

COLLABORATION AGREEMENT

REFERENCE KN4428/FAP (THE "AGREEMENT")

BETWEEN: THE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH ("CERN"), an Intergovernmental Organization having its seat at Geneva, Switzerland, duly represented by Florian Sonnemann, Head of Finance and Administrative Processes,

AND: PROFILA GMBH ("PROFILA"), established at Weggis, Luzern, Switzerland, duly represented by Shawn Jensen, CEO,

Hereinafter each a "Party" and collectively the "Parties",

CONSIDERING THAT:

CERN, an Intergovernmental Organization, is a leading global laboratory in particle physics, providing for collaboration of a pure scientific and fundamental character, with participation by scientific institutes from all over the world;

Profila is a company specialising in privacy education and rights management;

CERN has established and is currently implementing its data privacy legal framework. As part of this process, CERN has identified a need to implement an interface for data privacy management within CERN;

Profila has expertise in relevant technologies in data privacy management and wants to test its technologies before possible production and distribution;

The Parties wish to collaborate on the specification, deployment and testing of a so-called "minimum viable product" adapted to CERN's needs;

The mutual benefit that the Parties would derive from the proposed collaboration between them, including, in the case of CERN, in the interest of the implementation of its data privacy framework, and in the case of Profila, as a beneficiary of CERN's knowledge transfer activity;

AGREE AS FOLLOWS:

Article 1 Purpose

- 1.1 Under the terms of this Agreement, the Parties shall collaborate on the specification, deployment and testing of a minimum viable product ("MVP") that will take the form of an interactive system that could be accessed to ask specific questions about CERN procedures, privacy management and policies (the "Project"). The Parties shall use the results of their collaboration for non-military purposes only.
- 1.2 Except if the Parties agree otherwise, each Party shall bear the cost of its participation in the Project.

- 1.3 The Parties shall collaborate on a best-effort basis and no result is guaranteed for, and in relation to, the Project.
- 1.4 The provisions of this Agreement shall also apply to any Project work performed before the entry into force of this Agreement.

Article 2

Profila's contribution

- 2.1 Profila shall contribute to the Project by completing the Work Packages set out in Annex 1, which sets out the scope and duration of the activities of the Project and other relevant information.
- 2.2 Profila shall perform its work through qualified technical and data privacy experts (the "Profila Experts"). The Profila Experts shall deploy artificial intelligence technologies and frameworks, chatbots and any other relevant technologies to enable the Project and complete the Work Packages set out in Annex 1.

Article 3

CERN's contribution

- 3.1 CERN shall contribute to the Project by making available the organizational knowledge of the CERN Office of Data Privacy to assist Profila in the completion of the Work Packages set out in Annex 1.
- 3.2 Subject to Articles 8.1 and 11 and CERN's data privacy legislation, CERN shall allow Profila limited access to CERN's data protection documentation and anonymized datasets of CERN incident management reports. Such access shall be supervised by CERN's technical coordinator.
- 3.3 To the extent that CERN makes available any facilities, equipment and material required for the execution of Profila's contribution, they shall remain the property of CERN and are made available without any warranty or liability relating to their use. Profila shall take proper care of them until the completion of its contribution.

Article 4

Technical co-ordination and contact persons

The Parties shall each nominate a technical co-ordinator, who together shall coordinate the technical execution of this Agreement, as well as contact persons. Their names and contact details are set out in Annex 2. Notwithstanding the foregoing, the overall responsibility for the coordination of the Project lies with Profila.

Article 5

Experts

- 5.1 Each Party shall ensure the selection of experts with the necessary skills and competence to execute the Project on its behalf.
- 5.2 Profila personnel visiting the CERN site in the framework of the Project shall be granted such access status as CERN deems appropriate. They shall not be employed by CERN but shall, at all times during their stay at CERN, remain employed by Profila which shall bear exclusive responsibility for the payment of their salaries.
- 5.3 As their employer, it is the responsibility of Profila to ensure that, at all times during their visit to CERN, its personnel and their accompanying family shall have health insurance covering the financial consequences of illness and accident at levels adequate in CERN's Host States Switzerland and France. Profila shall be liable to CERN for any cost or expense incurred by CERN resulting from the situation where any aspect of insurance coverage is not in place.
- 5.4 Profila shall hold CERN free and harmless from liability in connection with the subject matter of this Article.

Article 6

Conduct and safety

- 6.1 The experts shall comply with the rules of conduct and safety in force at the host Party.
- 6.2 Any equipment or other item contributed by a Party to the collaboration shall conform to the safety rules in force at the host Party where it will be installed and operated.

