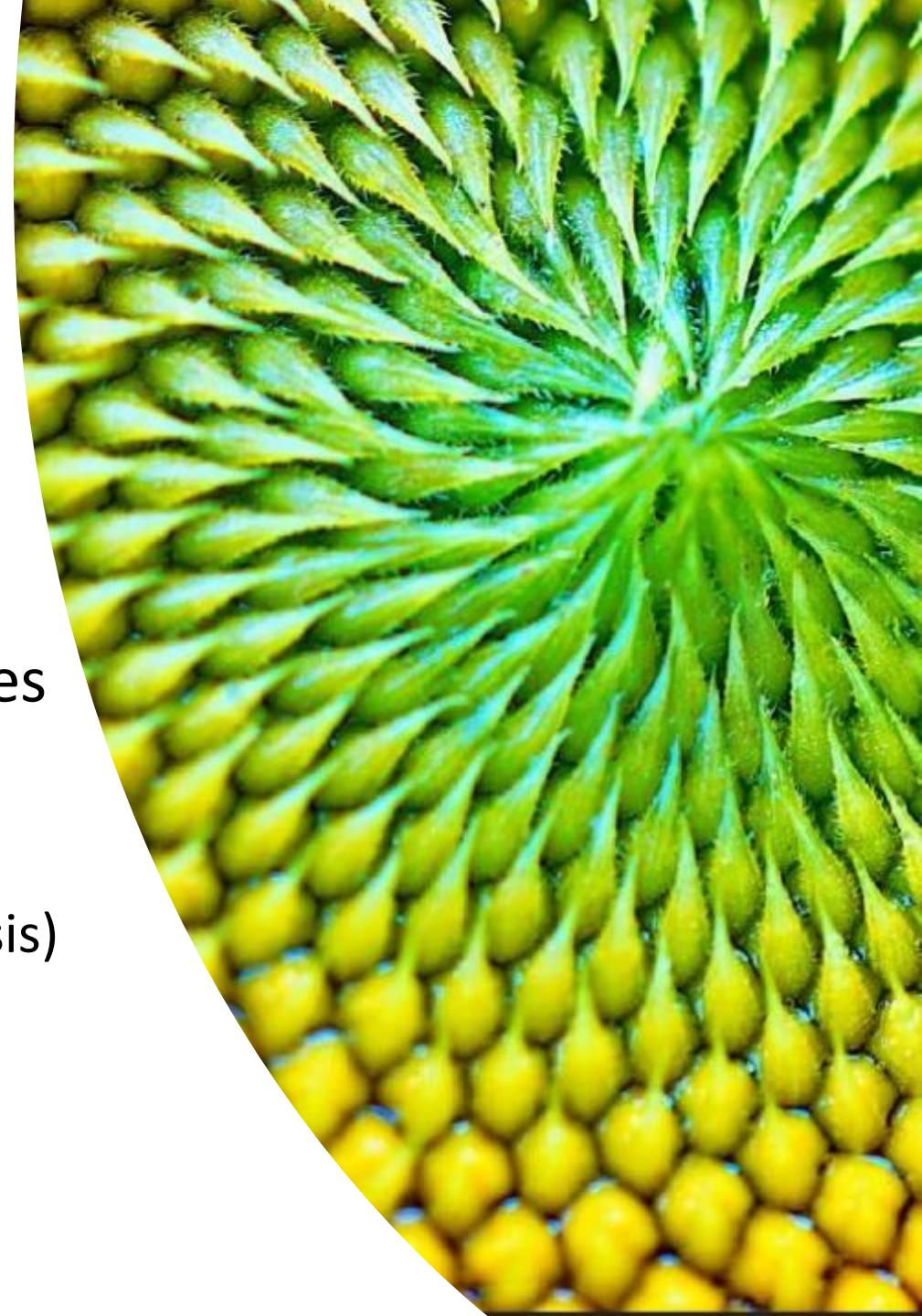


Outputs from OEWG 3.1 - DSI

- Co-Chairs' report: item 5 + Annex V
 - Elements of a potential recommendation to COP
 - All bracketed
 - No negotiations
 - Co-leads' summary of areas of potential convergence and apparent divergence on DSI
 - Co-leads' summary of linkages DSI-GBF
- Call for submissions of views and new information on policy approaches, options and modalities
- Establishment of the Informal Co-Chairs' Advisory Group on DSI

