

Questionnaire (Flood management pilot)

This questionnaire is used to collect data based on your participation and observations during the disaster management pilot in Vicenza (17-18 May 2022).

All participants involved in the pilot are given the opportunity to complete this questionnaire. The results of the completed questionnaires will be collated and will be used to support evaluation of xR4DRAMA.

Within the questionnaire, you will first be asked to fill in personal information, and to answer questions about the Pilot.

There are no right or wrong answers.

Participating in this questionnaire is voluntary. You do not have to answer any questions you do not wish to answer, and you may cease to participate at any time.

Your responses to this questionnaire will be used for xR4DRAMA research work which ultimate objective is to improve preparation and response to crisis events.

Your responses will remain confidential and data will always be presented in such a way that your identity cannot be connected with specific published data.

Shall you have any question, please ask the pilot administrator.

Part 1– Personal information.

In this part the end user is asked to provide some personal information that will help the researchers to evaluate the results of the questionnaire:

- *What is your professional background?*

☐ *Crisis management* ☐ *Rescue service or Responder* ☐ *Research* ☐ *Technical/Technology*

☐ *Other, please indicate.....*

- *Which option(s) best describes you (you can select more than one):*

☐ *I am a decision maker/policy maker*

☐ *I am a emergency manager*

☐ *I am a first responder*

☐ *I am a scientist / data aggregator*

☐ *I am a citizen*

☐ *Other (please explain).....*

- Gender

☐ Male

☐ Female

- Age range

☐ < 30 ☐ 31 – 40 ☐ 41 – 50 ☐ 51+

- What was your role in the Pilot?

☐ Decision maker/emergency manager (control room)

☐ First responder

☐ Citizen

(by selecting the role the user will be directed to the relevant part for compilation):

Part 2– Trial session: Decision maker/ emergency manager (control room) role

In this part the end user is asked to evaluate the tools made available by the xR4DRAMA to the operators in the control room, to improve their level of situation awareness in the management of flood emergencies.

The results of the evaluation, in terms of feedback and suggestions, will be addressed for the next prototype of xR4DRAMA system.

1) Authoring tool:

a) Is the User interface (UI) clear and user-friendly?

- Easy to use and intuitive
- Requires some effort but is good to use
- Usable but would like training
- Difficult, I would need training

b) Is the tool useful from a 'decisional' point of view?

- ☐ It is useful. I can see that I can benefit
- ☐ It is partially useful but I would like to see some improvements.

(please specify which ones)

.....

- ☐ No, I do not see the benefit.

c) Is the tool useful from a 'operational' point of view?

- ☐ It is useful. I can see that I can benefit
- ☐ It is partially useful but I would like to see some improvements.

(please specify which ones)

.....

- ☐ No, I do not see the benefit.

d) Did you find in the tool all the information you need to remotely create and enhance your situation awareness in managing disasters?

- ☐ Yes, I found good quality and speed of information
- ☐ Partially, I need other information
- ☐ (please specify which ones)

.....

- ☐ No, I do not find any useful information.

e) How do you define the clearness in visualizing the provided information from the system?

- ☐ Very good
- ☐ Good
- ☐ Sufficient
- ☐ Not good at all

(Please specify why)

f) What is your general impression?

- ☐ Good, I can start working with it straightaway
- ☐ Useful, It offers features I need but I would want more information/features

(please specify which ones).....

- ☐ Not useful

2) VR collaborative tool:

a) Were you acquainted to using the tools needed to create an immersive environment (e.g. VR glasses, VR environments, complex authoring tools)?

- ☐ Yes, I use them often
- ☐ Yes, I had occasion to use them in the past
- ☐ No, never used them

b) Is the User interface (UI) clear and user-friendly?

- ☐ Easy to use and intuitive
- ☐ Requires some effort but is good to use
- ☐ Usable but would like training
- ☐ Difficult, I would need training

c) Is the tool useful from a 'decisional' point of view?

- ☐ It is useful. I can see that I can benefit
- ☐ It is partially useful but I would like to see some improvements.

(please specify which ones)

.....

- ☐ No, I do not see the benefit.

d) Is the tool useful from a 'operational' point of view?

- ☐ It is useful. I can see that I can benefit
- ☐ It is partially useful but I would like to see some improvements.

(please specify which ones)

.....

- ☐ No, I do not see the benefit.

e) Did you find in the tool all the information you need to remotely create and enhance the situation awareness in managing disasters?

- ☐ Yes, I found good quality and speed of information
- ☐ Partially, I need other information
- ☐ (please specify which ones)

.....

- ☐ No, I do not find any useful information.

f) How do you define the clearness in visualizing the provided information from the system?

- ☐ Very good
- ☐ Good
- ☐ Sufficient
- ☐ Not good at all

(Please specify why)

g) What is your general impression?

- ☐ Good, I can start working with it straightaway
- ☐ Useful, It offers features I need but I would want more information/features

(please specify which ones).....

