



Amadora Peer Review Feedback Report

Uscore2: City-to-city peer review tool

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The peer review team wish to thank Amadora for its engagement and openness in the peer review process. In particular, the team wish to thank the Mayor and the civic leadership of the city for their hospitality, and the city Civil Protection Service for the support throughout the all process.

All photographs contained within this document were taken by the peer review team during its visit and reproduced with the kind permission of the team.



EXECUTIVE SUMMARY

In 2010 Amadora, Portugal joined the MCR campaign making the issue of risk, disaster and resilience a relevant one on the municipality agenda, focusing on the involvement of the relevant stakeholders in building a cultural mindset on resilience among the entire community.

In 2015, through the participation to the EU project Uscore, Amadora went through a comprehensive DRS analysis which allowed them to build a resilience action plan. These actions led the UNISDR to recognize Amadora as Role Model City for its capacity to foster both citizen and stakeholders engagement in resilience.

In 2017 Amadora joined an international EU-funded project (Uscore2) to design and pilot a new city-to-city peer review tool to assist cities around the world to strengthen their approach to disaster risk reduction. After participating in the design of the tool and testing it with the other partners in a pilot review in Viggiano, Amadora hosted a peer review process aimed at further improving the tool. This report is based on the outcomes of this peer review. During its visit to Amadora between 18th-20th April 2018, the peer review team had the opportunity to verify the strong commitment of Amadora to disaster risk reduction and to building a resilient community. The team was particularly impressed by the level of engagement of the political leadership and the continuity of their commitment both under the present Mayor and the previous one. This, combined with the outstanding work done by the Amadora civil Protection Service, has made it possible to involve in the resilience process an impressive number of stakeholders and to build advanced tools aimed at increasing awareness and education on the most relevant risks that the city is facing. (During an extremely well organized review process, the team had the possibility to integrate the

large amount of pre-visit information received, with the technical information and the experiences shared during interviews with a large and diverse number of stakeholders, including public, private and community entities).

The team also had the opportunity to participate in two sites visit which allowed it to test in the field some important aspects of the modules under review.

To meet additional stakeholders, verifying their level of commitment to improving Amadora's institutional capacity on resilience, from building community awareness to risk to organizing efficient response mechanism in case of disasters.

(This report runs through the outcomes of the peer review team's findings, detailing good practice, identifying areas that potentially could be strengthened, and finally offering a set of recommendations, could be included in the City Master Plan under preparation and the Action Plan, helping Amadora to formally launch a local platform for disaster risk reduction and a programme of work in line with the global commitments in the Sendai Framework). In addition to further improving the Organise for Disaster Resilience and institutional capacity of Amadora, this review can help to showcase this city at the international level as an example of institutional resilience best practice.



PURPOSE OF DOCUMENT

This report presents the findings, analysis, conclusions and recommendations relating to a city-to-city peer review of disaster risk reduction (DRR) arrangements in Amadora, Portugal. The peer review was carried out between 18th and 20th April 2018 using the Uscore2 city-to-city peer review tool.

The team conducting the peer review were as follows:

Giuseppe Guarino	General Director, Gruppo Lucano
Giuseppe Priore	City Council Member, Viggiano – President, Gruppo Lucano
Luciano Garramone	Senior Researcher, Italian Space Agency
Kathy Oldham	Chief Resilience Officer, Greater Manchester, UK
Jon Percival	Project Manager, Uscore2
Jennifer Bealt	University Of Manchester, UK

The Uscore2 project are grateful to Amadora , both for their hospitality in hosting the peer review, but also for agreeing to be peer reviewed and thereby piloting the peer review tool developed by the project team.



AMADORA'S PARTICIPATION IN DISASTER RISK REDUCTION (DRR)

In 2010 Amadora joined the United Nation's Making Cities Resilient Campaign in order to place the issue of risk, disaster and resilience on the municipality agenda and to build an institutional capacity (culture of safety and resilience) and reduce disaster impacts. The focus has been on strong coordination/leadership vital to be successful and empower all communities to participate in DRR.

In 2015, after working with stakeholders in creating a local campaign team and introducing several DRR good practices, Amadora joined the international EU-funded project U-SCORE aimed at piloting the UNISDR Disaster Resilience Scorecard tool in Europe and providing valuable feedback so as to improve the tool and indicators based on the ten essentials for making cities resilient. As part of the project Amadora went through a comprehensive Disaster Resilience Scorecard for Cities analysis.

In 2016 Amadora was recognised by the UNISDR as Role Model City for the capacity to engage local stakeholders in the MCR Campaign and for having an exemplary approach to citizen engagement in urban resilience and community resilience. Today Amadora have more than forty stakeholders (community groups, private sector, national/local authorities, academia, school community, non-governmental organizations) working with the local campaign team and the

involvement of municipal services (local government).

In 2017 Amadora joined the EU-funded project Uscore2 to design and pilot a new city-to-city peer review tool to assist cities around the world to strengthen their approaches to disaster risk reduction. The same year, at the 2017 Global Platform for Disaster Risk Reduction in Cancun (Mexico), Amadora received the UN Sasakawa Award for disaster reduction, based on the development of an innovative methodology to make community safe and strengthen awareness of disaster risks among new generations.

By April 2018, Amadora agreed to have the peer review tool tested on two modules in order to help to validate the tool and to support its final development. The effectiveness of the peer review tool was also evaluated using a methodology developed by the University of Manchester.

AMADORA: INTERNATIONAL CITY-TO-CITY PEER REVIEW

Amadora identified the following areas for assessment through the peer review process:

Uscore2 Peer Review Modules	Making Cities Resilient 10 Essentials
1. Organise for Disaster Resilience	Essential One: Organise for Disaster Resilience
6. Strengthen institutional capacity for resilience	Essential Six: Strengthen institutional capacity for resilience

In the Salford Workshop of November 2017, based on the experience of the peer review in Viggiano of October 2017, it was suggested that, for the Review Team to better understand the DRR issues of the city under review, Amadora would also provide information relevant to Essential Two (Identify, understand and use current and future risk scenarios).

Amadora also defined the specific objectives for the peer review. These were to:

- For Module 1: understand if the work carried out by the municipality in terms of disaster risk reduction is perceptible to stakeholders; what are the direct and indirect contributions of stakeholders to the city's resilience; and how the Disaster Resilience Scorecard contributed to the definition / implementation of a local strategy.

- For Module 6: improve networking from the point of view of institutional resilience; better understand the importance of local government in supporting the construction of a culture of security; improve efficiency and effectiveness of risk communication to entities and the population; better understand what is lacking in order to have a local platform on resilience, with the contribution of local stakeholders.

Over the course of the peer review, Amadora fielded 22 stakeholders to meet with the peer review team. The team would like to express its gratitude to all those who participated. Amadora also provided an excellent translation service during the peer review.

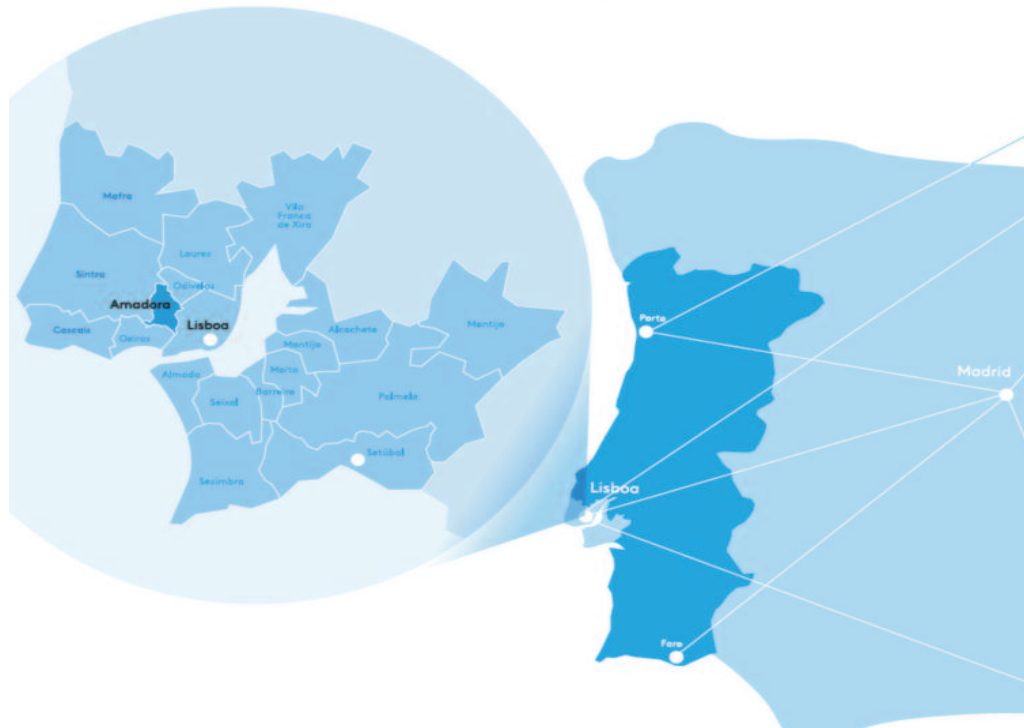
The review was conducted according to the timetable set out below:

