



Convention on Biological Diversity (CBD)

Clearing-House Mechanism (CHM)



Guidance for Developing National Clearing-House Mechanisms

*Olivier de Munck
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Roadmap for establishing and strengthening national CHMs

Level	Situation	Action
0	No CHM NFP	Convince Party to nominate CHM NFP
1	CHM NFP not equipped	Find solutions to provide basic infrastructure & communication facilities
2	No national CHM website	Get tools & support to establish web presence
3	National CHM web presence	Enhance web content Improve user experience
4	Good national CHM website	Expand information services Establish interoperability mechanisms Support other national CHMs

Adapt guidance to national situation

- No one-size-fit-all solution
- Various needs → Various approaches and responses

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Convince Party to nominate CHM NFP

- **Explain the important role of the CHM**

- Support to the NBSAP process
- Portal for national knowledge on biodiversity
- Useful as national dissemination tool
Public education & awareness
- Can increase international visibility
Country image, promotion of eco-tourism, ...
- Should facilitate scientific & technical cooperation

- **Identify the right person or partner institution**

- Survey of national biodiversity actors
(scientific institution, museum, university, ...)
- There may be a strong sustainable existing institution interested
in carrying out the role of CHM NFP
→ Win-Win situation
- Role of CHM NFP is very different from CBD NFP

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CBD NFP	CHM NFP
<ul style="list-style-type: none"> • Political Role • Government representative • Diplomat skills • Decision-making process <ul style="list-style-type: none"> - Negotiation - National Policy - National Planning 	<ul style="list-style-type: none"> • Technical Role • Project Manager • Entrepreneur skills • Implementation process <ul style="list-style-type: none"> - Scientific & tech. cooperation - Information Management (gathering, disseminating) - Webmaster
<ul style="list-style-type: none"> • Both roles are important & time-consuming <ul style="list-style-type: none"> → Adequate capacity to be effective • Importance of collaboration between CBD & CHM NFPs <ul style="list-style-type: none"> → CHM NFP should serve the CBD NFP 	

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- **Promote and plan the CHM at national level**
 - Convince national decision-makers that CHM is useful
 - Integrate the CHM in the NBSAP
 - Identify & mobilize resources (National, GEF/NBSAP, other)
 - Prepare a plan with sustainability in mind
 - Establish inter-institutional coordination mechanism
 - Identify and capture national information & knowledge
- **Involve stakeholders and users**
 - Involve representatives of your target audience when planning, testing and collecting feedback
 - Joint ongoing process to improve effectiveness



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Prepare a "business plan" for the New CHM

- **Institutional arrangements**
 - Responsibilities & Terms of references
 - Partnership arrangements
- **Resources allocation**
 - Human resources
 - Technical: graphic design, programming, webmaster
 - Content: management, update, validation
 - Website hosting options
 - Web content production & management
- **Activities**
 - Building national contact network
 - Learn about NBSAP priorities, targets & implementation
 - Information gathering & disseminating
 - Information architecture & web content preparation
 - Outreach & awareness activities

Provide basic infrastructure & communication facilities

- **Party's responsibility**
 - CHM NFP should be operational
 - Donors insist on sustainability
- **Prepare realistic project proposal**
 - First assess sustainability potential
 - Provide a detailed description/justification of needs
 - Project funding is temporary
- **Identify sustained resources**
 - At least small budget to maintain operations
 - Resources may be allocated if effectiveness is proven

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Establish web presence

- **Several options to establish web presence**
 - New or existing website
 - Hosted in-house or externally
 - Select a content management system (CMS)
- **Important decision**
 - Based on available resources and expertise
 - Each option has advantages and drawbacks
 - Big impact on maintenance
 - Political aspect
 - Choose the safest and easiest approach
 - Don't undertake a big project without adequate resources

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Options to establish web presence

- **Hosting a website**
 - Requires a solid infrastructure:
Web server + Firewall + High speed Internet + Support 24/7
 - Don't do it unless you have a special team
- **Obtaining space on existing website**
 - Agreement with a strong supporting partner
 - Many African Countries have their website hosted in Belgium
- **Using a web hosting service**
 - Many options
 - Price depending on usage



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Use a Content Management System (CMS)