- ☐ Not useful

Part 3– Trial session: First responder role

In this part the end user is asked to evaluate the tools made available by the xR4DRAMA to the first responders in the field, to improve their level of situation awareness in the management of flood emergencies.

The results of the evaluation, in terms of feedback and suggestions, will be addressed for the next prototype of xR4DRAMA system.

1) AR app:

a) Is the User interface (UI) clear and user-friendly?

- ☐ Easy to use and intuitive
- ☐ Requires some effort but is good to use
- ☐ Usable but would like training
- ☐ Difficult, I would need training

b) Is the tool useful from a 'operational' point of view?

- ☐ It is useful. I can see that I can benefit
- ☐ It is partially useful but I would like to see some improvements.

(please specify which ones)

.....

- ☐ No, I do not see the benefit.

c) Did you find in the tool all the information you need to enhance your situation awareness in managing disasters?

- ☐ Yes, I found good quality and speed of information
- ☐ Partially, I need other information
- ☐ (please specify which ones)

.....

- ☐ No, I do not find any useful information.

d) How do you define the clearness in visualizing the information requested from the system and the way to upload it through the app?

- ☐ Very good
- ☐ Good
- ☐ Sufficient, the procedures should be improved/simplified
- ☐ (please specify how)

.....

- ☐ Not good at all

(Please specify why)

e) What is your general impression?

- ☐ Good, I can start working with it straightaway
- ☐ Useful, It offers features I need but I would want more features

(please specify which ones).....

- ☐ Not useful

2) Data logger + RUSA device:

a) Is the tool useful from a 'operational' point of view?

- ☐ It is useful. I can see that I can benefit
- ☐ It is partially useful but I would like to see some improvements.

(please specify which ones)

.....

- ☐ No, I do not see the benefit.

b) What is your general impression?

- ☐ Good, I can start working with it straightaway
- ☐ Useful, It offers features I need but I would want more features

(please specify which ones).....

- ☐ Not useful

3) Smart Vest for health state and stress level monitoring

a) Size of the garment?

- ☐ S (cc: 76-82 cm)
- ☐ M (cc: 83-89 cm)
- ☐ L (cc: 90-96 cm)
- ☐ XL (cc: 97-103 cm)
- ☐ XXL (cc: 104-110 cm)
- ☐ XXXL (cc: 111-117 cm)

b) The overall comfort of the garment was

- ☐ Totally comfortable
- ☐ Comfortable enough
- ☐ Acceptable
- ☐ Totally uncomfortable

c) While wearing the breathability of the fabric was

- ☐ Totally acceptable
- ☐ Breathable enough
- ☐ Acceptable
- ☐ Totally unacceptable

d) During the pilot, does the band maintain its position?

- ☐ Yes
- ☐ No
- ☐ I don't feel it

e) What is your general impression?

- ☐ Good, I can start working with it straightaway
- ☐ Useful, but I would want some changes

(please specify any suggestion to improve the design of the garment).....

- ☐ Not useful

Part 4– Trial session: Citizen

In this part the end user is asked to evaluate the tools made available by the xR4DRAMA to the citizens, to report on flood-related issues and receive alerts and notification by the Authorities during emergencies.

The results of the evaluation, in terms of feedback and suggestions, will be addressed for the next prototype of xR4DRAMA system.

1) Citizen mobile app:

a) Is the User interface (UI) clear and user-friendly?

- ☐ Easy to use and intuitive
- ☐ Requires some effort but is good to use
- ☐ Usable but would like training
- ☐ Difficult, I would need training

b) Did you find in the notification center functionality useful?

- ☐ Yes, this is a functionality I would often use
- ☐ Yes, this is a functionality I might use
- ☐ No, I do not need it

c) How do you define the clearness in visualizing the information requested from the system and the way to upload it through the app?

- ☐ Very good
- ☐ Good
- ☐ Sufficient, the procedures should be improved/simplified
- ☐ (please specify how)

.....

- ☐ Not good at all

(Please specify why)

d) What is your general impression?

- ☐ Good, I can start working with it straightaway
- ☐ Useful, It offers features I need but I would want more features

(please specify which ones).....

- ☐ Not useful

Part 4– Trial session: All

In this part the end user is asked to evaluate the organization of the pilot itself. The results of the evaluation, in terms of feedback and suggestions, will be addressed in the pilot set-up to test the final xR4DRAMA system.

a) The setup of the Trial was clear and every person involved knew their role and activities to be performed.

- ☐ Yes, I agree.
- ☐ I partly agree

(please specify what was not clear).....

- ☐ I disagree

(please tell us why).....

b) The Trial was realistic to reproduce a disaster management scenario (its evolution and related cascading effects).

- ☐ Yes, I agree.
- ☐ I partly agree

(please specify what was not realistic).....

- ☐ I disagree

(please tell us why).....

c) The Trial sessions scenario was adequate to evaluate the solutions developed by xR4DRAMA and their impact on the disaster management

- ☐ Yes, I agree.
- ☐ I partly agree

(please specify what was missing).....

- ☐ I disagree

(please tell us why).....

Thank you for your collaboration!