18TH APRIL		VENUE: Amadora
09.00- 09.30	<u>Welcome from Amadora and practical details</u>	
MODULE 6: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE		
<u>PEER REVIEW TEAM:</u> Jon Percival, Kath Oldham, Giuseppe Guarino, Giuseppe Priore, Luciano Garramone		
09.30-12.30	PRATICAL EVIDENCES SCHOOL COMMUNITY	STAKEHOLDERS INVOLVED
	Strengthening the resilience of schools and their public is a top priority of the Municipality. Every month schools have awareness sessions about disaster risk reduction and drills in order to ensure a more effective response from internal structures. This process always involves a set of stakeholders.	<ul style="list-style-type: none"> • Education Municipal Department • Civil Protection Municipal Service • Fire Brigade • National Police • Civil Protection Associations • Portuguese Red Cross
12.30-13.30	Lunch	
MODULE 1: ORGANISE FOR DISASTER RESILIENCE		
<u>PEER REVIEW TEAM:</u> Jon Percival, Kath Oldham, Giuseppe Guarino, Giuseppe Priore, Luciano Garramone		
13.30-16.30	PRATICAL EVIDENCES DISASTER RISK ORGANIZATION	STAKEHOLDERS INVOLVED
	The strategy for disaster risk reduction has been a commitment made by all entities. The process of planning and organizing the response is presented in various plans and documents.	<ul style="list-style-type: none"> • Mayor's office • Civil Protection Civil Protection Municipal Service • Fire Brigade • National Police • Portuguese Red Cross
16.30-17.00	Review of the day	

19TH APRIL	VENUE: Biblioteca Municipal Fernando Piteira Santos	
MODULE 1: ORGANISE FOR DISASTER RESILIENCE		
PEER REVIEW TEAM: Jon Percival, Kath Oldham, Giuseppe Guarino, Giuseppe Priore, Luciano Garramone		
09.00-09.30	Peer Review team preparation	
09.30-09.45	Organise for Disaster Resilience (presentation)	SPEAKER Civil Protection Chief: Luis Carvalho
		STAKEHOLDER INTERVIEWS (one-on-one interview)
09.45-10.45	PLAN MAKING	<ul style="list-style-type: none"> • <u>Mayor</u>: Carla Tavares; • <u>Urban Planning Chief</u>: Deolinda Costa
	INTERVIEWS (30 MIN X 2)	
10.45-11.15	Coffee break	
11.15-12.30	PLAN MAKING	STAKEHOLDER INTERVIEWS (one-on-one interview)
	INTERVIEWS (30 MIN X 2)	<ul style="list-style-type: none"> • <u>Civil Protection Senior Expert</u>: António Farinha; • <u>Environment Department Chief</u>: Cristina Pereira
12.30-13.45	Lunch	
13.45-15.30	ORGANISATION, COORDINATION AND PARTICIPATION	STAKEHOLDER INTERVIEWS (one-on-one interview)
	INTERVIEWS (30 MIN X 3)	<ul style="list-style-type: none"> • <u>Civil Protection Regional Commander</u>: André Fernandes • <u>Dolce Vita Tejo Shopping Center Chief</u>: Roberto Xavier • <u>Local Council (Parish) Venteira President</u>: Carla Neves
15.30-16.00	Coffee break	
16.00-17.00	INTEGRATION	STAKEHOLDER INTERVIEWS (preference for one-on-one interview)
	INTERVIEWS (30 MIN X 2)	<ul style="list-style-type: none"> • <u>Deputy Mayor</u>: Luís Lopes • <u>Social Integration Chief</u>: Ana Moreno
17.00-17.30	Review of the day	

20TH APRIL	VENUE: Biblioteca Municipal Fernando Piteira Santos	
MODULE 6: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE		
PEER REVIEW TEAM: Jon Percival, Kath Oldham, Giuseppe Guarino, Giuseppe Priore, Luciano Garramone		
09.00-09.30	Review team preparation	
09.30-09.45	Strengthen institutional capacity for resilience in Amadora	<ul style="list-style-type: none"> • <u>Health and Security at Work Chief: Ursula Carrasco</u>
<u>09.45-10.45</u>	SKILLS AND EXPERIENCE // DATA SHARING	STAKEHOLDER INTERVIEWS (one-on-one interview)
	INTERVIEWS (30 MIN X 2)	<ul style="list-style-type: none"> • <u>Fire Department Commander: Mário Conde</u> • <u>National Police – Local Office Chief: Resende</u>
10.45-11.00	Coffee break	
<u>11.00-13.00</u>	PUBLIC EDUCATION AND AWARENESS	STAKEHOLDER INTERVIEWS (one-on-one interview)
	INTERVIEWS (25 MIN X 4)	<ul style="list-style-type: none"> • <u>Civil Protection Senior Expert : Carlos Rocha</u> • <u>EB2+3 School Teacher: Adelaide Paixão</u> • <u>ECRE Volunteer Association: Carina Castanheira</u> • <u>Education Department Chief: Marisa Durão</u>
13.00-14.00	Lunch	
<u>14.00-15.30</u>	TRAINING DELIVERY	STAKEHOLDER INTERVIEWS (one-on-one interview)
	INTERVIEWS (25 MIN X 3)	<ul style="list-style-type: none"> • <u>Elovitais – Health and Rescue Services: José Firmino</u> • <u>Local Council (Parish) Falagueira President : Ana Venâncio</u> • <u>Senior Academy representative: Vitor Tempera</u>
15.30-16.00	Coffee break	
<u>16.00-17.00</u>	LANGUAGE // LEARNING FROM OTHERS	STAKEHOLDER INTERVIEWS (one-on-one interview)
	INTERVIEWS (2)	<ul style="list-style-type: none"> • <u>Red Cross Local Delegation Chief: Fernanda Machado</u> • <u>Local Council (Parish) Expert: Rute Julião</u>
17.00-17.30	Review of the day	

Framework of Lisbon area and Amadora city in Portugal



AMADORA : A RESILIENT CITY

- Amadora town population: 175,558 (2011 census)
- Total area: 23,78 km²
- Population density: 7 363 inhabitants/sq km (the densest municipality in Portugal)
- City includes 6 Parishes
- Total foreign population: 10% of resident population
- Average age of the resident population: 41,5 years
- Average monthly income of workers: 1,249 euro
- Region: Lisbon Metropolitan Region (2,815,851 inhabitants)
- 18 municipalities including City of Lisbon and Amadora
- Lisbon Metropolitan Region area: 3,002 km²

KEY CONSIDERATIONS IN THE CONTEXT OF DISASTER RISK REDUCTION

Amadora is a satellite city of Lisbon located in the northwest of the Lisbon metropolitan area. Composing an area of only 23.78 km², Amadora Municipality is one of Portugal's smallest municipalities; however, with 7,363 inhabitants per km, Amadora has the highest population density of any municipality in Portugal. Amadora's population is characterized by an increasing proportion of elderly people. As a satellite city of Lisbon, younger people often leave the city to look for work in other Portuguese cities such as Lisbon, Sintra or Montijo, whilst the elderly people remain. The city also has a growing immigrant population, mainly from the former Portuguese colonies in Africa – Cape Verdian, Angola and São Tomé. Amadora has a large community of Roma gypsies who have given up their nomadic lifestyle to settle in Cova da Moura in Junta de Freguesia da Damaia, a neighbourhood with no real urban structure or planning in the streets and houses. One of the challenges facing emergency services is the lack of access and difficulties in evacuating this neighbourhood during fires or floods.



