

RISKS, HARMS AND BENEFITS ASSESSMENT, LEVEL 2

The Risks, Harms and Benefits Assessment, Level 1 and 2: The Assessment consists of two steps: (I) Risks, Harms and Benefits Assessment, Level 1 (“Checklist”), and (II) Risks, Harms and Benefits Assessment, Level 2. The Level 1 Assessment/Checklist is a preliminary assessment of the data use. The Level 2 Assessment should be completed when the initial assessment (Level 1 Assessment/Checklist) identified medium or high risks or harms for data use.

Team Composition: It is recommended that the Level 2 Assessment is completed and reviewed by a team or a review board of at least four (4) members with varying backgrounds (e.g. project manager, data scientist, privacy specialist and/or legal counsel, and data security specialist) to ensure complete and adequate review of the project.

If the activity involves a vulnerable segment of the population, such as children, disabled persons etc., the team or board should consider the inclusion of one or more individuals who are knowledgeable about and experienced in working with the type of vulnerable population concerned, if reasonably practical.

Where reasonably possible and beneficial, the team or board should consider including a member who is independent from the institution performing the activity. Each team or review board member should be sufficiently qualified in their field of expertise. In addition to possessing the professional competencies necessary to review specific activities, the team or board must be able to determine the acceptability of the proposed project with the mandates and guiding principles of its institution, applicable law, and community standards.

Documentation of the Level 2 Assessment: The record of the team or board's discussion should be kept in sufficient detail, and should include attendance during each discussion; actions taken; the opinion on actions taken; the basis for requiring changes in or for not approving the project; and a written summary of the discussion of debated issues and their resolution. The record should be securely preserved for appropriate review and audit by authorized personnel of the organization, and for potential compliance purposes. The records should be securely preserved for a reasonable period of time, but not less than the duration of the project, and until after the data used for the project's purposes is deleted. Alternatively, the record of the discussion could be included and made part of the Level 2 Assessment.

Context: In doing the Level 2 Assessment, it is recommended to consider the context, and the way that the individual (or groups of individuals) may be experiencing the positive impact or harm. The culture in which the individual or groups of individuals whose data is being used live, their customs, norms, habits or beliefs, as well as how they would assess the positive impact or harm should be taken into account. This Assessment should also consider any special vulnerabilities (e.g. children, women, people with disabilities, elderly, IDPs, refugees, etc.) of the individuals or groups of individuals that may be affected.

Training and awareness: A training program should be considered to train personnel in risk reduction and benefit maximization techniques and in other important aspects of designing and implementing projects that minimize harm and maximize benefits of data use for public good.

Nature of the Assessment, Level 1 and 2: This Assessment is not a legal document and is not based on any specific national law. It draws inspiration from international and regional frameworks concerning data privacy and data protection. The document provides only a minimum set of questions and guiding comments. The Assessment, Level 1 and 2, and its guiding comments are designed primarily as a general example for internal self-regulation and the balancing tool of risks and benefits for data use and non-use. As this Assessment offers only minimum guidance, anyone using it is encouraged to expand the list in response to the evolving data landscape or depending on the project's needs, risks, or specific context. Depending on the implementing organization (its legal status/nature) and applicable laws, the guiding principles, standards and basis for answering these questions may also need to be changed.

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For more information or to provide input on the Assessment, please contact dataprivacy@unglobalpulse.org. This Assessment is a living document and will change over time in response to the evolving data landscape. The latest version of the Risks, Harms and Benefits Assessment is available at unglobalpulse.org/policy/risk-assessment/.

For more information on the privacy protective and ethical use of data, please refer to the [Principles on the Protection of Personal Data and Privacy](#) adopted by the UN HLCM in 2018¹, and the [UNDG Data Privacy, Ethics and Protection Guidance Note](#) (2017)².

¹ Principles on Personal Data Protection and Privacy for the UN System Organizations (2018).

² Data Privacy, Ethics and Protection, a Guidance Note on Big Data for Achievement of the 2030 Agenda, United Nations Development Group (2017).

Instructions for completion

Parts 1, 2, and 3 assess the: 1) positive impact, 2) risks, and 3) harms inherent in the project. After completing these three steps, you will then proceed to Part 4, which instructs you to assess the likelihood of risks. At this stage, each team member will weigh the likelihood of risks against the positive impact of the project in order to determine if and how you should proceed with the project.

