

DIGIFED STANDARD GENERIC EXPERIMENT AGREEMENT

This "Agreement", is entered into by and between:

BETWEEN:

1. **Commissariat à l'Energie Atomique et aux Energies Alternatives**, a French state-owned research entity with a scientific, technical or industrial activity, duly organised under the laws of France and having its registered office located Bâtiment Le Ponant D - 25 rue Leblanc, 75015 Paris, France, and declared at the Paris Register of Commerce and Trade under the following registration number : R.C.S. PARIS B 775 685 019, represented by Sébastien Dauvé, as Head of LETI/DSYS, hereinafter referred to as the **"Cascade Funding Partner"** and **"Monitoring Partner"**.
2. [XXX] an organisation under the laws of [•] having its registered office at [•] represented by [•] acting as
3. [XXX] an organisation under the laws of [•] having its registered office at [•] represented by [•] acting as

[...]

Hereinafter individually referred to as the **"Selected Third Party"** and collectively as the **"Selected Third Parties"**)

Hereinafter individually referred to as **"Party"** or collectively as **"Parties"**).

Commenté [SE1]: Add as many bullets as required given the number of Selected Third Parties.

BACKGROUND:

- (A) Commissariat à l'Energie Atomique et aux Energies Alternatives, AVL LIST Gmbh, Budapesti Muszaki es Gazdasagtudományi Egyetem, Blumorpho SAS, Digital Catapult, Ikerlan S. Coop, Minalogic Partenaires, ST Microelectronics Grenoble SAS, ST Microelectronics SRL, Steinbeis Innovation Gmbh, Univerza V Ljubljani, Zabala Brussels SPRL, (collectively the "DigiFed Beneficiaries") participate in the H2020 project entitled *"Digital Innovation Hubs federation for large scale adoption of digital technologies by European SMEs"* (the "DigiFed Project").
- (B) The DigiFed Beneficiaries entered into a Grant Agreement N°872088 with the European Commission (the "Grant Agreement" or "GA") and the DigiFed Beneficiaries entered into a consortium agreement in 2020 with respect to the DigiFed Project (the "Consortium Agreement" or "CA").
- (C) Commissariat à l'Energie Atomique et aux Energies Alternatives, entered into a partnership with the Auvergne-Rhône-Alpes Region leading EasyPOC program dedicated for SMEs and mid-caps. EasyPOC program allows to finance a feasibility study and / or a proof of concept.

- (D) The DigiFed Project involves financial support to the Selected Third Party through a cascade funding scheme ("Cascade Funding") cofounded with EasyPOC program, exclusively applicable to the said Generic Experiment.
- (E) The Selected Third Party has been selected through an Open Call by the DigiFed Project to participate to the Generic Experiment Community "Secure Platform for IoT" set up animated by the Monitoring Partner.
- (F) The Cascade Funding Partner is willing to provide the Financial Support to the Selected Third Party for their involvement in the Generic Experiment Community and the Selected Third Party is willing to receive the Financial Support subject to the terms and conditions of this Agreement and its effective participation to the Generic Experiment community.
- (G) The Monitoring Partner is responsible for the execution of this Agreement and for the ongoing monitoring of the Generic Experiment.

IT IS AGREED AS FOLLOWS:

1. DEFINITIONS

Words beginning with a capital letter shall have the meaning defined in the preamble of the Agreement or in this Section:

- 1.1 **Agreement** means this Standard Generic Experiment Agreement (SGEA), together with its Annexes.
- 1.2 **Annex 1– Generic Experiment technical program** means the Annex to this Agreement setting out the technical program to be carried by the Monitoring Partner in the frame of the Generic Experiment.
- 1.3 **Deliverable** means the material element elaborated by the Monitoring Partner in the Generic Experiment and that is made available to the Selected Third Party.
- 1.4 **Generic Experiment** means the technical program detailed in Annex 1.
- 1.5 **Generic Experiment Community** means the group of all the Selected Third Parties together with the Monitoring Partner, sharing common interest about the Generic Experiment as proposed and animated by the Monitoring Partner.
- 1.6 **Financial Support** means the cash element to be given by the Cascade Funding Partner to the Selected Third Party for its participation to the Generic Experiment Community.
- 1.7 **Force Majeure** means any situation or event that:
 - (i) prevents a party from fulfilling its obligations under the Agreement;
 - (ii) was unforeseeable, exceptional situation and beyond the party's control;
 - (iii) was not due to error or negligence on the affected party's part (or on the part of third parties involved in the Generic Experiment); and

(iv) proves to be inevitable in spite of exercising all due diligence.

