

Istanbul ADMIP

Disaster and Emergency Prevention Response and Recovery Plan

PARKS OF ISTANBUL



Istanbul ADMIP

Disaster and Emergency Prevention Response and Recovery Plan







Published in the scope of "Istanbul Seismic Risk Mitigation and Emergency Preparedness Project" (ISMEP) conducted by Governorship of Istanbul, Istanbul Project Coordination Unit (IPCU) ISMEP Guide Books have been prepared by Beyaz Gemi Social Project Agency.

June 2014, Istanbul

Copyright©2014

All rights reserved.

No part of this book may be reproduced and circulated by electronic, digital or mechanical means without written permission of Istanbul Project Coordination Unit (IPCU) or Istanbul Provincial Disaster and Emergency Directorate (Istanbul DED). This book may not be used for profit purpose.

Executive Bodies

Governorship of Istanbul Istanbul Provincial Disaster and Emergency Directorate (Istanbul DED) Istanbul Project Coordination Unit (IPCU)

Academic Consultant

Prof. Dr. Mikdat Kadıoğlu

We thank to the employees of both Istanbul DED and IPCU for their contribution in the preparation of this book.

Contents



Introduction

- 8 ADMIP for an Istanbul Prepared for Disaster
- 12 Disaster Preparedness Works Conducted in Istanbul and ADMIP
- 14 Istanbul Provincial Disaster and Emergency Directorate (Istanbul DED)

16 Disaster Management and Basic Concepts

- 18 Management and Organization
- 19 Plan and Planning
- 19 Organizing and Coordination
- 20 Hazard and Risk
- 21 Incident, Emergency and Disaster
- 22 Disaster Management
- 25 Disaster Management Worldwide and Its Development
- 29 Planning in Disaster Management

32 ADMIP

- 34 Turkish National Disaster Intervention Plan and ADMIP
- 36 Characteristics of ADMIP
- 37 Basic Scenario of the Plan
- 38 ADMIP Organization Chart
- 40 Response and Operations Service
- 42 Information and Planning Service

- 42 Logistics and Maintenance Service
- 43 Finance and Management Service
- 44 ADMIP Service Groups
- 45 Implementation and Operation of ADMIP
- 46 Organization Chart at Provincial Level
- 48 Process Management of ADMIP and Works Performed
- 49 ADMIP Process Stages
- 51 Output of ADMIP Works
- 52 ADMIP Meeting 2013 for the Safe Future of Istanbul

54 Continuity of ADMIP

- 56 Ensure the Business Continuity for Organizations
- 60 Social, Environmental and Economic Effects of ADMIP
- 62 Integrated Urban Disaster Risk Management Strategy
- 66 e admip
- 67 Volunteering System
- 67 Communication Strategy
- 70 Importance of Media in the Planning Works





ADMIP for a Disaster Prepared Istanbul

Prof. Dr. Mikdat Kadıoğlu

Disaster Management Research and Practice Center Academic Member

The experience has shown that we need a better training, teaching, preparation and planning on disaster and emergency management in Turkey. 7.4 Marmara earthquake which has affected Istanbul, Kocaeli, Sakarya, Yalova, Bolu, Eskişehir and Bursa on August 17, 1999 and 7.2 Bolu eartquake on November 12, 1999 have caused great damage. Additionally, earthquakes, floods, explosion of ammunition store, forest fires, and concaves formed, terrorism and other disasters after 1999 all have clearly indicated that we need a better training, teaching, preparation and planning on disaster and emergency management in Turkey.

In other words, our country had to break the vicious circle of disaster, destruction and relief. For this purpose, more importance had to be given to the risk management consisting of reduction of loss and damage as well as preparation operations rather than the crisis management involved with intervention and improvement operations, is the modern disaster management requires.

In short, now priority should have been given in our country to target that "people should not be trapped in wreckage", instead of the operations performed by the question "how we could save people from wreckage". Because of all these reason, a new restructuring was performed under the Disaster and Emergency Department in Turkey by the Law 5902. Furthermore, considerable earthquake risk reduction operations were started for transformation of the areas subject to disaster risk in our country.

