

The Ethical Label: a tool to identify ethical and social aspects of research products

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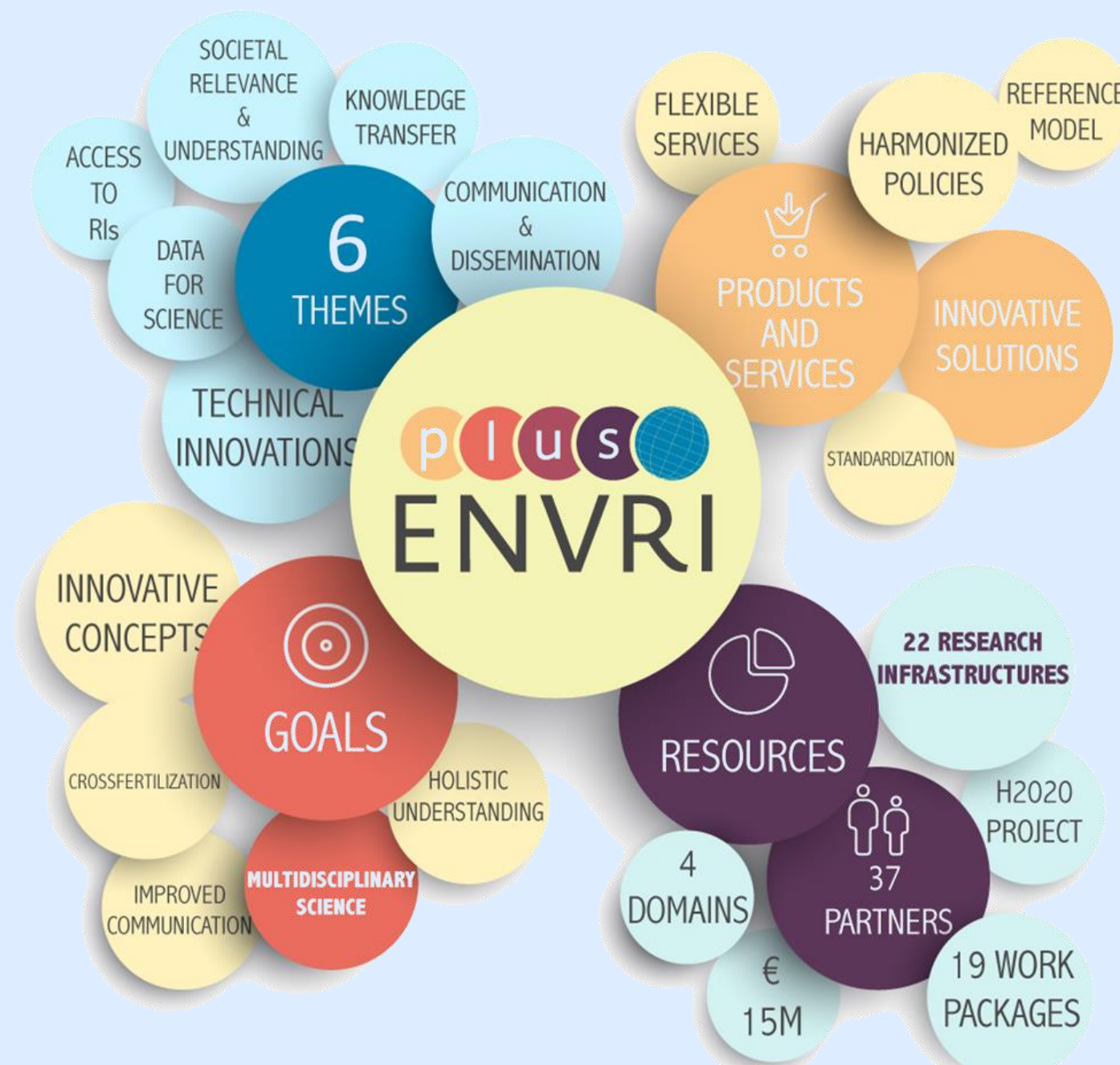
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Abstract

