1.1. Expectations at the beginning of the pilot activity

The last but not least of the pilot activities was “Citizen Science at the University of Cádiz: Research challenges from our society: From Cádiz to the World”. The Open Science activity of the University of Cádiz was a local activity, which aimed to energize, make visible and enhance citizen participation in research.

The activity took the format of a competition, “Research challenges from our society: From Cádiz to the World” (“Retos de investigación para nuestra sociedad: de Cádiz al Mundo”) and took place from May 16-30 May 2023. It was organized by participants of WP4 at the University of Cádiz and the Vice-Rectorate for Digitalization and Infrastructures.

It was a novel initiative at the University of Cádiz that was expected to have a great reception among the participants of the university community and the society. The activity aimed at promoting the collaboration between academia and society, identifying the most important challenges from our community, and giving solution proposals by sharing knowledge.

The pilot activity developed at the University of Cádiz could become an activity that might be organized by other partner universities in the future at their local areas. The main objective is to bring local concerns to academia and research areas. Moreover, this activity is designed to be performed virtually which allows us the possibility of being a simple, economic, and easily reproducible activity. The University of Cádiz is a perfect candidate for the development of this type of activity since it constitutes a very important core of Cádiz society. It has its branches in four campuses located in four cities in the province of Cádiz. It is closely connected with the productive sector and society.
The University of Cádiz made a high dissemination of the event, encouraging students from the university to participate. The results revealed important ideas to be taken into account that can be inspirational for Local Administrations. Real challenges of our society, our Cádiz society, were raised up for discussion. It is important to remark that the participation was lower than expected, but the ideas were very inspiring.

### 1.2. Methodology and Development

The team from the University of Cádiz started meeting in September 2022 until May 2023. Different aspects were discussed:

- The scope that University of Cádiz would like to give to this event. Although the activity was planned locally, it was discussed the possibility of giving an Alliance scope. Nevertheless, the language was a handicap if we were expecting involving society.
- The participants that we would like to involve. We opted for the participation in the competition of pairs formed by a student of the University of Cádiz with another non-academic person. The academic student-non-academic couples would have to upload videos to a platform explaining how they would solve societal challenges. On the other hand, the role of the voter was defined, any person from the University or the Society in general. The voters would vote for the uploaded videos they like the most.
- The design an creation of a platform to allow:
  a) the uploading of videos from participants;
  b) the voting procedure from participants;
  c) the visualization of the videos;
  d) the visualization of the winners; and  d) access to the competition rules.
- The dissemination. Dissemination material should be sent to all the faculties, faculties and universities webpages, and SEA EU/University societal media.
- Creation of an Experts Committee for evaluation of proposals.
- Choice of awards for the winners.
- The evaluation of the videos. The percentages for evaluation of the contributions were: 30% Votes from the University of Cádiz, 30% Votes from the society and 40% the vote of the Experts Committee.

The general objectives of the "Challenges from Cádiz to the World" competition were:

- to encourage citizen science.
- to support the transfer of popular knowledge.
- to create synergies between different sectors of the population to solve the same problem.
- to increase the impact and dissemination of the lines of research and knowledge transfer carried out at the University of Cádiz.
- to promote the generation and dissemination of knowledge in innovative and creative formats.
- to promote critical thinking, encourage public participation and the feeling of belonging of the population that faces local problems with global effects.

The virtual platform [https://citizenscience.uca.es](https://citizenscience.uca.es) was created that included the rules of the competition as well as the links to get registered, upload the videos and vote.
**Dissemination** of the event was performed 10 days before participants can get registered through:

- Emails to UCA students community.
- Faculties webpages and University webpage.
- Social media instagram accounts from Faculties, Universities and Scientific Culture Unit from the University of Cádiz.
- SEA EU Alliance-Cádiz network.

Examples of Dissemination:
https://cctrabajo.uca.es/noticia/concurso-retos-de-Cadiz-al-mundo-2023/
https://www.uca.es/noticia/abierto-el-plazo-del-concurso-retos-de-Cadiz-al-mundo/
https://ccmaryambientales.uca.es/noticia/concurso-ciencia-ciudadana/
https://www.instagram.com/p/CsVmue-onvP/
https://www.instagram.com/p/Cstod4zo2en/
https://www.instagram.com/p/Css_yOGo3br/
https://www.instagram.com/p/CsS1Ay4IKYE/
https://www.instagram.com/p/CsTRUBUoXmv/

**Participation requirements**

To participate in the competition, it was only necessary to form a couple between a student of the University of Cádiz (Bachelor, Master, Ph. student of the University of Cádiz (Degree, Master, Doctorate, from any of our campuses), with a person Campus), with a person outside this field of study and who has more life experience (grandparents, fathers, mothers, fathers, mothers). The participation of minors was not allowed.

**Themes of the challenges**

The themes of the challenges represented different lines of management of the environmental and marine sector that our society is facing in order to guarantee the quality of life we know so far for the coming years.

The themes of the proposed scientific challenges:

1) If you could manage the money of your city, how would you invest it so that there would be more wealth and more jobs?
2) How would you manage packaging to reduce waste and plastics in the sea?
3) What actions would you take so that tourists do not stress people who live in the city?

**How to participate? Applications and dates**

A link to the application form was available on the web page of the competition. Participants could get registered from the 16-22 May 2023. Once registered for the competition, participants
received an e-mail confirming their registration and the instructions to participate in the video challenges.

When the video submission period opened (22 May 2023), the couples uploaded the videos to the platform (one video for each challenge). The first 10 couples that met the participation requirements in their videos will be selected and the collection of more videos will be closed. Then the voting phase was opened on 26 May 2023 and closed on 30 May 2023.

The originality, the innovation of the video proposal was evaluated.

1.3. Challenges found and solution proposed

The main difficulties faced during the proposed objectives were to disseminate the activity at the University level. The dissemination channels and protocols at the University of Cádiz are not implemented properly. The information was sent by email to the students, but the information was not disseminated properly in faculty websites and social media. Discussion and giving solutions at the Committee of experts’ level helped to overcome these obstacles.

We will organize the activity at least during one semester long. We will do a better dissemination in order to reach out all students during a longer period of time. On the other hand, we will connect this activity with the local administrators since ideas might come up as useful strategies to solve problems at the local level.

1.4. Results obtained

Participants, three couples, uploaded interesting videos giving responses to three challenges of our society: absence of employment opportunities, contamination, and tourism pressure.

This pilot activity might constitute an example of good practices in order to link society with academia. It would be an interesting task to perform the competition at the same time in the rest of the universities, so that common challenges can be identified, and responses can be given from different points of view and cultural contexts.

When designing a common research agenda in WP6, one of the most important issues is to build a common research agenda that can provide solutions to society challenges. It is important to take this into consideration. Results obtained in this kind of pilot activity could be a significant input when deciding the most important topics of research that are planning to be funded.

1.5. Quality Self-Assessment

This activity is contributing to two transformation modules from the proposal: transformation module (4): reinforcing cooperation with non-academic actors, esp. academia-business cooperation; and transformation module (6) involvement of citizens, civil society and public/cities authorities in research and innovation. The present Pilot Activity contributes to support the involvement of citizens in research and innovation.

The dissemination of the event should be better registered. The event should be extended at least during one semester in order to be really integrated in the students’ academic activity. For a better impact of the results, it would be recommended to involve local administrators.

The results are videos in a Citizen Science platform that we have created. They are available over time (see submitted videos: https://citizenscience.uca.es/)