Additionally, is at is known, official rescue teams should give priority to the collective living areas, particularly schools, at the time of disaster depending on time of the day. For a number of reasons, it would take time for the expert search and rescue teams to all disaster areas, organizations and entities in the location. In other words, it is quite clear that not only several persons in charge, but the cities, districts and organizations should collectively prepare for disaster and emergency cases.



Looking from this perspective, 'disaster preparedness" trainings to be launched in the body of each organization will gain meaning and the planning operations at different levels will constitute a considerable progress for our country.

Of course, the statement "planners of planlesness are planned to failure" tells us that when the disasters and emergency cases suddenly occur, it is generally very hard to find an effective solution at that moment.

Moral and material damages we have experienced in the recent years have made us adopt the fact that each entity and organization should have a good plan, eliminating such phrases such as "we do not need plan, but food" However, in our country, in order to break the "destruction by disaster-relief" cycle", we should develop a more accurate understanding of disaster plans and we should implement the same at each level as soon as possible.

Although behind the disaster operations performed formerly lie rather or only "search-rescue" mentality, a number of deficiencies has remained in the matter of response. For example, there was no incident command system on site which creates a combination of communication, personnel, equipment and facilities in a standardized organizational structure in case of response.

And it was not possible to make and implement plan without a modular site emergency management system formulized for each level and at all hazards in which emergency services such as Incident Command system may be established and managed. However, such a standard management system should be foundation for all disaster and emergency preparedness and response management on local, city, provincial and national basis. Thus, an effective command system and use of common language and methods will create an effective disaster and emergency management with our central and local managements through a simple, but functional organizational structure. This organizational structure will be compliant with the organization structure of normal times and take place in the disaster and emergency plans to be prepared.

In order that the emergency response teams may act synchronously, Incident Command System, standard across the country and at each level, will be spread and used before, during and after the disaster.

The same Incident Command System to be implemented in our disaster plans will provide easiness and important benefits in practice. And by this approach, the disaster and emergency response plants at any level will also be dealt again.

Istanbul Earthquake Zones Map



1st Degree Earthquake Zone 2nd Degree Earthquake Zone 3rd Degree Earthquake Zone 4th Degree Earthquake Zone

ADMIP is a plan where common mind and experience of the world and the resulting integrated scientific principles an methods related to integrated disaster management are synthesized to address to the issues and requirements specific to Istanbul. Today, the security is given priority in the development operations, and it is intended to minimize all risks related to possible hazards in the planning of the cities.

Preservation of the public and environmental health is directly related to behaviors, knowledge and skills of the city dwellers individually in this respect. In this context, attention and continuous training of the local administrations, entities and organizations bear great importance.

Primary function of the disaster management operations is to protect the people and spaces my reduction of possibility of disaster and emergency. And other benefits of the disaster management operations include prevention of economic loss that may arise from disaster and emergency cases, conduct of a predefined working schedule free of any problem and improvement of the workforce in a positive way.

Because of all these reasons, the simplest and correct answer to the question "who is responsible for continuity of life, goods and work/ service" is "everybody".

To summarize, now our password should be "everybody, each family and each organization in our country should be prepared to the disasters in our country". Furthermore, we should always remember the statement by General Eisenhower, "plan is nothing, but planning process is everything".



District Population Densities According to the Address-Based Population Registration System

Thus the facts we should never ignore are involvement in the planning process and taking into consideration all disasters. In other words, disaster and emergency plans in the entities and organizations should not be merely tasks of one or two persons. Furthermore, plans should not be copied and prepared and put on the shelves..

Plans should be prepared for all kinds of hazards by involvement of all sections of the organization and/or society; all their functions should be tested by a variety of operations, constantly improved and updated.

Only such disaster and Emergency plans, prepared such a new and scientific approach may constitute a good basis for all kinds of protection and work/service continuity and a sustainable development. In our country, unfortunately, the basic principles and concepts in this regard have not been clarified and no common language and consensus has been obtained to eliminate any contradiction in terms. However, as General Patton said, "a good year plan today will be much better than the excellent plan of the tomorrow, even if the names of the existing plans are different and their contents are insufficient, it may be said they are "useful".