The following cannot be invoked as force majeure:

(i) any default of a service, defect in equipment or material or delays in making them available, unless they stem directly from a relevant case of force majeure;

(ii) labour disputes or strikes involving a party's own workforce; or

(iii) financial difficulties.

2. TERMS AND CONDITIONS FOR THE FINANCIAL SUPPORT

2.1 The Selected Third Party undertake to :

- (i) participate to the workshop sessions organised by the Monitoring Partner to share their use case and/or technical needs, to expose the technical results of the Generic Experiment, and
- (ii) potentially test the proof of concept developed by the Monitoring Partner, and
- (iii) answer to the final questionnaire and/or interviews to give their feedback about the Generic Experiment Community and the technical results and how they consider exploiting them.

2.2 The Monitoring Partner undertakes to :

- (i) carry out the Generic Experiment, and
- (ii) animate the Generic Experiment Community by organizing at least 3 workshops : one at the kick off of the Generic Experiment , one during the Generic Experiment and one at the end of the Generic Experiment.

2.3 In consideration of the Selected Third Party's undertakings set out under paragraph 2.1, the Cascade Funding Partner undertakes to pay each Selected Third Party the amount of 5 000 € (FIVE THOUSAND EUROS) upon signature of the Agreement provided that such signature by the Selected Third Party is received by the Cascade Funding Partner within 60 days from the notice date of its selection as a Generic Experiment Selected Third Party.

3. DELIVERABLES

Deliverables belong to the Monitoring Partner and are Confidential Information. They may be shared or eventually lent by the Monitoring Partner to the Selected Third Party without financial compensation.

The Selected Third Party acknowledges that the Deliverables are the result of R&D work and of experimental nature and as such, are not meant to be used for commercial purposes. Any and all use by a Selected Third Party of a Deliverable shall be at it's own risk and peril.

Any devices constituting or contained in the Deliverables are research elements intended for scientific tests. Consequently, such device may not either directly or indirectly be subject to any industrial and/or commercial exploitation.

The Deliverables may be made available to a Selected Third Party, without any license or intellectual property rights in favor of the Selected Third Party on any element that would be incorporated / accessible therein, and / or implemented.

4. LIABILITY

4.1 The Selected Third Party shall comply with all applicable laws, rules and regulations, including, but not limited to safety, security, welfare, social security and fiscal laws, rules and regulations.

4.2 The Selected Third Party shall not be entitled to act or to make any legally binding declaration on behalf of the Monitoring Partner and/or the Cascade Funding Partner and/or any other Selected Third Party.

A Selected Third Party shall on demand indemnify the Cascade Funding Partner from and against all Losses incurred by concerned Party, its employees, officers, agents and contractors as a result of any breach by or on behalf of the Selected Third Party as applicable of this Section 4.2.

4.3 The contractual liability of the Cascade Funding Partner under this Agreement shall be limited to the Financial Support paid or payable to the Selected Third Party. The contractual liability of the Monitoring Partner under this Agreement shall also be limited to the amount of the Financial Support paid or payable to the Selected Third Party. The contractual liability of the Selected Third Party under this Agreement shall be limited to the Financial Support paid or payable to the Selected Third Party.

4.4 No party shall in any case be liable for any indirect or consequential damages such as:

- loss of profits, interest, savings, shelf-space, production and business opportunities;
- lost contracts, goodwill, and anticipated savings;
- loss of or damage to reputation or to data;
- costs of recall of products; or
- any other type of indirect, incidental, punitive, special or consequential loss or damage.

4.5 Any limitations of liability in this Section 4 shall not apply:

- to any case of willful misconduct by a Party;
- to a breach by a Party of Section 6 (confidentiality);
- any infringement of intellectual property rights belonging to one Party to this Agreement by another Party; or
- to anything else which cannot be excluded or limited by applicable law.

4.6 In respect of any information or materials (including but not limited to Software, Results and Background) supplied by the Monitoring Partner to a Party, no warranty or representation of any kind is made, given or implied as to the sufficiency, accuracy or fitness for purpose nor as to the absence of any infringement of any proprietary rights of third parties. Such information or materials are provided on an "as is" basis.