- **Highly recommended**
 - Avoid reinventing the wheel
 - Many features, including multi-lingual capabilities
 - Easier maintenance
 - Adherence to modern web standards (XHTML, CSS)
 - Extensible
- **Selecting a CMS**
 - Several good open-source CMS
WordPress, Drupal, Joomla, Typo3
 - European Portal Toolkit (PTK)
Customized open-source built for CHM
 - Commercial CMS or custom solution
Depends on existing situation

CMS-based website infrastructure

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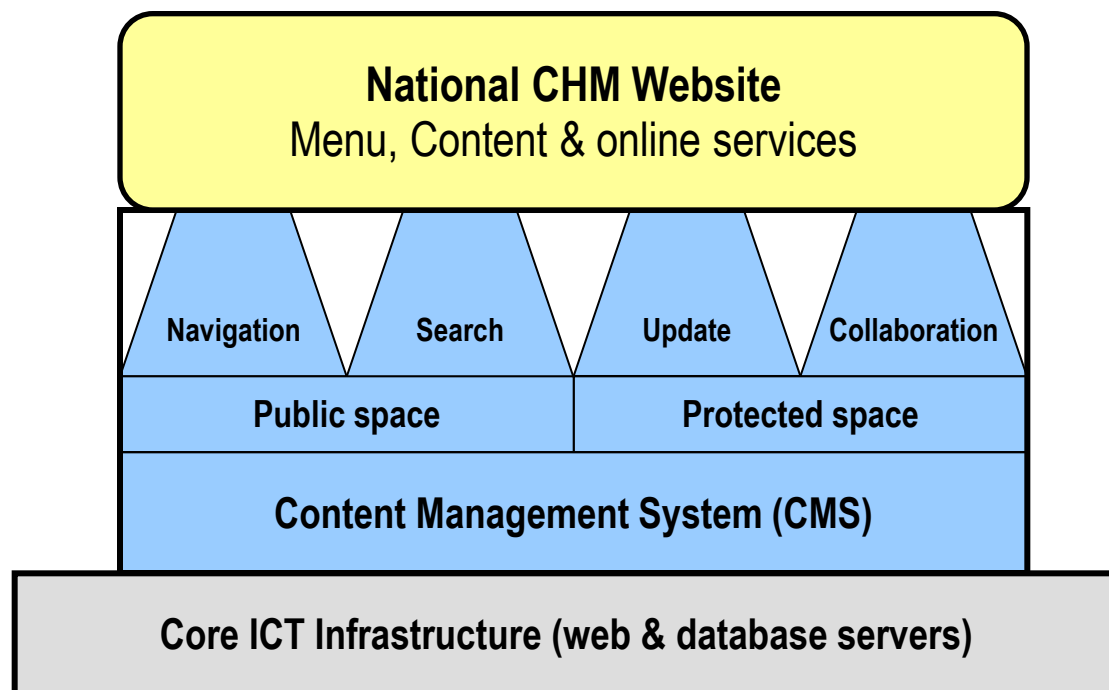
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Join the CHM Network

- **Notification 2008-066**
www.cbd.int/doc/notifications/2008/ntf-2008-066-chm-en.pdf
- **Show CHM Logo**
- **Common domain chm-cbd.net**
 - National URL can be maintained
 - To strengthen CHM networking
 - Each country/partner is encouraged to join cc.chm-cbd.net (where cc is the country code)
- **How to join the domain**
 1. Configure the web server to accept the URL
 2. Give URL & IP address to Secretariat
 3. The Secretariat will activate the URL in their Domain Name System (DNS)

Enhance web content

- **Information Architecture:**
Structure of web navigation (menus, header, footer, search) to provide access to various website sections
- **User Experience:**
Web content must be attractive, easy to find, up-to-date and relevant
- **Usability Testing:**
Prepare test scenarios and involve users in testing the website
- **Requires a permanent effort**

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Enhance web content

- **Reasons of no-use**
 - Nobody knows that it exists → audiences
 - It is not useful / no demand → strategic vision (marketing)
 - Product that does not sell because nobody needs it
 - Badly organized; too much information; not up-to-date
 - Technical issues, bugs
- **Solutions**
 - Target audiences → For whom? What for?
 - User monitoring → Feedback, Statistics, "User Testing"
 - User experience (UX) → **"User-Centric"** Design
 - Information architecture (IA) → Home page & Navigation

*Perfection is achieved not when there is nothing to add,
but when there is nothing to remove*

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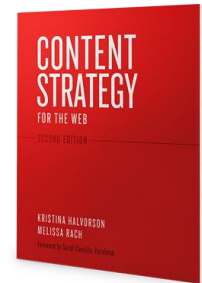


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References

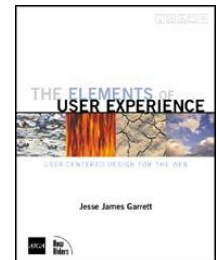
1. Content strategy for the web (2^a Ed.)