Furthermore, we should never ignore that disaster management is "the entire process of analysis, planning, decision-making and evaluation to organize the existing resources for getting prepared against all kinds of hazards, mitigation, response and recovery". Because of all these reasons, ADMIP, as mentioned above, is an advance work showing how the aforementioned change and transformation should be performed.

Scientific principles and methods for integrated disaster methods emerging by common mind and experience of the world is a plan synthesized to address to the issues and requirements specific to Istanbul. As provided for by the Law 5902, this plan, developed on basis of hazard and risk analysis, is not only involved with response and improvement; but, it also includes reduction of the disaster risks prior to disaster in order thee operations can be successful.

We hope the planning studies formulized for Istanbul be a guide to all our administrative units, entities and organizations.

Disaster Preparedness Works Conducted in Istanbul and ADMIP

This guide book you read has the object to share the stages of reasoning, preparation, implementation and maintenance of the continuity of ADMIP. In order that Istanbul and people living in Istanbul may get prepared against all possible disasters, particularly earthquake, a great number of preparation operations are performed under ISMEP (Istanbul Seismic Risk Mitigation and Emergency Preparedness Project).

In these operations, which are conducted under the titles Enhancing Emergency Preparedness, Reduction of Seismic Risk for the Seismic Risk Mitigation for Priority Public Facilities and Enforcement of Building Code, a wide range of risk-reduction activities of great comprehensive, multi-actor and participants ranging from structural retrofitting activities to the social trainings are performed. In this context, preparation, and supportive and preventive practices for preparation, damage reduction, response and improvement necessary before, during and after disasters are dealt with under the project.

This guide book you read has the intention to share reasoning, preparation, implementation and continuity of Istanbul Disaster and Emergency Prevention Response and Recovery Plan (ADMIP) as one of the studies mentioned above.

For this purpose, the book starts with explanation of the concepts constituting basis of ADMIP and examples are given worldwide for importance of planning in this discipline and development of disaster management.

In addition to the basic processes of ADMIP, the capacity building investments made for the organizations involved with the plan are also given under a separate heading.



By this study, DED, as owner of ADMIP, aims at maintaining coordination and cooperation among all organizations and entities in charge of conduction disaster preparations.

With ADMIP, the aim is to standardize and improve efficiency of disaster management processes in Istanbul.

ADMIP defines command system, plan preparation process, plan implementation processes and how involvement of the stakeholders will be achieved and identifies special roles and responsibilities of the different organization according to requirements of Istanbul. Using the organization structure prepared by Disaster and Emergency Management Department, Prime Ministry and shared with the public, ADMIP help full adaptation of Istanbul on national and international basis including staging of response and plans again taking place in the same plan, formation of the service groups by the respective organizations, establishment of stakeholder relationship, rather than hierarchical relation and coordination on local level as specified by Turkish Disaster Response Plan.

In addition to other preparation activities performed for the city, Istanbul DED also continue operations to increase applicability of the plan resolution.

ADMIP Meeting for the Safe Future of Istanbul

 ADMIP is put into effect in good adaptation to Turkish Disaster Response Plan prepared by Prime Ministry Disaster & Emergency Management Presidency.

Istanbul Provincial Directorate of Disaster and Emergency (Istanbul DED)

In the disaster management, the public, private sector, local administrations and community representatives should gather around the same table and be involved with the process.

A big and cosmopolitan city, Istanbul also brings together the requirement to manage it by special dynamics. For this reason, Istanbul Provincial Directorate of Disaster and Emergency (Istanbul DED) has been established to ensure coordination and cooperation among all entities and organizations in charge of conducting disaster preparations, follow up and control the services conducted.

Istanbul DED addresses to the specific structure of Istanbul and prepare the city against disasters by means of an organization and pleading applications in line with Turkish Disaster Response Plan prepared by Prime Ministry Disaster & Emergency Management Presidency (Prime Ministry DEMP).

Disaster management operations should not remain limited only with intervention during or after the disasters.

It is quiet evident that taking necessary precautions before disasters is more important than effective response during the disaster or even they are parts of a whole.

In other words, disaster management is coordination and integration of all studies necessary for preparation, protection, response to the threat of disaster, natural or human sourced disasters, construction, maintenance and development of the risk and damage reduction capacity.