5. CONFIDENTIALITY

- 5.1 All information of whatever nature and in whatever form or mode of communication, which is disclosed by a Party (the “**Disclosing Party**”) to another Party (the “**Recipient**”) in connection with the Digital Challenge during its implementation and which has been explicitly marked as “confidential” at the time of disclosure, or when disclosed orally or intangible form has been identified as confidential at the time of disclosure and has been confirmed and designated in writing within thirty (30) calendar days from oral or intangible disclosure at the latest as confidential information by the Disclosing Party, is “**Confidential Information**”.
- 5.2 The Recipients hereby undertake for the duration of the Generic Experiment and a period of 5 years after the end of the Generic Experiment:
- (i) not to use Confidential Information otherwise than for the purpose for which it was disclosed;
 - (ii) not to disclose Confidential Information to any third party without the prior written consent of the Disclosing Party;
 - (iii) to ensure that internal distribution of Confidential Information by a Recipient to its employees shall take place on a strict need-to-know basis;
 - (iv) use the Confidential Information solely for the purpose of the execution of the Generic Experiment and not otherwise use the Confidential Information in the design or manufacture of its products or the design of its processes, or in any other manner;
 - (v) not reverse engineer, decompile, disassemble, modify, adapt, translate or otherwise alter in any way, any prototype, product, sample, software, schematic, flowchart or other tangible objects which embody the Confidential Information, except if so authorized in writing by the Disclosing Party; and
 - (vi) to return to the Disclosing Party upon request all Confidential Information which has been supplied to or acquired by the Recipients including all copies thereof and to delete all information stored in a machine readable form. The Recipients may keep a copy to the extent it is required to keep, archive or store such Confidential Information because of compliance with applicable mandatory laws and regulations (i.e. public policy legislation).
- 5.3 The Recipients shall be responsible for the fulfilment of the above obligations on the part of their employees or third parties (if previously authorized) involved in the Generic Experiment and shall ensure that they remain so obliged, as far as legally possible, during and after the end of the Generic Experiment and/or after the termination of the contractual relationship with the employee or third party.
- 5.4 The above shall not apply for disclosure or use of Confidential Information, if and in so far as the Recipient can show that:
- (i) the Confidential Information becomes publicly available by means other than a breach of the Recipient's confidentiality obligations;

- (ii) the Disclosing Party subsequently informs the Recipient that the Confidential Information is no longer confidential;
 - (iii) the Confidential Information is communicated to the Recipient without any obligation of confidentiality by a third party who is to the best knowledge of the Recipient in lawful possession thereof and under no obligation of confidentiality to the Disclosing Party;
 - (iv) the disclosure or communication of the Confidential Information is foreseen by provisions of the Grant Agreement;
 - (v) the Confidential Information, at any time, was developed by the Recipient completely independently of any such disclosure by the Disclosing Party;
 - (vi) the Confidential Information was already known to the Recipient prior to disclosure without any obligation of confidentiality to the Disclosing Party;
 - (vii) the Recipient is required to disclose the Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order subject to the paragraph 5.7 of this Section.
- 5.5 The Recipient shall apply the same degree of care with regard to the Confidential Information disclosed within the scope of the Generic Experiment as with its own confidential and/or proprietary information, but in no case less than reasonable care.
- 5.6 Each Recipient or Disclosing Party shall promptly advise the other Recipient or Disclosing Party in writing of any unauthorised disclosure, misappropriation or misuse of Confidential Information after it becomes aware of such unauthorized disclosure, misappropriation or misuse.
- 5.7 If a Party becomes aware that it will be required to disclose Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, it shall, to the extent it is lawfully able to do so, prior to any such disclosure:
- (i) notify the Disclosing Party of said request, and
 - (ii) comply to the extent possible with the Disclosing Party's reasonable instructions to protect the confidentiality of the information at the Disclosing Party's expense, and
 - (iii) make such disclosure only to the extent it is compelled.
- 5.8 As far as the Cascade Funding Partner or the Monitoring Partner are concerned, disclosure of Confidential Information to the European Commission shall be governed by the terms of the Grant Agreement.

6. DISSEMINATION

- 6.1 Each Party agrees that any dissemination activity (including but not limited to publications, presentations or contributions to any standards organisation) by the

Selected Third Party is subject to the prior written approval of the Monitoring Partner.

- 6.2 The Cascade Funding Partner and the Monitoring Partner are entitled to include the main issues and information regarding the Generic Experiment in their reporting towards the European Commission, subject to prior written notification to the concerned Selected Third Party.
- 6.3 If the Generic Experiment is and/or its Deliverable are presented to any third party, each Party shall make visible on any and all communication medium (i) the EU emblem as well as the following text *"This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 761708"*, and (ii) the Region Auvergne-Rhône-Alpes logo.