SHOCKS

Shocks are the disasters or emergencies a city may face. Identifying risks enables proportionate and appropriate risk mitigation measures and preparedness in case of an emergency. Key risks in Amadora include (in order of severity):

- Floods
- Urban fires
- Traffic accident (road)
- Earthquakes
- Landslides
- Forest fires
- Traffic accident (rail)
- Heatwave
- Drought
- Structural collapse
- Snow fall

STRESSES

Stresses are the chronic pressures that a city faces that weaken the fabric of the city, making it difficult to absorb, respond to and recover from disasters. Over time, they can become disasters in their own right. The information shared with the peer review team in 2018 both before and during the peer review suggested a number of stresses may be present:

- Growing urban population and increased density, which put pressure on land and services
- Population living in slums (3,8% of total population)
- Foreign population (10% of total population)
- Increasing percentage of elderly population (18,7% of total population)
- High retention and dropout rate in primary education (16,2%)
- High unemployment rate (15%) with significant component of youth unemployment (32%)
- High proportion of the resident population (32,8%) who daily leave the city to work or study. This may impact negatively on both the traffic accident risk and the number of exceedances of concentration limits of pollutants
- The decline of ecosystems due to human activities
- Adverse effects of climate change that will likely increase or decrease extreme temperatures and precipitation.

EMERGENCIES IN AMADORA

CATEGORY	HAZARD	IMPACT				RISK
		POPULATION	ENVIRONMENT	SOCIO ECONOMY	TOTAL	
SNOWFALL	LOW	LOW	LOW	LOW	LOW	LOW
HEATWAVE	LOW	MEDIUM	LOW	LOW	LOW	LOW
COLDWAVE	LOW	LOW	LOW	LOW	LOW	LOW
DROUGHT	LOW	LOW	LOW	MEDIUM	LOW	LOW
FLOODS	MEDIUM	HIGH	LOW	HIGH	HIGH	HIGH
EARTHQUAKE	LOW	HIGH	LOW	HIGH	HIGH	MEDIUM
LANDSLIDE	LOW	MEDIUM	LOW	MEDIUM	MEDIUM	MEDIUM
TRAFFIC ACCIDENT (ROAD)	HIGH	HIGH	LOW	LOW	MEDIUM	HIGH
TRAFFIC ACCIDENT (RAIL)	MEDIUM	MEDIUM	LOW	MEDIUM	MEDIUM	MEDIUM
TRAFFIC ACCIDENT (AIR)	LOW	MEDIUM	LOW	MEDIUM	MEDIUM	MEDIUM
TRAFFIC ACCIDENT (HAZMAT)	MEDIUM	LOW	MEDIUM	LOW	LOW	LOW
URBAN FIRE	MEDIUM	MEDIUM	LOW	MEDIUM	MEDIUM	HIGH
STRUCTURAL COLAPSE	LOW	MEDIUM	LOW	LOW	LOW	LOW
FOREST FIRE	MEDIUM	MEDIUM	MEDIUM	LOW	MEDIUM	MEDIUM
HAZMAT	LOW	LOW	LOW	LOW	LOW	LOW

SEISMIC RISK

The whole of Lisbon Metropolitan Area is characterized by seismic risk due to the presence of both offshore and onshore active faults. During the Great Lisbon Earthquake, which occurred on November 1, 1755, nearly 70% of Lisbon's dwellings—about 23,000 buildings—were destroyed or substantially damaged by the combined effects of shaking, fire and tsunami. Recent work carried out at Portugal's Laboratório Nacional de Engenharia Civil has resulted in new seismic loading zones to be implemented in Portugal's national annex to Euro Code 8. According to this work the Lisbon Metropolitan Area, where Amadora is located, belongs to Portugal's highest seismic risk zone.

RECENT MAJOR DISASTERS IN AMADORA

STRONG WINDS

19/01/2013
09/02/2014
10/12/2017

LANDSLIDES

20/01/2020
06/02/2014
13/02/2014

URBAN FIRES

03/02/2009
28/06/2014

HAILSTORM

29/04/2011
17/01/2014

FLOODS

19/11/1983
30/05/2011



TIMELINE OF KEY DRR EVENTS

Before

2010

No DRR strategy in
Amadora

2010

In August 2010, the
Municipality of Amadora joined
the Making Cities Resilient
(MCR) campaign.

Amadora's Mayor created a
multidisciplinary team that
was composed of 7 members
(3 from Civil Protection Office,
3 from Health and Safety at
Work Service, 1 from Urban
Planning Office

2015

Amadora participated in
the EU-funded project
U-SCORE aimed at
piloting the UNISDR
Disaster Resilience
Scorecard tool in Europe
and went through a DRS
analysis.

2016

Amadora was recognized
by the UNISDR as Role
Model City in the MCR
campaign

2017

Amadora become involved
in the Uscore2 Project
funded by the European
Commission "City to city
Peer Review on Disaster
Risk Reduction"

2018

April 18-21 Amadora
hosts a Peer Review
covering 2 of the 12 peer
review modules.

ESSENTIAL ONE: ORGANISE FOR DISASTER RESILIENCE

Why?

Organise for Disaster Resilience at the national, regional and global levels is vital to the management of disaster risk reduction in all sectors and ensuring the coherence of national and local frameworks of laws, regulations and public policies that, by defining roles and responsibilities, guide, encourage and incentivize the public and private sectors to take action and address disaster risk.

Disaster Resilience Scorecard for Cities Assessment Criteria

The following table describes the preliminary, high level indicators for this Essential. These were used in the peer review as indicators against which to gather evidence and make recommendations.

Ref	Subject / Issue	Question / Assessment Area
P 1.1	Plan making	<p>Does the city master plan (or relevant strategy / plan) include and implement disaster risk reduction approaches in line with the Sendai Framework?</p> <p>By 'plan' we typically mean some form of city wide plan, cross cutting strategy or vision. This could be a spatial plan, an infrastructure plan or an environmental or sustainability plan, providing it complies with the criteria from Sendai Framework paragraph 27 (b).</p> <p>Alternatively, if a city has a stand-alone disaster risk reduction plan / policy / strategy in place in line with the national strategies this can also demonstrate compliance.</p> <p>For compliance the plan should have coverage across all of the ten essentials.</p>
P 1.2	Organisation, coordination and participation	<p>Is there a multi-agency / sectoral mechanism with appropriate authority and resources to address disaster risk reduction?</p>
P 1.3	Integration	<p>Is resilience properly integrated with other key city functions / portfolios? (e.g. planning, sustainability, investment case approval, finance and compliance, community engagement, emergency management, code compliance, infrastructure management, communications etc.)</p>

ESSENTIAL ONE: ORGANISE FOR DISASTER RESILIENCE

Methodology

To understand and assess Amadora's approach to Organise for Disaster Resilience the peer review team:

- a) Analyzed documentation provided by Amadora ahead of the peer review team visit.
- b) Participated in a site visit at the Crisis Room of the Amadora Fire Fighters where a table top exercise was held simulating an extreme weather/flooding event located in Falagueira location.
- c) Held interviews with public and private stakeholders and with the Mayor. The interview with the Mayor was of particular significance because it highlighted the understanding that is present at the political level that strengthening city resilience is a continuous circular process ("but this is a work that isn't concluded", Carla Tavares, Mayor of Amadora).

The data gathered from these processes has been reviewed by the peer review team and provides the evidence base for the assessment made in this section.



ESSENTIAL ONE: ORGANISE FOR DISASTER RESILIENCE

Amadora DRR Plans

After the municipality of Amadora joined the international MCR campaign, it created an interdisciplinary group/team [called the Local Campaign Team] to implement its proposals for a resilient city and its disaster risk reduction strategy in the Amadora County. It also created the Amadora Local Campaign 2010-2015.

The municipality has developed several plans that include or address disaster risk reduction issues:

- o Municipal Emergency Plan, (submitted for approval to the National Civil Protection Service) coordinated by the Civil Protection Municipal Service (Municipality of Amadora), involves more than 36 different entities. Is a plan to respond to a calamity or high impact disaster.
- o Preventive plan for Adverse Weather Conditions and Forest Fires, coordinated by the Civil Protection Municipal Service, involves 15 entities. It is a prevention plan with allocation of more resources in the face of possible disaster situations. It is triggered when there are special weather warnings and alerts of civil protection.
- o Municipal Master Plan updated and coordinated by the Geographic Information Division (Municipality of Amadora). It is the instrument that establishes the strategy of territorial development (at local level), the municipal land policy, territorial planning and urban planning.
- o Contingency Plan for Extreme Temperatures, coordinated by the Public Health Local Unit (Ministry of Health).
- o Plan for Healthy Aging, coordinated by the Division of Social Intervention.