Disasters are events locally experienced, affecting the local communities everywhere in the world and for this reason it is essential that the local stakeholders should actively contribute to the disaster management.

Local stakeholders should be made involved by means of disaster risk reduction operations, various meetings, organizations and platforms designed for this purpose.

In the disaster management, public, private sector, local administrations and social representatives should meet around the same table and made involved with the process.

Istanbul DED presents such a participatory planning tool by means of ADMIP.

Istanbul DED Organization Chart



Management units taking place in the current organization of Istanbul DED assume effective roles for planning, support, coordination and implementation of the activities of ADMIP.



Deaster Management and Basic Concepts

Disaster Management and Basic Concepts

An effective planning should contain analysis of the past information, decision-giving in the present status and evaluation for the future. Better understanding of ADMIP depends on unity of language in the description of the subject basic concepts of the plan. For this reason, this section is reserved for description of the basic concept.

As, of these concepts, management, organization and planning are also basic concepts of the management science, they are also defined in the framework of management science.

Some common concepts such as hazard and risk, which we encounter in other discipline in difference context and meaning have different meaning in the disaster management discipline. For this reason, these concepts are considered from the point of view of the disaster management discipline and they are given place in this context.

Management and Organization.

Management concept is generally defined as "a group activity conducted in cooperation to carry out some purpose or purposes". Management can be considered as activities related to planning, organization, execution, coordination and control functions to achieve the targets in an effective and efficient way.

In he management, which expresses not the incident, but the process, the resources available are organized in such a way to provide efficiency in order to achieve the predefined targets.

And the organization concept expresses establishment of a grading and official structure between the rulers and the ruled and identification of the works, persons to perform them and relationship among them clearly.

Organization is a system showing how the targets specified by the management may be achieved in the most effective and efficient way.

How Should be A Good Plan?

- It should be clear, net and understandable.
- It should be oriented to the target to be achieved.
- It should be flexible and adapt to the changing conditions.
- Performance and implementation should require minimum cost.
- It should cover an optimal duration.

- It should be based on scientific insights.
- It should comply with the adopted principles and standards.
- It should have precautions to remove negative effects with minimum loss.
- It should maintain a balance among the items it covers.
- It should use the existing facilities.
- It should be in written and well-tried.

Plan and Planning

As a whole of systematic decisions taken to achieve a target, plan shows the way and behavior to be used for achievement of a purpose.

Planning can be defined as process of identification of the targets and the activities necessary for achievement of the said targets. In other words, planning is to make selection among alternative actions for future.

An effective planning should contain analysis of the past information, decision in the current status and evaluation for future.

A correct planning helps use of the resources in a more effective and efficient way.

In order to achieve the expected targets, plan should have certain characteristics.

Organizing and Coordination

While organizing, another management function, expresses formation of management units by grouping necessary activities to implement the defined plans and definition of the tasks of the executives an workers in these units, the orientation function expresses power and effort to orientate the resources available to certain purposes in the most appropriate and effective way.

While coordination function of the management expresses integration of the activities to achieve the common purpose, the control expresses constant monitoring and evaluation by the superior whether the defined purposes have been achieved efficiently. For achievement of the common purposes in an efficient and effective way, the functions of planning, organization, orientation, coordination and control of the activities by the human group should be performed.

Each of these factors, which constitute the management process and also considered as management functions affect each other and constitute part of the system. Success of the management depends on execution of these functions in an efficient and effective way.

As it is seen, these basic concepts, each of which can be addressed in a wide manner, have been defined to achieve the common purposes in an efficient and effective way.

Disaster management discipline is, although it has different subject and field, serves this basic purpose essentially as a management field and activity provided it remains in its own field.



Disaster risk in an intersection set of hazard, exposure and defenselessness. For this reason, in cases when we could not eliminate hazards to reduce disaster (such as change of fault location), we should reduce exposure and defenselessness of the society.

Mathematical expression of the risk concept.

RISK = (HAZARD POSSIBILITY X EXPOSURE X DEFENSELESSNESS)/MANAGEABILITY

Hazard and Risk

The concepts hazard and risk, two most basic concepts of disaster management, are frequently used instead of the other, but expressing different results from each other, however interacting with each other.

