NoK
Procedures to answer decision making needs

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Revised after demonstration cases and second BiodiversityKnowledge conference

Lead author: Barbara Livoreil , Bangor University & FRB

Contributors: Ilse Geijssendorffer, Marie Vandewalle, Estelle Balian, Carsten Neßhöver, Rob Jongman & the KNEU consortium
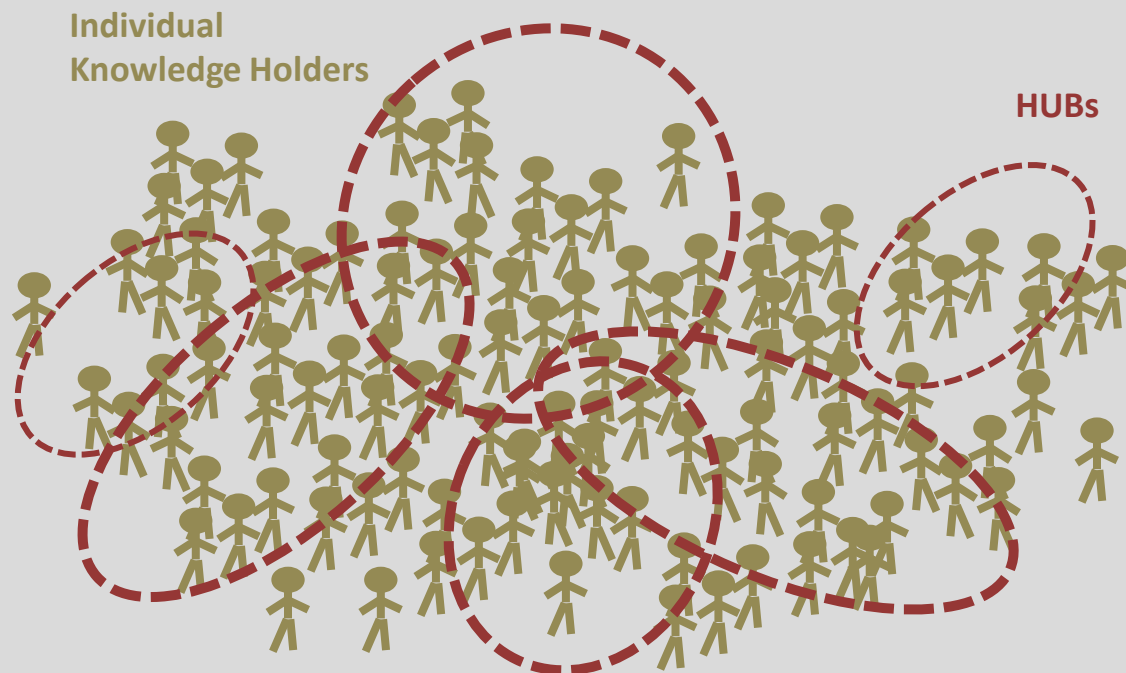
www.biodiversityknowledge.eu

Goal

Develop a functional European network of knowledge that would allow to collect and synthesize knowledge to answer requests and needs expressed by decision-makers at the European level

THE **N**ETWORK **o**f **K**NOWLEDGE concept

Biodiversity Knowledge

Individual Knowledge Holders

HUBs

A lot exists already! Let's use it well

KNOWLEDGE HOLDERS / PROVIDERS (EXPERTS)
People & organizations possessing relevant knowledge in various areas of expertise. NoK aims to *make it easy for knowledge holders to become knowledge providers*
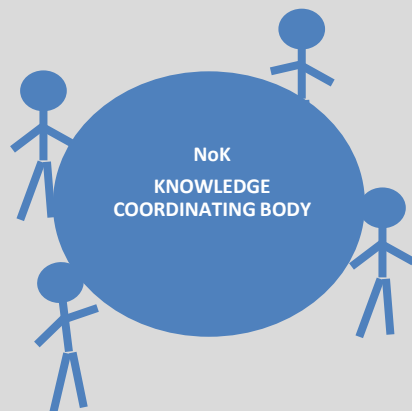
KNOWLEDGE HUBS
Networking person or organization. They have an overview of knowledge holders in a given area/ organization/ country and are able and willing to link these with the requests identified and tackled by the NoK.

Scientists, practitioners, managers, consultants, indigenous & local people, Institutes, scientific societies, NGOs, Administrations, governmental agencies, international bodies, political organizations (DGs), ministries, European & international conventions, Companies, private sector, NoK itself