- Kristina Halvorson & Melissa Rach
- <http://www.contentstrategy.com>



2. The elements of user experience (2^a Ed.)

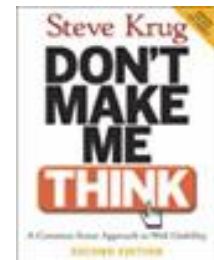
- Jesse James Garrett
- <http://www.jjg.net/elements>



3. Don't make me think (2^a Ed.)

A common sense approach to web usability

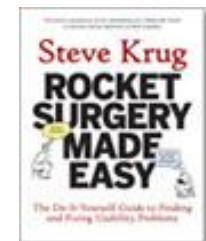
- Steve Krug
- <http://www.sensible.com/dmmt.html>



4. Rocket surgery made easy

The DIY Guide to Finding and Fixing Usability Problems

- Steve Krug
- <http://www.sensible.com/rsme.html>



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Role of a national CHM

1. Entry point for country biodiversity

- Search result for "[Country] + Biodiversity"

2. Organized menu of available information

- Biodiversity
- NBSAP
- Activities / Actors / Cooperation
- References and services (per categories and/or audiences)
- Interactive area (participation / contribution / collaboration)
- About us

3. Home page

- Should answer 2 questions:
 - **Where am I?** (in the Internet shopping mall)
 - **What can I do here?** (What can I buy?)
- Promotion of what's recent or most important

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Level 3 – National CHM Web Presence

Enhance web content to disseminate information

- **Disseminate biodiversity-related information**
 - Biodiversity in the country
 - NBSAPs & national reports
 - Other national biodiversity-related documents
 - Information by programme areas relevant to the country
- **Support NBSAP implementation**
 - National targets and indicators
 - Build an inventory of projects/initiatives
 - Links to expertise (experts, centres of excellence)

Potential Menu for a National CHM Website

Biodiversity [Country]

Overview

- Introduction
- ...

Ecosystems

- ...

Species

- ...

Threats

- ...

Protected Areas

- ...

Strategy & Implementation

NBSAP

- Vision
- Priorities
- Targets
- Indicators

Actions

- Initiatives &
Projects
- Progress
- Reports

Actors

- Government
- Others

Cooperation

- National & Local
- Regional
- International

References & Services

For

- Everyone
- Educators
- Journalists
- Government
- Scientists

About

- Protected Areas
- Species
- Indicators data
- More >

References

- Events
- Directories
- Publications
- Legislation
- Databases
- Maps
- Videos
- Links

Participate & Contribute

Your actions

- Suggestions
- Join us
- Your opinion

For members

- Forum
- Share data
- ...

About

Us

- Who we are
- Our mission

CBD

- Strategic Plan
- Aichi Targets

CHM

- Information
Exchange
- Network

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Examples of national CHM

- **Canada**
 - <http://www.biodivcanada.ca>
 - Good federal structure
- **Europe - BISE**
 - <http://biodiversity.europa.eu>
 - Good information architecture
- **Switzerland**
 - <http://ch.chm-cbd.net>
 - Good repository
- **Colombia**
 - <http://www.humboldt.org.co/chmcolombia>
 - Used by expert community

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- **Expand information services**
 - Typical services
 - Specialized services contributing to the Strategic Plan
- **Establish information exchange mechanisms**
 - Interface specification
 - Interoperability
- **Support other national CHMs**
 - Advice and support
 - Cooperation



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Typical CHM information services

- Information search
- Databases (species, experts, calendars)
- Directories
- Videos
- Maps
- Forums
- Social networking

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Specialized information services contributing to the Strategic Plan