Hazard

The hazard concept, a response to the question "What could be?" in the disaster management, can be defined as "natural-, technologicaland human-sourced event or chain of events with potential to give damages to the socio-economic order and activities of the society, natural environment, natural, historical and cultural resources in addition to leading loss of life and property".

Risk

The risk concept is defined as "potential loss to occur depending on the level of damage to be suffered by the factors under threat when a hazard occurs in a certain time and space".

First of all, the result from these two definitions is that the risk occurs dependant on hazard. In other words, in order that any of the factors such as humans, other living beings, non-living things such as buildings and other values may be under threat, they should be under threat, that is, exposure to hazard. However, this interaction also creates asking a different question: Does existence of hazard always create existing of risk?

To answer this question, vulnerability and some related concepts should also be defined.

Vulnerability

Vulnerability is expressed as "a measure of possible death, injury, damage, destruction and loss from which the society may suffer upon occurrence of a potential event." In other words, vulnerability is opposite of the coping capacity of the society.

Exposure

Exposure concept expresses "amount and number of humans and assets which a certain hazard may affect". Consequently, existence of exposure is considered with a hazard and existence of humans and assets covered by such hazard." Natural-, technological- and human-sourced situations, which cause physical, social and economic loss and suspend/interrupts normal life and cannot be coped with local facilities and resources.



Defenselessness

In the disaster management, defenseless is the answer to the questions "May it happen here" If happens, what could be"? It is degree of possible loss and damage the society may be exposed to upon occurrence of the disaster.

When the risk concept is read again under light of these concepts, which are very important for disaster management, it is found that the risk is an intersection of the concepts hazard, defenselessness and exposure.

Manageability

Defining the risk more accurately in the damage management is directly related with the manageability concept. The manageability concept is defined as "level and capacity to minimize and cope with loss and damages for the affected society in case of a disaster in relation to the variables such as existing institutional systems against possible risk, preparation level, planning, existing los reducing precautions, laws and regulations, early alert and estimation, public awareness, information systems, resources, training levels and participation."

As it may be seen from the definition, it constitutes capacity measure of the society, which is under risk of disaster. In this context, the higher the capacity of the society to cope with, the less risk value.

Incident, Emergency and Disaster

There are three different concepts, which are frequently used in the damage management discipline and serve to distinguish the occurring events by their results and sizes and measures.

From these concepts, the incident is local incidents with very limited effect. They do not affect working capacity of the settlement units, organizations and entities and they are generally taken under control by the first interveners.

Emergency is expressed as results of the events, which require emergency response to protect people, goods and environment and can be coped with local facilities. In other words, emergency cases are results of such events that interrupt normal life and activities of certain sections of the society.

Compared with these two concepts, the disaster concept has a clearer and more universal definition.



Losses caused by Disaster and Emergencies

According to the concept adopted by the United Nations of a universal quality, disaster is defined as " natural-, technological- and human-sourced event which create physical, social and economic loss for the people, stops or interrupts normal life and human activities or and thus affect the communities in such a way that cannot be eliminated by the affected community through use of local facilities and resources."

As it may be seen from the definition, disaster does not express the occurring event itself; in other words, it expresses the effect on the local community. In this context, measure of the disaster should be considered not only with the reason leading to it, but, additionally, with its effect also. Consequently, whether it is a natural-, human- or technologicalsourced event, reduction of the effects of the disasters is directly proportional the reduction of "vulnerability" taking place in the definition of risk. The equation reaches us to the concept of "Modern or Integrated Disaster Management System" today.

Disaster Management

The concept of disaster management aims "prevention of the events that may create disaster or reduction of their loss.

Management of all entities and organizations and their resources for planning, orientation, support, coordination, orientation, support, coordination of all activities required to be performed in the operations such as disaster preparedness, response after disasters and recovery so as to cover all parts of the society and establishment of corporate structures or re-arrangement and provision of an effective and efficient structure."

As it may be seen from the definition, the concept of disaster management, having basic principles and purposes, which are not quite different from the general management approach, but reconsidered specifically by the subject is consisted of four stages.