GOVERNING THE PROCESS

Biodiversity
Knowledge

NoK
KNOWLEDGE
COORDINATING BODY

NoK
ADMINISTRATION
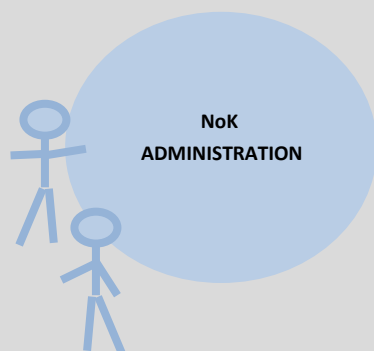
NoK- KCB
KNOWLEDGE COORDINATING BODY
Ensures the proper management of each request, initial dialogue with requester for feasibility, identifies appropriate knowledge providers and convenes working groups or other meetings, maintains dialogue s and organise (peer) review of documents. Ensures networking and links up with research strategies.
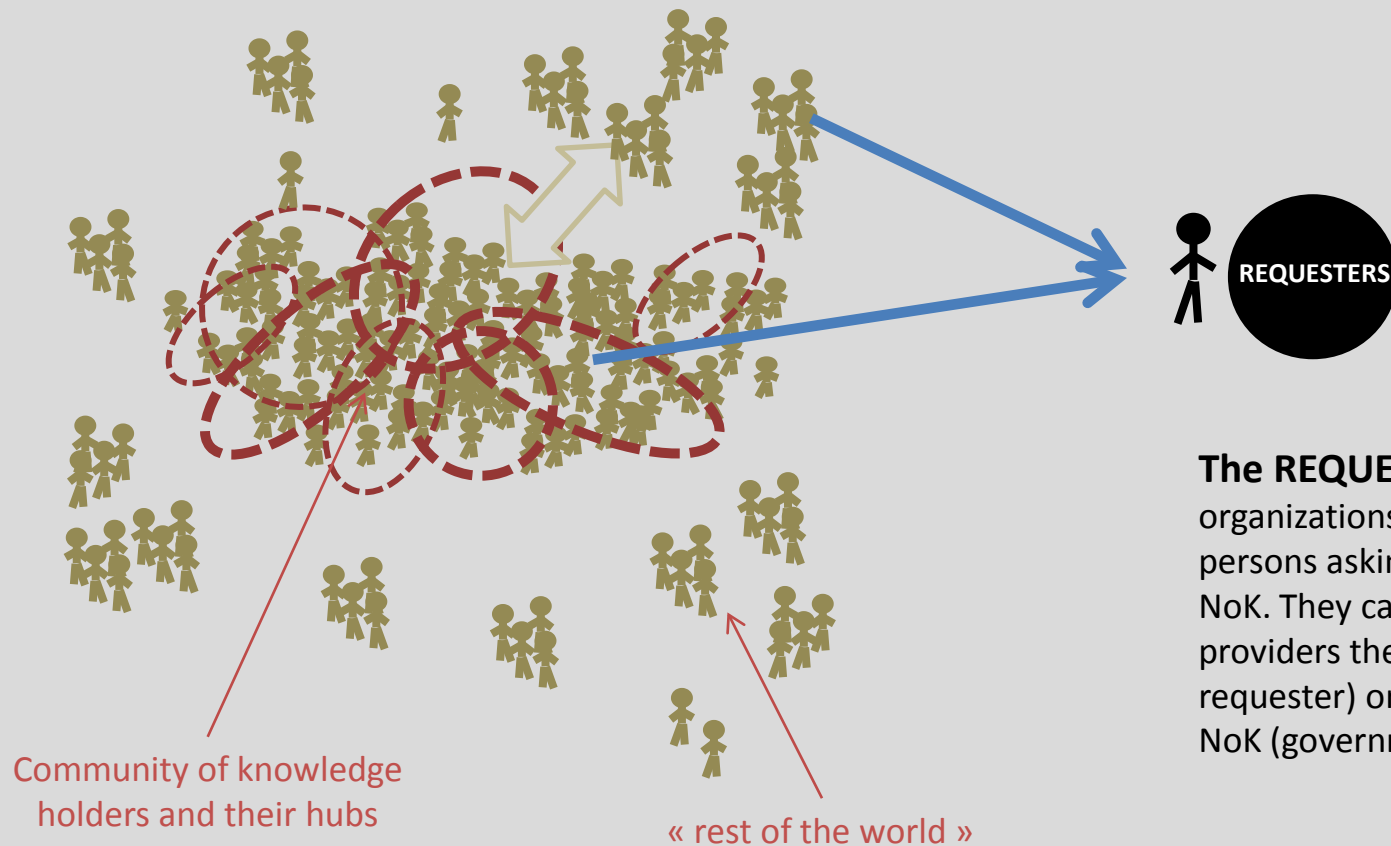
NoK secretariat
schedules and handles the day-to-day work and budget, supports the work of the NoK, liaises with knowledge hubs . May provide support in identifying knowledge sources and experts.
May be responsible for developing communication strategies/plans and ensure their implementation.

1- **OPENNESS :** wide participation from all potential actors, through open invitations for participation, building on participants' enthusiasm and diversity, and ensuring open access to the NoK products.

2- **DIALOGUE & TRANSPARENCY** : to ensure strong internal and external communication and functional network

3 – **ROBUSTNESS of its work**: by applying approved guidelines and methods, ensuring peer-review at various stages, tracking conflicts of interest

4- **CAPACITY BUILDING** to facilitate collaborative working , strong methodological approaches and scientific standards

5- **COST EFFECTIVENESS:** maximize efficiency and minimize costs by mutualizing efforts and sharing expertise

6- **SELF-REFLECTIVE and ADAPTIVE**: processes and governance are continuously and formatively evaluated

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Livoreil et al.
V 17th of February, 2014

11

THE ACTORS

Community of knowledge holders and their hubs

« rest of the world »

