

ISAR+ PT SHOWCASE REPORT

iSAR+

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Abstract:

The iSAR+ Project aims to research and develop guidelines and an associated platform that, in emergencies or crises, enables citizens using new mobile and online technologies to actively participate in the response effort, through the bi-directional provision, dissemination, sharing and retrieval of information essential for critical PPDR intervention, in search and rescue and medical assistance.

In its first stage, iSAR+ defines an overall concept and validates it through a prototype – the concept prototype, with the purpose to implement a subset of identified user requirements and needs and requiring validation from the iSAR+ end-users community through an exercise, the PT showcase, performed in the end-users environment, based on a simulated crisis scenario, using iSAR+ prototype, planned and reported in this document.

¹ Nature of deliverable: **R** = Report; **P** = Prototype; **D** = Demonstrator; **O** = Other

² Dissemination level: **PU** = Public; **PP** = Restricted to other programme participants (including the Commission Services); **RE** = Restricted to a group specified by the consortium (including the Commission Services); **CO** = Confidential, only for members of the consortium (including the Commission Services).

³ Sensitive content: **Y** = Deliverable contains sensitive material; **N** = Deliverable does not contain sensitive material.

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Executive Summary

The iSAR+ Project aims at research and development of set of guidelines that, in emergencies or crises, enable citizens using new mobile and online technologies to actively participate in the response effort, through the bi-directional provision, dissemination, sharing and retrieval of information essential for critical PPDR intervention, in search and rescue, and medical assistance. Those guidelines shall among all enable smooth integration of iSAR+ solutions into the current CONOPS of PPDR (e.g. through technological, organizational, ethical and legal and human perspectives). To accomplish this iSAR+ aims at **demonstrating and validating its main concepts** by means of technological platform presented to end-users in an interactive exercise – namely a prototype that will be delivered according to a spiral model of system design (i.e. successful iterations).

In the first stage of the work the concept prototype, is created in order to **respond to a subset** of already identified **preliminary user requirements** and needs that have been reported [D2.221]. Current prototype will provide a baseline for subsequent prototype versions (i.e. Basic and Enhanced Prototypes). All prototype incarnations with no exception are going to be delivered in the process tightly coupling the iSAR+ technical developments (WP6) with end-users community feedback through continuous validation (i.e. through official showcases and scenarios as milestones).

The document D2.231 defined the scope of the concept prototype, its methodology, and describes its two components (in the form of mock-ups): PPDR component and Citizens component.

Performed in synchronization with the Project's official iterations, the showcases were planned to act as advanced validation means of the iSAR+ prototype, concept and platform. Carried out in the end-users' environment, User Showcases are meant to have an active participation of the iSAR end-users community, particularly considering the definition of the new CONOPS and the citizens' involvement.

The first showcase, PT Showcase, was therefore planned according to this document to be performed in Portugal together with Portuguese end-user Community, part of National PPDRs entities.

This showcase mainly consists of a CPX exercise to demonstrate and use the concepts defined on the first iteration of iSAR+ project. The exercise was thus expected to elicit end-user needs and retrieve further feedback in order to consolidate existing ones and/or identify new requirements.

The exercise was based on a simulated crisis scenario defined together with Cascais local PPDR and executed by a mix team composed by PPDR operational, Police operational and iSAR+ partner members.

The commitment and interest of all participants was crucial to the success of this exercise. At the end it was possible to build a deeper insight of what iSAR+ guidelines and platforms can be in the near future and how PPDRs entities shall organize to face a new reality of crisis management policies, tools and processes.

The showcase results were discussed in a workshop performed in the day after, and are presented in this document and also as an annex to D7.731 – Workshops (Plan and Results).

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Introduction

1.1 The iSAR+ project

The iSAR+ Project aims at research and development of a set of guidelines that, in emergencies or crises, enable citizens using new mobile and online technologies to actively participate in the response effort, through the bi-directional provision, dissemination, sharing and retrieval of information essential for critical PPDR intervention, in search and rescue, and medical assistance.

Those guidelines shall among all enable smooth integration of iSAR+ solutions into the current CONOPS of PPDR (e.g. through technological, organizational, ethical and legal and human perspectives). To accomplish this iSAR+ aims at demonstrating and validating its main concepts by means of technological platform presented to end-users in an interactive exercise – namely a prototype that will be delivered according to a spiral model of system design (i.e. successful iterations).