Part 1: Assessing the Purpose and Positive Impact

This section may be largely based on the Level 1 Assessment, and you may include the same or similar information from the Level 1 Assessment in Section 1.1 below. This Part 1 will help you with the risk- benefit assessment and risk mitigation decisions. The following set of questions is designed to identify the positive impact expected to result from your project, and assess its magnitude, significance, and likelihood. In answering questions 1.2-1.4, please consider consulting with the domain experts (for example, in a pandemic study, consult with an epidemiologist(s)) and data scientists to ensure that the data is sufficiently complete, sufficient, relevant, etc., to allow the project to achieve its goal).

1.1 Identify Purpose and Positive Impact

Please provide a brief (text) description of the project, and explain the project's purpose, as well as the positive impact you expect to achieve, if the project is successful. Your response should include answers to the following questions:

- Is there a problem or unexplored issue that this project serves to address or explore?
- What is that positive social, environmental, cultural, or political impact, etc.?
- What is the positive impact on the achievement of the Sustainable Development Goals (SDGs)? Identify a concrete SDG that will be affected by this project (if any).

1.2 Assess the Likelihood, Magnitude, and Significance of the Expected Positive Impact

STEP	ESTIMATED MEASUREMENT*	COMMENTS	INSTRUCTIONS/NOTES
Assess the likelihood of the expected positive impact			*Units of Measurement. Please indicate the likelihood as a percentage (%). Likelihood is defined here as the probability of the impact occurring (e.g., how likely is it that the project you are undertaking will be successful in achieving its goal?)
Assess the magnitude of the expected positive impact			*Units of Measurement. Please indicate the magnitude as an estimated number of people that could be affected.
Assess the significance of the expected positive impact**			<p>*Units of Measurement. Please include a ranking of the expected positive impact's significance on a scale from 1 (least) to 7 (most).</p> <p>**Significance calls for a qualitative assessment (e.g., improving health vs saving life vs saving money. Note that in most cultures saving life will likely have the highest significance). In considering the significance please also take into account 1) the nature of the impact; 2) the value of project's contribution to the achievement of the positive impact; 3) the imminence of the impact (e.g. Is this a research project that should further advance the understanding of the potential approaches? Or, are you actively developing a solution that will be used to impact the lives of people directly in the near future?)</p>

Part 2: Assessing the Likelihood of the Risks

This section may be largely based on the Level 1 Assessment and you may include the same or similar information from the Level 1 Assessment in Section 2.1 below. The following set of questions is designed to assist you in identifying the potential risks that could result from your project and its use of data, and their likelihood. Please express the likelihood as a percentage (%). Likelihood is how you estimate the probability of the impact occurring (e.g., how likely is it that the project you are undertaking will be successful in achieving its goal?). Please consider the mitigation factors listed in the Annex "Risk Mitigation."

2.1 Assess Some of the Following Common Risks

A. RISK	B. ESTIMATED MEASUREMENT	C. COMMENTS	D. INSTRUCTIONS/NOTES
<p>Leakage: What is the likelihood of unintentional leakage or unintentional disclosure of either the raw data or of the information/knowledge resulting from your analysis of the data?</p>			<p><i>Consider the vulnerabilities of your security system. In answering this question, consider the likelihood of the risk occurring due to the actions (a) of a member of the project team; (b) of known third parties (e.g., government, research partners); who have requested or may have access, or who may be motivated to get access in order to misuse the data and information; (c) by unknown third parties (e.g. due to hackers or other malactors).</i></p>
<p>Intentional Unauthorized Disclosure: What is the likelihood of intentional unauthorized disclosure by a member of your project?</p>			<p><i>Consider the make-up and motives of your team to disclose to unauthorized third parties?</i></p>
<p>Destruction: What is the likelihood of a physical destruction of the data, due to different technical/mechanical problems?</p>			<p><i>Consider the vulnerabilities of your technical system. In answering this question, consider the likelihood of the risk occurring due to the actions (a) of an unexperienced member of the project team; (b) due to the non-existence of back ups.</i></p>