	Aichi Strategic Goal	Information Services
A	Underlying causes & mainstreaming	Knowledge of biodiversity and of ecosystemic services
B	Reduce pressures	Information on invasive species, threatened species, vulnerable ecosystems
C	Safeguard biodiversity	Information on protected areas, ecosystems, species
D	Increase benefits	Information on sustainable use
E	Enhance implementation	NBSAP Indicators Cooperation Funding sources

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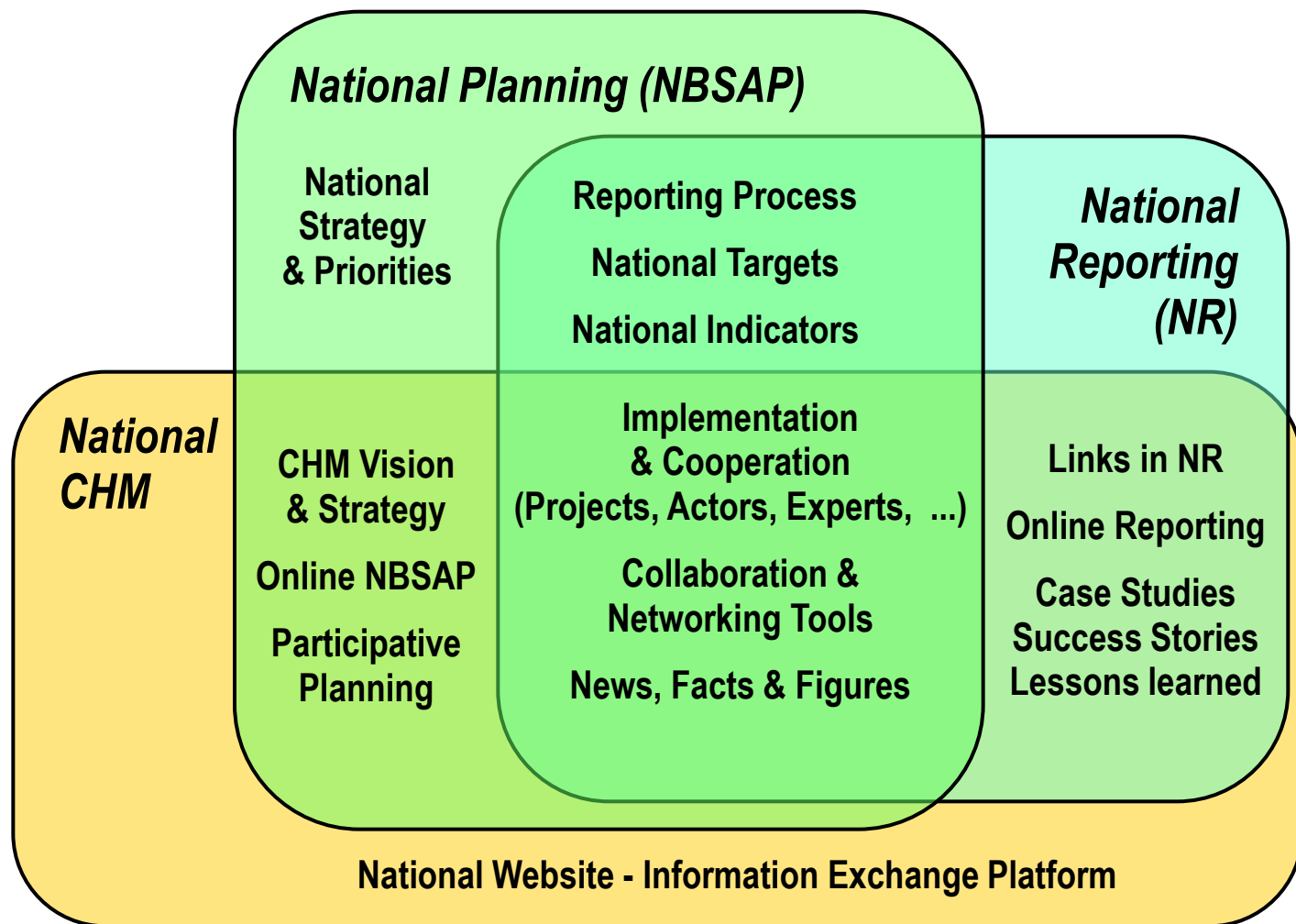
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Specialized information services for planning and reporting



