

BLOCKCHAIN CHALLENGE



Generalitat de Catalunya
**Departament de Polítiques Digitals
i Administració Pública**



Agència de
Residus de
Catalunya

TERMS AND CONDITIONS 2019

Collaborators:



BLOCKCHAIN
CATALUNYA

eurecat
Centre Tecnològic de Catalunya



vottun
certify • trace • trust • verify

1. PURPOSE

1.1 The purpose of the following rules is to regulate the participation of persons and 'Teams' that are interested in forming part of the activity known as the 'Blockchain Challenge' (www.blockchainchallenge.cat), organised by the Catalan ministry for Digital Policy and Public Administration, with the collaboration of the Agència de Residus de Catalunya (ARC, Catalan Waste Agency) and Eurecat (hereinafter, 'The Organisation'), to be held on 30 November and 1 December 2019 in Espai BITal, in L'Hospitalet de Llobregat.

1.2 For the purposes of these Rules for Participation, capitalised terms and expressions that are written in inverted commas and in bold will have the meaning assigned below:

'Blockchain Challenge' is a definition, creation and development contest, where blockchain experts, programmers and UI/UX developers will compete in person to create a system based on blockchain technology to track and monitor citizens' behaviour as regards sorted waste collection.

'The Organisation' is the ministry for Digital Policy and Public Administration of the government of Catalonia, with the collaboration of the Agència de Residus de Catalunya (ARC) and Eurecat as the entity running the contest.

'Participant/s' refers to person/s older than 18 in possession of the legally required documentation to prove their age and identity, who enter in the 'Blockchain Challenge', in accordance with the provisions of these rules for participation.

'Team' means the **'Participant'**, comprising a minimum of two and maximum of four persons who enter in the 'Blockchain Challenge', in accordance with the provisions of these rules for participation.

1.3 The 'Blockchain Challenge' is an in-person contest where participants are required to define and develop a system based on blockchain technology to identify citizens and economic activities that produce municipal waste, using a mobile app and recording their behaviour in relation to sorted waste, in order to encourage good behaviour.

1.4 The objective of the 'Blockchain Challenge' is to promote the use of blockchain technology and new technologies, by defining and developing new proposals for a system that tracks, monitors and encourages sorted collection of municipal waste. In turn, the goal is to create an inspirational networking ecosystem with blockchain technology experts, programmers and UI/UX developers, as well as other profiles with whom knowledge and experience can be shared.

1.5 The challenge is to make available a transparent and accessible tracking and monitoring system, so that each citizen and economic activity that produces municipal waste may know how to help improve sorted waste rates in their area, taking advantage of the current situation in which user identification systems are being installed, in bin bags, bins and containers installed on public roads.

The system has to enable public authorities to access the information and adapt their actions according to the results obtained, so they may reconsider the system in order to improve the effectiveness of the public service, from an environmental, financial and social perspective.

1.6 The initiative must provide a solution to be able to collect and store data in a distributed manner in the different municipal elements and ensure it may be consulted by the ARC, with

the purpose of setting key performance indicators to measure target achievement, statistics, track the effectiveness of the different models, etc.

The solution may be developed for all waste in general or for a specific fraction: both ordinary waste (organic fraction, glass, containers, paper/cardboard and the rest fraction) and others, such as textile and bulky waste, etc.

1.7 The participating 'Teams' will be made up of between two and four persons, and may be formed by blockchain technology experts, UI/UX developers and programmers, among others. Consequently, it shall be necessary to meet the requirements established in these rules for participation, and properly fill in and submit the entry form in due time and manner.

1.8 The proposals of the new systems shall focus on providing a solution for collecting and storing data related to the sorted waste collection of municipal refuse generated by citizens and economic activities. The solutions must ensure said data is collected and stored in a distributed, transparent and secure manner, as well as encourage waste sorting.

1.9 There will be two winning teams selected by a jury. The team awarded First Prize will receive €4,000 and the team that wins Second Prize will receive €2,000.