Informal Co-Chairs' Advisory Group

- Established by Co-Chairs, led by Co-Leads
- 1 kickoff meeting
- 4 'working' meetings
- 30 Parties from 5 regions + 5 IPLC representatives
- Co-Leads' report to the Working Group
 - Proposed analytical framework (multi-criteria analysis)
 - Update of the co-leads' summary on the potential convergence and apparent divergence
 - Conclusions and recommendation for further work



Pre-sessional document

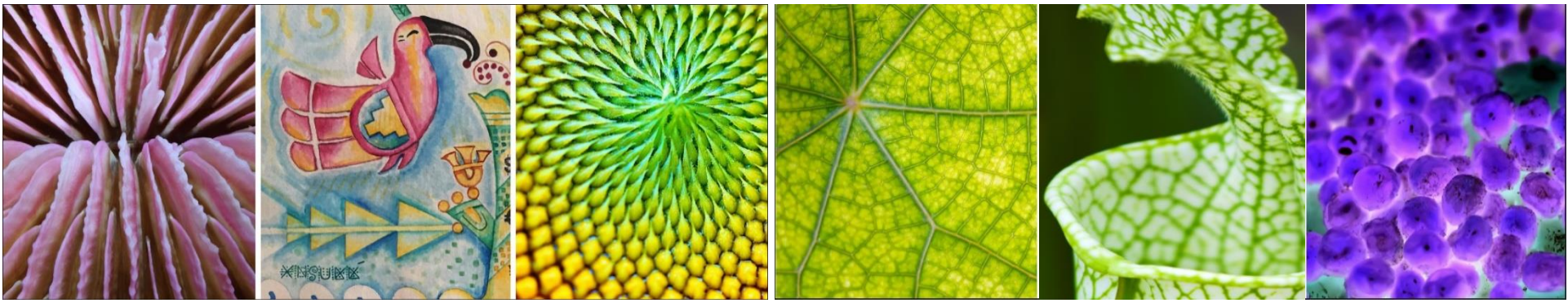
- I. Background
- II. Work of the informal Co-Chairs advisory group
- III. Elements of a recommendation





What next....?

- **Parties to engage in Geneva in March 2022 in accordance with Dec 14/20**
 - Continue considering the outcome of OEWG3.1 and the intercessional work in order to:
 - To make recommendations to COP 15
 - How to address DSI in the context of the post-2020 global biodiversity framework



Thank you

Agenda Item 5 of the Resumed OEWG-3 on Post-2020 GBF Webinar



Convention on
Biological Diversity

Co-Lead's Report on the Work of the Co-Chairs' Advisory Group on DSI

Ms. Lactitia Tshitwamulomoni, South Africa & Mr. Gaute Voigt-Hanssen,
Norway

Date: 03 February 2022



PRESENTATION OUTLINE

- 1. Purpose of the Advisory Group**
- 2. Organisation of Work of the Advisory Group**
- 3. Key elements of the Report**
 - 3.1 Outcomes of the Co-Chairs' Informal Advisory Group**
 - 3.2 Co-Leads' Conclusion and Recommendations**

1. PURPOSE

The Advisory Group was established to provide advice and feedback to the **Co-Chairs** and the **Executive Secretary** in preparation for the 2nd part of the OEWG-3, focusing on:

- (a) Assessment of consequences of possible policy approaches, options or modalities for benefit-sharing arising from the utilization of DSI**, (report of the 1st part of the OEWG-3 & submissions received by 30 September 2021);
- (b) Areas of potential convergence and areas of divergence**, (co-leads summary, annexed to the report on the 1st part of the OEWG-3);
- (c) Areas of additional work on DSI** for the period between OEWG-3 and CBD-COP 15; and
- (d) Existing and potential studies, dialogues, views etc from formal and informal activities related to DSI.**

