DELIVERABLE 5.1

Disaster Management AI Portal

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Project Name:	**Disaster Management Artificial Intelligence Knowledge Network**
Acronym:	ARTION
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Project website:	**https://www2.kios.ucy.ac.cy/ARTION/**
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Dissemination level:	Public

Contents

1. INTRODUCTION

The major objectives of ARTION includes the sharing of knowledge in order to raise awareness on the benefits from incorporating Artificial Intelligence (AI) solutions into the disaster management cycle and motivate further advances in a more unified and directed way. Towards this goal, the Disaster Management AI portal aims to play a significant role by enabling broad sharing of material, knowledge, and best practices among stakeholders. For example, researchers will have access to open access datasets and AI algorithms and emergency response organizations will have access to the training material developed throughout the project. The Disaster Management AI portal will provide a single point of access to data, software and algorithms, reviews, scientific publication whilst facilitating as a space for interaction, knowledge transfer, sharing of expertise and collaboration between academics and scientists, developers and entrepreneurs, emergency response experts, policy makers and first responders.

In particular, the portal will host in open-access mode the following:

- AI algorithms created through ARTION
- The datasets collected during the activities of the ARTION project (e.g., emergency response exercises and disaster management scenarios)
- Other relevant material like manuals, documentation, etc.

The Disaster Management AI portal will be powered by CKAN (Comprehensive Knowledge Archive Network), which is a free, open source-platform for building data repositories in order to manage and publish open data. All material will be stored at the servers of the KIOS Research and Innovation Center of Excellence at the premises of the University of Cyprus (UCY). CKAN has been selected for this purpose as it exhibits several advantages, among which the following aspects were considered as particularly desirable:

- It allows customizations of its features,
- It can be installed and run completely under the control of the interested organization,
- It supports advanced data visualizations,
- It is a well-established platform used by governments, organizations and communities worldwide.

The first, basic version of the portal is developed and will be launched online at the end of March, 2021 in accordance to Milestone MS7 in month 3 of the project.. The portal will evolve over time, both visually and content-wise, as the project evolves, and new material will be created and uploaded.

As soon as the Disaster Management AI portal becomes populated with sufficient material, it will be communicated to interested researchers and stakeholders by the following means:

- Through the online training workshops and training course that will be carried out as part of the project,
- Through scientific publications related to ARTION that will utilize the material (i.e., datasets and algorithms) hosted on the platform (a link to the source, i.e., to the portal, will be included in the publication)
- Through direct communication of the partners with interested stakeholders in order to inform them about the project's results and outcomes.

2. THE DISASTER MANAGEMENT AI PORTAL

We present the first version of the Disaster Management AI Portal. The appearance of the portal is not customized yet, but it is fully functional and ready to host the aforementioned material. Figure 1 shows the main page where all datasets will be listed with search-box functionality.

Organization of the datasets into categories (called groups) is possible. Figure 2 is a screenshot of viewing the available groups. Currently there is only one group as we are still at the early stages of the project and the portal does not contain actual datasets yet. When selecting a specific group, all the corresponding datasets appear in a list (Figure 3).

The Disaster Management AI Portal will result from the collaborative outputs of the partnering organizations. Therefore, the material in the portal can be also categorized according to the corresponding organization that uploaded the specific item. Figure 4 shows a screenshot of viewing the organizations contributing to the portal. Each project partner can have a different profile in the portal, containing a short presentation of the organization and listing all the material uploaded by the specific partner. Figure 4 shows the profile of one of the organizations collaborating in the project (KIOS). The rest of the partners will be added prior uploading material to the portal (as not all project partners are expected to contribute to the collection and generation of material for the portal).

Finally, Figures 6 and 7 illustrate a dummy dataset that was used for testing and demonstration purposes. Upon selecting a specific dataset from one of the screens illustrated above, a screen with some details of the dataset as well as a "download" button will open. A screen providing more detailed information about the dataset is also available. The dataset that appears here is not a real one, therefore the information provided is very basic just for testing purposes.