Performed in synchronization with the Project's official iterations, the showcases were planned to act as advanced validation means of the iSAR+ prototype, concept and platform. Carried out in the end-users' environment, User Showcases are meant to have an active participation of the iSAR+ end-users community, particularly considering the definition of the new CONOPS and the citizens' involvement.

iSAR+ project foresees the execution of three user Showcases performed in: Portugal to validate the project's concept; France to conclude the basic iteration; and Finland finalizing the enhanced iteration.

The first showcase was based on surveys that do not include personal data, relieving concerns regarding personal data. The second and third showcases require the individuals' use of the iSAR+ prototypes and the gathering of personal data, activities supervised by the national data protection authorities.

Aligned with these showcases, iSAR+ project organizes workshops to present and discuss showcase results, to analyse the feedback from end-users and integrate the needed improvement in the project's assets.

1.2 Objectives of this report

This report aims at describing the PT showcase, namely the used approach, the results obtained and the recommendations for the next showcases. As previously mentioned, the showcase was followed by a workshop where its results were thoroughly discussed and analysed taking into consideration the iSAR+ conceptual objectives and plans.

Those conclusions coming from the analysis of showcase results affecting iSAR+ objectives, plans and requirements, are presented in a separate document, as an annex to the D7.731 – iSAR+ Workshops (Organisations and Results).

1.3 Report organisation

This document is organized as follows:

- Section 2 describes overall plan and main considerations for the PT Showcase: objectives; elements to monitor; date and location; scenario and timeline; overall rules and considerations;
- Section 3 reports on the analysis of the showcase execution and results;
- Section 4 presents the final conclusions.

The iSAR+ concept prototype is thoroughly described in D2.231 – The iSAR+ Concept Prototype.

The results of this showcase were analyzed in a workshop performed in the day after, with the participation of the observers and some showcase end-user participants. The conclusion of this analysis is presented as an annex to D7.731 – iSAR+ Workshops (Organisation and Results).

2 The showcase plan

The showcase has taken place in 2013-10-09 in the headquarters of Cascais's Civilian Protection Services, located in Alcabideche. The objectives of the event are detailed in section 2.1, and in order to ensure that the objectives would be fulfilled a list of elements to be closely monitored is established in section 2.2. The overall idea is to determine the success of the showcase by analysing the results on the areas identified as critical for monitoring purposes.

The showcase is based on a Scenario detailed in a time line presented in section 2.3 and will follow a specific methodology as detailed in section 2.4.

2.1 PT showcase objectives

The main objective of this showcase is to validate the concept defined in the first iteration of iSAR+ project. Aiming the fulfillment of this objective, the following goals were planned to be achieved:

- To demonstrate the iSAR+ concept, namely the focus on the use of social media information to support PPDR on crisis management scenarios;
- To extract comments and new ideas, from the end-user's community participating in the showcase;
- To further consolidate the requirements baseline and initiate the next phase of the iSAR+ development.

2.2 Elements to monitor

The following elements were planned to be monitored during the showcase:

- Type of information provided by the citizens to the PPDRs via social media channels;
- Type of information delivered by the PPDRs to the citizens community during crisis situations;
- PPDR procedures for taking advantage of the information provided by the citizens through the social media channels;
- Procedures for securing citizen's data privacy rights during crisis management situations.
- Procedures to validate the information received from citizens and social media (eliminate rumours, duplication, etc)

2.3 The showcase scenario

Cascais, July the 4th 2014.

The America's Cup yacht race will leave the harbours of Cascais for another edition of the planet's oldest international sports competition. The city is crowded with sailing fans from all over the world. In the meantime in downtown Cascais, maintenance work is being undertaken in the city's gas distribution system. Several citizens report to the emergency services a very strong gas scent and the civil protection agents decide to further investigate the problem. A few minutes after the inspector arrives at the site, a huge explosion occurs in one of the most popular hotels in Cascais located just 100m from the location where the gas scent reports have been initially registered. The hotel is now on fire and a series of subsequent explosions occur; one of these explosions affects a near-by restaurant. The emergency team started rescuing and evacuating victims from the area. The chaos was established and the area became unsecured, having people plundering business and commercial buildings. People have disappeared when trying to get out of the area. Local embassies requested information on possible citizens from its country involved in the accident.