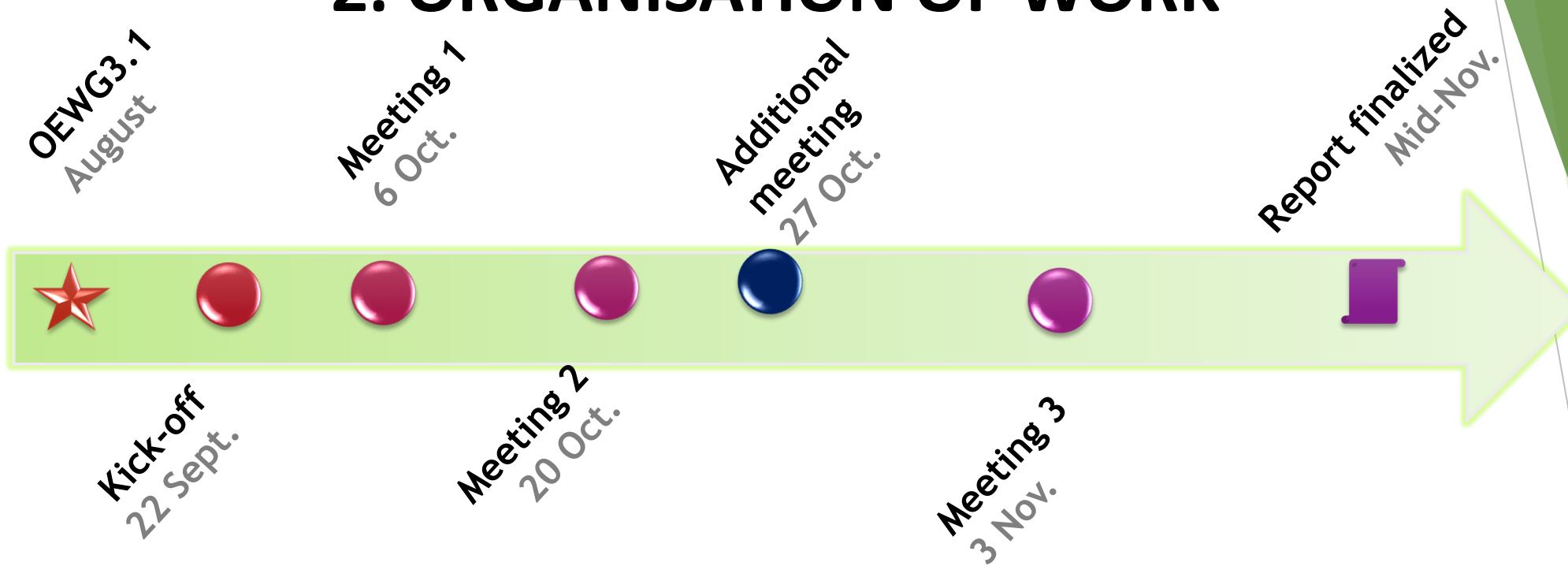
NEW!!! DSI resources: <https://www.cbd.int/dsi-gr/resources.shtml>

2. ORGANISATION OF WORK

- ▶ Submissions of views and new information on policy approaches, options or modalities for DSI were received from 11 Parties & 16 observers.
- ▶ Additional two hybrid options received:
 - ✓ Combination of options 1 and 2.2- would depend on whether **single or multiple DSI was used** and whether the **country of origin of the GR is known**.
 - ✓ Combination of options 1 and 2.2- where the **country of origin is unknown, employ internationally standardized MATs**. Where the **country of origin is known, benefits must be shared with the provider countries**.

N.B Hybrid options have not been included based on the assessment methodology adopted, which focuses only on distinct separate options.

2. ORGANISATION OF WORK



Analytical framework

Informal Co-Chairs' Advisory Group



2. ORGANIZATION OF WORK

Date and time (Montreal time)	Agenda
Kick-off meeting: Wednesday 22 September 2021	
7.30-9.00 am	<ol style="list-style-type: none">1. Welcome from co-leads and Co-Chairs2. Introductions3. Terms of Reference of the Group4. Logistics and administrative items5. Presentation of the work plan for the upcoming sessions
1st working meeting: Wednesday 6 October 2021	
7.30-10.30am	<ol style="list-style-type: none">1. Presentation of key new elements arising from the compilation of submissions2. Presentation on multi-criteria decision-making frameworks3. Presentation and discussion on updated policy options and criteria framework (matrix)
2nd working meeting: Wednesday 20 October 2021	
7.30-10.30am	<ol style="list-style-type: none">1. Feedback on revised assessment framework document2. Expert presentation on key issues of divergence<ul style="list-style-type: none">• open access: Professor Sabina Leonelli• traditional knowledge: Professor Maui Hudson3. Discussion on areas of convergence/divergence
Additional working meeting: Wednesday 27 October 2021	
7.30-10.30am	Discussions on areas of convergence and divergence: <ol style="list-style-type: none">1. Open data2. Traditional knowledge3. Other areas of potential convergence and apparent divergence4. Planning of the report to be presented to the working group
3rd working meeting: Wednesday 3 November 2021	
7.30-10.30am	<ol style="list-style-type: none">1. Comments on updated framework and criteria2. Comments on updated summary of areas of convergence and divergence3. Discussion of recommendations for areas of further work4. Planning: Co-leads' report on the Informal Co-Chairs' Advisory Group