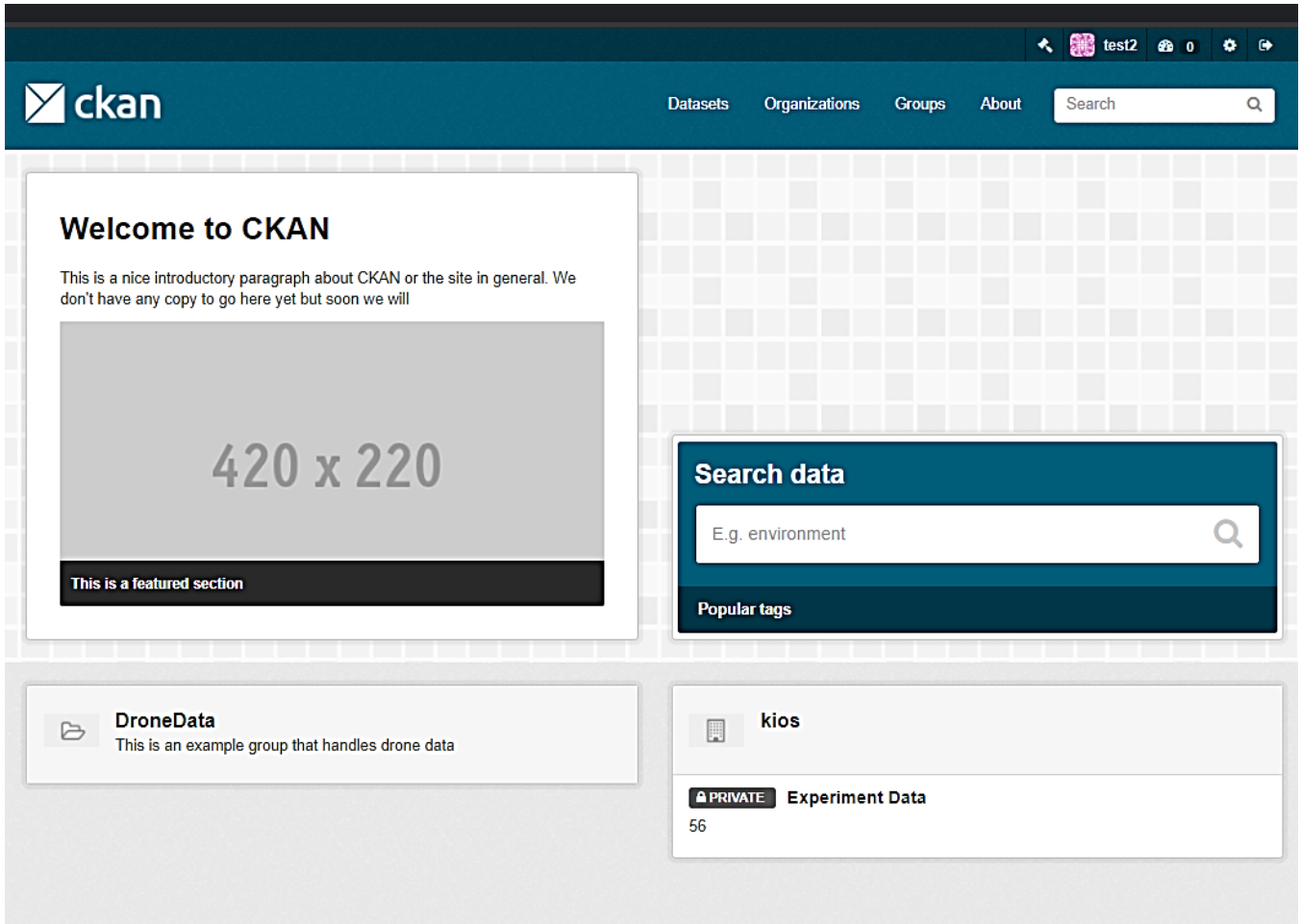*Figure 1: The main screen of the Disaster Management AI Portal*