ENVRIplus is a Horizon2020 project in which ethics applied to geosciences features as a fundamental issue, at the core of the scientific research and practice. ENVRIplus brings together Environmental and Earth System Research Infrastructures (RIs), projects, and networks, with technical specialist partners to create a more coherent, interdisciplinary and interoperable cluster of Environmental Research Infrastructures across Europe (<http://www.envriplus.eu/>). Within the project, an entire work package (WP13) is dedicated to develop an ethical framework of reference for RIs, able to increase the awareness of scientists on the importance of ethical aspects in Earth and Environmental sciences and on the responsibility they have in conducting research activities. The Ethical Label (EL) is a tool created by WP13 with the aim to identify and highlight ethical and social aspects of “activities, products, and data” (deliverables) undertaken within and/or resulting from the ENVRIplus project (<http://www.envriplus.eu/wp-content/uploads/2015/08/D13.2-Ethical-label-template.pdf>). The specificity of the EL template is to provide additional information to the description of the technical-scientific characteristics usually associated to deliverables of a research project. The EL template is structured as a user-friendly tool, with different tables related to: “type of product”, “field affected”, “accessibility”, “end-users”, “potential impact”, “area concerned”, and “potential misuse”. The final table “summary” groups information selected in the previous sections of the table into a simple format, useful to tag a deliverable. Finally, a procedure to approve the EL associated to an ENVRIplus deliverable is suggested. The adoption of the EL will allow a more complete characterization of the outcomes of the project. While the EL was developed within a specific project, it is meant to be applicable to any research activity leading to published products, with the long-term goal to improve the way in which (geo)scientists can communicate their scientific and technological achievements both to specialist and not-specialist end-users.

The ENVRIplus Project

ENVRIplus is a Horizon 2020 project bringing together Environmental and Earth System **Research Infrastructures (RIs)**, projects and networks with technical specialist partners to create a more coherent, interdisciplinary and interoperable cluster of Environmental Research Infrastructures across Europe (<http://www.envriplus.eu/>).



One theme of the project deals with the **societal relevance and understanding**, and within that theme an entire work-package (WP13) aims at developing an ethical framework for RIs.

Objectives of WP13 are:

- increase the awareness of both scientists and the public on the importance of ethical aspects in Earth sciences;
- establish a shared ethical framework of reference, to be adopted by RIs governing bodies;
- increase the awareness of RIs management and operational levels and of the individual involved scientists on their social role in conducting research activities in the research work environment;
- assess the ethical and social aspects related to the results achieved and deliverables released within the project.

Activities completed

- **State of art** on ethical issues useful for the goals of the project (collection and analysis of materials already existing within scientific organizations, institutions all over the world).
- Survey through an “ad-hoc” **questionnaire** to investigate how each RI participating in ENVRIplus faces ethical issues in relation to its activities, and so to understand the level of perception that researchers and technicians involved in the project have on the ethical implications of their scientific activities.

- Elaboration of an **ethical label template** to characterize each product of the project, that partners will be able to use in order to give essential information about the ethical and social implications of their products.

- Definition of **ethical guidelines for research infrastructures** to be used by partners for developing their policies and their own codes of conduct.

- **Dissemination** of all the results of the previous activities on websites and social networks, so that they are suitable for the public.



ENVRIplus themes



- ❑ The **Ethical Label Template** is a tool to highlight the ethical and social peculiarities of “activities, products, and data” (deliverables) undertaken within and/or resulting from the ENVRIplus project.
- ❑ Authors of ENVRIplus deliverables are invited to use the Ethical Label in order **to give essential information about the ethical and social implications of project outputs**.
- ❑ The specificity of the Ethical Label is **to provide additional information to the description of the technical-scientific characteristics** usually associated to deliverables.



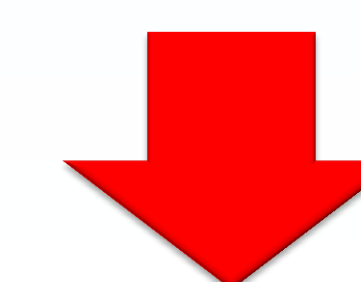
Procedure proposed to tag a project product

The procedure could be managed by the internal coordination office of the ENVRIplus project, which should review the Ethical Label in order to approve it or to send it again to authors, requesting clarifications from them.

