KU LEUVEN

Ethical Commission Dual Use, Military Use & Misuse including Human Rights Assessment

Ludo Froyen (chair EC DMM – KU Leuven)

Dual use, military use and misuse in an academic context

- Legal aspects e.g. export control of dual-use items

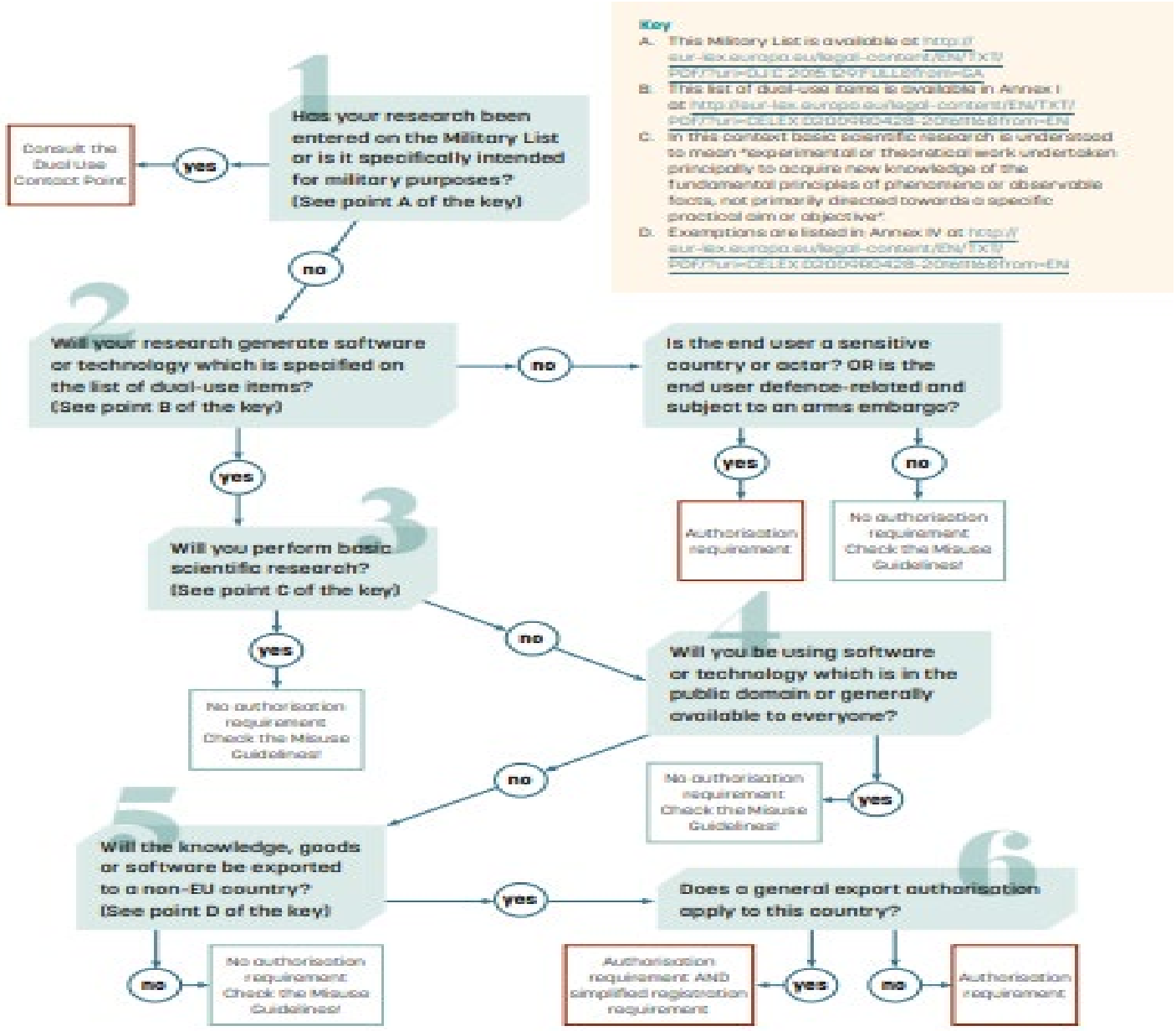
  The European legislation on the export of dual-use items (Council Regulation (EC) No 2021/821) requires that the EU countries take appropriate control measures to counter the undesirable and uncontrolled proliferation of dual-use items, software and knowledge specified on the dual-use control list to non-EU countries

- Ethical aspects

VLIR Guidelines for researchers on dual use and misuse of research (Oct 2017)

Institutions and funding bodies aim to raise researchers' **awareness** of the issues relating to dual use and misuse of research and help them to handle this appropriately.