REQUESTERS

The REQUESTERS are the organizations or groups of persons asking a question to the NoK. They can be knowledge providers themselves (NoK self-requester) or external to the NoK (governments, businesses…)
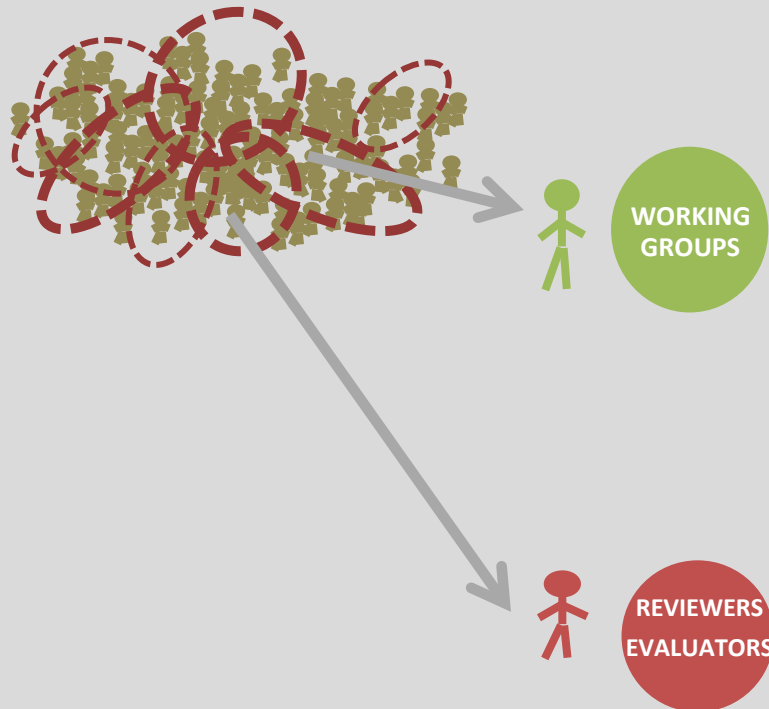
Scoping: a preliminary estimation of what (knowledge) is available to answer the request.

This is an important step to evaluate the feasibility of the mission asked by the requester.

In the case of NoK, the scoping group can assess the existence of knowledge on topic, its quantity, its type (e.g. qualitative, quantitative), as well as the knowledge holders relevant (how many, where, discplines, availability…).

This facilitates planning and a dialogue requester/KCB, and choice among knowledge synthesis options/methodologies.

SCOPING GROUP

Ad-hoc WORKING GROUPS
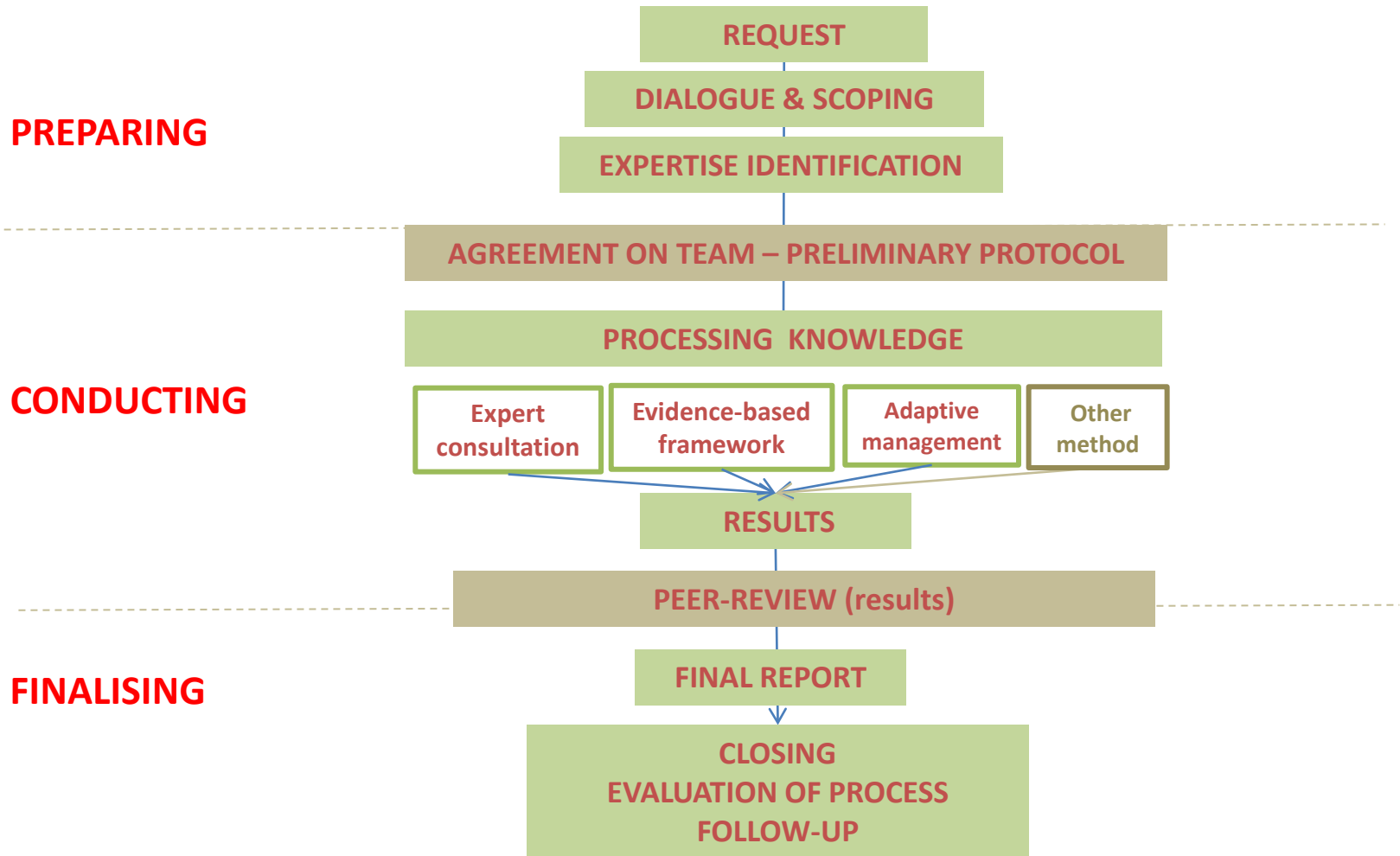
are composed of individual experts identified with the help of knowledge hubs. They conduct the work needed to answer the question/problem raised towards the NoK, using different methods. They will produce a report (or other product) and will discuss and set out recommendations and policy options as appropriate. They may also signal the need for additional research, assessment or capacity building.