2. ELIGIBILITY

2.1 The 'Blockchain Challenge' is open to everyone who loves blockchain technology, and distributed networks and systems: experts in blockchain technology, UI/UX developers and programmers, among others.

3. PARTICIPATION REQUIREMENTS

3.1 Participation is open to anyone over the age of 18 with a valid ID document (DNI/NIF) or passport, or any other document that, in accordance with Spanish legislation, proves the participant's identity and age. In this regard, 'The Organisation' will exclude any 'Participant' whose personal details do not match their true identity or fail to meet any other requirement.

3.2 'Participants' shall fill in the entry form where they must provide information about the name of the team, as well as other details. The 'Team' will comprise a minimum of two members and a maximum of four. The information provided on the 'Team's' entry form as regards the level of professional experience of its members will be assessed by 'The Organisation' in order to confirm participation.

3.3 It shall solely and exclusively be possible to enter the contest using the form available via the link included on the website www.blockchainchallenge.cat at any rate before 22 November 2019.

Only entries made before 22 November 2019 at 23:59 shall be admitted. The applicable time zone is Central European Time (GMT + 1).

3.4 The 'Teams' shall include at least one blockchain technology specialist, a programmer or a UI/UX developer.

3.5 The 'Teams' may be made up of both blockchain technology experts, and programmers or UI/UX developers who are interested in creating a system based on blockchain

technology, to track and monitor the way citizens and economic activities behave as regards the sorted waste collection of municipal waste.

3.6 The 'Participants' undertake to provide their own resources for the development of their proposal, including but not limited to: devices, computers, mobile phones, tablets, gadgets and/or any other necessary material.

3.7 All the members of the 'Teams' shall participate in person; remote participations will not be accepted.

3.8 The 'Participants' may not be replaced by others without previously notifying 'The Organisation'. If a 'Participant' is unable to attend, regardless of the reason, nobody may be able to take its place if 'The Organisation' has not been notified prior to the start of the 'Blockchain Challenge'.

3.9 If for any reason a registered 'Team' is finally unable to attend the event, it shall notify 'The Organisation' at least 72 hours before the start of the 'Blockchain Challenge'.

3.10 No proposals will be admitted that have been presented publicly on any medium or in any other event. In this case, said proposals and the 'Team' will be disqualified by 'The Organisation', and will not be entitled to compete for the prizes.

3.11 In the event a team withdraws from the contest before 10:00 on Sunday 1 December, its entry will not be assessed by the jury.

4. ENTRY OF TEAMS AND PARTICIPANTS

4.1 To be able to participate, the interested 'Teams' must enter in the event using the specific forms available on the Entries section of the web portal www.blockchainchallenge.cat and duly filling in all the required fields.

4.2 The name of the team may not include the name of a business or brand.

4.3 The participant must fill in the following fields on the entry form:

- Details of the Team: Name of the team; number of persons in the team (indicate 2, 3 or 4). Have you previously worked on the creation and development of a system based on blockchain technology? Why would you like to enter into the Blockchain Challenge? Have you participated in other competitions related to the same subject? Which one/s?
- Details of Participants: First name, surname, mobile phone number, email, job, role in the team (blockchain specialist, UI/UX developer, programmer, other), position, statistical position, company/entity/university, department, sector, address, postcode, country, town/city, province. Which individual talent/s do you bring to your team? Link to your LinkedIn profile. OPTIONAL: Attach your CV in PDF or Word.

4.4 Once the entry form has been duly filled in within the established periods, the entry will be formalised with the validation of 'The Organisation', which will send an email if the application is approved.

5. DATES AND TIMES

5.1 Entries: the entry period ends on 22 November 2019, at 12:00 hours. 'The Organisation' reserves the right to extend the entry period, as well as create a waiting list for teams that do not initially obtain a place.

5.2 The 'Blockchain Challenge' contest date: 30 November at 10:00 until 1 December at 10:00.

5.3 Presentation of proposals before the jury: Sunday 1 December (the times are pending confirmation).

5.4 Announcement of winners: Sunday 1 December after the presentation before the jury and its deliberation.

6. DEVELOPMENT OF THE BLOCKCHAIN CHALLENGE

6.1 Each 'Team' will be assigned their own workspace, which will be indicated once they have proven their identity upon arrival at Espai BITaL, the venue of the Blockchain Challenge.

