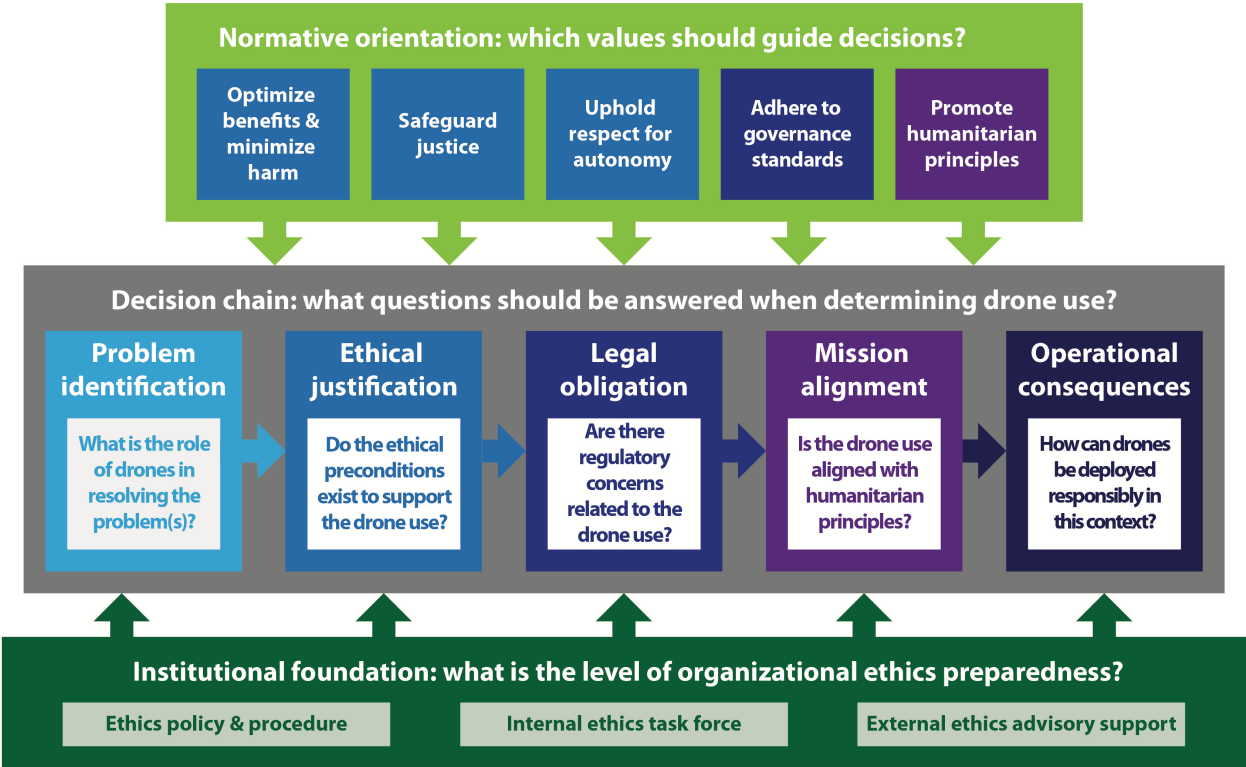# Framework for the Ethics Assessment of Humanitarian Drones (FEAHD)

Framework for the Ethics Assessment of Humanitarian Drones (FEAHD)

Normative orientation: which values should guide decisions?

| Optimize benefits & minimize harm | Safeguard justice | Uphold respect for autonomy | Adhere to governance standards | Promote humanitarian principles |

Decision chain: what questions should be answered when determining drone use?

Problem identification	Ethical justification	Legal obligation	Mission alignment	Operational consequences
What is the role of drones in resolving the problem(s)?	Do the ethical preconditions exist to support the drone use?	Are there regulatory concerns related to the drone use?	Is the drone use aligned with humanitarian principles?	How can drones be deployed responsibly in this context?

Institutional foundation: what is the level of organizational ethics preparedness?

| Ethics policy & procedure | Internal ethics task force | External ethics advisory support |

In this document, we provide primary questions and components of the FEAHD. These questions are proposed with the aim of supporting teams or individuals using the framework to drill down and consider further aspects of a particular topic across the decision-chain or of ethics preparedness. It is not intended that users of the framework consider all of these questions, but rather that they use them as prompts as they dial in or dial out their attention between the broader structure of the FEAHD, and looking more closely at a particular dimension – all with the goal of supporting attention to values across the different stages of humanitarian use of drones.