The America's Cup is an important international event and all the major world news networks are at Cascais covering the event. About 60% of the citizens in downtown Cascais do not speak Portuguese.

2.3.1 Scenario actors

Typically all operations are centrally coordinated at the Civilian Protection Municipal Services, through close cooperation with the Rescue Operations Command (ROC) or through direct contact with the First Responders when deemed to be necessary. The ROC will typically coordinate the First Responders.

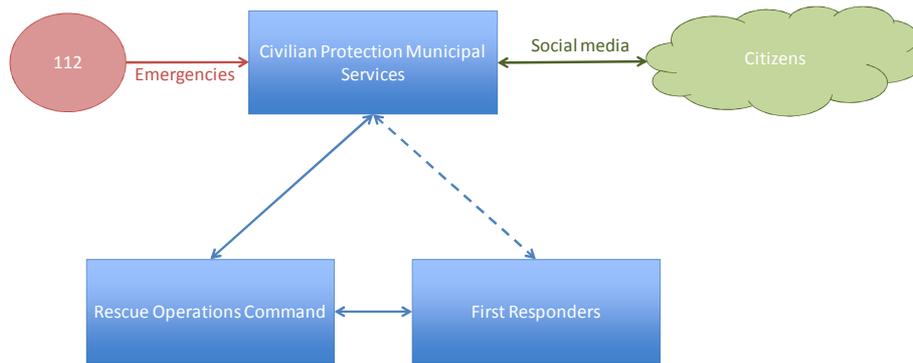


Figure 1 – Scenario Actors relationships.

The PT Showcase scenario will require the participation of three types of actors:

- The Civilian Protection Municipal Services (**CPMS**) – here is located a team of experts that coordinate all the event response activities. The team experts are also capable of assessing the event at the site – these members are referred to as inspectors;
- The Rescue Operations Command (**ROC**) – Command and Control outpost established at the theatre of operations where operations of the first responders are locally coordinated and first aid assistance is provided to citizens.
- The First Responders (**FR**) – the emergency first responders provide assistance to the citizens in the case of an emergency, including the police.

A fourth type of actor, the **citizens** and **media**, does not play a direct role in the scenario although their presence was simulated by the generation of data performed by Tekever members.

All the actors were located in three physical places (**exercise areas**) of Cascais’ Civilian Protection facilities: the **Communication Room (central)**, where all the information is received and validated before disseminated to the decision makers; **Operations Room** with all the main decision makers, either from the Civilian Protection services, from the Police Department or from any other emergency entity; and an **Operational Vehicle** simulating the Rescue Operations Command and with all the entities typically located at the Theatre of Operations, like the First Responders.

To better understand all the actors mentioned in the timeline please consider the following list of abbreviations:

Abbreviation	Description
CPMS	Civilian Protection Municipal Services
CPS	Civilian Protection Services
DCRD	District Central Rescue Dispatch
Estoril FD	Estoril Fire Department
FD Coprs	Fire Department
GNR	(Republican) National Guard
K-9 Teams	Canine Teams
LP	Municipal Police
OCCV	Operational Command and Communication Vehicle
PD	Police Department

ROC	Rescue Operations Command
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Table 1 - Actor Abbreviations

2.3.2 Scenario timeline

The following table presents the scenario's timeline and lists all the simulated activities performed during the Command Post Exercise (CPX).

The simulated location in downtown Estoril is completely fictitious and will be designated by Rua da Explosão (Explosion Street), where the fictitious Hotel iSAR+ is located.

09H00	<p>Central receives a phone calls informing of a strong gas odor near the ISAR+ Hotel.</p> <p>DCRD also receives through emergency hotline several reports of a strong gas odor in the same spot.</p> <p>Estoril FD receives several reports of the same occurrence.</p>	1
09h10	<p>CPMS Technician is dispatched to the scene.</p> <p>CPS notifies Estoril FD.</p>	2
	Estoril FD is dispatched (RECON)	3
09h15	CPMS notify the gas company.	4
09h30	ISAR+ Hotel explosion, causing high damage and eventually victims. There is lots of smoke in the area and panic is installed.	5
09h32	Estoril FD elements request reinforcements to central.	6
	CPS deployed team reports to Central.	7
09h38	Arrival of Estoril FD reinforcement. Beginning of fire extinction process. Beginning of Rescue and Recovery actions (Rescue the Victims).	8
	<p>Central reports the situation to DCRD and activates all rescue protocols.</p> <p>Estoril PD is notified. Estoril FD Central reports occurrence to CPMS.</p> <p>ISAR+: Smoke pictures are received</p>	9
	CPS Central summons LP to the Scene.	10
09h40	Paramedics and Communications Outpost arrive on the Scene.	11
09h45	<p>PD arrives on the Scene. Security Perimeter is established and isolated. That information is reported to CMPS.</p> <p>ISAR+: Security Perimeter Establishment is announced.</p>	12
	<p>ROC reports the existence of at least 40 persons injured, 12 of them in severe condition and confirmation of 6 injured persons</p> <p>ISAR+: Victim Tracking Tools are activated</p>	13
	Triage Outpost established in Casino Gardens.	14