Mitigation Stage

It is defined as the stage consisted of activities such as identification of disaster hazard and risk, if possible prevention of it an taking precautions against big damages, information, awareness building and development of the capacity of the society with respect to disaster hazard and risk, and development of the legislation and corporate structuring applied before and after the disaster, determination and implementation of researchdevelopment policy and strategies.

Preparation Stage

It is the stage consisted of activities such as planning, resource management, mutual assistance, society awareness and training of the response personnel against the expected hazards prior to disaster. It is also called planning stage.

Risk Management

- Estimation and Early Warning Systems Identification of Hazard and Risks Physical/Structural Mitigation Activities Taking Measure • Awareness Raising and Training Activities Rescue, Evacuation and Emergency • Short, Medium and Long Term Mitigation Plans Aid Plans Reinforcement of Critical Facilities and Training and Drills Providing Resources Infrastructure Under Risk Protection of Ancient Works. Environment and Establishment of Volunteering System Natural Life Revision or Regulation of the Legislation PREPAREDNESS MIGATION DISASTER DISASTER MANAGEMENT **SYSTEM** 35N0853 RECOURT • Intelligence, Transportation, • Search, Rescue, First Aid, Evacuation, Collective Debris Management Aid Restructuring Vital needs such as Food, Water, Medicine, etc. Repair and Retrofitting Works Security, Environmental Health Construction of Permanent Houses • Secondary Disasters: Fire, Epidemics, etc. Programs for Economic Recovery • Press and Public Relations Health and Medical Services Temporary Housing Formation of Normal life Conditions Damage Assesment and Debris Removal
 - .

Crisis Management

Risk and Crisis Management Interaction



Response Stage

Being relatively the most important stage of the disaster management, it is the stage starting immediately after occurrence of the disaster event during which requirements such as search – rescue operations, first aid and medical intervention, temporary accommodation and board are urgently addressed.

Recovery Stage

It concerns activities performed for a safe life and restoration of normalized socio-economic conditions in the region affected by the disaster.

It is also a stage where long term results such as re-establishment of infrastructural services gain, restoration of training, health and transportation services and loan to small enterprise are considered. Furthermore, this stage is also considered as a loss reduction stage in the disaster management cycle.

Highly complex disasters occurring today and their results as well as multi-actor, multidisciple structure of the disaster management, which targets to serve multiple purposes all clearly show that the disaster management operations may not be limited with interventions during and after disaster only.

Recent history has clearly shown that taking precautions before occurrence of disaster is as important as the effective and efficient response activities during the disaster.

And at this point, ADMIP, presumably the first example of understanding of modern disaster management in our country, helps lay foundation of a more reliable Istanbul with the participatory approach it bring and its integrated point of view. ADMIP, standing for Istanbul Disaster and Emergency Prevention, Response and Recovery Plan, is also owner of commitments and applications much more than the word "plan" in its name.

In this respect, ADMIP should be considered as a new, integrated and participatory understanding, which constitutes necessary foundations for building a "Reliable Life Culture" in the city entirely. Shortly, ADMIP is an initiative to perform what has not been done so far in our country, containing all we have told up to now.

Necessary Operations For a Disaster Management System, Suitable to the Current Conditions, Modern and Integrated

- Taking into consideration all hazards
- Implement all phases
- Use all resources
- Ensure involvement of all individuals and organizations with these operations

Disaster Management Worldwide and Its Development

Mentioning shortly about historical development of his approach, which also forms foundation of ADMIP presumably the first modern and integrated disaster plan in our country and which is hereby frequently highlighted as synthesis of "common mind" of the world and great painful experience in his study would be very important clarify under which situations and conditions the method used has been developed and, on the other hand, express result cause-effect relation causing emergency of the method during the progress.

As it is known, most part of innovations, inventions and development throughout the world history have been originated from a need. And it is not different for the disaster management discipline; the humanity has taken lessons from the disasters throughout history and developed new methods and developed new methods by inquiring into how they may address to these disasters effectively all the time. History is full of such quite interesting examples. Perhaps, the most interesting of these examples, which is very surprising for its meaning and expression, is a T-shirt commissioned by Us Federal Emergency Management Agency (FEMA).