I.   Normative Orientation: Which values should guide decisions?

Deciding whether and how to embark on a drone project in the aid sector will benefit from attention to how values can be linked to practices through a clear normative orientation. As a starting place for reflection about the humanitarian use of drones, the FEAHD proposes five value orientations based on a review of the literature on ethical issues related to humanitarian drone use, insights gained from field studies, and a series of expert consultations. These values include the following:

- **Optimize benefits, minimize harm**
- **Safeguard justice**
- **Uphold respect for autonomy**
- **Adhere to governance standards**
- **Promote humanitarian principles**

II.   Decision Chain: What questions should be answered when determining drone use?

The decision chain proposes a sequence of key questions that should be asked and answered in making the strategic decision regarding whether and how to use drones in a specified context, and in relation to the five principles noted above. Additional questions are presented below which are linked to each of the main steps of the decision chain. This bank of additional questions is intended to support further lines of reflection for those seeking to delve deeper into a specific component of the decision chain.

- **Problem identification: What is the role of drones in resolving the problem(s)?**
  - *What is the problem?*
    - Is there a lack of imagery for monitoring or mapping purposes?
    - Are there challenges for the timely delivery of emergency or medical supplies?
    - Are there unreliable or unavailable telecommunications in the proposed operations?
  - *What is the context of the proposed drone use?*
    - Have drones already been used in this locale?
    - What is the legacy of prior drone activities?
    - What is the general level of literacy, both educational and technological, of the community members of this locale?
    - Have governments made long-term commitments regarding the use of drones in this locale? What is the leadership structure?

- *Who are the key stakeholders?*
  - Are there any donors involved? What are their specific interests and expectations?
  - Which governmental authorities will be involved (regulatory bodies, relevant ministries, etc)?
  - What are the relationships between the organisations and the local government as well as key donors?
  - Who are the technical personnel (drone manufacturers, operators, service providers, etc)?
  - Which communities will be involved? What are their needs and expectations?
  - What is required for the organizations to interact with the other identified stakeholders?
  - What are the most appropriate stakeholder engagement strategies?

- **Ethical justification: Do the ethical preconditions exist to support drone use in this context?**
  - *What are the potential harms and benefits?*
    - What are the actual or potential harms that may arise for the involved communities, or to the local environment, due to the proposed drone operations?
    - What are the measures to avoid or mitigate any potential harms?
    - How can the ethical and legal obligations of optimizing benefits and minimizing harms be fulfilled?
  - *How can justice be safeguarded?*
    - Are costs and benefits shared fairly among the stakeholders?
    - Will all affected stakeholders have equitable access to the resources or benefits that the use of drones will generate?
    - Will the costs incurred justify the need to introduce the proposed operations?
    - Is the use of drones cost-effective based on the existing knowledge and evidence?
  - *How can respect be demonstrated?*
    - Are the involved communities aware of the introduction of the proposed drone operations? Might it disrupt existing relationships?
    - How will communities be engaged and consulted in the project development?
    - What are the ways in which the community members may be informed of the proposed drone operations?
    - Are there dedicated task forces, budget, and communication strategies to proactively engage the involved communities?

o Do the involved communities have prior knowledge of, or experience with, drones?

o What expectations and understandings exist related to "informed consent", as well as its operational process?

o What are community members' expectations regarding their participation in the process, as well as the outcome of the proposed operations?

o Has the fair sharing of benefits between the involved communities and the operations teams been appropriately assessed?

o In the case where the involved communities disagree with or reject the proposed operations, what are the alternative solutions to resolve the identified problem(s)?

- **Legal obligation: Are there regulatory concerns related to the drone use?**

  o Are there regulatory and compliance aspects relevant to the proposed operations?

  o Which authorities are involved, and what policies must be adhered to?

  o Are there dedicated personnel to coordinate the regulatory aspects of the proposed operations?

  o Are there any internal compliance procedures that can help manage these processes?

  o Are there specific regulations for anticipated risks related to the aspects of safety, airspace, environment, and data protection?

  o Are there any existing regulations or policies governing the involvement of the identified stakeholders (e.g., conflict of interest)?

  o In the absence of local regulatory frameworks, is there alternative legal guidance which can be relied upon (e.g., from the home countries of the operations teams)?

  o Who will be accountable if things go wrong?