	Reinforcements are requested	15
	Mayor is notified by CPS	16
09h50	First victim is evacuated to the Hospital. They are reported to have burning injuries	17
	Paramedics arrive on the Scene.	18
	OCCV Activation for Command Post OCCV Activation for Command Post establishment.	19
09h52	LP arrives on the Scene and with PD collaboration the evacuation routes are defined	20
09h53	LP requests for tows to remove damaged and parked vehicles in the Scene. ISAR+: The platform is used to inform the population that all vehicles should be removed from the Scene.	21
	Traffic is cut-off in Av. Marginal, Av. Aida and Av. Portugal on both directions. ISAR+: The platform is used to inform the population about this event and again to remove all their belonging vehicles from the Scene.	22
	Meeting Point established. Casino's Gardens are being evacuated. ISAR+: The platform is used to announce the Meeting Point.	23
10h00	ROC does a Status Report. High property damages reported and number of victims is updated (78 Injured, 28 in severe condition and undetermined number of missing persons). ISAR+: The platform is used to provide a Status Report and announce the availability of the missing person's service.	24
10h01	Press arrives at the Scene.	25
	PD begins to route the evacuated persons to the Meeting Point. ISAR+: Information about missing persons is updated.	26
10h02	PD requests reinforcements for the Scene (to assure the Security Perimeter establishment). Corpse Removal vehicle and Forensics Teams are activated.	27
10h05	Gas Company Technician's cut the gas supply	28
	Press reports Live the Explosion. ISAR+: The platform collects the press's news about the incident.	29
10h10	CPS notifies ROC that a Briefing will be made at 10h30m. The Psychological Trauma Teams are activated. ISAR+: The platform is used to announce this event	30

10h15	2 Victims are evacuated to the Hospital	31
10h20	<p>"ISAR+ Democratic Republic" Embassy requests information of possible victims with that country.</p> <p>ISAR+: ISAR+ platform is consulted with the purpose of listing all victims with that nationality</p>	32
10h25	New status report is requested. It is reported that there are 126 Injured persons (39 in severe condition, burned and multiple traumas), of where 3 have already been evacuated to the Hospital. According to information reported by the Hotel Manager, there is a family missing.	33
10h27	4 Victims Evacuated.	34
10h31	PD dispatches K-9 units	35
	Fire spreads to the Hotel's upper levels and threatens the nearby facilities (a restaurant and a cake shop).	36
10h35	<p>Press Conference held by the CPS Director.</p> <p>They inform that every information can be received via iSAR+ platforms... A Portal with Mobile Applications. It is also announced that there is the possibility that all citizens may use the service to look for missing persons or report them.</p> <p>It is announced that the iSAR+ applications are now available for download.</p>	37
10h40	<p>The Emergency Hotline is still overloaded.</p> <p>There are countless incoming calls on hold.</p>	38
	ROC requests reinforcements for the Fire Teams.	39
	ISAR+: Missing Persons reported increased to 53. Several help requests arrive by SMS from the citizens. A SMS is received by someone that is stuck in a hotel-room in the 9 th floor.	40
10h45	<p>Psychological Support Teams arrive on the Scene.</p> <p>ISAR+: This arrival is announced.</p>	41
	FD Corps of Alcabideche, Cascais, Parede, Carcavelos and S.D. de Rana arrive on the Scene.	42
10h50	<p>Messages and Videos about the situation are still being reported on Social Networks. Some of the sent images show signs of people destroying and plundering local businesses. Some stores are already on fire and with high property damage. The images and videos are hand-made drawings.</p> <p>ISAR+: This information is received by CPS through iSAR+ Mobile Apps</p>	43