Although there is an interconnection between the various plans that the municipality has for the various areas of activity (environment,

social, emergency, community engagement, planning), there is no master plan or strategic document that is in line (especially) with the priorities of the Sendai Framework for Disaster Risk Reduction.

In 2015, as part of the EU funded project USCORE, Amadora went through a comprehensive Disaster Resilience Scorecard for Cities analysis. Based on the completion of the Scorecard analysis, Amadora has drafted and agreed a DRR action plan. However, the peer review team was unclear how this is being progressed and what governance processes are in place for the action plan.

On the other hand, the peer review team recognised that several city departments are at present involved in key issues that could inform a DRR master plan. Among others:

- creating a clear identity and strategic direction for Amadora to foster economic growth and appropriate land use.
- drawing on knowledge from local scientific/technical institutes.
- working with the Lisbon district in partnership with academic experts to develop a climate change adaptation plan.
- strengthening risk assessment for city/civil protection and analysing data collected by the Civil Protection Service.
- creating awareness of health challenges associated with different social challenges in Amadora.
- designing a clear annual training program.
- including in the emergency plan the sustainability of a prolonged emergency response.

ESSENTIAL ONE: ORGANISE FOR DISASTER RESILIENCE

Organisation, coordination and participation

During the last 8 years Amadora has been working actively to create a cross-departmental civil protection culture: “civil protection is not uniquely for the civil protection office but is for all departments” (from the interview of Mayor Carla Tavares), encouraging a sense of empowerment, engagement and strong relationships in building DRR governance. With Mayoral leadership, the multidisciplinary team (Local Campaign Team) was established, reporting to Amadora’s Deputy Mayor for Civil Protection Municipal Service. The mission of the Team has been defined as : “increase engagement and information sharing among different stakeholders in DRR issues”. The team is composed of 7 members (3 from Civil Protection Office, 3 from Health and Safety at Work Service, 1 from Urban Planning Office).

The Team has been working actively in defining the structure for DRR governance and in fostering relevant stakeholders participation.

At the present time Amadora has involved more than 40 stakeholders [academic–scientific entities, local councils, municipal services, public–private organizations, rescue and emergency services, private social solidarity organizations, non-governmental organizations (NGOs) and schools] in its DRR governance arrangements.

A summary of stakeholder involvement is as follows:

- Academic–scientific entities: Develop a set of studies about risk and vulnerability assessments.
- Local councils (parish): Promote contacts with local associations and citizens’ groups to increase their awareness.
- Municipal services: Gives cooperation and collaboration to the campaign team.
- Rescue and emergency services: Provide data

about disaster losses and support stakeholder training and awareness for first aid and drills.

- Public–private entities and private social solidarity institutions: Receive technical support to improve their emergency plan and provide social and cultural activities about disaster risk reduction to their clientele.
- NGOs: Support public awareness initiatives and provide free training to campaign stakeholders.
- Schools: Organize training and awareness activities about risk and disasters.

All the inputs from stakeholders are converted into outputs available to the population. For example, some of the stakeholders (rescue and emergency) provide data that is organized by the team into risk assessments and/or the municipal emergency plan, weather warning system and/or municipal contingency plans. Others lend their facilities to campaign events. The stakeholders see practical results from this participation (publications, flyers on self-protection measures, risk information across communication channels) and the team promote their stakeholders within the community as strong organizations able to face a disaster.



ESSENTIAL ONE: ORGANISE FOR DISASTER RESILIENCE

Organisation, coordination and participation continued...

The peer review team heard from many stakeholders about the leadership and effective work of the civil protection department. There is a wide and growing engagement of stakeholders in Amadora's resilience which has result in variety of actions and positive outputs like:

- a proactive approach to training and dealing with risk which has generated increasing levels of feedback and ideas to further meet people's training needs.
- drills and implementation of protective measures.
- pre-planning for communication with the public and briefings during emergencies;
- dissemination of warnings linked to air quality to populations at risk.
- participation in awareness events linked to the International Day of Disaster Reduction.
- close relationship between civil protection services.
- a multi-stakeholder emergency committee which convenes to manage the response to emergencies.
- development of volunteering as part of corporate social responsibility, in particular the Senior Academy project is an innovative and effective way of engaging older people in DRR and of promoting inter-generation learning.
- emergency plans for most of the relevant private stakeholders approved and audited by national level Civil Protection authorities.
- active planning in case of a terrorist attack in conjunction with specialist national services for some of the areas most exposed to congregations of large numbers of the public.

Although there is a close cooperation between many stakeholders across different sectors, there is no multi-agency/sectoral mechanism or local platform that formally meets on a regular basis to address disaster risk reduction and to actively share all the available information on risk scenarios.

Completion of the Disaster Resilience Scorecard has been part of Amadora's journey to reach its current level of activity in DRR however the peer review team would recommend that resilience is strongly featured in the city's new Master Plan and/or the current DRR action plan is actively used and taken forward.



ESSENTIAL ONE: ORGANISE FOR DISASTER RESILIENCE

Integration

One of the main strengths in Amadora's approach to resilience is the support provided by the local-level leadership.

In the application process to the international MCR campaign, at the time Amadora's Mayor (Joaquim Moreira Raposo) presented the following commitment "Amadora will develop all the necessary efforts for the campaign to have as many connections as possible, coming from the local, scientific and academic communities, exposing the necessity of decreasing the risk and the number of disasters (...)".

During the MCR campaign, strong support has been maintained by the new Mayor (Carla Tavares) who has stressed the importance of encouraging an inclusive, all-of-society approach to safety and security; "It's the citizen's obligation to have an intervening role in the society promoting a safety culture... it's the responsibility of all of us ... This includes schools, creating the "Senior Academy", involving NGOs like the Portuguese Red Cross ... We are all Civil Protection officers".

This provides an example of transformative leadership, encouraging a sense of empowerment, engagement and strong relationships in building community resilience. Under the leadership of the Mayor and the Civil Protection Department, the subject of resilience and disaster risk reduction is gaining increasing visibility. Amadora is trying to deliver a change in the culture of the society and to interest people in safety, security and risk prevention.

Through the interviews during the peer review, the review team had the opportunity to verify that this approach to integrating vertical structures into horizontal systems for cross-agency collaboration is producing a range of benefits including:

- understanding of high probability/most frequent and high consequence risks.
- acknowledging that awareness raising needs to be an ongoing activity.
- providing a political mandate to the local civil protection office to deliver an effective programme.
- recognising the opportunities afforded by being a small municipality with close working relationships and the power to work together.
- recognition of the role of national and local governments with an interest in influencing the balance of power between national and local governments to serve the best interests of communities.
- existence of good connections and the presence of a level of integration in planning between local and district levels.

This reflects in a close cooperation between many stakeholders across different sectors. Still this cooperation is not structured and it is, most of the time, dependent on the willingness of each city department to voluntarily exchange information among on another on disaster risk reduction. In some cases the cooperation is indirectly helped by administrative rules (i.e for the Water Service the Mayor sits on the Board and this help investment decisions to be influenced by the resilience considerations of the city).

One of the main strength in Amadora approach to resilience is the support provided by the local-level leadership.

ESSENTIAL ONE: ORGANISE FOR DISASTER RESILIENCE

Site visit

As part of the review of module 1, the review team had the possibility to participate in a site visit to the Crisis Room of Amadora's Firefighters where a table top exercise "Falagueira 18" was organized simulating an extreme weather/flooding event in the Falagueira parish. All the relevant stakeholders were present at the simulation showing excellent coordination between different departments and institutions in charge of emergency response.

Reflections on the exercise from the peer review team are listed below:

Strengths:

- Regular consideration of media and communication input
- The protection of cultural heritage was considered
- The team set clear priorities e.g. the needs of the living (immediate needs) over body recovery
- Media mis-information was considered and addressed
- Practical and psychological medical support was obtained
- Clear up/debris removal/restoration of the environment was planned
- Impact of the flood scenario on protective eco-systems was understood
- Evacuation and shelter of the affected population was considered
- Mitigating the impact of the flooding on the wider city was an early consideration
- Use of future forecasts to plan how to sustain the response and to predict the behaviour of the flood waters
- Traffic/transport impacts were rapidly addressed

- Joint working, clarity of roles and responsibilities and working together were all demonstrated throughout the exercise
- There was recognition of potential criminal impacts but the pursuit of criminal lines of enquiry was not at the expense of saving life and dealing with the living
- Security of evacuated properties was arranged
- Body recovery was handled sensitively

Areas that could be explored further:

- How is the joint situational awareness maintained between departments and institutions?
- Would a joint strategy be written setting out collective priorities to guide responders and ensure an integrated emergency response between all agencies?
- Is there an overall lead for public communication and handling of the media?
- Does the police service have access to disaster victim identification specialists?
- How would post-incident support be given to homeowners and businesses?
- How would long-term psychological support be provided?
- Are museums encouraged to write and rehearse emergency plans to protect collections?