6.2 Each 'Participant' will be provided with credentials, which shall be kept visible at all times during the event.

6.3 'The Organisation' shall provide the attendees with basic infrastructure throughout the event to enable connectivity via a Wi-Fi network, which shall be accessed under the exclusive responsibility of each 'Participant', expressly releasing 'The Organisation' from liability for any matter derived from said access.

6.4 With the purpose of validating the definition and development of the system (Inception), during the contest the mentors will perform two control stages, at the start of the contest and at the end with the project closure, in order to analyse the progress of the developments and monitor the participating 'Teams'. The contributions provided by each 'Team' will be assessed at the sole and exclusive discretion of the jury. The challenges in which the mentoring stages are performed will be detailed at the start of the contest.

6.5 At the start of the contest, the participating 'Teams' will be provided with the documentation that they will use to work on the project to create a system based on blockchain technology.

6.6 During the event, different members of 'The Organisation' or team of mentors will guide the 'Participants' in the definition and development process (if necessary) and they will assist the 'Teams' in any other task or query associated to the contest.

6.7 All programming languages are permitted; the use of any platform and/or operating system is likewise allowed.

6.8 The system shall be defined and developed using Blockchain Ethereum technology.

6.9 The mobile app with which citizens would use the system based on blockchain technology shall use either the Android or iOS operating systems.

6.10 Throughout the contest, 'The Organisation' reserves the right to assess the quality of the developments and source code created by the participating 'Teams', using manual and/or automatic techniques.

6.11 Likewise, 'The Organisation' reserves the right to disqualify any 'Participants' considered to have failed to meet the criteria and/or content of the rules during the 'Blockchain Challenge'. In the event the 'Participant' is disqualified for infringing the rules and/or participation criteria, it expressly waives the right to complain to 'The Organisation', collaborators and/or any third parties.

6.12 The 'Participants' expressly release 'The Organisation' from any type of liability and/or complaint for any kind of theft, harm, material or personal damage caused as a result of failing to adhere to the rules of the premises where the event is held. The participant at fault shall be exclusively liable for said theft, harm, material or personal damage.

6.13 'The Organisation' shall not assume the cost of accommodation and/or journeys of the 'Participants' during the event. Said expenses and any others incurred shall be borne exclusively by each 'Participant'.

7. PRESENTATION BEFORE THE JURY

7.1 The participating 'Teams' shall present their projects before a jury made up of persons appointed for the purpose by 'The Organisation'.

7.2 The presentation shall not last longer than five minutes. It must include details of the initial objective of the proposal, its level of achievement, strengths and weaknesses, functional design, programming language and the development environment or framework employed. It will be necessary to include a video showing a practical demonstration of the system created during the 'Blockchain Challenge', as well as any other information the 'Participants' consider relevant for the assessment.

7.3 The presentation of the results, in addition to the mentors' final evaluation, will enable the jury to make a final assessment of the developments and select the two winning 'Teams'. The jury's decision will be unappealable and the 'Participants' agree that by entering the contest, they waive the right to make any complaint in this regard.

7.4 The jury will be made up of blockchain, development and programming experts, designated by 'The Organisation'. The members shall have no relationship of interest with the 'Participants'.

8. JURY CRITERIA

8.1 The winner will be selected by the judges, whose decision will be based on the fulfilment of a series of criteria:

- **ORIGINALITY AND DEGREE OF INNOVATION**

Originality consists in applying new perspectives for proposing a system for tracking, monitoring and encouraging sorted waste collection in a distributed, transparent and secure manner. Preference will be given to solutions based on a new idea instead of one that previously exists.

- **THE ROLE OF BLOCKCHAIN TECHNOLOGY IN THE SOLUTION**

The role of blockchain technology within the overall solution will be rated. Preference will be given when it plays a relevant and irreplaceable role.