	and it was gathered through the social-networks 'mining' tools available on the platform.	
10h55	<p>CPS Director informs Councilman that it should be requested that LCPC should be partially activated.</p> <p>ISAR+: the platform is used to generate a set of reports with the purpose of informing the councilman with the latest updates.</p>	44
	<p>The councilman communicates to the Mayor that CMPS should be activated. The Mayor agrees and activates the CMPS.</p>	45
11h00	<p>The restaurant next to the Hotel is now on fire. There is a danger of gas deposit explosion. ROC requests PD to increase the Security Perimeter around this location.</p> <p>ISAR+: The new Security Perimeter is announced.</p>	46
11h05	<p>3 more victims with burning injuries are evacuated in several ambulances to the Hospital. Motorcade is requested to the PD with the RNG Traffic Division in Carcavelos.</p> <p>ISAR+: Some complaints are registered in the Social Networks due to the delays in victims evacuation and low number of medical resources on the Scene.</p> <p>The messages received are in English, French, Spanish and Arab, among other languages.</p>	47
11:08	<p>Due to the increasing number of victims, the request for FD reinforcements is spread for more of the surrounding FD Corps so that the victims evacuation is more efficient.</p>	48
11h10	<p>CPS and Psychological Teams request the population to bring water and light meals to the Meeting Point, especially Milk for children.</p> <p>It is also requested for Diabetes medicine.</p> <p>ISAR+: This support request targets the general population, using the iSAR+ services for the effect. Meanwhile some citizens, in the iSAR+ platform already volunteered themselves to provide Milk, housing among other resources. Those citizens also organized several collection points so that other citizens may also contribute</p>	49
11h15	<p>CPMS meets with CPS in it's installations in Alcabideche.</p> <p>Councilman and Director of CPS are on route to Alcabideche and inform the Press about the CPMS activation.</p>	50

	iSAR+: The platform detects the first News about the incident in the International Press.	
11h20	K-9 Teams arrives on the Scene.	51
	ROC declares the fire in the Hotel as "under control".	52
	2 more victims are evacuated to Cascais Hospital.	53
11h25	Messages and images about the incident are still being reported in the Social Network. iSAR+: Images about the happenings are being registered. Help requests are still being received via SMS and some support messages (besides increasing the Rescue Teams morale, they are not very helpful for the rescue operations).	54
	Unconfirmed information arrives, stating that a family is missing. The message comes from representatives of America's Cup organization. iSAR+: The platform is consulted to validate the received information.	55
	A picture of the family is available on the platform, taken by representatives of America's Cup organization. iSAR+: Family disappearance record is updated.	56
11h30	iSAR+ CPMS publishes in ISAR+ Portal the SMS Guidelines and the Phone number for the information services.	57
	Small violence is reported near the Traffic-Cut in Av. Marginal and Av. Aida. iSAR+: This information arrives by SMS to CPS and it's confirmed by several records in Social Networks.	58
	A Status Report is made. Rescue Teams in the Scene: 5 FD Corps, 16 Emergency vehicles, 50 Firefighters, 15 PD Elements, 2 K-9 Teams, 6 LP Elements, 3 Disaster Psychological Support elements, 2 Brigades from Cascais Ambiente (Cascais Environment), 3 CPS Technicians, 3 Gas company Technicians.	59
	In the Meeting Point : 34 People (Of which, 5 couples, 4 couples with children, 9 other persons of which 4 are hotel employees). The need to find a shelter is verified. iSAR+: The platform is used to initiate a shelter seeking for the victims.	60
11h40	Councilman gives a Status Report to the Press where it informs the creation of an Information Point inside School X's installations, near PD precinct.	61

	ROC reports that the fire in the restaurant has been put out.	62
11h41	The Press requests information about the missing family. iSAR+: ROC uses iSAR+ to update the Status about the missing family.	63
11h45	Injured are still being evacuated to the Hospital.	64
12h00	The evacuated and dislocated Populations are being transferred to Cascais City Hall iSAR+: The platform is used to register all the people in those installations.	65
	GNR reports to have found the missing family in Abano beach. iSAR+: This information is added to iSAR+ platform	66
12h10	ROC reports the fires on the HOTEL are extinct.	67
	CPS activates Engineer Technical Teams.	68
12h15	The Councilman informs the conclusion of the Rescue Operations. All fires have been extinct, all the victims evacuated to Hospitals, the missing family has been found and all the people have been evacuated to City Hall installations in Adroana. A Notice has been elaborated in Portuguese and English about the Status Report. That same report is published in iSAR+.	69
12h30	The recovery and rebuilding procedures have been initiated.	70
12h35	END	71