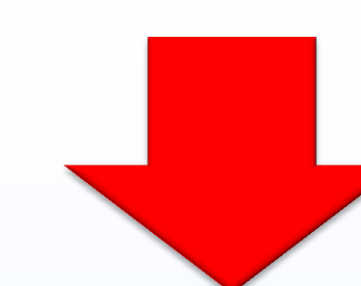
The final approval would lead to mark the product as “*ethically & socially labelled in conformity with ENVRIplus standards*”.

The stages of the procedure could be the following:

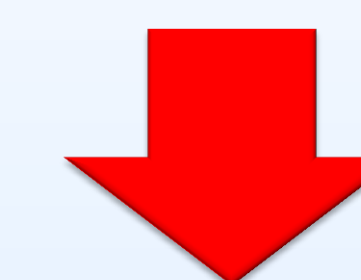
Compilation



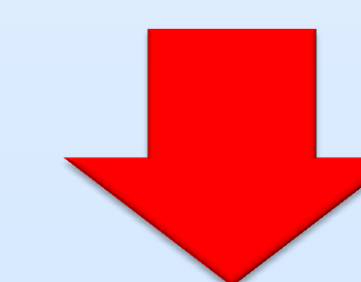
Control



Revision



Approval



Release

AND SOCIAL ASPECTS OF RESEARCH PRODUCTS

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Structure of the Ethical Label

Type of product	Questionnaire	
	Classification tools	
	Database	
	Dataset	
	Software	
	System design	
	Services	
	Website	
	Report	
	Methods and strategies	
	Procedures, protocols, standards, guidelines	
	Technological device	
	Technological facility	
	Dissemination materials	
	Training course, educational activity/tool	
	Prototype	

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USER-FRIENDLY
TOOL
7 TABLES

Accessibility	public	
	restricted to	

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Field affected (that the product contributes to enrich)	Knowledge	
	Methods	
	Dataset	
	Training and education	
	Dissemination (outreach)	
	Social well-being	
	Environment	
	Sustainability	
	Risk prevention and resilience	
	Safety	
	Professional skills	
	Technological innovation	

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End-users	Universities / academic institutions	
	Researchers (scientists)/Technicians	
	Research infrastructures	
	Government agencies	
	Local authorities	
	Public officers	
	Teachers	
	Students	
	Industry	
	Public companies	
	Private companies	
	Decision makers	
	Law makers	
	Professionals	
	Media	
	Citizens	

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Potential impact	Project management	
	Social	
	Educational	
	Political	
	Scientific	
	Environmental	
	Industrial	
	Economical	

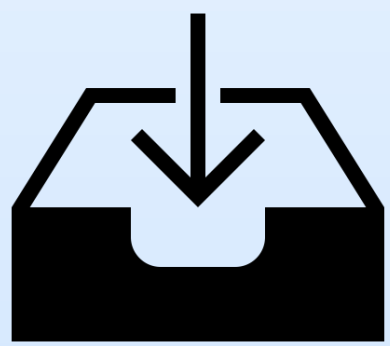
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Area concerned (for which the product has been created)	Natural hazard / risk	
	Climate change	
	Environmental monitoring	
	Data acquisition, storage, elaboration and management	
	Science education and communication	
	Natural resources usage	
	Energy supply	
	Pollution and waste storage	
	Ecosystem and biodiversity conservation	
	Working environment	
	Research integrity	