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<p>Misuse Risk: What is the likelihood of the raw data or the information/knowledge resulting from your analysis of the data being misused or reused for a purpose not authorised by your organisation?</p>			<p><i>This question calls for an assessment of the misuse risk due to (a) the actions of team members; (b) of third parties who get access in an improper manner and (c) third parties who get access in a proper manner through your release, publication and authorized disclosure of your data, results or report.</i></p>
<p>Re-identification Risk: What is the likelihood of the risk that any non-personal, de-identified, aggregated, or pseudonymised data will be used to identify an individual?</p>			<p><i>Consider the likelihood that someone will have the right measures and means to re-identify the data, taking into account the level of effort, resources and time that might be needed to re-identify the data. Also note the increasingly robust ability to re-identify people from snippets of information such as identification numbers, birth dates, zip codes, emails, IP addresses, telephone numbers, cell tower or geo-location information, etc., when combined with publicly available information or other sources of information.</i></p>
<p>Legal Risk: What is the likelihood of your collection, analysis or other use of the data being non-compliant with the law (including privacy laws) or with contractual obligations?</p>			<p><i>See any relevant policy, law or standards applicable to your organisation. In addition, be sure to verify the terms of the agreements: (a) signed and by which your organisation is bound with regard to data handling; (b) any other terms and conditions which may apply to the data that you are considering using for your project (e.g., Terms of Use presented by the data provider at the time of collection - such as click through agreements online) or (c) any other licenses or sticky policies that your dataset may have.</i></p>
<p>Data Quality: What is the likelihood of your data being inaccurate, not up to date, or irrelevant to the project's purposes?</p>			<p><i>Consider that an inaccurate data set could cause an incorrect operational decision, create a certain bias, or deprive certain groups (that were not accounted for in the dataset) of critical aid. Ensure that you have consulted with data scientists and</i></p>

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			<p><i>data analysts to help you answer this question and in order to ensure that your data is as accurate and as complete as possible. It is recommended that you ensure that every data analysis involves human expertise, to provide contextual and human characteristics and to reduce bias in the data set. Supplementing and correlating your dataset with other ground truth data could also help to enhance the quality of your data and of decisions made based on the analysis of your data.</i></p>
<p>Creating New Data: What is the likelihood that your project will create new data sets which may be potentially sensitive?</p>			<p><i>At times, creation of a new data set could create unexpected or unintended risks. Should your project's results lead to the creation of a new data set, possibly a derivate of your initial data use, you may want to consider potential risks associated with the use of this new data set and conduct a separate Assessment, Level 1 for this new data set. Depending on the outcome of your initial Assessment, you may need to conduct Assessment Level 2 as well.</i></p>

2.2. Are There Other Risks You Should Consider?

Please identify any other risks that may be associated with your project and assess the likelihood of their occurrence. Please add any additional lines for risks, if necessary.

RISK	ESTIMATED MEASUREMENT	COMMENTS
Additional Risk 1		
Additional Risk 2		

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Additional Risk 3		
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2.3. Assessment Summary and Risk Mitigation Strategy

Assessment Summary: Considering the likelihood of risks, make a decision about whether the risk percentages you entered for each risk are high or low. Until you have a basis for measuring the likelihood of a given risk or developed mechanisms to reduce likelihood risks, it is best to score the likelihood as **"high."**

Risk Mitigation: Identify those risks that have a higher likelihood of occurring (in the table above) and consider additional mitigation strategies to reduce the risks (e.g., enhancing overall data security strategy; changing the passwords; training personnel; deleting unnecessary data) or alter the overall design of the project or dataset (e.g., by reducing the data granularity or by limiting data access to only certain individuals or entities). Consider consulting with an expert about how to mitigate the risks (i.e., the data expert, the legal or privacy expert, or the data security expert). You may need to also consult experts or any relevant guidelines for additional risk mitigation techniques.

Describe the steps you will take to mitigate these risks in the space below:

Once you consider additional measure(s) to mitigate the risks, please explain if the mitigation measures reduced the risks to "low".

If you identified all of the risks as low, proceed to **Part 3.**

Part 3: Assessing the Harms

The following table is designed to assist you in identifying and assessing potential harms that could result from data use for the project, and their magnitude, severity, and likelihood. Please assess each harm taking into account the risks that you identified in Part 2. Note that there is only one chart for each type of harm (e.g. Physical Harms to Known or Identifiable Individuals), so you may need to print additional pages if you envision multiple different harms that fit each category below.