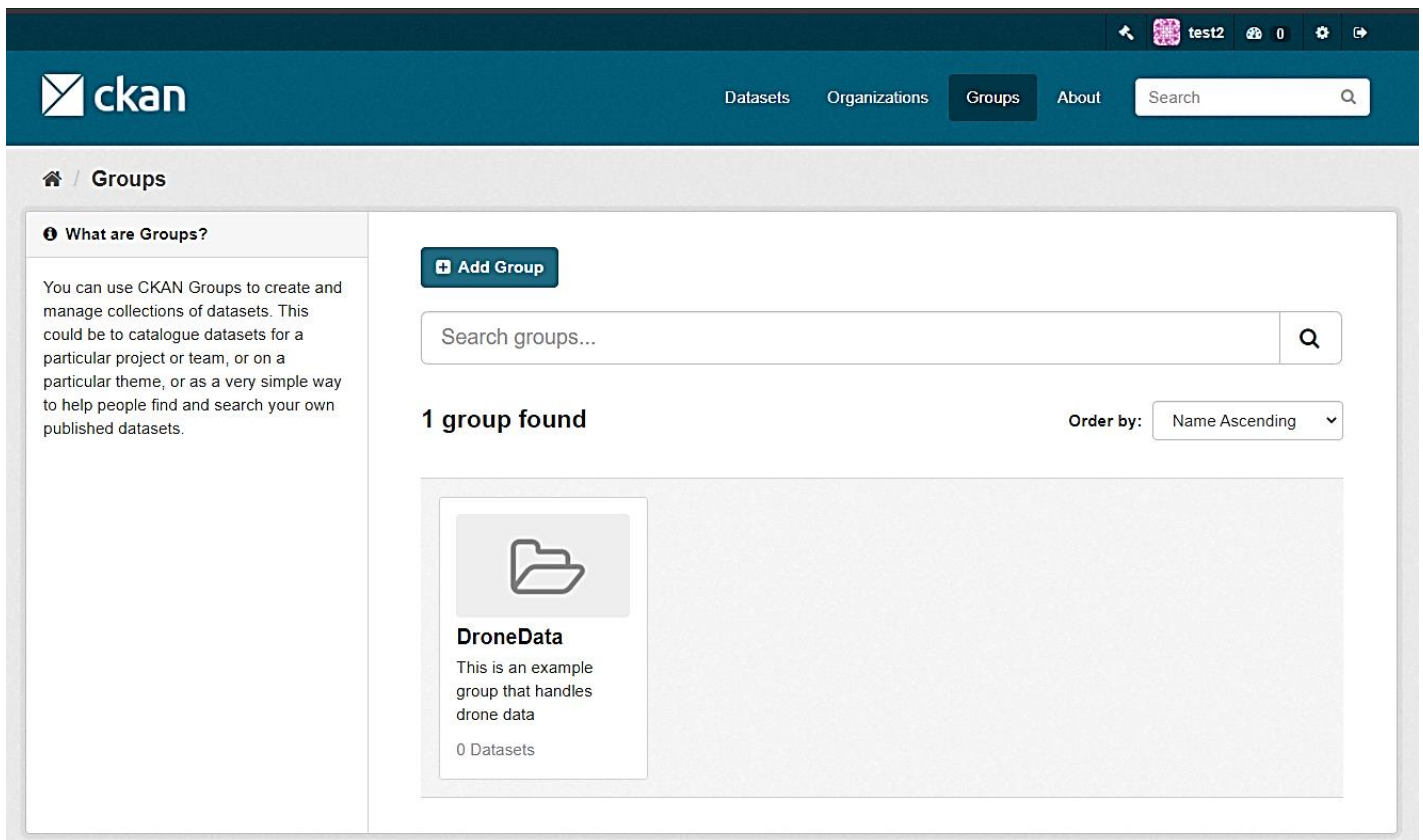*Figure 2: Datasets can be organized into groups (categories)*