Researchers indeed have a legal and **ethical obligation** to prevent or mitigate as much as possible the risks and potential damage which may be caused by malicious use of their research results.



Legal aspects e.g. export control of dual-use items

Source: VLIR Guidelines for researchers on dual use and misuse

KU LEUVEN

Ethical aspects

- KU Leuven promotes **ethical responsible research:**
  - Primarily invest in research with purely **civil applications**
  - Priority attention to **peacebuilding, conflict prevention, conflict management** and **respect for human rights**
  - Defence related research ***can*** in some cases be justified (e.g. geopolitical stability*)
  - KU Leuven **excludes** research of into purely **offensive weapon systems** (cf. decre Flemish government)

- (Academic) freedom of researcher is not unlimited (should fit within the KU Leuven vision concerning defence related research)

* *e.g. supported by European Defence Agency, European Defence Industrial Development Programme, DARPA, …*

Academic research and responsability

It is primarily the **responsibility of the researcher**

- to assess the possible positive and/or negative consequences of his/her research
- to estimate whether it is desirable to conduct this research and whether it is necessary to build in safeguards to exclude or mitigate as much as possible eventual negative impact of the research

Some definitions

- **dual use:** *research that has the potential also for military applications*
- **military or defence related research:** *research with a military end goal, research financed by a military department, a company in defence technology, …*
- **misuse**: *research that has the potential for malevolent / criminal / terrorist abuse (risk assessment needed!)*

Context (defence related research)

- Substantial investments in military R&D by the **EC**: **European Defence Fund (EDF)** – €7.953 billion for the period 2021 – 2027 *

  = research for innovative military technologies and products

- Increase of the R&D budget of the **Belgian** Department of Defence (e.g. DEFRA projects)

*Target group: SMEs, Large Enterprises, Government, *Knowledge Centers*

The Dual-Use Dilemma

Free Research

- essential for progress of science (raise own scientific questions and address these independently, share data…)
- in Germany protected by the Constitution

Research Risks

- unintended harmful consequences
- deliberate "misuse" of research results and methods by third parties (attack, defense, crime, terror, repression …)

What are the limits of research?
How and by whom are these limits determined?
How can adherence to these limits be enforced?

07.03.2022, Flemish universities' Dual Use WG | Responsible Handling of Security-Relevant Research in Germany | 8

Source: Presentation by Johannes Fritsch (Leopoldina - Germany)

Starting point

Researcher is the primary **responsible** person:

- Trade-off of the potential positive/negative consequences of her/his research
- Assessment of the appropriateness of the planned research
- Plan to exclude or to mitigate the potential negative impact of the research

EC DMM is available for advice and evaluation

Flowchart for the researcher

1. Will you involve human participants in your research, or will you make use of human embryos, human bodily material and/or human data?
2. Will you process personal data?
3. Will you conduct a research experiment using animals?
4. Does your project involve research that can be used for both civil and military purposes (dual-use research) or that could be misused for unethical purposes?
5. Will you conduct research with a potential impact on human rights?
6. Will you use non-human genetic resources and/or traditional knowledge associated with genetic resources?
7. Does your research raise potential safety risks for the researchers involved in the project or the environment?
8. Does your research poses potential security risks for the researcher because of the need to travel to higher-risk areas abroad?

Role EC DMM

The Ethics Committee on "Dual Use, Military Use & Misuse of Research" (EC DMM) **evaluates** project proposals with **potential risks** related to dual use, military use or misuse of research

The EC DMM is also responsible for the evaluation of research that is **potentially problematic in terms of human rights**

EC DMM

- Researchers can consult the EC DMM for a formal (binding) ethical evaluation (see flow chart) (advice and/or evaluation)

- The committee uses a **multi-factorial approach weighing** the following aspects:
  - research topic
  - funding body
  - consortium partner(s)
  - end use(r)