3.1. Are any of the following harms possible from your project?

Check all categories of harms that apply to your project and list them in the chart below. Then, in **Part 3.2**, describe each harm in detail and assess its magnitude, severity, and likelihood according to the instructions below.

In assessing harms, please consider some of the following factors that may influence the outcome of your assessment:

- Geocultural landscape where the project is being conducted
- Social, Economic, Political Instability
- Legal/Regulatory landscape
- Use of sensitive non-personal data
- Individuals, organisations or state actors that are conducting the project
- Individuals, organisations or state actors that will have access to/utilize the results of the project

You should evaluate each category of harm that may impact both: **a) known or identifiable individuals/groups of individuals** and **b) unknown or non-identifiable individuals/groups of individuals**.

Depending on the context, a non-identifiable group of individuals could also suffer harm as a result of unintended effects of the data project's outcome. *For example, a project unrelated to an election may inadvertently identify a group of individuals that were protesting against certain policies in a country. Even if the project does not identify who these protesting individuals actually were, it could show that a certain group were from a specific village. In this case, it is critical to consider that—depending on contextual factors (such as political, cultural, or geography)—information that protesters were from a specific village, if known, may harm the entire village, if such information is misused and enables authorities to limit freedom of speech as a result.* For this reason, you will be asked to identify each harm for known and unknown individuals separately.

CATEGORY OF HARM	YES/NO	NAME THE HARM(S)	KNOWN or UNKNOWN INDIVIDUAL/GROUP?	COMMENTS
Physical <i>Are there any potential physical harms (e.g. death, serious bodily injury, forced movement, etc.)?</i>				

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<p>Infringement of Rights</p> <p><i>Are there any potential legal harms (e.g. loss of privacy or other fundamental rights, profiling, active persecution, violence, forced movement, repression)?</i></p>				
<p>Economic</p> <p><i>Are there any potential economic harms (e.g., loss of livelihood, loss of home, loss of other property, financial loss, etc.)?</i></p>				
<p>Psychological and Emotional</p> <p><i>Are there any potential psychological or emotional harms (distress, depression, emotional instability, etc.)?</i></p>				
<p>Social</p> <p><i>Are there any potential social harms to known or identifiable individuals (e.g. reputational damage)?</i></p>				
<p>Other Harms</p> <p><i>Are there any other potential harms?</i></p>				

3.2. Describe the harms

For each potential harm you identified in **3.1**, please complete a table below. Describe each harm in detail, identify which SDG may be negatively affected by the harm, and then assess its magnitude, severity, and likelihood according to the instructions. Depending on the number of harms identified above, you may need to print out additional pages beyond the three provided below.

HARM #1: <input style="width: 300px; height: 20px;" type="text"/>			
Based on your description in 3.1 , please identify what SDG and which specific Target of the SDG may be negatively affected (e.g. Zero Hunger).			
MEASUREMENT CATEGORY	UNITS of MEASUREMENT	YOUR ASSESSMENT TEAM'S COMMENTS	INSTRUCTIONS/NOTES
Magnitude			<i>Please indicate a number of people or homes. Approximately how large is the harm (e.g. how great is the number of people or institutions who may suffer the harm? If an economic loss, how large is the loss)?</i>
Severity			<i>Please rank on a scale from 1 (least) to 7 (most). The severity question calls for a qualitative assessment, whereas the magnitude question focuses on quantitative assessment. Severity in this context means the significance of the harm for the person or group concerned. For example, in some cultures, privacy may be of utmost significance, whereas in other cultures it may not be (or different cultures may have different views on what privacy to reasonably expect). (For most, if not all, individuals or cultures, death or serious bodily injury would be a severe harm.)</i>
Likelihood (%)			<i>Please identify the likelihood in %, noting how likely you think the harm is to occur, and taking into consideration every risk that you identified as likely to occur previously, in Part 2.</i>

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HARM #2:

Based on your description in 3.1, please identify what SDG and which specific Target of the SDG may be negatively affected (e.g. Zero Hunger).