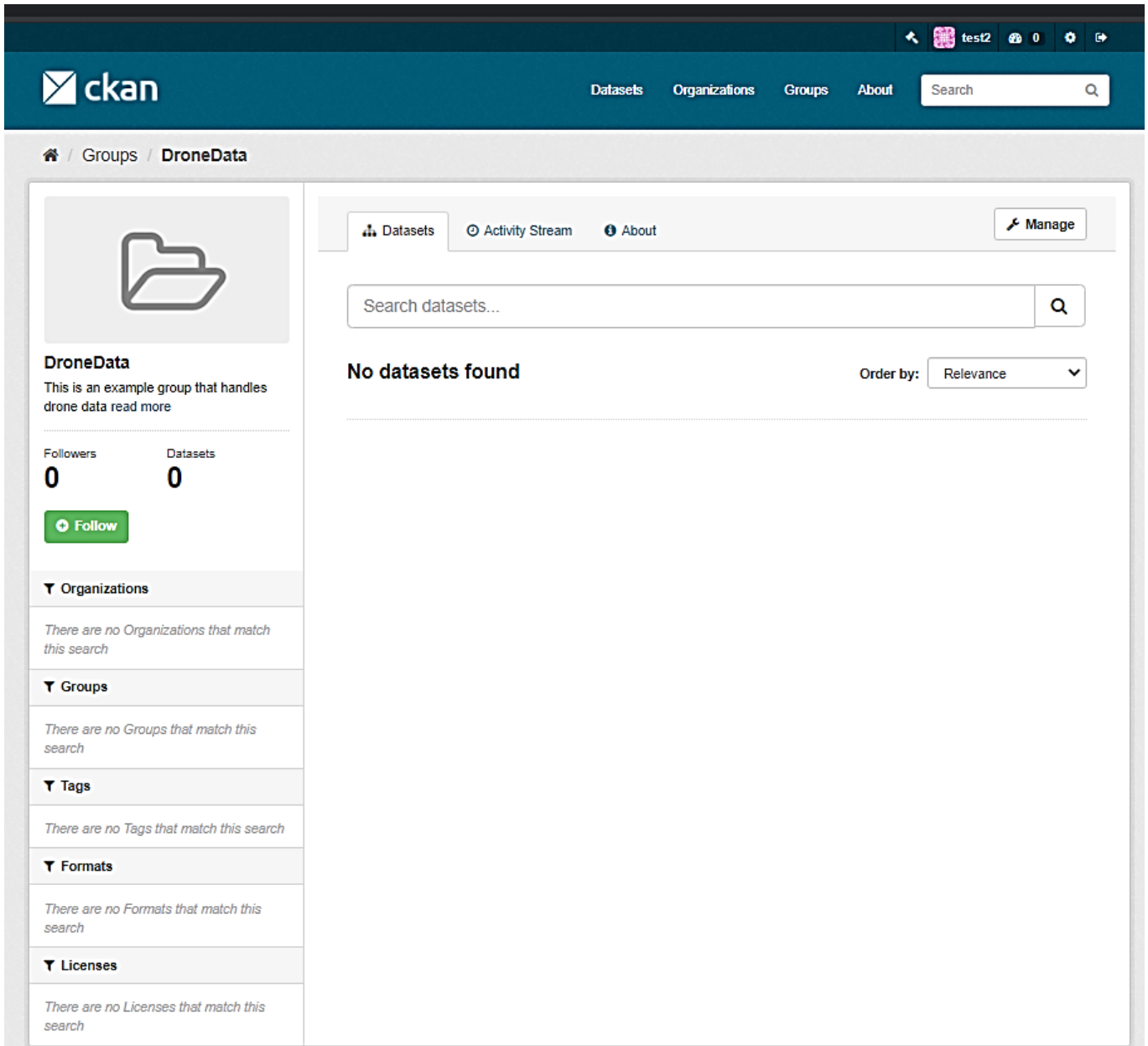
Figure 3: View of the contents of a group