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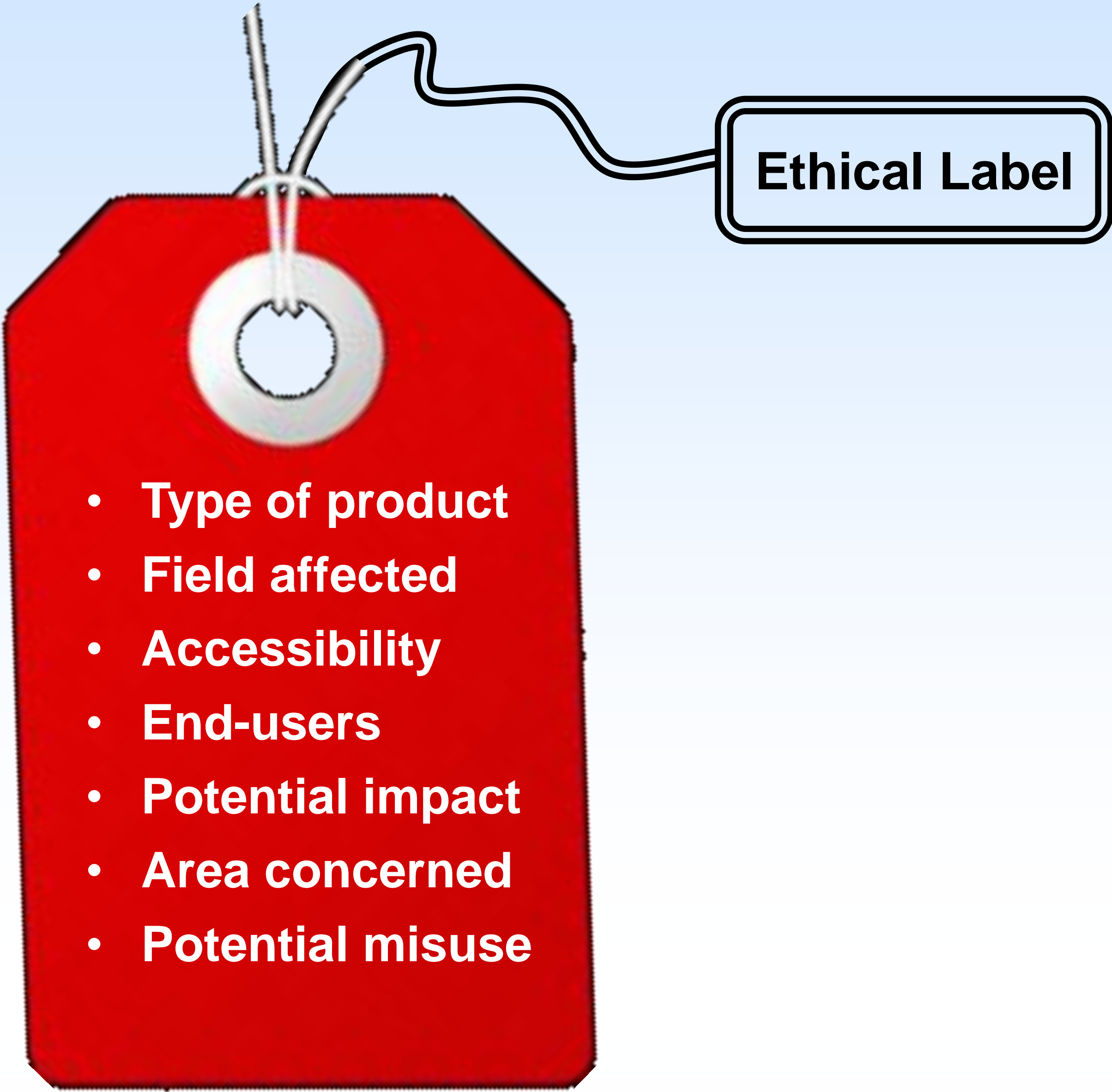
Potential misuse (warnings)	Manipulation	
	Conflict of interest	
	Underestimation of uncertainties	
	Negligence in using the product	
	Terrorism and crime	
	Industrial espionage	
	Financial speculations	
	Controversial media coverage	
	Ideological matters	
	Scientific controversies	
	Other	
	None	

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Download here:
<http://www.envriplus.eu/wp-content/uploads/2015/08/D13.2-Ethical-label-template.pdf>

The table “SUMMARY” groups information selected in each of the previous tables into a simple format, useful to tag each project product



CONCLUSION

The Ethical Label will allow a more complete characterization of the products of the ENVRIplus project. While the Ethical Label was developed within a specific project, it is meant to be applicable to any research activity leading to published products, with the long-term goal to improve the way in which (geo)scientists can communicate their scientific and technological achievements both to specialist and not-specialist end-users.



Environmental Research
Infrastructures Providing Shared
Solutions for Science and Society



The first European project in which ethics applied to geosciences finds space as a fundamental issue, at the base of scientific activities