3. KEY ELEMENTS OF THE REPORT

3.1 Outcomes of the Advisory Group:

Section A: Framework for the Assessment of policy options related to ABS in respect of DSI

► Approach

- ✓ Step-by-Step approach adopted to help Parties to gradually narrow down the possible DSI options.

► Methodology

- ✓ Acknowledged that DSI is a highly complex issue with both qualitative and quantitative costs and benefits that cannot be easily estimated nor monetized.
- ✓ Multi-criteria analysis (MCA) technique was selected to guide the development of an analytic framework for an initial assessment of different DSI options.
- ✓ MCA is an assessment method that ranks or scores options against multiple criteria.
- ✓ It provides a systematic way for decision makers to assess the trade-offs of different policy options.
- ✓ A key feature of MCA is a **Performance Matrix**.

Steps to carrying out an MCA

Table.1 Steps to carry out an MCA

- 1. Establish the decision context and the aims of the assessment**
- 2. Identify policy options or alternatives**
- 3. Identify the criteria against which each option will be assessed**
- 4. Describe how each option will be assessed (scores)**
- 5. Assign weights to each of the criteria to reflect their relative importance**
- 6. Combine weights and scores to derive values**
- 7. Assess results**
- 8. Conduct a sensitivity analysis using different scores or weights**

Adapted from Department for Communities and Local Government (DCLG), 2009

DSI policy options - updated

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No PIC	No MAT	6	One percent levy on retail sales of genetic resources payment on retail sales into a multilateral mechanism				

3. KEY ELEMENTS OF THE REPORT

3.1 Outcomes of the Advisory Group:

Section A: Framework for the Assessment of policy options related to ABS in respect of DSI

► Criteria and scoring

- ✓ 4 Broad Criteria identified with a total of 19 sub-criteria.
- ✓ Scoring method uses an absolute scoring scale of 0 to 10 including an explanation or assumptions underlying the score.
- ✓ N/A can be used to indicate “*do not know*” or “*not applicable*” including an explanation.
- ✓ A selection of criteria can be assigned a “*pass*” or “*fail*” scoring, rather than an incremental scoring.

N.B The goal of the scoring exercise is to reflect on the areas of strength and weakness of each option~ which will serve as a basis for more in-depth assessment of options at a later stage

3. KEY ELEMENTS OF THE REPORT

Section B: Co-Leads 's summary of the discussion on potential convergence and apparent divergence of the Advisory Group:

Key Elements	Convergence	Divergence
a) Fair and Equitable benefit sharing	<i>The benefit from the use of DSI should be shared in a fair and equitable way</i>	<i>Implementation of fair and equitable sharing of benefits from DSI</i>
b) Open Access of DSI in public databases	<ul style="list-style-type: none"> <i>It is important to keep access to DSI in public databases open as it is currently</i> <i>Control over access to data</i> 	<i>Interpretation of "open access"</i>
c) Role of IPLCs, and Traditional Knowledge	<i>IPLCs are stewards of biodiversity and their role and interests should be considered in the sharing of benefits from the use of DSI</i>	<ul style="list-style-type: none"> <i>Mechanism of recognition of traditional knowledge associated with DSI</i> <i>Scope of DSI or scope of benefit-sharing modalities</i>
d) Capacity Building	<i>Capacity-building is needed and important</i>	None
e) Linkages between ABS		<i>Are access and benefit-sharing coupled?</i>
f) Legal clarity and certainty	<i>The DSI solution must be legally clear and certain for users and providers</i>	None
g) Consistency with existing Laws, decisions and other forums	<i>A DSI solution must be consistent with international law and treaties (including the Convention and its Protocols), respect previous CBD decisions, and be coherent with other international forums that are considering DSI.</i>	None