Figure 4: The organizations contributing to the portal

Figure 5: An organization's profile at the portal
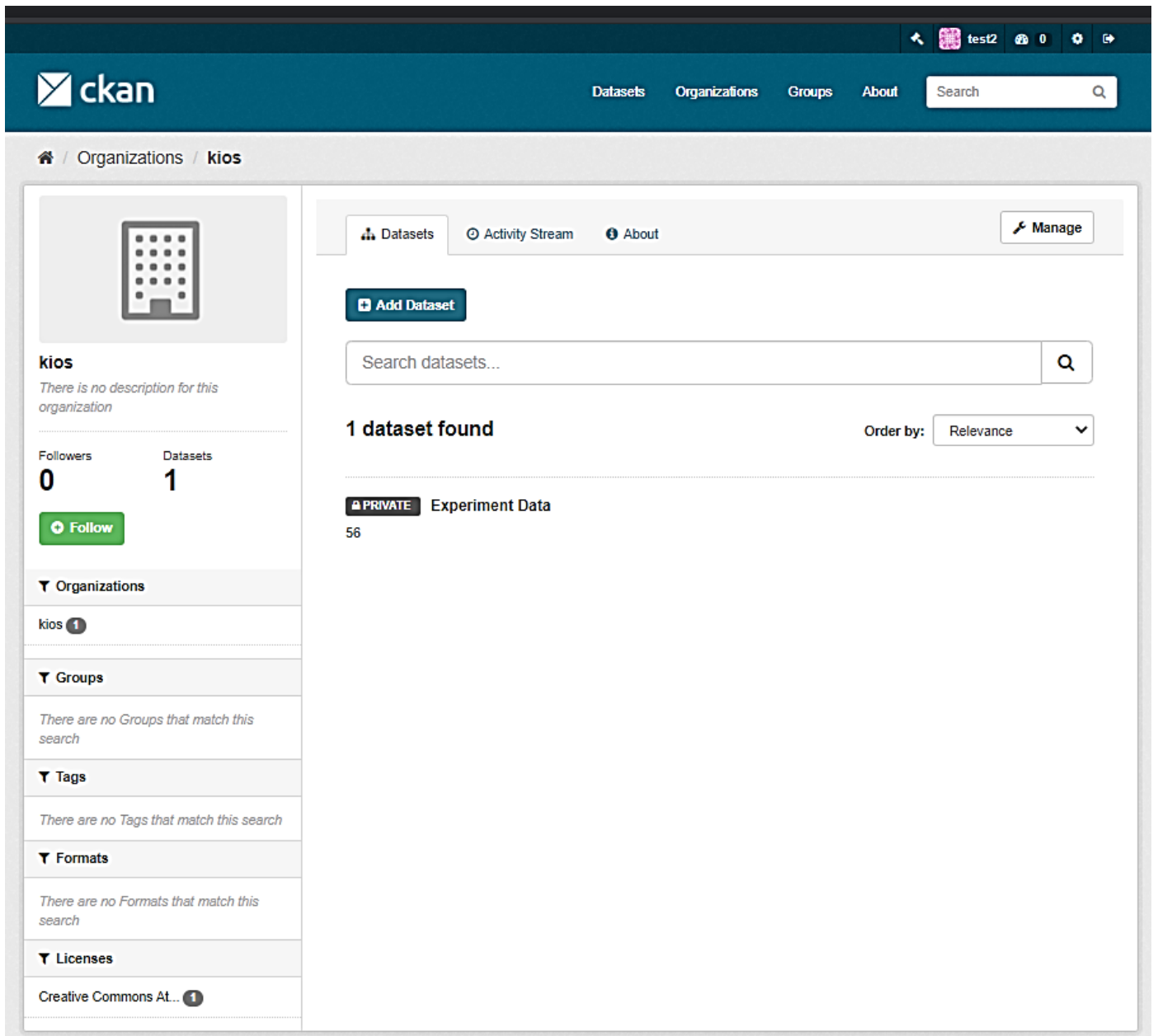
Figure 6: Accessing a dataset (with the ability to download it)

3. DISSEMINATION

The Disaster Management AI portal that will act as a) a single point of access to data, software and algorithms, reviews, scientific publication, and b) a space for interaction , facilitating knowledge transfer, sharing of expertise and collaboration between academics and scientists, developers and entrepreneurs, emergency response experts, policy makers and first responders.

The development of the portal has been so far focused on delivering the required functionalities. Once the portal is launched online, a number of dissemination measures will be undertaken to promote wider spread access to the platform by key stakeholder.

All required logos, disclaimers and acknowledgements will be added in order to comply with the signed Grant Agreement.

4. CONCLUSION

Currently, the Disaster Management AI portal is developed and tested and it is a fully functional open-access repository. Over the next period the layout of the portal will be customized to serve the needs and appearance of ARTION outputs. At the end of March 2021, it will be launched and become available through a public domain (Milestone MS7 in month 3 of the project).