With a design on it showing Noah's Ark and the statement "the First Emergency manager2, T-Shirt symbolizes the prophet Noah, who analyses the flood and possible damage and thus a damage reduction plan and according to this plan builds an ark and thus take board the animals he has chosen on a certain approach (one female and one male) and save them and finally release them after the flood.

Another interesting example signs the time of Roman Empire. In those times, addressing to the requests of the Roman public about fires frequently, the Emperor Augustus have established fire brigade groups consisting of slaves called "The Vigiles" in BC 6.

Using pumps, hook, sticks and similar materials, these groups also acted as the police fore of Rome. Serving as day and night patrols, these groups has transformed to teams consisting of hundreds of people in the later periods and continued to intervene with the fires under the conditions of the period.

Historical examples are also important to show the process of change in the understanding along the periodical requirements. In this context, "back plague" in the 14th century Europe has caused development of the treatment techniques as a result of observations made and the Big London Fire in the 17th century caused construction of the building by use of briquette and stone materials in the later period, while they were made of wood previously.

At this point, to mention about 1755 Lisbon Earthquake would also give important hints to understand today. Also being one of the biggest earthquakes in the history, this 9.0 earthquake and those experienced have also shown the first "coordinated disaster action" n the history.

The Recorded Earthquakes in Istanbul



One of the biggest earthquakes recorded in its history, this earthquake and things experienced subsequently is also the first "coordinated disaster response" successfully implemented as recorded in its history.

Authorities of the time have successfully organized all factors, including armed forces after the disaster; taken the city under security, obtained food from outside the city, and prevented the food prices from getting out of control and falling into black market.

As a result of successful policy in the first moments of the disaster, the situations was taken under control and operations started with the army engineers for reconstruction of the city.

Together with the Lisbon Earthquake, it was started to examine effects of the earthquake on the buildings and use the resulting findings for reconstruction of the city, this was a complete innovation for the 18th century. Took place in the history books and being very important for the disaster management discipline, the Lisbon Earthquake and the success story being it is dependent on the organization of the intervention performed on basis of a long-term strategy, instead of the understanding of "save the day".

Each of the historical events shedding light on today is of a lesson character for the emergency managers, containing data deserving in-depth examination one by one.

However, we should look back to the20th century to find the roots of the modern and current disaster management operations.

The first steps of the Disaster Management have been taken after the World War I under the concept "passive protection".

And the concept which has originated modern and integrated disaster management is "civil defense" started to be implemented in a wide and systematic way after the World War II. Most roughly, the civil defense can be defined as protection of the civil people in war.

In this context, it appeared during the Cold War, when mass destruction weapons and nuclear war threat have been considerable; especially, in the countries member to the Western Block, it has formed basis of the preparations to this effect and it has undergone some structural changes after the Cold War is over.

Today, examining the history of the current disaster and/or emergency management units worldwide, it is seen that almost all of them have been civil defense unit in the period of Cold War.

Approach to the Disasters by Consideration of Those Experienced Up to 90's

Extraordinary meanings ascribed to the disasters in the first periods of the history; consequently, the belief that the disasters could not be prevented and no action could be taken against them; and a process of taking lessons from the observations and information obtained starting in the 14th century; Implementation of the lessons obtained from the disasters in 17th century and the period of thinking the future when intervening.

The changing conjuncture changed after end of the Cold War has affected each field of activity directly as that of the civil defense; additionally, increase of the riskprone areas and population in connection with the urbanization rate and the destructive disasters have driven the states to take a variety of measures related to disasters.

As a result, the civil defense units with their proper organization, having the required legal infrastructure have started to be converted into disaster management units.

As it is seen, actually the human experience throughout thousands of years symbolizes four main stages of the modern disaster management today.

In this context, the process started with the response stage and it is followed development of necessary techniques in the intervention in the course of time and precautions taken especially against fires. As a result, while the intervention was organized by a systematic planning, the activities were also conducted to restore to the times prior to the event.

However, although symbolizes the four main stages, the difference of these activities from the current approach is hidden in its systematic.

These activities as product of events and periods, different and independent of each other, do not have the integrated understanding of the current modern disaster management. For emergence of this understanding, we had to wait for 90's.

The 90's are the years when the disaster management understanding has started to change worldwide upon start of the international organizations to become more active in the response.