- **COST AND REPRODUCIBILITY OF THE PROJECT**

It is very important to be able to replicate the developed system; for this reason, the amounts of resources required to finally implement the considered solution will be considered.

- **USABILITY**

From a usability perspective, the main idea is to boost and give quality to a user's experience when interacting with the solution. Consequently, the following variables will be taken into account:

- Learnability: How easy is it for users to perform basic tasks the first time they put the solution into practice?
- Efficiency: Once users have learnt how the system works, how long will it take them to perform tasks?
- Memorability: When using the system again after a length of time, how long does it take users to reacquire the necessary knowledge to use it efficiently?
- Effectiveness: While performing a task, how many mistakes does a user make? How serious are the consequences of these mistakes? How long does it take the user to undo the consequences of their own mistakes?
- Satisfaction: When performing the tasks, do users consider the solution to be user-friendly?

- **FUNCTIONAL DESIGN OF THE IDEA**

Without considering the final implementation, the proposal will be rated at a theoretical and functional level: is the perspective of the project, the components and resources used clear enough?

- **QUALITY OF THE IMPLEMENTATION**

When referring to the quality of the implementation, it is carried out at different levels: performance, maintenance, fulfilment of functional requirements, stability, building process and the process for establishing the basis, the source code. The design and visual aspect of the solution will also be taken into account.

9. PRIZES

9.1 The team that wins First Prize will be awarded €4,000.

9.2 The team that wins Second Prize will be awarded €2,000.

9.4 The two prizes awarded in this contest shall be subject to the provisions of Act 35/2006 of 28 November, on Personal Income Tax. In the event that the prize winner has their tax residence in Spain, upon acceptance of the prize they shall be obliged to adhere to the

regulations in force, by virtue of which 'The Organisation' shall withhold or pay tax on these prizes. The prizes shall also be subject to the provisions of Royal Decree 2069/1999, of 30 December, approving the Statute of the Public Business Entity *Loterías y Apuestas del Estado*, Decree 3059 /1966 of 1 December, approving the consolidated text of fiscal taxes, and other consistent provisions.

9.5 Employees of the Agència de Residus (ARC), the government of Catalonia and Eurecat are not permitted to participate in the 'Blockchain Challenge'.

10. RESERVES AND LIMITATIONS

10.1 Falsification and/or concealment of data implies being disqualified from the 'Blockchain Challenge'. Likewise, if applicable, the prize shall be returned in full and 'The Organisation' and/or third parties shall be compensated for any damages.

10.2 'The Organisation' may expel 'Participants' that fail to adhere to the rules, terms and conditions of the 'Blockchain Challenge', as long as it is not due to force majeure. 'The Organisation' shall likewise expel any 'Participant' and/or attendee that prevents the normal and peaceful development of the 'Blockchain Challenge' or abandons the contest before Sunday 1 December at 10:00.

10.3 'The Organisation' reserves the right to disqualify the 'Teams' that submit projects with a virus, malware or any other malicious component that could damage, interfere or vulnerate the security of the system or systems, or data. They may also be disqualified when they have provided false personal data.

10.4 The 'Participants' are expressly informed that while the 'Blockchain Challenge' is underway, images and videos will be taken. If any attendee and/or 'Participant' refuses to appear, they shall previously notify 'The Organisation' in writing.

10.5 All the information, documentation, resources that 'The Organisation' makes directly or indirectly available to the 'Participant' in relation to the event shall be treated with confidentiality. They shall not be made known nor transmitted in any way to third parties by the 'Participant', nor shall they be used for business purposes, either by the 'Participant' or on their behalf. Likewise, 'The Organisation' undertakes to maintain the confidentiality of all the proposals that do not pass the selection process to participate.

11. INTELLECTUAL AND INDUSTRIAL PROPERTY

Likewise, all participants grant 'The Organisation' a free multi-user licence for its Project. Said licence shall be exclusive, with no territorial limits and transferrable to other entities of 'The Organisation', enabling it to exercise its rights, namely: total or partial reproduction using any medium, translation, adaptation, arrangement or any other transformation of the same in any form, which may be exercised and developed in its own name.