ESSENTIAL ONE: IDENTIFIED GOOD PRACTICE

During the extensive interview process the peer review team had the opportunity to verify the high level of professionalism of the stakeholders related to the understanding of risks in Amadora and also to identify several areas of good practice in the municipality's approach to DRR. Some of these good practices, although not an exhaustive list, are indicated below:

- 1) The city decision makers are well aware of the importance of establishing a DRR strategy for the city providing a political mandate to the local Civil Protection Office to deliver an effective programme. They have also created a clear identity and strategic direction for Amadora to foster economic growth and appropriate land use. (P.1)
- 2) Amadora has in place a number of Emergency and Contingency Plans which have benefitted from a good level of collaboration with external knowledge centers on risk analysis and from working with the Lisbon district in partnership with academic experts to develop a climate change adaptation plan. This has allowed the city to strengthen risk assessment for the city/civil protection under the leadership of the Civil Protection Service. (P.1)
- 3) The local Civil Protection function is well advanced in terms of understanding both the importance of response and the role of prevention and planning. A good emergency response integrated system is in place with the participation of all the relevant functions. Emergency plans for most of the relevant private stakeholders have been approved and audited by national level civil protection authorities. These plans include, for some of the areas most exposed to large public congregations, the case of a terrorist attack and have been developed in conjunction with specialist national services. (P.2)
- 4) The city has in place a team with multi agency participation to increase awareness on DRR among city departments and also to raise public awareness. Some of the major city departments have a good integrated approach to risk in areas such as health and social assessment; sustainability of a prolonged emergency response; designing a clear annual training program; dissemination of warnings linked to air quality to the population at risk; development of volunteering as part of corporate social responsibility; drills and implementation of protective measures; pre-planning for communication with the public and briefings during emergencies. (P.3)

ESSENTIAL ONE: AREAS TO CONSIDER STRENGTHENING

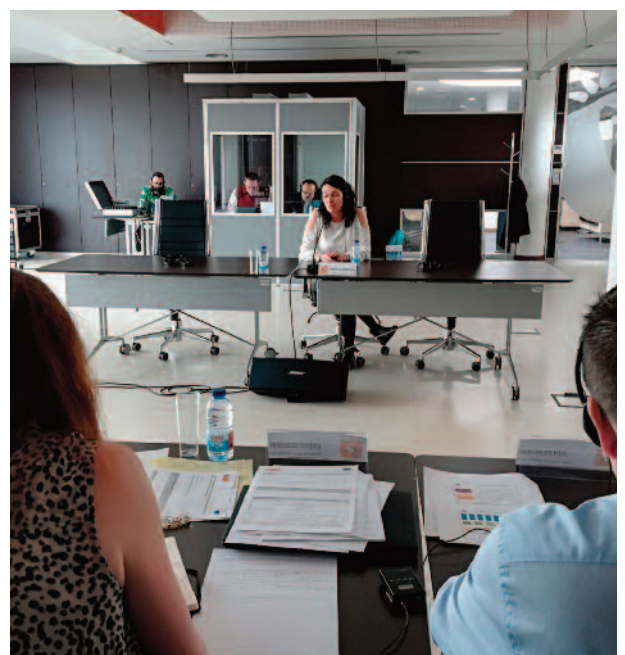
At the end of the peer review process, using both the pre visit information provided by the city of Amadora and the interviews with the stakeholders during the visit, the peer review team has identified the following areas which may be of interest for the city to consider further:

- 1) After joining the MCR campaign, under the leadership of the Mayor and the civil protection department, Amadora has done an impressive amount of work to deliver a change in the culture of the society on the subject of resilience and disaster risk reduction. These efforts have resulted in improving the overall understanding of risk and in creating several tools to prevent and manage risks. Also in 2015 Amadora drafted and agreed a DRR action plan. The team feels that the city is still missing a full understanding of the economic advantage for the city in the development of a comprehensive master plan that includes disaster risk reduction considerations. The existing work could be strengthened by focusing on two main actions: 1. creating the governance process for the existing DRR action plan. 2 developing a city master plan that includes disaster risk reduction approaches in line with the Sendai Framework .
- 2) The review team felt that although there was evidence of a close cooperation between many stakeholders across different sectors, the city could build on the present good integrated system for disaster response and could transfer that experience to resilience planning. Amadora could explore a formal mechanism to ensure a continuous shared understanding of risk between different departments and create a multi-agency/sectoral mechanism or local platform that formally meets on a regular basis to address the information about risk assessment and DRR in general.
- 3) The city of Amadora is part of a large number of highly populated and interconnected districts which share similar risks and stresses. The review team felt that, although the city has some collaboration with adjacent municipalities on climate change analysis, there is a need to create a closer and more structured cooperation with neighbouring cities, in particular with the city of Lisbon which is part of the 100 Resilient Cities program, sharing with them risk information and governance planning. It would also be beneficial to extend this effort to ensure a shared understanding of risks between the city and other regional and national agencies.
- 4) The city has developed an excellent understanding and response planning for the most probable risks. This choice has allowed the city to better encourage the interest of communities in safety, security and risk prevention. It was not clear to the team if the same level of analysis and prevention and response planning has been devoted to the most severe risk that Amadora is facing: the seismic risk. The current emergency plan could contain more considerations about how the municipality and other organisations would deal with this risk, including how regional and national assistance would be obtained.

ESSENTIAL ONE: RECOMMENDATIONS

These recommendations are offered for consideration to help Amadora to build on its current significant strengths in resilience governance:

- 1) The establishment of a multidisciplinary team (Local Campaign Team). The effective work that the civil protection department has delivered under political leadership, generating growing engagement of city stakeholders in resilience, could be put forward as areas of best practice within Portugal and across the wider international community.
- 2) The city should identify a governance mechanism for the DRR action plan developed in 2015 and should focus on developing a master plan which will incorporate resilience and disaster risk reduction approaches to meet the objectives of the Sendai Framework.
- 3) The city should capitalize on the existing large stakeholder participation in resilience and disaster risk reduction and on the existence of a Local Campaign Team to create a local platform that formally meets on a regular basis. This mechanism will improve data sharing across sectors on risk scenarios and on governance solutions to DRR.
- 4) The active role in DRR played by Amadora at an international level should be capitalized on at the regional and national levels with a proactive approach to transferring its experience on organising for disaster resilience to neighbouring municipalities and to the national civil protection system.
- 5) The city should utilize its network of collaboration with technical stakeholders in order to strengthen risk analysis, scenario studies and response preparedness for the most severe risk of an earthquake disaster.



ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Why?

(Understanding a city’s institutional background regarding risk reduction / management and building resilience can help in detecting current gaps in the local capacity to coordinate DRR activities and take action towards prevention, mitigation, response and recovery in the case of disasters, as well as identifying the best and most-effective approaches to strengthen relevant institutions for managing disaster risk). Institutions include, as applicable, central, state and local government organisations. Other groups also have a role to play in reducing some of the vulnerabilities, which is complementary to government measures, such as private sector organisations providing public services (depending on locale, this may include phone, water, energy, healthcare, road operations, waste collection companies and others as well as those volunteering capacity or equipment in the event of a disaster); industrial facility owners and operators; building owners (individual or corporate); NGOs; professional, employers’ and labour organisations; and cultural institutions and civil society organisations.

(<http://www.unisdr.org/campaign/resilientcities/home/index/Essential%20Six:%20Strengthen%20Institutional%20Capacity%20for%20Resilience/?id=6>).

Disaster Resilience Scorecard for Cities Assessment Criteria

The following table describes the preliminary, high level indicators for this Essential. These were used by the peer review team as indicators against which to gather evidence and make recommendations.