2.4 Methodology of Showcase

The PT showcase was based on a CPX (Command Post eExercise) undertaken by members of the Portuguese end-user community. The exercise was performed in Portuguese language. The CPX was based on the timeline described in section 2.3.2 as the basis to generate several actions supported by the iSAR+ technology. It was then used a role playing game approach governed by the rules presented in section 2.4.1.

The execution of the exercise and the alignment of the time-line progress between the different actors were coordinated by Tekever members located in the three exercise areas.

The most important actions were performed by the PPDRs members, under the observation of other iSAR+ consortium partners (the **Observers**). AS the exercise was performed in Portuguese language, Observers were supported with non professional translation services provided by Tekever members.

The execution of the scenario during the showcase required the close integration of several different resources:

- Data and simulators (described in section 2.4.2) have been used to emulate data sent by citizen community and social media channels (only Twitter in the case of this showcase) during the scenarios events.
- The showcase venue (described in section 2.4.2) was a critical resource for the execution of the showcase because it needed special requirements to support the execution of the virtual scenario while providing visibility of the results to the audience;
- The showcase participants (described in section 2.4.3) and their role in the showcase execution was also subjected to careful thought in order to ensure that all the required skills and expertise were available for both executing the time-line and analysing the results of the showcase.

2.4.1 CPX rules

The CPX exercise can be easily described by a role playing game governed by several rules. In this game three distinct teams participated:

- The **coordination team**. This team was responsible for generating the events and coordinating the overall game. This team comprised several members with distinct roles and responsibilities, from generating data and communication messages to ensuring the overall control of the game. With respect to the latter, the member assigned as exercise coordinator was empowered to increase/decrease the speed of the events in the story line (timeline) in order to maximize the exercise outputs towards meeting the desired objectives. Furthermore the coordinator was empowered to decide to cancel or suspend the execution of the overall game;
- The **playing team**. This group was actually using the tools of iSAR+ as a response to the events generated by the coordination team. This team comprises representatives of PPDRs, PSP and FR, which were located in all the distinct physical locations. The actions undertaken by the players dictated the overall outcome of the exercise. For the PT showcase the players were trained in the usage of the iSAR+ concept prototype tool [D231], in a specific event that occurred one week before the showcase, the Showcase Dry Run.
- The **observation team**. This team was focused on observing all actions performed by the playing team and, more importantly, the results of those actions. The observation team was not allowed to interfere into the game, unless explicitly authorized by the game coordinator. After the end of the game, during the debriefing session, this team will be able to request the coordination and the playing team for further information that may contribute to better assess the exercise outcome. The observers will decide whether the exercise objectives were satisfactorily achieved, or not. Depending on this decision the coordinator may decide to re-execute the exercise.

The game was played in the facilities presented in section 2.3, and took around two hours to complete, one hour more than it was the initial plan, due to a slow Internet connection. The game start by a 20 minutes briefing performed by the coordinator (in the Portuguese language). The different teams proceeded with the game actions and after the game is declared closed by the coordinator, a debrief session has followed. During the debrief session the team of observers gathered information about the exercise results. By the end of

the debriefing session the observers provided feedback to the coordinator regarding the success of the exercise in meeting the expected results.

Before the game starts all the participants shall sign an Informed Consent expressing that they freely agree to take part in the showcase after being informed about its purpose, risks and related issues.

2.4.2 Data & Simulators

The scenario execution required the generation of several data in order to emulate the citizens inputs to the CMOC. It is important to highlight that the data used in the showcase execution was **totally fictitious with respect to names, locations and events**. The simulated data was produced using three approaches:

- Real time messages generated by the actors of the scenario timeline. In this case Tekever members generated messages to stimulate the iSAR+ platform with data;
- Mass fictitious data generation for triggering the iSAR+ data processing engines for alert generation;
- Fake images (hand-made drawings) produced solely for this event to illustrate specific aspects of the showcase timeline.

The previous data generators will be described in the following sub-sections.