Notwithstanding the provisions of the previous section, in the event that the 'Participant' wishes to market their Project, it shall first be offered to 'The Organisation', which shall have priority; in this case, the 'Participant' and 'The Organisation' will negotiate the terms and conditions of either the sale of the Project or the transfer of all exploitation rights to the Bank

if an agreement is reached. Failure to reach a financial agreement shall imply that 'The Organisation' maintains its user-licence in a non-exclusive manner.

12. PUBLICITY

12.1 The selected and winning proposals may be disclosed by the ministry for Digital Policy and Public Administration of the government of Catalonia, by the Agència de Residus de Catalunya and by Eurecat, in communications of an informative or instructive nature, in both paper-based written media and the Internet.

12.2 With the purpose of disseminating the activities performed during the event, the 'Participants' expressly authorise 'The Organisation' and collaborators to use their image in audio-visual media (photographs, videos, etc.). In the event that the 'Participant' does not consent to the use of their image for the aforementioned purposes, it undertakes to previously notify 'The Organisation' in writing.

13. CONFIDENTIALITY

13.1 The 'Participant' gives its consent and authorises the organising entities of the ministry for Digital Policy and Public Administration, as well as Fundació Eurecat, with its registered office in Parc Tecnològic del Vallès, Avinguda Universitat Autònoma, 23 -08290 Cerdanyola del Vallès, and holder of the tax identification code (CIF) G66210345, to include its personal data with the purpose of referring to its participation in the contest, and the possible public announcement of being chosen as the winning proposal.

14. CODE OF ETHICS

The 'Participants' undertake to fulfil the following assessment criteria requirements of the contest and the code of ethics:

14.1 The only proposals considered valid shall be directly related to a system based on Blockchain Ethereum technology that uses a mobile app to interact with citizens.

14.2 The development of the proposals shall not include sexually explicit or suggestive content or references. Said content or references shall neither be violent, derogatory or discriminatory towards ethnic groups, racial groups, gender groups, religious groups, professional groups or age groups; nor may they be of a profane or pornographic nature.

14.3 The participation shall not promote illegal drugs (nor the use of any one of the foregoing), nor any activity considered unsafe or dangerous, nor with political messages.

14.4 The participation shall not be obscene or offensive; nor shall it advocate any kind of hate or hate group, nor make obscene comments about 'The Organisation', the sponsors or their products or services, nor other associated persons, products or businesses.

14.5 The participation shall not contain brands or logotypes that belong to other persons, nor advertise or promote any brand or product of any kind.

14.6 The participation shall not contain copyrighted materials owned by third parties (including photographs, sculptures, paintings and other artworks or images published on websites or on television, films or other media).

14.7 The participation shall not contain materials that include the names, images, photographs nor other features that could identify any person, living or dead, without written permission.

14.8 Under no circumstances shall the participation infringe the national legislation in force.

15. PERSONAL DATA

15.1 **The Secretariat for Digital Policy. Ministry for Digital Policy and Public Administration provides the following basic information on Data Protection:**

- **Identification of the processing**

Workshops and informative acts within the field of telecommunications and the information society.

- **Controller**

Secretariat for Digital Policy. Ministry for Digital Policy and Public Administration.

Contact: Carrer Salvador Espriu, 45-51, 08908 L'Hospitalet de Llobregat

- **Data protection officer**

Contact: dpd.politiquesdigitals@gencat.cat

Via Laietana, 26, 08003 Barcelona

- **Purpose**

Collect the data of persons outside the Secretariat for Digital Policy who sign up for workshops and informative acts organised by this body and/or in which it collaborates.

- **Storage of data**

The personal data will be stored for the amount of time necessary to fulfil the purpose for which they were collected. Once this period has lapsed, in accordance with applicable regulations on documents and filing matters, the data will be stored indefinitely, until such time the table exists for accessing, evaluating and selecting the documentary series that include/s these data.

- **Standing**

Processing is carried out with the consent of the interested person. You may withdraw your consent at any time.