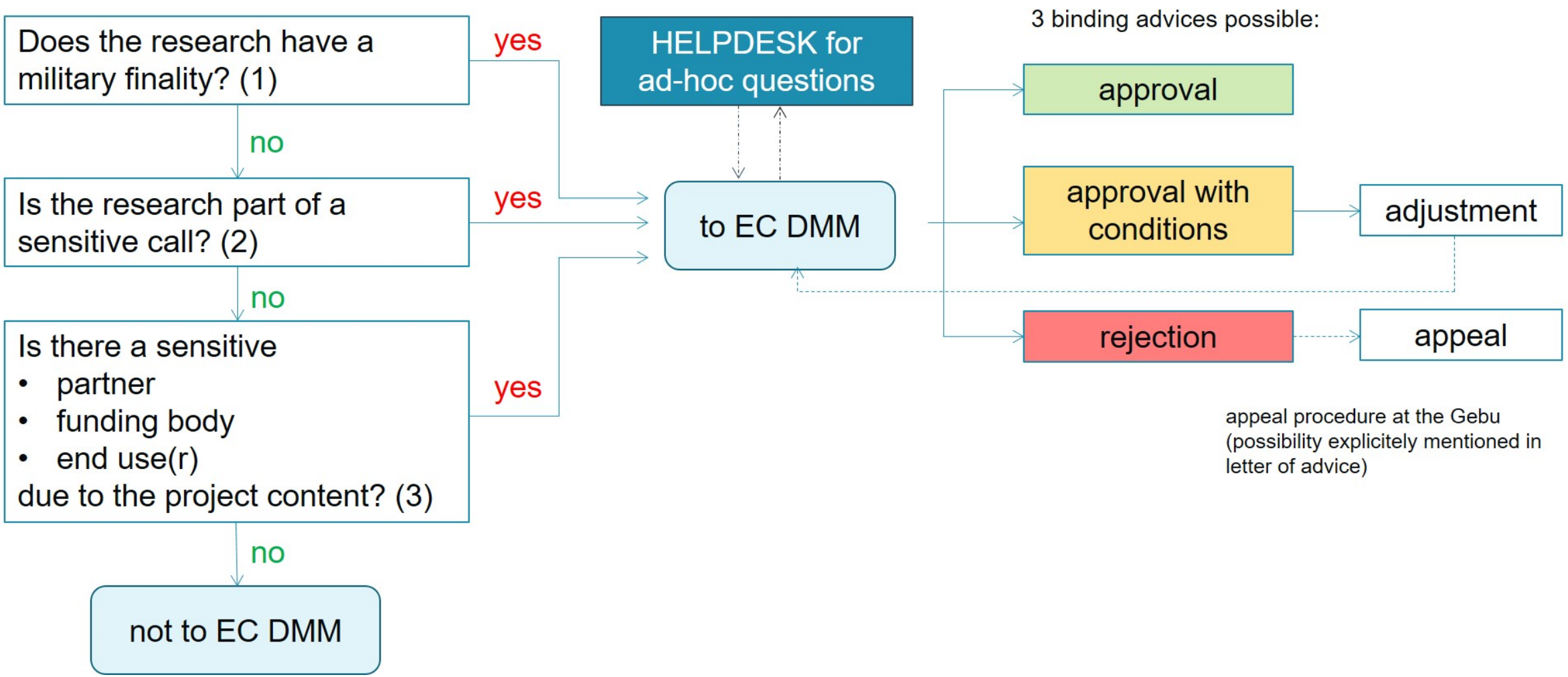
Flow chart EC DMM

Flow chart to guide

- researchers
- supporting services (DOC, LRD)

in assessing whether a project should be submitted to EC DMM for evaluation

Flow chart applies to all types of research and forms of collaboration (research supported by public funding, contract research funded by companies, collaborations between academic institutions, …)


Does the research have a military finality? (1)
yes
no
Is the research part of a sensitive call? (2)
yes
no
Is there a sensitive
• partner
• funding body
• end use(r)
due to the project content? (3)
yes
no
not to EC DMM
HELPDESK for ad-hoc questions
to EC DMM
3 binding advices possible:
approval
approval with conditions
adjustment
rejection
appeal
appeal procedure at the Gebu (possibility explicitely mentioned in letter of advice)

KU LEUVEN

Human Rights Assessment

Starting point

"Aanbevelingen voor de invoering van een mensenrechtentoets aan de Vlaamse universiteiten Rapport van de ad hoc VLIR-werkgroep Mensenrechten" *

23 Octobre 2019

* Chair Stephan Parmentier

KU Leuven has adopted an unambiguous Human Rights Policy, which applies to all agreements concluded with third parties in the context of **research, education and service to society**.