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- **CHM → Planning**
 - **Raising public awareness** on national challenges and priorities
 - **Participative planning** through stakeholder consultations to collect views, comments and suggestions
 - **Dissemination of NBSAP** to stakeholders and the public
 - Mobilization of support for participation and implementation
 - Getting feedback on existing NBSAP for review and further planning
- **CHM → Reporting**
 - **Central collection** of stakeholders' inputs for national reports
 - Provision of relevant **sources of information/data** for reporting
 - **Online collaboration** to collect comments/suggestions on draft report
 - Sharing case studies and success stories
 - **Dissemination and promotion** of national report
 - Providing **up-to-date content for links** in national reports

Establish exchange mechanisms with other networks

- **Define information exchange interface**
 - Basis for data exchange & aggregation
 - Important to define good formats and classifications
 - Agree on single update point
- **Interoperability**
 - Automated information exchange between computer systems
 - Various technologies based on standards (REST, RSS/Atom, Open Data Protocol, ...)
 - Requires some IT expertise
- **Examples**
 - European Portal Toolkit (RSS/RDF News & Events)
 - InforMEA using Open Data Protocol www.informea.org
 - GFIS RSS formats (News, Events, Publications) www.gfis.net

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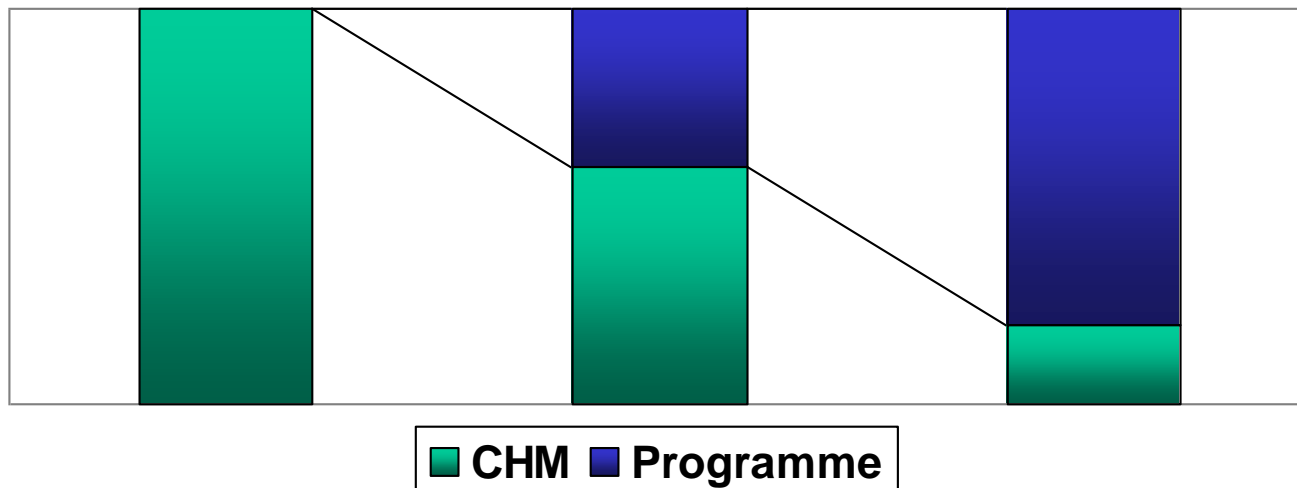
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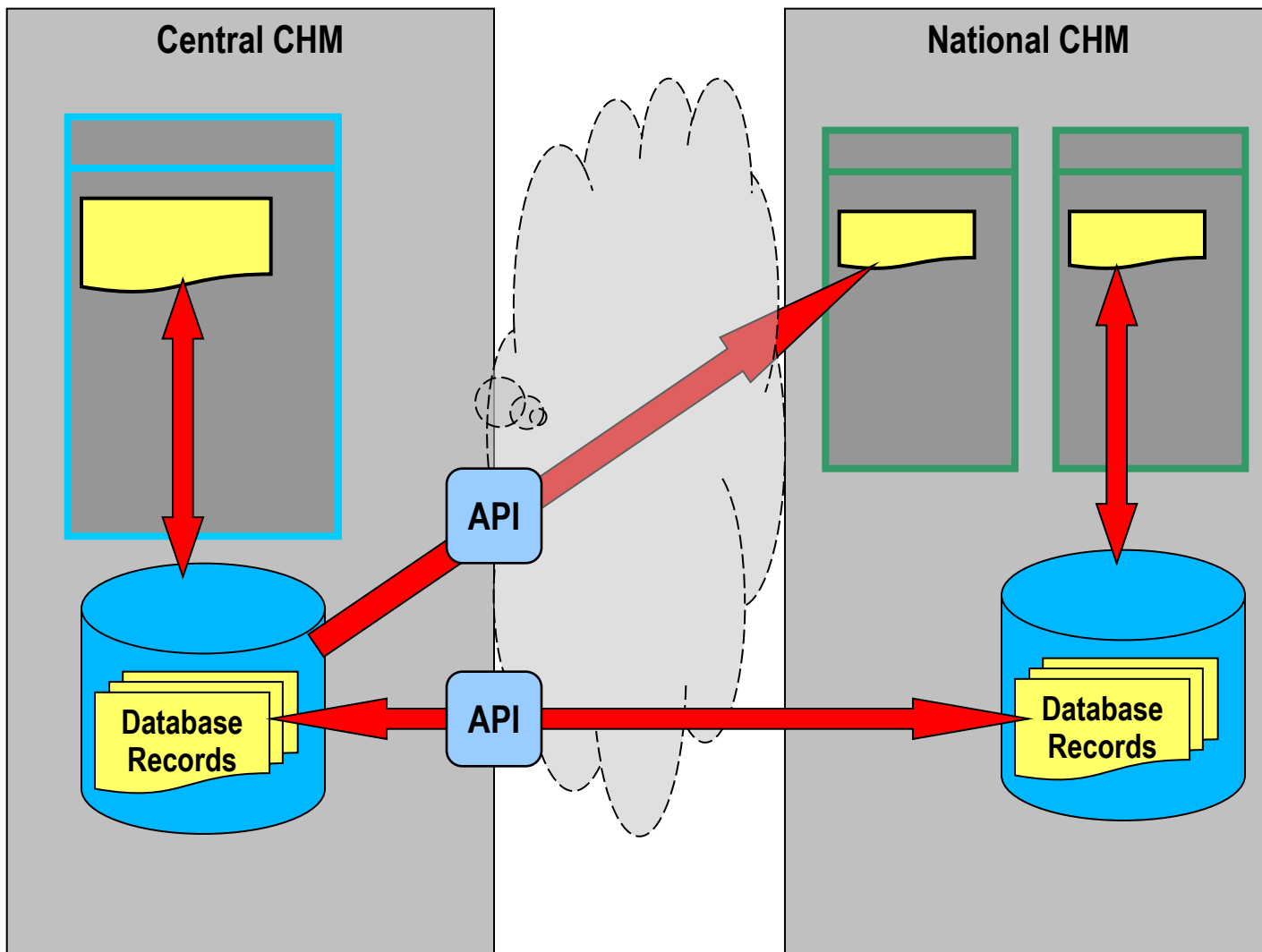
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Core Types	Customized Types	Specific Types
<p>Meeting</p> <p>Decision</p> <p>Side event</p> <p>NFP</p>	<p>Expert</p> <p>Case study</p> <p>Best practice</p>	<p>Protected Areas</p> <p>Invasive Alien Species</p> <p>EBSA map</p> <p>ABS Certificate of Compliance</p>



Level 4 – Information exchange mechanism

Interconnection & Interoperability



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Level 4 - Good National CHM Website

Encourage sharing of expertise to support other national CHMs

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- **But do not neglect your own National CHM**
 - Make sure information is kept up-to-date
 - Ensure sustainability
 - Be ready to adapt to new situations
- **Support other National CHM**
 - in the same region / speaking the same language
 - Share expertise & data
 - Provide advice and technical support
- **Facilitate Scientific & technical cooperation**
 - Meet national actors and facilitate scientific and technical cooperation
 - Link to all cooperation agencies in the country (UN, EU, Bilateral Cooperation, NGOs, ...)
 - Promote transfer of technology



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Final comments

- **General guidance (No one-size-fit-all)**
- **Importance of high-level commitment**
- **Often possible to do something even with limited support**
- **Do not hesitate to contact the CBD Secretariat**
- **Questions or comments**



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Thank you



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