3. KEY ELEMENTS OF THE REPORT

Section B: Co-Leads 's summary of the discussion on potential convergence and apparent divergence of the Advisory Group:

Key Elements	Convergence	Divergence
h) Traceability	<i>Whether traceability of DSI is essential to a solution</i>	None
j) Importance of the CBD and the SDGs	<i>A solution on DSI is important for the objectives of the Convention and the SDGs</i>	None
k) Importance of DSI in research and conservation	<i>DSI is of importance for scientific research and innovation, for contribution to the conservation and sustainable use of biodiversity, and for human, animal, and plant health as well as food security, in tandem to benefit-sharing</i>	None
l) Future proofing	<i>Building flexibility into the solution on DSI to allow for adaptations to future technological advances, benefiting from newly available legal and administrative framework, data and technology, and keeping the solution efficient and effective over time.</i>	None
m) Scope of the CBD and/or the NP	None	<i>DSI and the scope of the Convention on Biological Diversity, the Nagoya Protocol and the post-2020 global biodiversity framework</i>

3. KEY ELEMENTS OF THE REPORT

3.2 Co-Leads' Conclusion and Recommendations:

High-Level Criteria/ Principles for DSI Solution including Key Points for Consideration

A. Potential elements of a recommendation

- (i) Any benefits from the use of GR should be shared in a fair and equitable way, and solutions should be found on how to share benefit arising from the use of DSI.
- (ii) Access to DSI in public databases remains open.
- (iii) IPLCs are stewards of biodiversity, and their role and rights should be taken into account in addressing DSI.
- (iv) Capacity-building is an integral part of the solution on DSI.

B. Areas for further consideration towards convergence

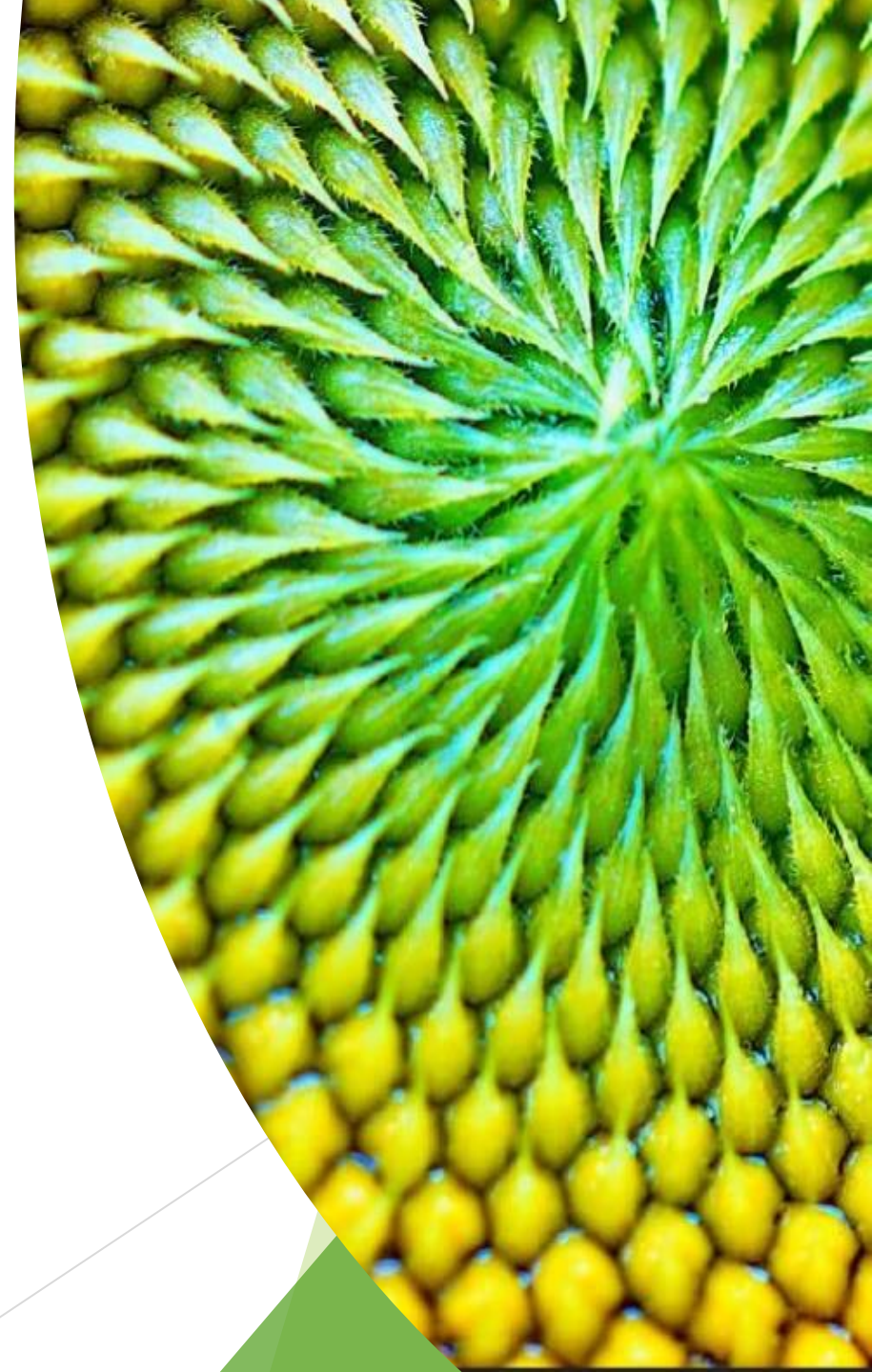
- (i) Efforts to explore potential modalities will help to elucidate further common understanding on what fair and equitable benefit-sharing would entail in practical terms in this context.
- (ii) Further work is needed to characterize the monetary and non-monetary benefits that could be shared through a solution on DSI.
- (iii) Further discussions are needed on modalities to consider IPLCs in a solution on DSI.
- (iv) Further discussions are needed on the timetable for implementing a solution on DSI, and what it would imply.
- (v) Further discussion on the consideration of special cases, such as health emergencies, and their implications for the solution, would be useful.