7. CHECKS AND AUDITS

- 7.1 The Selected Third Party undertake to provide any detailed information, including information in electronic format, requested by the European Commission or by any other outside body authorised by the European Commission to check that the Generic Experiment and the provisions of this Agreement are being properly implemented.
- 7.2 The Selected Third Party shall make available on request to the European Commission all original documents, especially accounting and tax records, or, in exceptional and duly justified cases, certified copies of original documents relating to the Agreement, stored on any appropriate medium that ensures their integrity in accordance with the applicable national legislation, for a period of five years from the date of payment of the last instalment of the Financial Support.
- 7.3 The Selected Third Party undertakes to allow European Commission staff and outside personnel authorised by the European Commission the appropriate right of access to the sites and premises of the Selected Third Party and to all the information, including information in electronic format, needed in order to conduct such audits.
- 7.4 In accordance with Union legislation, the European Commission, the European Anti-Fraud Office (OLAF) and the European Court of Auditors (ECA) may carry out spot checks and inspections of the documents of the Selected Third Party, and of any recipient of Cascade Funding, including at the premises of the Selected Third Party, in accordance with the procedures laid down by Union law for the protection of the financial interests of the Union against fraud and other irregularities. Where appropriate, the inspection findings may lead to recovery decisions by the European Commission.

8. COVID-19

The parties hereby acknowledge that given the date on which this agreement is signed, i.e. after the implementation of new lockdown/curfew measures decided by the French authorities involving a risk of suspension and/or decrease of CEA on-site activities, all or part of the work/tasks/actions/services, etc. to be carried out under this agreement may not be able to be carried out under the conditions set out herein during the lockdown/curfew period, a restart of activities and any future potential resumption(s) of the said measures or any measures having a similar effect.

Consequently, the Parties expressly agree to confer, at the request of one or the other Party, to define via an amendment any eventual change to the Generic Experiment (such as to schedule, dates, list of deliverables, costs) that may be needed given the exceptional circumstances experienced in the execution of the Generic Experiment.

9. TERMINATION

- 9.1 The Cascade Funding Partner can terminate this Agreement with immediate effect by written notice to a Selected Third Party:
- (i) if a Selected Third Party is in breach of any of its material obligations under this Agreement, which breach is not remediable, or, if remediable, has not been remedied within thirty (30) days after written notice to that effect;
 - (ii) if the concerned Selected Third Party is declared bankrupt, is being wound up, is having its affairs administered by the courts, has entered into an arrangement with its creditors, has suspended business activities, or is the subject of any other similar proceeding concerning those matters; or
 - (iii) if the concerned Selected Third Party is subject to an event of Force Majeure, which prevents the affected party from correct performance of its obligations hereunder and such circumstances have lasted, or can reasonably be expected to last more than 3 months.

10. CONCLUDING CONDITIONS

- 10.1 This Agreement shall enter into force on the date of its last signature. Any ancillary agreements, amendments, additions or modifications to this Agreement shall be made in writing and signed by the Parties confirming that it agrees.
- 10.2 Save as expressly set out in this Agreement, no rights or obligations of the Parties arising from this Agreement may be assigned or transferred, in whole or in part, to any third party without the other Parties' prior formal approval.
- 10.3 Amendments and modifications to the text of this Agreement require a separate written agreement to be signed between all Parties
- 10.4 The Selected Third Party shall promptly notify any total or partial transfer or change of Control to the Cascade Funding Partner and the Monitoring Partner.
- 10.5 If any provision of this Agreement is determined to be illegal or in conflict with the applicable law, the validity of the remaining provisions shall not be affected. The ineffective provision shall be replaced by an effective provision which is economically equivalent.
- 10.6 This Agreement shall be construed in accordance with and governed by the laws of Belgium excluding its conflict of law provisions.
- 10.7 Settlement of disputes
- (i) The Parties shall endeavour to settle their disputes amicably.

- (ii) Any dispute arising out of or in connection with this Agreement between any of the Parties, which cannot be solved amicably within 90 calendar days of its occurrence, shall be submitted to proceedings under the ICC Mediation Rules. If the dispute has not been settled pursuant to the said Rules within two (2) months following the filing of a Request for Mediation or within such other period as the Parties may agree in writing, such dispute shall thereafter be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules of Arbitration.
 - (iii) The place of arbitration shall be Brussels if not otherwise agreed by the conflicting Parties. The language of the arbitration shall be English.
 - (iv) The award of the arbitration will be final and binding upon the Parties a party to the arbitration.
- 10.8 Nothing in this Agreement shall limit the Parties' right to seek injunctive relief in any applicable competent court
- 10.9 List of Annexes:
Annex 1 Generic Experiment Technical program

CEA ref : [●]

Project H2020 DigiFed/Generic Experiment/ Secure Platform for IoT

Cascade Funding Partner and Monitoring Partner	Commissariat à l'Energie Atomique et aux Energies Alternatives
Name and surname of representative	Sébastien DAUVE
Representative's capacity	Head of LETI/DSYS
Date of signature	
Signature	

Selected Third Party	XXX
Name & surname of representative	
Representative's capacity	
Tel:	
Email:	
VAT Intracom (EU)/ SIREN (France) number	
Date of signature	
Signature	

Commenté [SE2]: Add one page per Selected Third Party

ANNEX 1 - Generic Experiment Technical Program

Use of the Trustzone on a STM32MP1 chip to monitor a Linux OS.