REVIEWERS & EVALUATORS
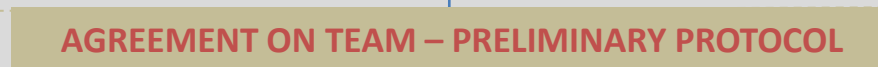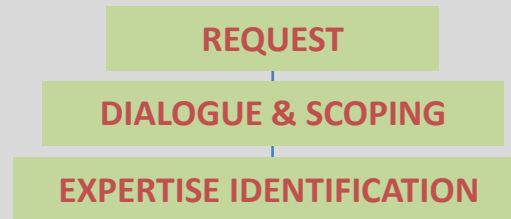
REVIEWERS examine the outputs from working groups under predefined conditions in order to evaluate its quality, the compliance to the methodological standards of each approach, the absence of biased analysis or conclusions, ensure the independence of conclusions from any pressure group. They can be experts in the topic addressed by the request, the methodology chosen to provide the answer, or end-users. They can be scientists/academics but also holders of practical knowledge, decision-makers or end-users themselves. EVALUATORS, organized via a specific Evaluation Body to the NoK would focus their view on the NoK processes.

THE PROCEDURE
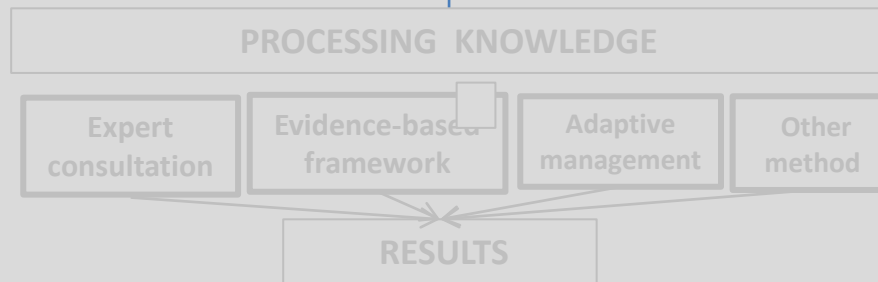
OF KNOWLEDGE TRANSFER AND SYNTHESIS TO ANSWER A REQUEST

PREPARING

REQUEST

DIALOGUE & SCOPING

EXPERTISE IDENTIFICATION

AGREEMENT ON TEAM – PRELIMINARY PROTOCOL

PROCESSING KNOWLEDGE

CONDUCTING

| Expert consultation | Evidence-based framework | Adaptive management | Other method |

RESULTS

PEER-REVIEW (results)

FINALISING

FINAL REPORT

CLOSING
EVALUATION OF PROCESS
FOLLOW-UP

REQUESTER CONTACTS NOK – KCB

www NoK

REQUESTER

KCB

INITIAL   REQUEST
(use request form, appendices 1&2)

Immediate rejection

Request elligible for further examination

Prioritization
(if needed)

Feedback to requester explaining reasons

DIALOGUE

Seeking greater understanding or predictive power (e.g. What is the role of biodiversity in maintaining specific ecosystem functions (e.g. biogeochemical cycles)?)

Seeking measures of anthropogenic impact (e.g. what is the impact of wind farm installations on bird populations?)

Seeking measures of effectiveness of interventions (e.g. How effective are marine protected areas at enhancing commercial fish populations?)

Seeking appropriate methodologies (e.g. what is the most reliable method for monitoring changes in carbon stocks in forest ecosystems?)

Seeking optimal management options (e.g. what is the optimal grazing regime for maximizing plant diversity in upland meadows?)

Socio-economic impacts of specific developments in biodiversity (e.g. what are the anticipated costs of the spread of the invasive species xyz on health or agriculture?)