Ref	Subject / Issue	Question / Assessment Area
P 6.1	Skills and Experience	Does the city have clear access to all the skills and experience it believes it would need to reduce risks and respond to identified disaster scenarios?
P 6.2	Public education and awareness	Does a co-ordinated public relations and education campaign exist, with structured messaging and channels to ensure hazard, risk and disaster information (that can be understood and used) is properly disseminated to the public?
P 6.3	Data sharing	Extent to which data on the city’s resilience context is shared with other organisations involved with the city’s resilience.
P 6.4	Training delivery	Are there training courses covering risk and resilience issues offered to all sectors of the city including government, business, NGOs and the community?
P 6.5	Languages	Are training materials available in the majority of languages in common use in the city?
P 6.6	Learning from Others	Is the city proactively seeking to exchange knowledge and learn from other cities facing similar challenges?

ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Methodology

To understand and assess Amadora's approach to strengthening institutional capacity for resilience the peer review team:

- a) Analyzed documentation provided by Amadora ahead of the peer review team visit including: several papers published in collaboration with universities; reports on expert exchanges with other European cities; extensive information on awareness, training and education programs.
- b) Participated in a site visit to the José Garcês Primary School where the team had the opportunity to view activities undertaken as part of a program related to education in schools to disaster risk reduction together with a full evacuation drill simulating a major emergency in the school, including a final debriefing meeting with all the relevant stakeholders participating in the drill.
- c) Interviews with several stakeholders including representatives of volunteering associations.

The data gathered from these processes has been reviewed by the peer review team and provides the evidence base for the assessment made in this section.

Access to skill and expertise

In the Portuguese legal framework the Municipality has a direct responsibility to ensure that its assets have security plans and an adequate response capacity to deal with disaster situations. In order to guarantee a complete risk analysis of its critical infrastructures and the preparation of emergency plans and self-protection measures, the municipality draws on the expertise of its departments, in particular the civil protection department and the division of geographic information. These departments have been working with different technical institutions to prepare a complete study of the most probable risks in Amadora together with risk maps. The technical institutions include: the Lusofona University for Humanities and Technologies, the TERCUD (Center for Studies of Territory, Culture and Development), the New University of Lisbon, e-GEO (Center for Studies of Geography and Planning), Professional School Gustave Eiffel, the Amadora Fire Fighters, and the District Center of Operative Intervention of Lisbon. Furthermore, although the city's Environment department currently lacks the internal skills and knowledge to predict the local impacts of climate change and to build these projections into future plans for services, this activity will take place once the climate change adaptation plan has been developed for the Metropolitan area of Lisbon.

There are other critical infrastructure and services inside the Amadora territory which depend on the national government using national resources:

- Hospital and Health Centre (Ministry of Health)
- Secondary Schools (Ministry of Education)
- Fire Fighters (Internal administration Ministry)
- Public Security Police (Ministry of Internal Affairs)
- Portuguese Red Cross – Local Delegation of Amadora (Ministry of Defence)
- Regiment of Lancers – Army (Ministry of Defence)
- Portuguese Electricity Company (private sector)
- Inter-municipal Water and Sanitation Service (public-private sector)
- Galp – Gas company (private sector)

ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Access to skill and expertise continued...

Usually these entities draw up their own plans and only request the support of the municipality, through the Municipal Civil Protection Service, to conduct drills and training for their employees. The approval of their contingency plans is always done by the District Civil Protection Service.

The municipal Emergency Plan of Amadora has been completed and submitted to the District Civil Protection Service for approval. In the plan all the municipal entities and the sectors depending on national government resources are represented.

During the interview process the team had the opportunity to verify that Amadora has a committed and motivated civil protection service. This draws on the skills and experience of other stakeholders both within and outside of the Council.

Of note is the Fire Service, which is composed of 105 firefighters, mostly volunteers, which deals with an average of 50 emergencies a day, particularly road traffic accidents due to the high number of roads crossing Amadora. They participate actively in the city's risk assessments with full data sharing. The service is also an important component of the command structure for response. The Amadora Fire Service maintains a strong collaborative relationships with fire brigades of neighbouring municipalities, including Lisbon, which allows them to access mutual aid/surge capacity and also specialist capabilities. They maintain a continuous program of training and drills, according to the national requirements, which includes drills for several SEVESO sites (mainly medical and pharmaceutical companies).

An important role in the emergency response is played by the Amadora Police Service, especially with regard to the role of reassuring and giving hope in emergencies through a visible and authoritative presence on the ground. They also participate actively in the activities of the response command structure maintaining a strong relationship with the civil protection service. The Amadora Police Service appears strongly committed to building trust between the police force and communities and this aspect is an important part of the comprehensive training program that they have in place. As part of this process they have also introduced new technologies (e.g. bodycams).

Many of the risks that Amadora faces are shared with the neighbouring municipalities, in particular the city of Lisbon which is part of the same metropolitan area. Lisbon participates in the 100 Resilient Cities program and, like Amadora, is a global leader in resilience. The review team feels that Amadora should pursue a stronger collaborative approach with Lisbon to leverage the experience and the resources available in the two cities.

In addition, two areas that may benefit from further development are; (a) the promotion and full exercising (validation) of the city's emergency plan once it is approved; (b) enhancing local technical knowledge in climate change risk so that projections can be applied to future service planning and emergency scenarios.

ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Public awareness and education

One of the main objectives identified by Amadora when the city joined the MCR campaign was to create a cultural shift in the entire community about the importance of safety, security and risk prevention. This goal was well summarized during her presentation by Ursula Carrasco, Chief of the Amadora Health and Security at Work: “to build a mindset for disaster risk reduction”.

Through the direction of the Local Campaign Team, the municipality has been able to develop an impressive and coordinated public relations and education campaign, especially focused on children and older people.

The Local Campaign Team organizes two awareness-raising programs each year:

- 1) A dedicated program for the school community, which offers 16 types of sessions for different school grades and for teachers.

Kindergarten

- Educate to prevent
- Playing to protect yourself

First cycle (6-10 years old)

- Prevent to Protect
- Living without risk
- Child road safety
- Road safety
- Playing to protect yourself

Second Cycle (11-12 years old)

- Urban fires
- Child safety
- Road safety

Third Cycle (13-15 years old)

- Earthquake SOS
- Urban fires
- Forest fires
- First aid

Secondary and Professional (16-18 years old)

- Preparation in survival on the disaster scenario
- Human occupation: risks vs planning
- Climate change



ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Public awareness and education continued...

Teachers and employees

- First aid
- Self-protection measures and drills

All sessions aim to complement the contents of the school curriculum, where some concepts related to the climate change, risk and disasters are already presented.

2) A program aimed at public and private organisations, which offers 11 types of sessions.

- Urban fires/ Domestic security
- Forest fires
- Self-protection measures in disaster situations
- Cold wave impact on population health
- Heath wave impact on population health
- Survival in the disaster scenario
- Road safety (for seniors)
- Senior security
- Pediatric first aid
- Senior first aid
- Self-protection measures and drills

The actions are promoted by several organisations:

- Municipal Civil Protection Service;
- Firefighters Brigade;
- Public Security Police;
- Local Public Health Unit;
- Community Emergency Response Team;
- Portuguese Red Cross – Local Delegation;
- ELOSVITAIS Association.



ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Public awareness and education continued...

Between 2010 and 2018 more than 800 awareness sessions in schools were organized. In the last school year almost 10,000 students of a total of 23,000 were involved in the programme (that means 44% of school community coverage). The sessions for the public and private institutions were substantially less, however, about 6,000 people had access to the sessions, from a total population of about 150 000 people (4%).

Clearly Amadora has an impressive and co-ordinated public relations and education campaign especially focused on children and older people and the quality of such extensive program was verified by the review team during the site visit to the José Garcês Primary School (see paragraph below).

One of the important aspects of the education and awareness program is the involvement of active citizenship in the process. The review team was very impressed by the level of involvement in the school programs from the elderly people organized in the Senior Academy. This is a successful and effective way of engaging older people in DRR and in helping them to spread DRR knowledge amongst this cohort. The Senior Academy is a world class example of inter-generational work to educate children about risks and about staying safe. Furthermore the involvement of citizens in the Senior Academy strengthens individual resilience and encourages new learning.

The review team was also strongly interested in learning about the large variety of communication tools that the municipality has developed to support the school education and awareness program. In particular, the use of different multimedia techniques and the

development of children’s games to encourage the risk education through play.

Clearly the focus on schools will deliver long-term benefits and a more educated population. On the other hand there was little evidence that children/schools are managing to engage parents and further consideration about how to raise awareness of DRR in the adult population may be helpful.



ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Data sharing continued...