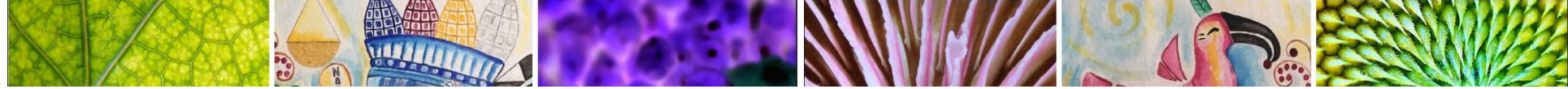
C. Mandate to advance work on the multi-criteria analysis and for the continuation of work of the informal advisory group

- (i) A step-by-step approach should be followed ahead to help us gradually narrow in on the elements needed to move the discussion forward;
- (ii) The completion of the MCA of policy options, with the support of external expertise, & to advance the assessment to the next steps, such as weighing the criteria, assessing available information.
- (iii) The continuation of the work of the Advisory Group in the intersessional period leading to the resumed sessions of the CBD-COP 15, to complete its original mandate and/or including to provide feedback on the analysis of policy options and to address any other issues mandated by the Working Group at the resumed OEWG-3.

THANK YOU!

Documents on DSI





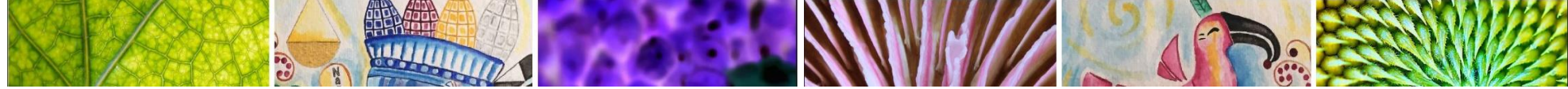
CBD/WG2020/3/4/ADD1

I. Background

- Reminder of CBD/WG2020/3/4 with
 - Overview of the meeting of the AHTEG on DSI
 - Overview of informal webinar series and online forum organized by the Co-Chairs and supported by the Secretariat
- Outputs of the first part of the 3rd meeting WG2020