What is a desirable state for....? (e.g. What is the desirable state of forest in terms of deadwood and other biodiversity-relevant structures?)
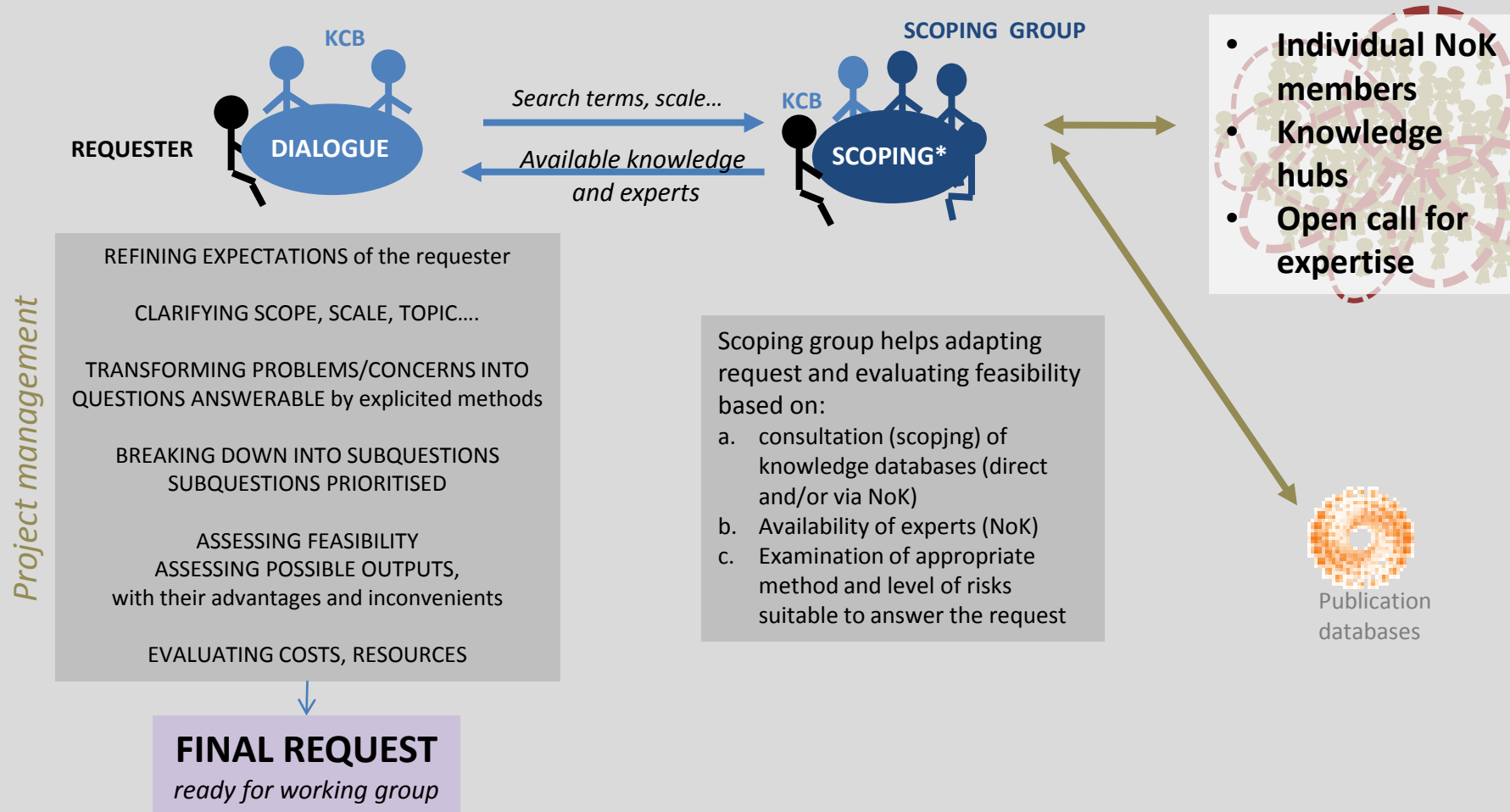
Scenario building (e.g. How will the risk of flooding change under current climate scenarios up to 2050?)

Horizon scanning (e.g. what will be the biggest novel threats to biodiversity in 2050?)

Public opinion/ perception issues (is there public support for badger culling in the UK?)

Distribution of species, diseases and other elements of biodiversity (e.g. How has the distribution and abundance of rabies in fox populations changed in the last 10 years?)

Clarification of definitions (e.g. how do different people/groups define ecosystem services?)

KCB

SCOPING GROUP

REQUESTER

DIALOGUE

Search terms, scale…

KCB

Available knowledge and experts

SCOPING*

- **Individual NoK members**
- **Knowledge hubs**
- **Open call for expertise**

Project management

REFINING EXPECTATIONS of the requester

CLARIFYING SCOPE, SCALE, TOPIC….

TRANSFORMING PROBLEMS/CONCERNS INTO QUESTIONS ANSWERABLE by explicited methods

BREAKING DOWN INTO SUBQUESTIONS
SUBQUESTIONS PRIORITISED

ASSESSING FEASIBILITY
ASSESSING POSSIBLE OUTPUTS,
with their advantages and inconvenients

EVALUATING COSTS, RESOURCES

Scoping group helps adapting request and evaluating feasibility based on:
a. consultation (scopjng) of knowledge databases (direct and/or via NoK)
b. Availability of experts (NoK)
c. Examination of appropriate method and level of risks suitable to answer the request