The Municipality has developed an early warning system. The information (via SMS and mailing list) relating to meteorological warnings and civil protection alerts is sent to around 600 people. All organizations with prevention, relief and recovery responsibilities are integrated into the system. However the municipality does not have a database that lists all the critical infrastructure and basic services and the state of the current emergency planning in place for each type of infrastructure or service.

During the interviews it was possible to verify that many stakeholders receive data openly from the civil protection service and that during the preparation of their contingency plans several types of exercises are held in collaboration with the civil protection service in order to establish operational procedures and work on various response scenarios. However, a number of other stakeholders were not knowledgeable about the local disaster risks faced by Amadora and some would appreciate more proactive sharing of risk data rather than having to request it.



ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Training delivery

As mentioned in the previous paragraph on public awareness and education, Amadora makes available several training programs both for schools and for employees of public and private organisations. These programs are not mandatory and are organized by the civil protection service on a voluntary basis. While the training in schools is expanding to a large sector of the student population, training for employees and the general public seems to be lacking a strong impulse.

Some of the good practices that Amadora has in place for training relate to the involvement of a large spectrum of stakeholders in delivering specific trainings events.

Among others:

- The Firefighters which offer wide-ranging activities to engage school children in understanding risks and in building awareness of the role of firefighters, e.g. summer apprenticeships and 'be a firefighter for a day' appear to be strongly supported.
- The Police Service which actively participates in activities in schools and has comprehensive training for their officers including training aimed at understanding the role of the police in transforming and improving the image of Amadora.
- A very successful innovative project developed in March 2017 to encourage people with disabilities to meet different civil protection services (council, police, fire, Red Cross) and then to express their understanding of civil protection in art that was displayed in the main shopping centre.
- A local NGO which has training certified to European standards and fosters the commitment and passion of volunteers to be active in civil protection.

- The Amadora Red Cross which is a proactive partner in on-the-ground civil protection training in the community and can provide psychological training and support in emergencies.
- The Social Integration Division which organizes meetings of a group from the immigrant population with the council on a regular basis to raise issues and discuss solutions.
- Several NGO's, working with immigrant communities, which are trained in local risks by the civil protection service.

All stakeholders interviewed described opportunities to receive training in civil protection, emergency response and resilience. Stakeholders also described drills which were undertaken usually in partnership with the emergency services and civil protection service. The peer review team observed an evacuation drill at a primary school (which will be described in detail in a subsequent paragraph), following which many stakeholders offered observations and suggestions during a debrief process. Suggestions include; (a) considering a wider number of scenarios for drills (currently mainly fire); (b) considering how lessons identified through drills could be shared more widely where they might help others to improve their emergency preparedness.



ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Language

One of the relevant stresses that Amadora is facing is a growing immigrant population. Presently the foreign population accounts for 10% of the total population. While the majority of the immigrants are from Portuguese colonies in Africa, Cape Verde (64%) followed by Angola (11%) and Guinea Bissau (12%), and speak the Portuguese language, there is also a large community of Roma gypsies. More recently people from East Europe, Pakistan, Bangladesh, India and Brazil have become an additional component of the immigrant population.

The historical growth of the population has created a city with many contrasts and differences in both its social and urban fabric (3,8% of the populations still leaves in slums). The City Council has developed an holistic approach to social resilience issues with active policies in terms of training, employment, social integration, health, education, youth and others.

In particular the review team, during the interview process with stakeholders involved in social integration policies, recognized the following areas of good practice: developing social intervention programs to promote quality of life; stimulating social cohesion activity including work with the NGO's to support immigrant communities; geo-referencing of vulnerable elderly residents who would need support in an emergency; activity to innovate and learn though EU projects.

Although the Resilience Action Plan developed in 2015 identified as an action the “ensuring of the translation of all publications about risks and disasters, to existing nationalities in the Municipality”, there was no evidence of training materials being available in languages other

than Portuguese and, on occasions, English. This indicator was difficult to assess in that those interviewed consistently did not recognise a need for information to be available in different languages since many citizens from different countries speak Portuguese, although increasingly people are arriving from non-Portuguese speaking countries.



ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Learning from others

Amadora, starting in 2010 with the participation to the MCR campaign, has always been very proactive in the process of exchanging knowledge with other cities in particular at the international level. The peer review heard from a number of people about other international projects beyond Uscore2 and about research material developed with other cities. This included: participation in the EU project Uscore in 2015-2016 in collaboration with several European cities, the participation in all the major recent International Conferences organized by the UNISDR, an exchange of experts with Västra Götaland, Sweden as well as the present peer review process as part of the EU Uscore2 project.

At the national level, Amadora has maintained a strong collaborative approach with the National Civil Protection Service and is establishing relations with the other municipalities of the district including the city of Lisbon on the development of a comprehensive climate change study.

Beyond this, the city described how it wishes to position itself as an international city, seeking inward investment from international companies.

ESSENTIAL SIX: STRENGTHEN INSTITUTIONAL CAPACITY FOR RESILIENCE

Site visit

During the first day of the peer review the team participated in a site visit to the José Garcês Primary School, located in a neighbourhood with a strong immigrant community.

The visit to the school offered an opportunity to see a range of civil protection experts holding educational sessions with children including the Academia Sénior, the municipal civil protection team, the fire service, the police and the Red Cross. The school teaches some disabled children with complex needs and these children were integrated into the classes, ensuring they also received the information and an opportunity to learn.

The teaching included:

- Visual aids
- Films
- Interactive games
- Interactive quizzes

The school is in a deprived area of the city, and training is tailored to need. For example, there are a high number of home fires, often started by children 8 – 12 years old. This age group was being taught about fire safety.

The review team was highly impressed with the level of dedication to the sessions held in the school from the teaching staff. The teaching staff had a holistic approach to teaching resilience. This approach could be summarized by the introductory statement of the school Director, “today is about citizenship”.

The school program is offered on a voluntary basis, Amadora sends a programme of activity to each school from which it can choose the sessions it wishes to hold.

The whole programme is impressive, however two aspects stand out:

- The progression of scenarios from everyday hazards to major emergencies promoting a culture of total safety.
- The intergenerational interaction between the Senior Academy and the children.

The peer review team recognise the role that children can play in communicating to their whole family the key messages they have learnt in the activity that they perform at school. Given the extent to which the program has extended throughout the Amadora school system, there is an opportunity to try to measure the impact of the school programme in raising the awareness of risk, encouraging children to adopt safety measures and reducing the frequency and impact of emergencies.

The second part of the visit was dedicated to the topic “children are growing in this school knowing what to do in an emergency” (as from the message from the school Director). The school organised a full evacuation in response to fire. All the services that had participated to the previous educational sessions observed the evacuation and offered their insights afterwards.

The school is to be congratulated on the evacuation and on the willingness to learn and to improve procedures.

ESSENTIAL SIX: IDENTIFIED GOOD PRACTICE

Identified good practice

Over the last 8 years the municipality of Amadora has clearly dedicated a large amount of effort to building institutional capacity for resilience and in developing an all-of-society and inclusive approach to DRR. The peer review team, during the site visit and the extensive interview process, was able to identify several areas of good practice in the city's approach to this important component of DRR. Among some of the most relevant are:

- 1) Amadora has developed an impressive and co-ordinated public relations and education campaign especially focused on children and older people. This campaign has been able to obtain two important results: a) a large number of the city student body has been introduced to and educated about the different risks that the city faces; b) many relevant stakeholders (civil protection service, fire service, police service, volunteering from the Senior Academy, the Red Cross and others NGO's) have been involved in the campaign to support the educational and training process. In particular the Senior Academy is a world class example of inter-generational work to educate children about risks and about staying safe (P6.2).
- 2) Under the political leadership of the Mayor and of the city council, together and with motivated and professional the management of the civil protection service, Amadora has developed strong, structured relationships with a large number of relevant stakeholders. This has allowed the city to access an impressive number of skills and expertise in DRR. This is reflected in outcomes such as building an extensive risk analysis based on historical climate data (P6.1).
- 3) Amadora is actively pursuing open data sharing among relevant stakeholders and has built an excellent structure to manage the response to the most probable risks. Training and drills are undertaken by public and private stakeholders usually in partnership with the emergency services and civil protection service (P6.3, P6.4).
- 4) Amadora is clearly living up to its recognition as a role model city within the UN's Making Cities Resilient campaign, having developed through the years good and continuing relationships with other cities, in particular at the international level. The participation in the Uscore project in 2015 and in the peer review process of the Uscore2 project in 2017 is a good example of a city proactively seeking to exchange knowledge and learn from other cities (P6.6).