- **Mission alignment: Is the drone use aligned with humanitarian principles?**

  o Could the introduction of new technology potentially undermine the humanitarian principles of neutrality, impartiality, independence, and humanity, or other committed principles, such as the Sustainable Development Goals (SDGs)?

  o Will the use of new technology pose potential reputational risks to your organization? If so, what are the mitigation measures?

  o Are the roles and responsibilities of involved stakeholders well defined, and clearly communicated, prior to their engagement?

- In the case where there may be trade-offs between the proposed solution(s) and inaction (e.g., imbalanced harm-benefits assessment), are there any alternatives to help resolve the identified problem(s)?

- **Operational consequences: How should drones be deployed responsibly in this context?**
  - *What is the level of involvement and related responsibilities regarding the management of the proposed drone operations?*
    - What type and degree of inhouse operational expertise is currently available to your organization?
    - Will your organization collaborate with external service providers? What are the terms and conditions of these collaborations?
    - Will outsourcing the entire operations as well as related responsibilities to third parties be an option?
    - Are there any third-party organizations based in the locality of the proposed operations, which your organization could work with?
  - *What are the technical conditions required to manage the proposed drone operations?*
    - What type of drones should be deployed?
    - How many drones should be purchased?
    - How frequent should the drone flights be (e.g., short intervals *vs.* continuous flights)?
    - Are there any adverse factors that may become barriers for drone flights (e.g., weather or connectivity conditions)?
    - What are the anticipated risks in terms of safety, including human, environmental, as well as data safety?
    - Are there any compliance procedures or measures developed, or needing to be developed, to ensure safety and to assist risk mitigation?
  - *Will pilot study be conducted prior to the proposed operations?*
    - Have all technical issues related to safety and security, including human, environmental and data aspects, been properly addressed prior to full operations?
    - Are funds available to allow full operations after the pilot study?
    - Have the immediate as well as mid- and long-term outcomes been reasonably defined prior to full operations?
    - What is the estimated scope of work and timeline vis-à-vis committed human and financial resources for full operations?

- o In the case where donor funds are exhausted, is there any plan B to continue the proposed operations to achieve the intended objectives?
- o Has an equitable data ownership and sharing plan been established at the onset of the proposed operations?
- *How will operations be conducted?*
  - o Are the proposed solutions likely to be long-term and sustainable ones for local governments and communities?
  - o Has there been any industry lobbying or nudging with respect to the deployment of the proposed technology?
  - o What are the impacts of the proposed technology with respect to job creation or skill formation for the country or region in which the operations will take place?
  - o Are there any local capacity building activities being envisaged, and what are the specific strategies?
  - o Can entities within the country manage the full operations independently in the long run?
- *Will a final evaluation be conducted after the operations?*
  - o Has any internal reporting system been established? Have periodic field reports been developed?
  - o What is the appropriate procedure for mid- and end-term evaluation of the proposed operations?
  - o How will accountabilities to communities as well as to donors be addressed throughout the operations?
  - o What are the key performance indicators or core criteria for the evaluation of the operations?
  - o Who will own the data obtained from the operations as well as the evaluation? Who has access to the data?

III. Institutional Foundation: What is the level of organizational ethics preparedness?

Ethics preparedness concerns the structures and processes in place to support an organization's ability for handling ethical issues. A range of resources may contribute to organizational ethics preparedness including policies or guidelines, internal organizational structures such as ethics tasks forces, or external organisational mechanisms such as ethics advisory boards.

- **Ethics Policy and Procedure: What policies and procedures exist or are needed in your organization to support ethics preparedness?**
  - What policies and procedures are in place in your organization, which could provide guidance related to ethical concerns?
  - To what extent are the existing policies and procedures applicable to this particular context?
  - What resources are needed, and what potential costs will be incurred, to establish ethics policies and procedures to respond to any gaps?

- **Internal Ethics Task Force: Is it feasible to establish a dedicated ethics support structure within your organization?**
  - Is identifying a responsible point of contact with an ethics advisory role a realistic institutional setup for your organization?
  - What are the resources needed to set up an ad hoc ethics task force? Would this be helpful?
  - What should be the defined responsibilities of an internal ethics advisor or task force?

- **External Ethics Advisory Support: What are the possibilities for external ethics advisory support?**
  - Would it be beneficial to access external ethics advisory support? Does such a service exist for your organization?
  - How responsive are existing advisory supports? Are there any bureaucratic hurdles in seeking guidance from them?
  - How effective are existing advisory supports to which you can access?
  - Is the composition of the advisory support a good fit for addressing the needs of your organization (e.g., including legal and compliance expertise)?