Publication databases

FINAL REQUEST
ready for working group

KCB   www NoK   **REQUESTER**

AGREEMENT ON FINAL REQUEST

Preliminary Protocol agreement
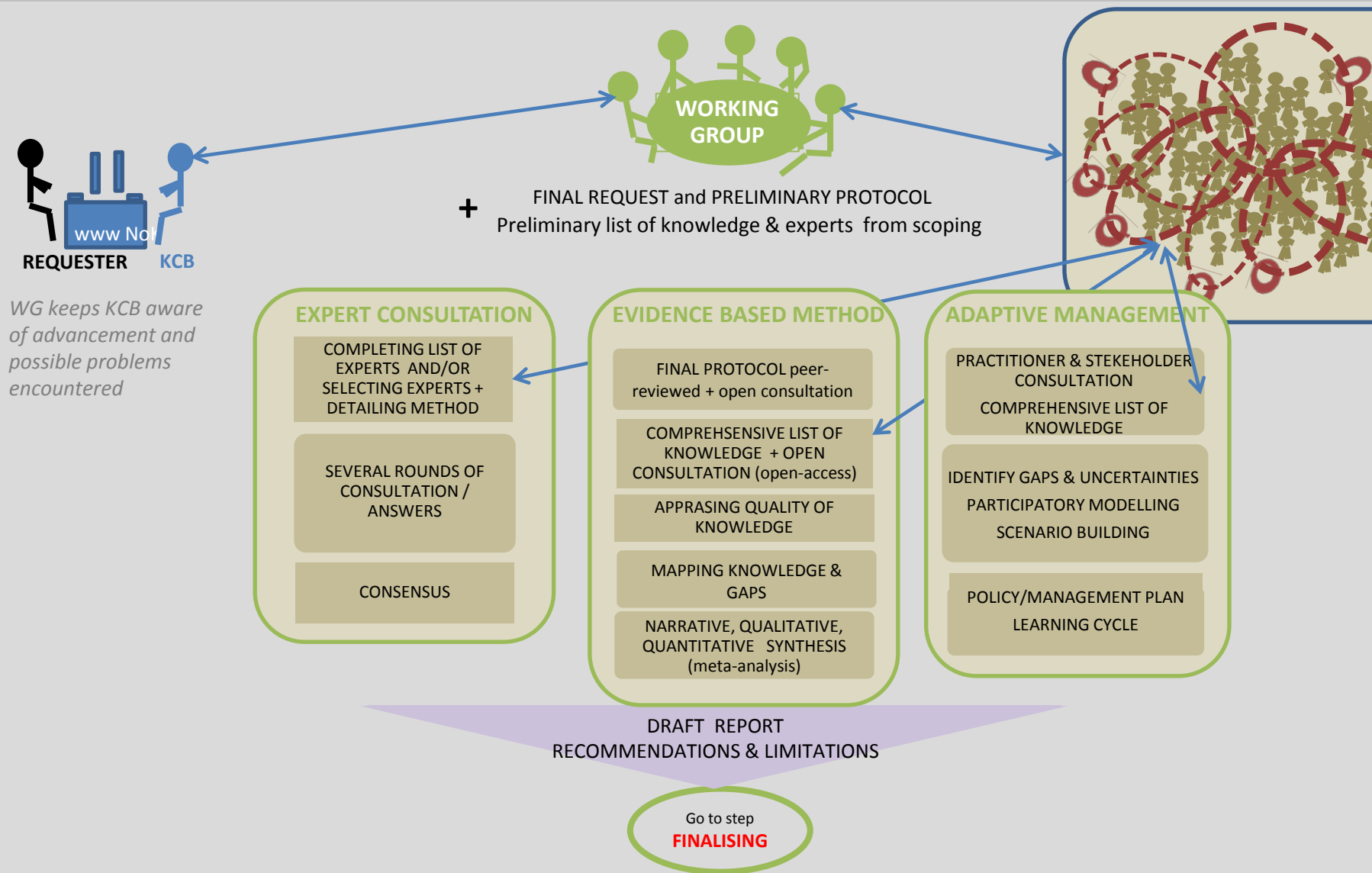
FINALISED REQUEST
PROCEDURE /APPROACH PREFERED OR COMPULSORY
TIMELINE,
FINANCIAL ASPECTS
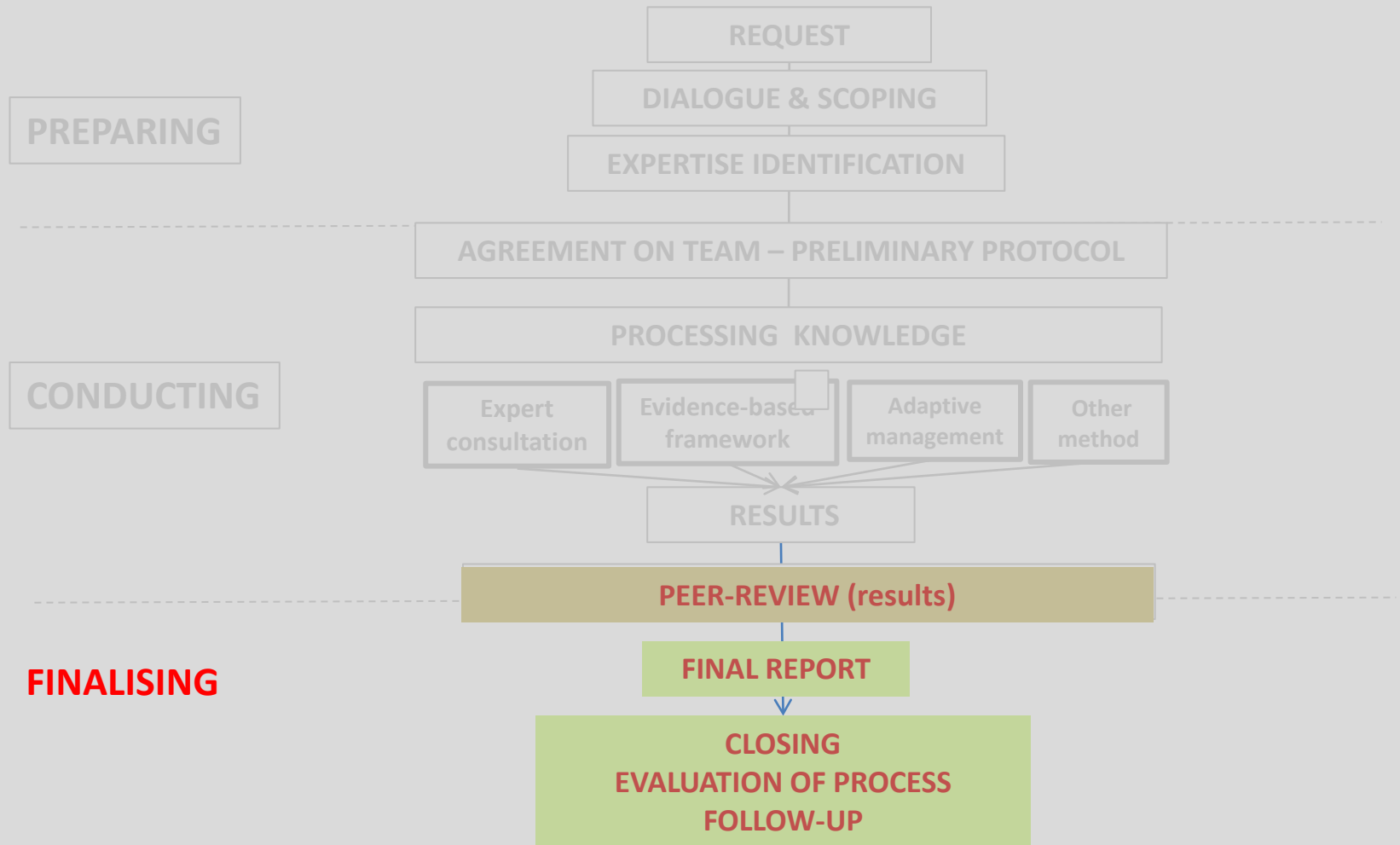
Administrative procedure, contract, complete registration