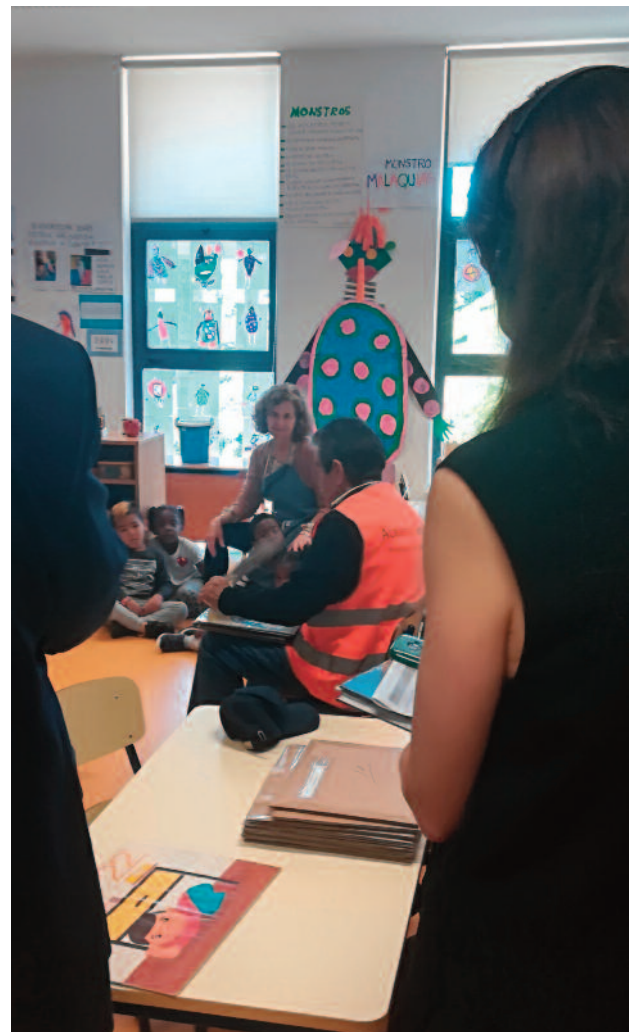


ESSENTIAL SIX: AREAS TO CONSIDER STRENGTHENING

Identified areas to consider strengthening

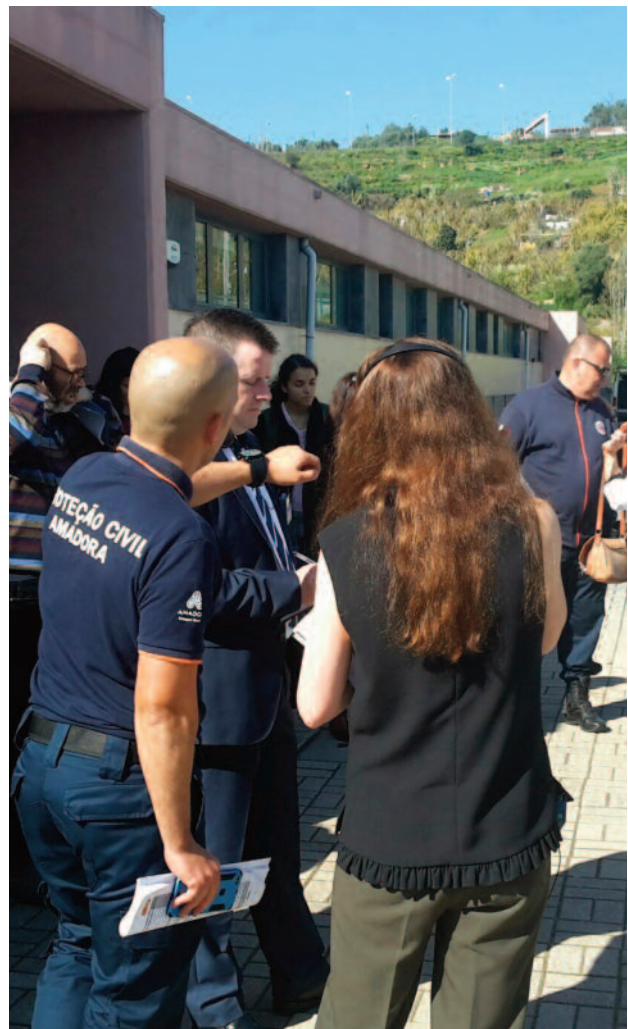
The peer review team, through the extensive interview process, has been able to identify a few areas that the city may be interested in strengthening regarding institutional capacity building:

- 1) Although Amadora has developed a comprehensive range of data regarding risk analysis on the most probable risks and this data is available to stakeholders, the process of data sharing is not structured and mainly left to the willingness of each stakeholder to access it and to integrate it into its own emergency plan. It would be beneficial if data sharing could be structured through a common platform with a more proactive approach.
- 2) The training offers many opportunities to stakeholders under the management of the civil protection service. In particular the training in the schools, both from a theoretical and a practical point of view, is particularly advanced. This activity could be further improved by extending the scenarios for drills to risks other than fire and by extending the learning process from these drills to a wider audience and to additional groups within the community.
- 3) The city could consider holding a multi-agency exercise for one or more of the city's reasonable worst case disaster scenarios with an emphasis on testing decision-making processes where high level/political decisions are required. Also the city could explore how to increase public participation in drills and emergency exercises. Amadora may wish to consider how risk information is shared with Parishes to foster a greater understanding of specific Parish-based risks, thereby enabling relevant drills and exercises to be held at a parish-level.



ESSENTIAL SIX: AREAS TO CONSIDER STRENGTHENING

- 4) Amadora is part of the large Lisbon metropolitan area and is adjoining with the city of Lisbon. Several main highways that interconnect the metropolitan area cross Amadora and a large percentage of the population (33%) leave the city daily to travel for work or study. Road accidents are the most probable risk in Amadora. The city should build strong links between the road safety advice and accident prevention work of the police and the experience of firefighters in responding to road traffic accidents. A road safety campaign, including signage on major routes promoting safe driving, in partnership with the police, may help reduce current demand on firefighting and other services.
- 5) While there is strong evidence of volunteer participation in the educational and communication programs, the peer review team found less evidence of the involvement of the NGO's in the process of response to emergencies. This could be further explored by the city which could leverage the experience of the Fire Service, the Red Cross and NGO's which already benefit from training certified to European standards.
- 6) The city has developed a large variety of education, training and communication tools for risk prevention and preparedness. The team feel that, due to the presence among the city's population of groups of immigrants from several foreign countries with no Portuguese language heritage, the city may want to explore the effectiveness of communication on risk and preparedness with these groups and eventually may consider making all this material available in the languages of these groups.
- 7) Several stakeholders highlighted the importance of psychological support during the response to emergencies. This component may also be very important in case of disasters involving large segments of the population, like earthquakes and terroristic attacks. It could be beneficial for the city to work with organisations in Amadora, like the Red Cross, to explore if it's appropriate to build such psychological support into emergency plans.



ESSENTIAL SIX: RECOMMENDATIONS

Recommendations

- 1) Once the city's Emergency Plan is approved, the city should consider improving its emergency response through a full validation of the plan through specific sets of drills and exercises. The peer review team feels that this will help strengthen the understanding of relevant stakeholders (both public and private) that prevention and preparedness are two essential components of the city's DRR. In addition, the involvement of large numbers of people in the community will further strengthen the resilience educational program that the city has developed.
- 2) Amadora has made knowledge sharing and learning from other cities an important component of its approach to DRR. This has materialized in a number of important international projects in which the city is actively involved. The team feels that the city should pursue a similar approach in Portugal, in particular with the various municipalities of the Lisbon metropolitan area district. This collaborative approach is particularly significant for enhancing local technical knowledge in climate change risk so that projections can be applied to future service planning and emergency scenarios.
- 3) Building on the current levels of large stakeholder participation in the resilience process, the completion of the city's Emergency Plan and the quality of international relations developed with other resilient cities, Amadora may consider formally launching a local platform for disaster risk reduction and a programme of work in line with the global commitments in the Sendai Framework.
- 4) The city should promote the existing work developed within the education and training campaign for children and older people as good practice with other cities in the Making Cities Resilient Campaign. In particular the the Senior Academy is a world class example of good practice in delivering children's education on risk and safety.
- 5) The city should strengthen the education and prevention campaign on risks to reach all parts of the population, including parents, adults in general and groups within the community who do not speak Portuguese.