Article 7

Intellectual Property

In this Article, the following definitions shall apply:

- "Background" shall mean all Intellectual Property (regardless of the form or medium in which it is disclosed or stored) owned or controlled by a Party at the commencement of the Project, and any Intellectual Property developed independently of the Project (whether before or after the date of the Agreement), provided by a Party for use in the Project;
- "Intellectual Property" shall mean all intellectual property, including "Know-How", in forms such as drawings, designs, documents, inventions, software programmes (including algorithms), technology, reports, processes and protocols, and protected by means such as secrecy, patents, copyrights and trademarks;
- "Know-How" shall mean unpatented technical information (including, without limitation, information relating to inventions, discoveries, concepts, methodologies, models, research, development and testing procedures, the results of experiments, tests and trials, manufacturing processes, techniques and specifications, quality control data, analyses, reports and submissions) that is not in the public domain;

- "Results" shall mean all information and Intellectual Property created in the execution of the Project.

The ownership, licensing and use of Background and Results as between the Parties shall be governed as follows:

- a) Background shall remain the property of the Party contributing it for the execution of the Project. Save as expressly granted in this Article, no licence to use any Background is granted or implied by this Agreement.
- b) Results shall be owned by the Party carrying out the work generating the Results. Results shall be treated as Confidential Information pending a decision as to their protection by the owning Party.
- c) Where the Parties have jointly carried out work generating Results they shall have joint ownership of such Results. Subject to paragraph (e) below, the Parties shall establish an agreement regarding the allocation and terms of exercising the joint ownership.
- d) Subject always to pre-existing obligations concerning the same, each Party shall grant the other Party a royalty-free, non-exclusive licence to use its Background for the execution of the Project, but for no other purpose. To the extent necessary for the execution of a Project and exclusively for this purpose, each Party receiving such licence may sub-license this Background to third parties, having previously informed the other Party in writing of the same.
- e) Each Party hereby grants the other Party a non-exclusive, royalty free, perpetual and irrevocable license to use its Results (including jointly-owned Results) for the execution of the Project and for its own internal non-commercial purposes (which includes "research and development" and "having manufactured"). In respect of CERN as a licensee, this license shall include the right to any updates or improvements to the Results, as well as the right to sublicense third parties for the purpose of the latter's participation in the execution of CERN's mission, and for the purpose of implementing a personal data management system within CERN. In order for the Parties to be able to exercise their rights under this Article, Results shall be provided in the preferred form for making modifications to them.
- f) CERN furthermore grants Profila a non-exclusive royalty-free license to use its Results which are needed to exploit its own Results for the purpose of commercial exploitation.
- g) Subject to pre-existing obligations, each Party shall grant the other Party a non-exclusive, royalty free, and perpetual licence to use its Background to the extent necessary to make use of the Results for the purposes defined in paragraphs (e) above.
- h) The providing Party provides no warranty in respect of Intellectual Property made available by it under this Agreement, and the receiving Party shall hold it free and harmless from any liability arising from its use (including, where applicable, by its partners and contractors) of such Intellectual Property.

- i) Background and Results shall be used in accordance with good industry practice and professional standards. Any use of a Party's Background and Results shall be subject to prior obligations of that Party in relation to such Background and Results and to limitations imposed by sub-contractors/manufacturers of items implementing the Background or Results. Each Party shall inform in writing the other Party as soon as reasonably possible of any such prior obligations in relation to its Background and Results. Any use of CERN Background or Results shall be for non-military purposes only.

Article 8

Data Privacy

- 8.1 Any personal data made available by CERN to Profila under this Agreement shall only be processed for the purposes of the Project. CERN shall anonymize any such personal data, unless such anonymization prevents the Parties from completing the Work Packages set out in Annex 1.
- 8.2 In any event, Profila shall ensure that its processing complies with the principles set out in CERN's Operational Circular No. 11.¹
- 8.3 On completion of the Project, Profila shall promptly delete all CERN data, in particular the data described at Article 3.2.

Article 9

Use of CERN logo

- 9.1 Profila shall not use or make reference to any images of CERN, the CERN logos or any of the names or acronyms under which CERN is known without its prior written permission. Without prejudice to Article 9.2, any permission granted shall expire no later than on the date of termination of this Agreement.
- 9.2 CERN may, at its sole discretion, withdraw any permission granted pursuant to Article 9.1 at any time.

Article 10

Publications

If a Party wishes to issue any publication, report, video testimony, press release, public announcement or any other type of communication (other than internal communication) in relation to the Project, it shall seek the prior written approval of the other Party. The latter's decision in the matter shall take into account inter alia any requirements for the protection of the corresponding Results.

¹ https://cds.cern.ch/record/2651311/files/Circ_Op_Angl_No11_Rev0.pdf

Article 11

Confidentiality

- 11.1 All information provided by CERN to Profila for the purpose of the Project, including any derivative or other information that would allow for extrapolation or identification of information provided by CERN, is herewith designated as confidential and shall be protected as such by Profila indefinitely, until otherwise indicated by CERN.
- 11.2 CERN shall treat as confidential any information provided to it by Profila that is designated as confidential. Except as agreed otherwise in writing, this obligation shall continue for a period of five (5) years from the date of termination of this Agreement.
- 11.3 In respect of the other party's confidential information the receiving Party shall:
- not use confidential information for any other purpose than for the execution of this Agreement;
 - limit the circle of recipients of such confidential information on a need-to-know basis and ensure that the recipients are aware of and comply with the obligations as specified in this Article.