MEASUREMENT CATEGORY	UNITS of MEASUREMENT	YOUR ASSESSMENT TEAM'S COMMENTS	INSTRUCTIONS/NOTES
Magnitude			<i>Please indicate a number of people or homes. Approximately how large is the harm (e.g. how great is the number of people or institutions who may suffer the harm? If an economic loss, how large is the loss)?</i>
Severity			<i>Please rank on a scale from 1 (least) to 7 (most). The severity question calls for a qualitative assessment, whereas the magnitude question focuses on quantitative assessment. Severity in this context means the significance of the harm for the person or group concerned. For example, in some cultures, privacy may be of utmost significance, whereas in other cultures it may not be (or different cultures may have different views on what privacy to reasonably expect). (For most, if not all, individuals or cultures, death or serious bodily injury would be a severe harm.)</i>
Likelihood (%)			<i>Please identify the likelihood in %, noting how likely you think the harm is to occur, and taking into consideration every risk that you identified as likely to occur previously, in Part 2.</i>

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HARM #3: <input type="text"/>			
Based on your description in 3.1, please identify what SDG and which specific Target of the SDG may be negatively affected (e.g. Zero Hunger).			
MEASUREMENT CATEGORY	UNITS of MEASUREMENT	YOUR ASSESSMENT TEAM'S COMMENTS	INSTRUCTIONS/NOTES
Magnitude			Please indicate a number of people or homes. Approximately how large is the harm (e.g. how great is the number of people or institutions who may suffer the harm? If an economic loss, how large is the loss)?
Severity			Please rank on a scale from 1 (least) to 7 (most). The severity question calls for a qualitative assessment, whereas the magnitude question focuses on quantitative assessment. Severity in this context means the significance of the harm for the person or group concerned. For example, in some cultures, privacy may be of utmost significance, whereas in other cultures it may not be (or different cultures may have different views on what privacy to reasonably expect). (For most, if not all, individuals or cultures, death or serious bodily injury would be a severe harm.)
Likelihood (%)			Please identify the likelihood in %, noting how likely you think the harm is to occur, and taking into consideration every risk that you identified as likely to occur previously, in Part 2.

Please add any additional lines for harms, if necessary. Otherwise, please proceed to **Part 4**.

Part 4: Final Decision: Assessing the risks of data use and non-use

Decision and Rationale for Decision: Based on the information collected in this assessment, make a final decision as to whether or not you should proceed with the project.

Guiding points to make your decision:

1. In making your final assessment, pay extra attention to the likelihood of the risks that you identified in Part 2, and how these risks will make the harms you identified in Part 3 more likely to occur. Note that, at times, even with low likelihood of certain risks, the harm may be so severe that you may want to ensure that the risks are extremely low. Note that although the risks may be high, the harm may not always be severe enough to outweigh the positive impact.
2. Please also assess the risks and positive impact of data use and the risks of data non-use.
3. Then summarize your determination and the rationale behind any decision to proceed.
4. It is recommended that this assessment (in both its qualitative and quantitative aspects) and final decision at minimum be reviewed and approved by the team that consists of the project manager, data expert, and the data engineer/security engineer/privacy and legal expert.

In making your final decision, you may choose to fill out this simplified chart:

	POSITIVE IMPACTS OF DATA USE	RISKS OF DATA USE	RISKS OF DATA NON-USE
Likelihood			
Magnitude			
Severity/Significance			

Please record your decision and any rationale for it in the space below.

These questions may guide your final determination: *Are the risks and harms of data use/misuse proportionate to the benefits of data use? You may also consider risks and harms of data non-use in relation to risks and harms of data use/misuse? Is it safer to not use data, considering the risks? Is the cost for the missed opportunity for using data to benefit public good too high? Finally, will you proceed with the project?*

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Each member of the review team should answer this question by filling out the chart below. Each member should make a final decision regarding whether to proceed with the project or not, describe their decision, and provide their rationale for it in the final column. You can describe whether you changed the design or scope of the project; or whether you intend to use a different dataset, or have employed additional risk mitigation techniques, etc.

MEMBER	NAME, TITLE	SIGNATURE	DECISION and COMMENTS
Project Lead			
Security Expert			
Legal Expert			
Privacy Expert (may be same as Legal Expert)			