For the actual process of conducting the review, a **detailed protocol** on the steps to be taken is desirable, to ensure transparency. If the methological approach has been pre-selected, it should comply to its standards and allow the working group to refine it (e.g. which consultation process if expert consultation approach prefered by requester, which criteria will be used for the conduct of a systematic review).

WORKING GROUP

REQUESTER   KCB

www No!

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FINAL REQUEST and PRELIMINARY PROTOCOL
Preliminary list of knowledge & experts from scoping

WG keeps KCB aware of advancement and possible problems encountered

EXPERT CONSULTATION

COMPLETING LIST OF EXPERTS AND/OR SELECTING EXPERTS + DETAILING METHOD

SEVERAL ROUNDS OF CONSULTATION / ANSWERS

CONSENSUS

EVIDENCE BASED METHOD

FINAL PROTOCOL peer-reviewed + open consultation

COMPREHSENSIVE LIST OF KNOWLEDGE + OPEN CONSULTATION (open-access)

APPRASING QUALITY OF KNOWLEDGE

MAPPING KNOWLEDGE & GAPS

NARRATIVE, QUALITATIVE, QUANTITATIVE SYNTHESIS (meta-analysis)

ADAPTIVE MANAGEMENT

PRACTITIONER & STEKEHOLDER CONSULTATION

COMPREHENSIVE LIST OF KNOWLEDGE

IDENTIFY GAPS & UNCERTAINTIES
PARTICIPATORY MODELLING
SCENARIO BUILDING

POLICY/MANAGEMENT PLAN
LEARNING CYCLE

DRAFT REPORT
RECOMMENDATIONS & LIMITATIONS

Go to step
FINALISING

REQUEST

DIALOGUE & SCOPING

PREPARING

EXPERTISE IDENTIFICATION

AGREEMENT ON TEAM – PRELIMINARY PROTOCOL

PROCESSING KNOWLEDGE

CONDUCTING

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RESULTS

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FINAL REPORT

CLOSING
EVALUATION OF PROCESS
FOLLOW-UP

DRAFT REPORT

RECOMMENDATIONS

LIMITATIONS

Requester consulted at this stage to see if draft report meets requirements or requires some precision.
Must be transparent (keep track) to avoid pressure by requester to orient results or conclusions/recommendations.

www No

REQUESTER   **KCB**

Evaluators & Reviewers

Evaluation and Review

(also see checklists in Rundall et al 2007)