The iSAR+ system incorporates a data-mining platform, which will process the information flowing through the social-media platforms. During the showcase, Tekever members generated the data flowing in the social media (twitter only) to be used by the data mining tools (Osyntlab from Thales in this case). This data generated alerts that trigger a decision process. The data (messages) was produced in Portuguese, English and Spanish to demonstrate the aspects that concern the language issues while mining data from the social media channels.

To support some scenes of the scenario story-line, several fake images will be produced and generated. It is important to highlight that all persons that appear in these images are handmade designs and therefore are covered by the iSAR+ project's data privacy framework.

2.4.3 The showcase venue

It was assumed that executing the exercise in operational facilities (Cascais Civilian Protection Facilities) might represent an obstacle on using some local resources. Tekever has ensured the availability of:

- Laptops that were used in the three exercise areas and with high bandwidth internet connection (some services may be deployed outside the showcase venue)
- One big-screen (or projector) that allowed Observers to closely follow the outcome of the showcase
- Use of local phone and radio communications between the three exercise areas and actors playing outside of these areas (like some First Responders)

3 The PT showcase execution

As already mentioned, before the showcase and in order to train the actors and validate/correct time-line details, a Dry Run test was performed in the showcase location. It occurred on October, 2nd, with the participation of almost all the showcase participants. It was also a good opportunity to present objectives and plans, and to request the participants to answer a Pre-Questionnaire developed in the scope of task 3.2 (refer to D1.111 annex B), aiming at better understanding the attitudes and current use of mobile and online communication tools and social media by Public Protection and Disaster Relief services in crisis management.

The showcase took place on October, 9th, as planned. It started at 10:00 with a briefing conducted by the iSAR+ project coordinator, explaining the players what were the main objectives of the exercise, appealing to the critical spirit in relation to the project guidelines as well as regarding the usage of the iSAR+ platform and the way it was designed.

The timeline execution was coordinated by 3 Tekever members located in the three exercise areas: Communications Room; Operations Room; and Operational Vehicle.

A fourth member of Tekever was responsible for generating data as explained in section 2.4.2.

During the exercise, iSAR+ Observers were escorted by a fifth Tekever member (Observers Point of Contact), allowing them to closely follow the step-by-step execution of the exercise. It was also possible to move between exercise areas and receive specific briefings from the participants.

The exercise was performed using Portuguese language with non professional translation support for the Observers.

3.1 The PT showcase analysis

The exercise took exactly two hours. The speed could be adjusted by the Tekever members in order to balance between the important and expendable steps. The level of closeness to reality was higher than expected, mainly due to the commitment and interest of all players, who even performed extra steps not included in the timeline but that would be necessary in a real crisis management environment. At the end of exercise the feeling of success was unanimous.

After lunch, a session was organized to give players and observers the opportunity to exchange opinions, comments and suggestions.

PPDR members had the opportunity to expound their opinion on the usage of such social tools and how (and why) this opinion has changed due to this exercise.

From the PPDR point of view, instead of an exercise to evaluate operational teams' capacity to react on crisis situation while using iSAR+ platform, as it was their initial expectation, what happened was that this exercise mainly allowed all the stakeholders to analyze the iSAR+ guidelines and platform while answering to a simulated crisis situation.

The showcase was then mainly focused on the collection of inputs, comments or recommendations, on the usage of iSAR+ platform aiming the validation of the concept developed in the scope of the first iteration of this project – the Concept Iteration.

At the end of the exercise PPDRs have expressed surprise and are convinced that, after all, they can take advantage of such tools in the management of crisis situations. It was quite impressive to receive very interesting suggestions contributing not only to improve the iSAR+ platform but also to define the needed guidelines on how to implement such tools, how to train and prepare the PPDRs to, for example, react to new kind of inputs only available through the use of this kind of platform, like data coming from the citizens. At the end it was clear that the entire crisis management operational concept might change.

For the iSAR+ partners, the discussion with end users (session 3) was crucial to have an opportunity to gather directly from the operational inputs which will undoubtedly contribute to the definition of work to be performed within the THEO work packages, and also for the preparation of the next showcases based on suggestions collected here and the lessons learned by all the exercise stakeholders.