Article 12

Liability

- 12.1 Except as provided in Articles 5.4, 7 (h), 13.2 and in this Article 12, each Party shall bear its own loss and damage in connection with this Agreement.
- 12.2 Subject to Article 12.3, the responsible Party shall indemnify the other Party for its loss and damage resulting from gross negligence or from willful misconduct by the responsible Party, or a violation by the responsible Party of the rules of conduct and safety in force at the host Party.
- 12.3 Notwithstanding the foregoing, the Parties shall in no event be liable to each other for any consequential loss or damage, such as loss of income or of availability of data or installations.

Article 13

Entry into force, duration and termination

- 13.1 This Agreement shall enter into force on the date of signature by the last Party to sign. It shall remain in force for as long as necessary to give effect to the Parties' respective rights and obligations under this Agreement.
- 13.2 In case of a substantial breach by a Party, the other Party may terminate this Agreement in whole or in part if no corrective action satisfactory to the other Party is taken within one (1) month of the issue of a letter of notice by the other Party to the breaching Party.

ANNEX 1: WORK PACKAGES

	Activities and detailed tasks:	Task to be carried out by:	Duration:
WP1	<u>Privacy ontology</u> Create a taxonomy of classes and relationships between the Parties able to comprehensively describe key privacy concepts and operations. It should contain definitions for user and data subjects, entities, policies, operations and transactions, access control, devices, etc.	PROFILA (at PROFILA's premises)	6 months
WP2	<u>Models and datasets</u> In order to validate the functionality and algorithms of the Profila Privacy AI, a relevant corpus of data and a number of models will be developed. The models will describe the typical interactions, workflows and expected outcomes of CERN procedures and will be trained on data extracted from relevant sources such as existing FAQs; requests, incidents, and answers from ticketing systems; public discussions, papers and publications; public legal documents such as Operational Circulars and the CERN Rules and Regulations; etc.;	PROFILA (at PROFILA's premises)	6 months
WP3	<u>Prototype Interaction Interface</u> Implement a conversational interface system based on the concept of chatbots. An initial implementation will be developed based on off-the-shelf conversational engines and a meaningful, but limited set of structured FAQs that the bot can access to try and reply to input questions. As the framework implementation progresses, the ontology stabilizes, the reliability of datasets and models increases, a more sophisticated approach will be taken making use of Natural Language Processes (NLP) techniques applied to a specific Closed Domain model developed for the Project. Both textual and verbal interactions will be investigated, with textual being for the moment the main interaction mode foreseen for the project MVP. A set of integration APIs will also be developed by Profila to allow integrating the conversational engine in customer systems.	PROFILA (at PROFILA and CERN's premises)	8 months
WP4	<u>Integrated MVP system</u> The final outcome of the Project is the implementation of a proof-of-concept system (or Minimum Viable Product, MVP) integrating the different technologies and functionalities developed during the course of the project. The MVP will take the form of an interactive system that typical CERN end-users will be able to access to ask specific questions about CERN procedures, privacy management and policies. The MVP will make use of the Privacy Ontology, the trained	PROFILA (at CERN's premises)	4 months

	Activities and detailed tasks:	Task to be carried out by:	Duration:
	models and the conversational engine. It is understood that this initial instance of the system will provide support for the CERN specific context. The MVP will be exposed to end-users on a voluntary base through a mechanism and scope to be defined during the course of the project. The system behavior will be monitored during its usage and the user satisfaction with the interface and with the quality and reliability of the information produced will be measured. The information collected will be used to produce iterative improvement in the different parts of the system.		
WP5	Project close	PROFILA (at CERN's premises)	1 Month

Execution schedule and milestones:

Sect.	Component	Artefact Description	Milestones
WP0	Project Initiation	Project & resource planning (onboarding)	Mar 2019
WP1	Ontology	Design of core concepts & framework	Mar-Aug 2019
WP2	Models and datasets	Collection & preparation of core data	Mar-Aug 2019
WP3	Prototype Interaction Interface	Design & develop of basic chatbot conduit and associated API's	Jun-Jan 2020
WP4	Integrated MVP and Testing	MVP integration, release and testing	Nov-Feb 2020
WP5	Project close	Framework published under suitable open source licenses. Project closure, and plans for further work.	Feb 2020

CERN Group: FAP-BC

Acceptance procedure(s): This is a research project, acceptance is based on documentation of the outcomes of the various stages including all problems, limitations and solutions.