KU Leuven does not want to cooperate with *parties* which are directly involved in gross and/or systematic violations of human rights, nor does it want to participate in *projects* which may directly or indirectly lead to gross and/or systematic violations of human rights.

Help in assessing new agreements

Two aspects are important in assessment of agreement with partner:

- partner itself
- intended activity

The intended partner

- Has the partner been **involved** in gross and/or systematic human rights violations in the recent past?
- Has the partner been **accused** of gross and/or systematic human rights violations in the recent past?
- Is the partner **active** in a sector linked to gross and/or systematic human rights violations?
- Does the partner **come from a region** known for its gross and/or systematic human rights violations or is the partner (institution) situated in such a region?

The intended activity

- Can the **cooperation** as such lead to serious and/or systematic violations of human rights?
- Can the **results** of the cooperation lead to serious and/or systematic violations of human rights?
- Is there a risk of serious and/or systematic human rights violations in the **context** of the project?

Guidelines

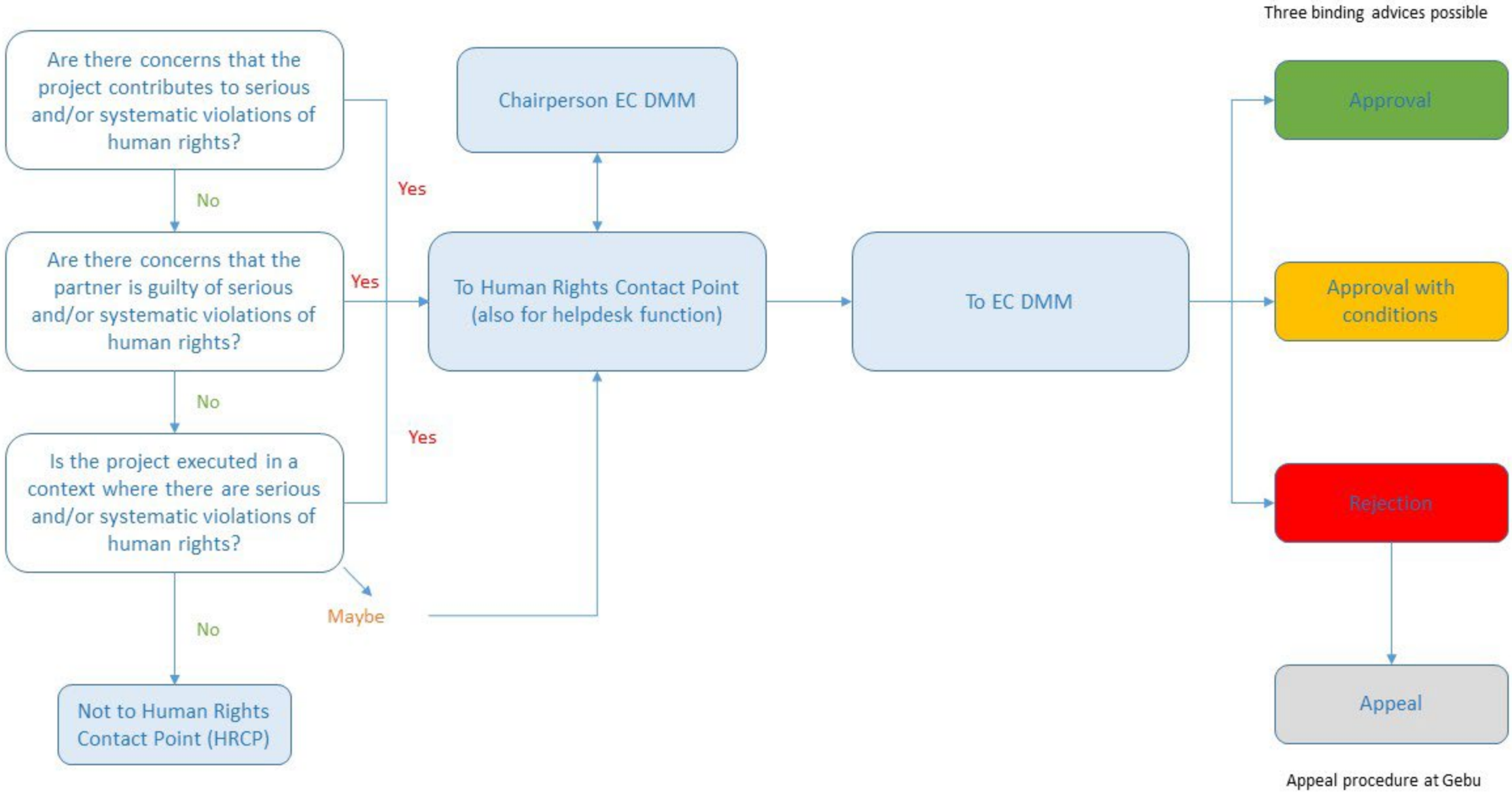
KU Leuven follows the following guidelines