The observers were prepared to gather all the possible information, focused on the monitored elements and that would ultimately translate into important inputs for the next phases of the project. The collected results were discussed the day after, in a workshop organized for this purpose. These results were grouped according to the following issues:

- New requirements – which concerns any feedback potentially associated with requirements that the iSAR+ projects had not identified;
- Requirements consolidation – which concerns the feedback contributing to requirements that already identified in the iSAR+ requirements baseline, could now be consolidated by confirmation or better clarification;
- Goals and Schedule – which concern feedback that might affect the iSAR+ goals and schedule;
- Adoption roadmap – which concerns the viability and plans for the end users community to actually use iSAR+ solutions in real world situations;
- Business and exploitation – which concerns the feedback on the potential commercial exploitation of the iSAR+ solutions;
- Recommendations for future showcases (detailed in section 3.3) – which concern recommendations and suggestions for improvement of the future iSAR showcases which will occur in France and in Finland.

The conclusions that came out of the workshop are detailed as an annex to [D7.731 iSAR+ Workshops \(Organisations and Results\)](#), except those concerning the recommendations for future showcases.

3.2 Recommendations for the future showcases

Concerning next showcases, not only are the goals different but the maturity of the project's assets is also expected to allow shortening the distance between the exercise environment (simulated) and what would be a real crisis situation.

While in this first showcase the goal was mainly the validation of the iSAR+ concept to better guide the next phases of the project, the French showcase as well as the Finnish showcase, aim the validation activities as part of the development process of the THEO workpackages iterations.

It is then expected to face a completely different awareness of what iSAR+ can be and how it can support PPDRs and Citizens in crisis situations.

As explained above, in the PT showcase, PPDR members were willing an opportunity of training and evaluating their capacity to react in crisis situations. The stage of iSAR+ project and the goal of this first showcase didn't fulfill this desire, despite its success. However a clear recommendation was raised for the next showcases: holding LIVEX exercises (instead of CPX) with active participation of PPDRs organisations as well as citizens and media, allowing complete validation of the overall iSAR+ products and guidelines.

To better analyze the results of the showcase two recommendations came up: (1) separate leaders from other operational members when collecting comments from end users, to reduce possible communication obstacles (some people might not want to express themselves in front of their boss); (2) analyse and collect comments addressed directly to each point (step) of the timeline, aiming at a feature oriented evaluation.

As initially defined this showcase was based on surveys that do not include personal data, relieving concerns regarding personal data. The second and third showcases require the individuals' use of the iSAR+ prototypes and the gathering of personal data, activities supervised by the national data protection authorities. Therefore the coordinators of each showcase will undertake efforts to receive their National Data Protection Authority's (DPA) approval for the respective showcase, mitigating all potential risks related to data protection and privacy by the enforcement of individual informed consent forms. Those approvals will be provided to the European Commission prior to the commencement of the next showcases. It shall be clear that social media monitoring is restricted to organizations that permit monitoring, such as Twitter.

If the iSAR+ consortium receives a non approval from the DPAs, or if the approval last too long, the corresponding showcase shall be performed in similar conditions of the PT showcase, based on fictitious data.

The next showcase shall be performed in June 2014, before the holiday season, in France, organized by PPSL – Pole Pilote de Sécurité Locale, with the support of Tekever. It will take into account lessons learned of the PT showcase, and also, if possible, the results of two opportunities under analysis:

- Pre-showcase performed in France, in a date/place to be defined, opportunity to be followed-up by PPSL, with the purpose of training PPDRs on some of the iSAR+ tools and prepare the FR showcase;
- The iSAR+ consortium aims to observe the flood exercise performed in Paris in Spring 2014, opportunity to be followed up by DEVERYWARE. Nevertheless, this is to be confirmed due to the secret character of this procedure.

It was clear that people using iSAR+ need to be trained, not only on the tool's usage but also on the new activities and concerns coming up from the usage of such tools: how to deal with new inputs, namely those coming from citizens, which does not happen without iSAR+ tools; how to disseminate information directly to citizens and what kind of information; how to organize the PPDR structure (resources, process, etc) to be ready to use iSAR; how to balance the availability of new information and the undesirable increase of panic caused by that kind of information. This kind of training shall be performed before the next showcases, also as a validation mean of the iSAR+ guidelines.

Finally, and more difficult to achieve is the Citizens community training and education, namely the format of the training means and the way to disseminate them. Training Citizen Community, via schools, social networks, or by any other way, is a hot subject to be discussed in the next phases of iSAR+.