This Generic Experiment Technical Program was defined during "Phase 1 Generic Experiment definition" of DigiFed WP2 by CEA-Leti together with European companies invited to several workshop organized in 2020.

The Generic Experiment Technical Program is organized in 3 WP being financially supported by Easypoc for WP1 and DigiFed for WP2 and WP3.

- CEA-Leti's technical team will implement WP1 and WP2.
- WP3 dedicated to the Generic Experiment Community animation and assessment, is lead by Y.SPOT, CEA's Open Innovation Center with the contribution of the technical team.

Rationale of the Generic Experiment Technical Program

The TrustZone is an isolation mechanism present on some ARM cores, which allows two execution modes to be implemented : a "Secure" mode with full control over the core and its peripherals and a "NonSecure" mode with restricted access. It is therefore possible to use certain privileges of the "Secure" mode to ensure that the "NonSecure" mode has not been corrupted. In our case, two OS are used:

- a Linux OS runs in "NonSecure" mode, which is used to run user applications.
- the OPTEE OS runs in the "Secure" mode which is used to run applications requiring a high level of security.

In order to meet the needs of the industry, it is proposed within the framework of the Generic Experiment to develop monitoring mechanisms for a Linux OS running the TrustZone on a STM32MP1 board.

These monitoring mechanisms aim to ensure that the "NonSecure" world has not been attacked.

These monitoring mechanisms will eventually be based on a standardised secure element called TPM.

WP1 - Proof Of Concept (POC) : Deployment of an infrastructure in the TrustZone reinforcing the security of a Linux OS

Duration: T0 – T0+6

WP1 is financed by EASYPOC and lead by LETI/DSYS/LSOSP.

This first WP lays the basics for using the TrustZone to improve the security of the "NonSecure" part.

Several functionalities will be integrated to the POC :

- Enslavement of the " Non-Secure " world by the " Secure " world
 - Enable OPTEE to carry out monitoring operations on a periodic basis
 - Using secure communication to alert when attacks are detected

Monitoring base

- Attestation of the basic bricks of the system

Demonstration of the POC to a few companies (1-5) who would volunteer to test it and give their feedback is planned.

An appropriate Material Transfer Agreement shall be executed by the concerned parties prior to any loan contemplated for POC testing purposes.

Deliverable : T0+6

POC reporting an alert via a secure connection when an attack is detected, along with the POC documentation.

WP2: Using the TrustZone to detect abnormal behaviour in a partially non-secure OS.

Duration : T0+4 - T0+12

WP2 is financed by DigiFed and led by LETI/DSYS /LSOSP

The aim of this development is to implement an initial solution for advanced system monitoring, but also to set up an architecture that facilitates the implementation of new monitoring solutions.

Several functionalities will be integrated in this WP2:

Extraction of signals allowing to decide on the security of a system.

Monitoring architecture:

- Implementation of an architecture facilitating the deployment of new monitoring strategies.

Deliverable : T0+ 12

Demonstrator of malware detection by the TrustZone, which integrates monitoring functions into the POC of WP1.

WP3 : Animation of the Generic Experiment Community

Duration : T0 –T+13

WP3 is financed by DigiFed and led by CEA/DRT/YSPO with support of technical team (LETI/DSYS/LSOSP).

The aim of this WP is to animate exchanges with the Generic Experiment Community in order to :

- To exchange on the companies' use cases :
 - What are the main attacks/threats encountered or potential?
 - What are the different Uses Cases of the companies ?
 - What are the configurations used by companies?
- To communicate on the technical choices:
 - Which are the attacks that could be monitored,
 - What are the technical solutions envisaged,
 - To answer the technical questions asked by industrialists for their future use of the POC. (acting as an intermediary/entry point between companies and the LSOSP laboratory).
- To gather the interest of companies for :
 - The solution developed,

CEA ref : [●]

Project H2020 DigiFed/Generic Experiment/ Secure Platform for IoT

- A possible exploitation,
- The proposed GEC collaboration model.

Deliverable : 3 Workshops will organised:

- one at the kick-off to launch the Generic Experiment Technical Program, T0+1
- one in the middle of the Generic Experiment Technical Program to present the POC, T0+6
- one at the end of the Generic Experiment Technical Program , T0+13