

Data Escape Game

Ordering party Objectives of the call for solutions	Ministry for Digitalisation The objective is to create a "Data Escape Game" to familiarise state agents with data concepts in an engaging way. This project contributes to actions 6 and 8 of the "Talents and Skills" pillar of Luxembourg's data strategy, thereby helping to foster a data culture and data literacy within the public sector.	IP and other details	The developed solution is protected by applicable intellectual property and copyright laws and remains the exclusive property of the State of the Grand Duchy of Luxembourg for the duration of the project and beyond. The contracting authority does not grant any license or authorization regarding the intellectual property rights it holds over the project. The economic operator is not entitled, without the prior written consent of the contracting authority, to use the results for commercial purposes.
Type of solution required	Conceptual proposal and implementation of a "Data Escape Game"	Deadlines for submission of the offer	Offers should be sent to the following email address by 10:00 a.m. on September 22 2025 at the latest: Info@govtechlab.lu
Selection criteria	 Proposed approach (40%) Quality of the proposal (level of detail, completeness, etc.) (30%) Proposed schedule (15%) Price (15%) 	Deadline for questions	24th August 2025
Standards to be met	Not applicable	Contact for questions	info@qovtechlab.lu Before submitting your question, please check first if the answer is not already provided in this document.

1. The objective

The objective of the "Data Escape Game" is to familiarise participants, i.e. civil servants, with data concepts in an engaging way. This project contributes in particular to actions 6 and 8 of the "Talents and Skills" lever of Luxembourg's data strategy, and thus to the creation of a data culture and data literacy within the public sector.

2. The concept

The game requires participants to be physically present. It should be designed as a portable game that can be played in any meeting room or conference room, without the need for any special infrastructure. The idea would be to offer this game regularly as an event in the physical space of the GovTech Lab, accompanied by the Data and/or GovTech Lab team from the Ministry for Digitalisation.

The game will consist of two parts:

- 1) An application for tablets or other electronic devices to guide participants through the game. The application will provide clues, be used to solve certain puzzles, and set the pace of the game. The application must be easy to maintain by the Ministry for Digitalisation.
- 2) Physical items (cards, USB sticks, documents, books, etc.) distributed throughout the room that participants will use as data sources (clues).

The game will be offered as a team building and training activity for various departments/teams/divisions of ministries, administrations and public institutions. The number of participants is to be determined but should be limited to a maximum of six people.

The game must be designed so that it can be solved by participants with basic knowledge of data.

The game will last between two and three hours. This is to ensure that participants only need to dedicate at most half a working day for this activity.

The activity should be considered as a training course (in line with INAP requirements), and participants should be able to request a certificate of completion. Specific criteria will be communicated to the selected service provider.

Other ideas to be considered as optional:

- A prize to be awarded to participants for completing the game.
- A leaderboard for participating teams, with a score or simply the time taken to "complete" the game.

Description of the problem / challenge

3. The structure

The objective of the game is to introduce concepts related to data, with a focus on the FAIR (Findable, Accessible, Interoperable, Reusable) principles and data protection principles listed below, to civil servants through a series of puzzles to be solved. Participants will thus be able to discover the various concepts through a gamification approach.

1) Findability

Search for the first puzzles in the room and the first combination of these is intended to lead to an inventory exercise. At this point, participants may discover the advantages of using a standard for the description of data sets.

2) Accessibility δ Interoperability

Participants will learn the difference between data that is 'present' but not usable at that moment, e.g. unreadable formats or access restrictions, and accessible or even interoperable data, and find ways to make it accessible.

This step may correspond to a phase of cataloguing/inventorying the data that has been collected. The collected data must be easily integrated into different systems and with other data. It is possible to provide OCR tools to digitise physical data and make it interoperable with data that is already available in digital form.

3) Data quality

Data quality refers, for example, to the validity and completeness of data. In the game, participants will be confronted with data sets of varying quality, which will lead them to identify the criteria that make data reliable, understandable and reusable. This refers, for example, to exercises that help identify inconsistent values, ambiguous formats or input errors to assess a certain level of data quality and interoperability, without which participants will not be able to progress in the game and move on to the reuse stage.

4) Pseudonymisation δ Anonymisation

Data processing for use/reuse in different contexts. Participants will be made aware of the challenges of personal data protection, particularly through the concepts of pseudonymisation and anonymisation. These concepts are essential for ensuring data reusability while complying with legal and ethical requirements. In some puzzles, participants may encounter pseudonymised data accompanied by the reidentification key and learn how the key is secured, while in other cases they may not.

5) Use / Reuse

The data must be reusable and accessible for analysis in order to find answers to the game's challenges. Some puzzles will invite participants to compare several similar but differently documented data sets to understand what facilitates or hinders their reuse. They will thus learn to recognise best practices that make data not only accessible but also fully usable by others. Basic statistical calculations, or even cross-referencing and using data, may lead to the next stage of the game, or even the final 'escape' from the room.

Various types of puzzles and challenges should be included:

	1) Types of puzzles		
	X-word puzzle ;		
	Metapuzzles ;		
	• Etc.		
	2) Challenges		
	Identifying what data is;		
	Inventorying data;		
	Standardising dataset descriptions and the data itself;		
	Adapting data;		
	Analysing data to find a new clue;		
	• Etc.		
	The types of puzzles and challenges will be defined together with the service provider selected to create the game.		
	The use of different types of data will also be required in the puzzles to improve understanding of the value of certain types of data. A summary of the game with explanations of the different concepts encountered in the game could be provided at the end of each session. These explanations will be provided by the Data and/or GovTech Lab team at the Ministry for Digitalisation.		
	A moderation/user guide shall be provided by the service provider to guide the facilitator(s) through the game (e.g. to be able to give tips to help participants in different situations).		
Planning	The completion of the project is foreseen for end of December 2025.		
	The offer should be no longer than 5 pages and should include:		
Contenu de L'offre	 A brief presentation of the company; The response to the challenge described; The approach that will be followed; The reasons and arguments for the chosen approach; The different stages and corresponding schedule; Any costs for IT equipment. If a "BYOD" approach is proposed, please indicate the specifications of the equipment required. A fixed price. 		
	The offer must be accompanied by the following documents:		

Certificate of registration in the trade register in accordance with the conditions applicable in the Member State where the economic operator is established;
Europass CVs (to be created via the following link https://gd.lu/6RRTSQ) of the proposed members detailing their roles over the last three years, with a focus on IT solution development, game design and any other relevant experience;
Mandatory certificates showing that the economic operator is in compliance with its obligations relating to the payment of social security contributions, taxes and duties, and relating to the declaration of withholding tax on salaries, at a date that must be no

earlier than three months and no later than the date set for the submission of applications, issued by:

- o The Centre for Data Processing, Affiliation and Collection of Joint Contributions for Social Security Institutions
- o The Luxembourg Inland Revenue,
- o The Registration Duties, Estates and VAT Authority
- A criminal record extract (dated less than one year ago) for the person who signed the offer and has the capacity to bind the legal entity, or an equivalent document issued by the judicial or administrative authority of the Member State of the country where the economic operator is established.

The offer must be written in French or English.

Budget

The total budget for the project must not exceed €79,000 excluding VAT. Any offer exceeding this amount will not be considered and any changes exceeding this amount will be rejected.