- *International Covenant on Civil and Political Rights* (ICCPR)
- *International Covenant on Economic, Social and Cultural Rights* (ICESCR)

Examples of problematic partners and activities

- Academic partner that ***systematically discriminates*** against certain groups of people or employees because of their political opinions
- Non-academic partners that use ***child labour***
- (Academic or non-academic) partners that actively ***contribute*** to serious human rights violations *committed by a national government*
- Activities that ***discriminate against*** certain groups of people, e.g. joint PhD programme not open to people of particular ethnicity
- …

- EC DMM will always investigate both **partner** organisation and **planned** activities
- EC DMM advice will **never** be **solely** based on information about country in which organisation is active


Three binding advices possible
Are there concerns that the project contributes to serious and/or systematic violations of human rights?
No
Are there concerns that the partner is guilty of serious and/or systematic violations of human rights?
No
Is the project executed in a context where there are serious and/or systematic violations of human rights?
No
Not to Human Rights Contact Point (HRCP)
Yes
Yes
Yes
Maybe
Chairperson EC DMM
To Human Rights Contact Point (also for helpdesk function)
To EC DMM
Approval
Approval with conditions
Rejection
Appeal
Appeal procedure at Gebu

Some typical examples in academic research

Artificial intelligence

Behavioral science

Border control systems

Encryptography

Materials research and nanotechnology

Robotics

Virus research

...

Overview EC DMM advice applications

	Number of applications	Advice (pos/neg)
2014	1	1 positive advice
2015	5	5 positive advices
2016	8	8 positive advices, 3 with extra conditions
2017	8	8 positive advices, 1 with extra conditions
2018	34	32 positive advices, 9 with extra conditions, 2 negative advices
2019	37	35 positive advices, 9 with extra conditions, 2 negative advices
2020	48	46 positive advices, 16 with extra conditions, 2 negative advices

KU Leuven: 16 faculties

HUMANITIES & SOCIAL SCIENCES

- Instituut of Philosophy
- Theology and Religious Studies
- Law
- Economics and Business
- Social Sciences
- Arts
- Psychology and Educational Sciences
- Associated Faculty of the Arts

SCIENCE, ENGINEERING & TECHNOLOGY

- Science
- Engineering Science
- Bioscience Engineering
- Engineering Technology
- Architecture

BIOMEDICAL SCIENCES

- Medicine
- Pharmaceutical Sciences
- Movement and Rehabilitation Sciences

Composition EC-DMM (16 members)

1. Chair
2. Hoger Instituut voor Wijsbegeerte, Centrum voor Ethiek, Sociale en Politieke Filosofie, ethicus
3. Faculteit Economie en Bedrijfswetenschappen
4. Faculteit Rechtsgeleerdheid, Onderzoekseenheid KU Leuven Centrum voor IT & IE Recht
5. Faculteit Rechtsgeleerdheid, Leuvens Instituut voor Criminologie, expert human rights
6. Faculteit Geneeskunde, Departement Cellulaire en Moleculaire Geneeskunde
7. Faculteit Geneeskunde, Laboratorium Virologie en Chemotherapie
8. Faculteit Geneeskunde, Laboratorium voor Klinische Microbiologie
9. Faculteit Industriële Ingenieurswetenschappen, ethicus
10. Faculteit Bio-ingenieurswetenschappen, Departement Biosystemen en Ethiek @ Arenberg
11. Faculteit Ingenieurswetenschappen, Departement Werktuigkunde
12. Faculteit Ingenieurswetenschappen, Departement Elektrotechniek
13. Faculteit Industriële Ingenieurswetenschappen, Departement Computerwetenschappen, expert human rights
14. LRD, observer
15. DOC, observer
16. International Office, observer, expert human rights

Concluding remarks

Awareness (researcher and institute)

Attitude (engagement of researcher)

Application (TRL)