- **Addressees**

The data will be communicated to the processors providing the ICT services on behalf of the controller. No data will be transferred to third parties nor will they be transferred internationally, except when required by law.

- **Rights of the interested parties**

You may exercise your rights of access, rectification, erasure and the right to object to processing, and you may also exercise your right to request the controller to restrict processing by submitting the form available at [Rights of interested persons](#)

You may also submit a claim before the Autoritat Catalana de Protecció de Dades (Catalan Data Protection Authority) at www.apdcat.cat

15.2 Pursuant to Regulation (EU) 2016/679, of 27 April 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such

data and the pertinent national regulation, **FUNDACIÓ EURECAT, the controller, provides the following basic information on Data Protection:**

- Controller:
FUNDACIÓ EURECAT
G66210345
Av. Universitat Autònoma, 23 – 08290 Cerdanyola del Vallès (Barcelona) -
legal@eurecat.org
- **Data of the data protection officer:** dpo@eurecat.org
- **The reason for processing your personal data:** To send you information that matches your interests.
- **Standing:** Data processing is legitimised by the consent provided by the person interested in the activity.
- **Addressees:** The data will not be transferred to third parties, except when required by law.
- **Rights:** You have the right to access, rectify and erase your data, as well as exercise the right to restrict processing and data portability by sending a letter to either the controller's postal address or email address: legal@eurecat.org
- **Storage:** The data will be stored for the length of time required to carry out the service.

15.3 Fundació Eurecat, as the entity running the Blockchain Challenge, informs that it fulfils all the requirements established by data protection regulations and has implemented all the necessary technical and organisational measures to guarantee the security of personal data.

Likewise, in the event that the controller fails to fulfil its obligations regarding personal data, you have the right to lodge a complaint before the Agencia Española de Protección de Datos (Spanish Data Protection Agency).

The 'Participant' acknowledges its right to oppose, access, rectify and cancel its personal data in accordance with the provisions set forth by law, as well as exercise the right to restrict processing and data portability by sending a letter to either the controller's postal address or email address: legal@eurecat.org

15.4 It is necessary to provide personal data on the contest entry form for technical reasons; failure to include said data will imply not being able to enter as a 'Participant' in the 'Blockchain Challenge'.

15.5 The 'Participant' guarantees that the Personal Data given to Eurecat for the 'Blockchain Challenge' are true and it assumes the responsibility to notify any modifications of said data. Likewise, the 'Participants' authorise Eurecat to use its name and image in any paper-based or electronic advertising or communications it develops or carries out to disseminate the results of the 'Blockchain Challenge', in accordance with the terms and conditions established and agreed in these rules. Eurecat will transfer the data to the ministry for Digital Policy of the government of Catalonia and the Agència de Residus de Catalunya, as the organiser and collaborator, respectively, of the Blockchain Challenge. Under no circumstances will it use the 'Participants' data for commercial purposes.

16. ACCEPTANCE OF LEGAL TERMS AND CONDITIONS

16.1 By entering the 'Blockchain Challenge', it is assumed that the 'Participants' expressly and fully agree to these rules. 'The Organisation' reserves the right to interpret and/or modify the terms and conditions of the 'Blockchain Challenge' at any time, even cancelling or declaring it null and void, provided there is a justified reason. In all cases, using the same means, it undertakes to communicate the modified rules or, if applicable, the cancellation of the event as a whole, in such a way all the 'Participants' have access to this information.

16.2 By entering the 'Blockchain Challenge' the 'Participants' undertake to accept and respect the jury's decisions in all terms, expressly waiving the right to complain about said decisions.

16.3 'The Organisation' reserves the right to make changes at any time in the running of the 'Blockchain Challenge' and/or end it early if necessary due to a justified reason, without incurring liability of any nature. In the event any change is made, it shall be duly communicated.

16.4 To resolve any dispute that could arise in relation to the interpretation or applications of these rules, Spanish law will be applied. Both 'The Organisation' and the 'Participants' and attendees expressly subject themselves to the jurisdiction and competence of the Courts of Barcelona, with express waiver of any other jurisdiction to which they might have recourse.