Quality assurance
Accuracy of information, external/internal validity, reliability, « risk assessment » / confidence, level of transparency & replicability
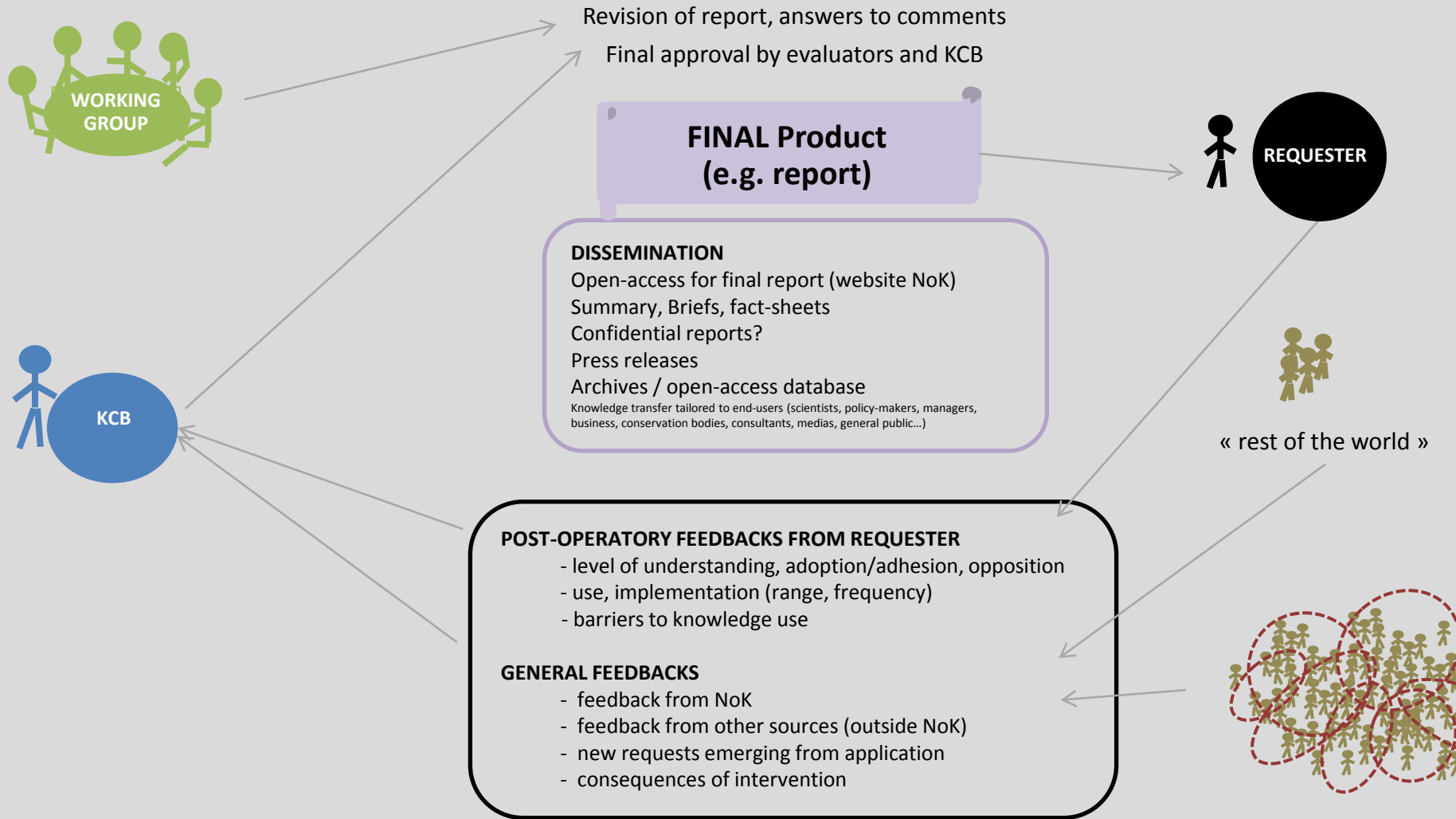
Limitations: relevance to real-world conditions, measurable indicators of performance, applicability, adequacy of the information, actionability of the evidence

Alternative options: if a dominant answer is not obvious (multiple options present themselves), the requester should be informed of the potential trade-offs associated with each option

Expected barriers: to use of synthesis, including time pressure, perceived threats to autonomy, preference for tacit knowledge, lack of resources. Suggests performance indicators

Lifespan of the answer: Anticipate need for future updating?

WORKING GROUP

Revision of report, answers to comments

Final approval by evaluators and KCB

FINAL Product (e.g. report)

REQUESTER

DISSEMINATION
Open-access for final report (website NoK)
Summary, Briefs, fact-sheets
Confidential reports?
Press releases
Archives / open-access database
Knowledge transfer tailored to end-users (scientists, policy-makers, managers, business, conservation bodies, consultants, medias, general public…)

KCB

« rest of the world »

POST-OPERATORY FEEDBACKS FROM REQUESTER
  - level of understanding, adoption/adhesion, opposition
  - use, implementation (range, frequency)
  - barriers to knowledge use

GENERAL FEEDBACKS
  - feedback from NoK
  - feedback from other sources (outside NoK)
  - new requests emerging from application
  - consequences of intervention

Acknowledgements

To all who organised and attended the workshops in Budapest, Copenhagen, Aix-en Provence, Brussels and Berlin from 2011 to 2013. Also, those who have answered questionnaires, surveys, and provided support and feedback at different stages.

Without they input, this prototype would have never gone so far into details. We have learnt a lot from our exchanges, our various backgrounds, expertise and visons, from our different cultures.

To all participants in the Demonstration cases of the KNEU project carried out between May 2012 and May 2013. Their input and feedback in terms of the process as well as the methods applied helped strengthening the process on the NoK.

KEY REFERENCES

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-- Graham, I. D. *Translating knowledge into action: strategies for bridging the gap between research, policy and practice.* Available at: <http://clahrc-sy.nihr.ac.uk/images/KEE-presentations/day1/morning/Dr Graham CLAHRC October 2010 .pdf> (also: Graham, I.D., Logan, J., Harrison, M.B. et al. *Lost in knowledge translation: time for a map?*.J. Continuing education in the health professions 2006: 26, 13-24)

- NICE, National Institute for Health & Clinical excellence. www.nice.org.uk

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--Seventh Framework Programme Theme ENV.2010.2.1.4-3 *Developing a European scientific biodiversity Network to inform policy-making and economic actors* (PDF document distributed to all partners, 55p) –(KNEU)