II. Work of the informal Co-Chairs' advisory group

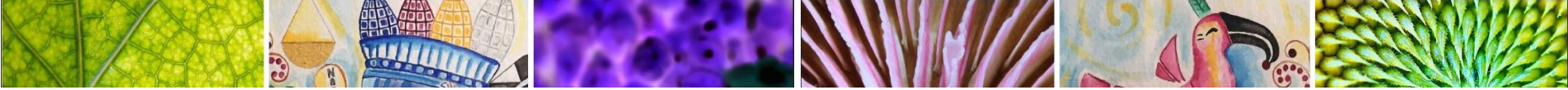
- A. Framework for the assessment of policy options related to access and benefit-sharing for digital sequence information on genetic resources
 - Incremental update of policy options and refinement of criteria for the framework
- B. Areas of potential convergence and apparent divergence on digital sequence information on genetic resources, and potential further work
 - 4 higher level criteria
 - 4 areas of recommended further work



CBD/WG2020/3/4/ADD1

III. Elements of a recommendation (some of the noticeable points)

- Taking into consideration
 - the work of the contact group on potential elements of a draft recommendation
 - the co-leads' report on the work of the informal Co-Chairs' advisory group on DSI
- Takes notes of work of informal Co-Chairs' advisory group on DSI
- Takes note of the policy options
- Takes note of the listing of potential criteria
- Recognizes the higher-level criteria
- Endorses the recommendation of the co-leads for a step-by-step approach



CBD/WG2020/3/4/ADD1

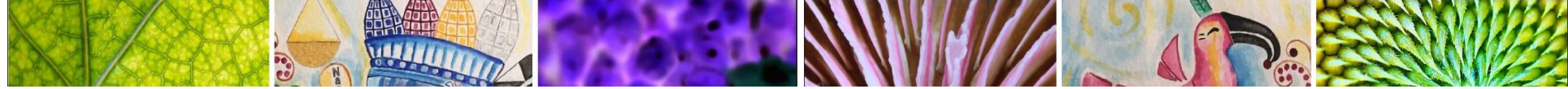
Annex I policy options to be considered in the first step of the multi-criteria analysis

Annex II criteria and sub-criteria

Annex III performance matrix

These are the result of an incremental refinement and updating:

formal process → informal process → 1st part of OEWG3 → advisory group



Information documents related to DSI

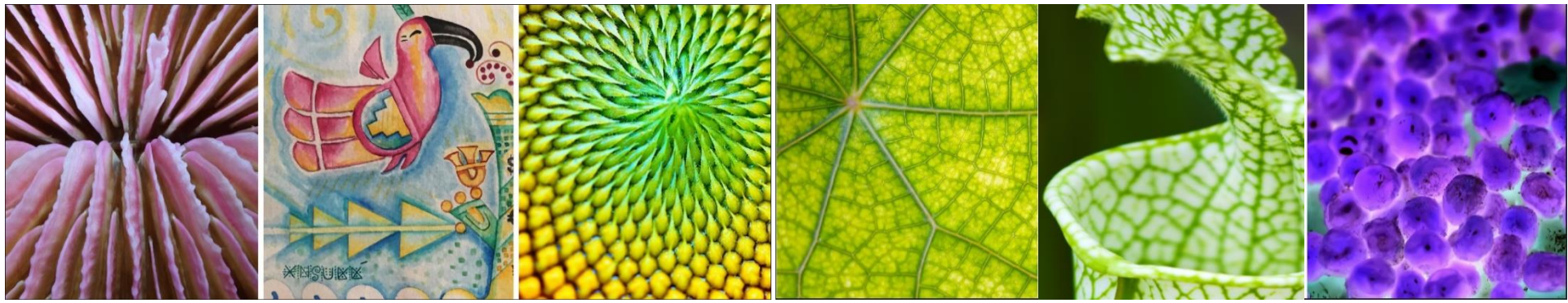
- ✓ CBD/DSI/AHTEG/2020/1/7 *Report of the Ad Hoc Technical Expert Group on DSI*
- ✓ CBD/WG2020/3/INF/8 *Co-leads' report on the work of the informal Co-Chairs' advisory group on DSI*
- ✓ CBD/WG2020/3/INF/7 *Views and new information on policy approaches, options or modalities for DSI*
- ✓ CBD/WG2020/3/INF/1 *Update of DSI in relevant international processes and policy debates*
- ✓ CBD/WG2020/3/INF/9 *Information from the Commission on Genetic Resources for Food and Agriculture related to digital sequence information on genetic resources*
- ✓ Note: CBD/WG2020/3/CRP1 is now superseded by CBD/WG2020/3/5, annex V, section A

Q & A



Closing remarks





Thank you