As it has been expressed before, both end of the Cold War and increase in the number and effects of the disasters experienced worldwide have caused many countries to show attention to this field. Eventually, the United Nations has announced the 90's as "A decade to Reduce International Natural Disaster Damages" with the development of international cooperation to reduce disaster induced damages especially in the developing countries.

For this purpose, the mission of his "decade" has been specified as building capacity to prevent natural disasters or reduce their effects in the member countries to serve as a guide to apply the current science and technology to reduce the disasters induced damages.

In the Conference on Reduction of Natural Disaster Damages, 1994, (Yokohama, Japan), where the activities conducted related to this mission was evaluated, the member countries have formulized Yokohama Strategy and action Plan for "A More Safe World".

HFA's 5 Priorities for Action



With this document where the concept of risk analysis and damage reduction, more clearly, the "risk management" concept is clearly highlighted, the principles have emerged such as "risk analysis being a necessary step for the policy and activities to reduce the disaster induced damages" and "priority importance of the prevention of the disasters and preparation activities in reducing the need for disasters aids".

Following Yokohama Strategy and Action Plan, in the 2nd World Conference on Disaster Reduction organized in Kobe, Japan, Hyogo Framework Action Plan (HFA) aiming at reducing the damages induced by the disasters occurred between the period 2005-2015 was prepared and adopted by 168 member countries of the United Nations. Considered as the common mind and experience of the world, these principles have made their mark in the following ten years and, as a whole, also guided implementation of the disaster management policies.

An action plan for reduction of the disaster risks, HFA is consisted of 3 strategic target and 5 priority action plans.

Its strategic targets include integration of the reduction of the disasters risks with sustainable development plan and policies; development of organizations, mechanisms and capacities for building awareness and sensitivity to the disasters and reinforcement of the existing ones and systematic participation of the approach of reduction of disaster risks preparation against the emergency, response and recovery programs.

As a requirement of the ear, they have agreed on that risk management is a more effective and consistent way to follow in the disaster management compared to the crisis management and the policies and actions were formulized in this way. Disaster management has taken a long way throughout the human history to take the name of "disaster management", given a number of exams and taken various lessons from these examinations.

When evaluation the most important point reached in the world, it can be clearly expressed that the period of "response only after the disaster" has closed down, and the period of "effective risk management" has stated instead.

The risk management activities essentially consisted of the stages of "damage reduction" and "preparation/planning" provide important benefits for reduction of the social vulnerability.

Furthermore, it also provides the required support felt both by executives and implementers in increasing the effectiveness of response to the types of disasters that cannot be prevented.

Basic Principles of Constant and Systematic Planning Approach

- Identification of the current hazards, risks, and disaster-prone region s
- Evaluation of the levels of current preparation and defenselessness
- Social-based character, allowing contribution by all stakeholders;
- Test and development of the plan by way of updating, training and operations

Because of all these reasons, the planning and event command system expressed in this study constitute an inevitable part of the risk management together with the damage reduction activities.

Planning to be made with an approach of governance backed up an understanding containing all stages of the modern and integrated disasters management will provide what we will need when "that moment" comes.

Although exposed to some criticism, the event command system and scenario-based planning approach today reflects the basic planning understanding used at the headquarters and on site in all countries of the world.

Planning in the Disaster Management

Before proceeding to the details of ADMIP in the following chapter, we should also mentioned about importance of the planning in the disaster management.

As it has been stated under the heading related to planning, planning is a concept indicating the process for determination of the activities necessary to identify the purposes and achievement of these purposes.

And function of the planning is not much different for the disaster management discipline. Planning in the disaster management is to estimate the future related to the disaster management and identify the requirements and resources necessary for elimination of the events to occur.

Effective disaster planning also brings together a process management operating with certain dynamics. In this context, in order that the disaster planning may give the desired result, it is dependent on implementation of the following steps: When the most important point reached by the world today, it may be clearly stated that the period of "response only after the disaster" has closed down, and the period of "effective risk management" has stated instead.

Targets of the Disaster and Emergency Aid Plans

- Provision of life and property safety
- · Protection of environmental, historical, cultural and natural assets
- · Prevention of the chain events and primary disasters that may occur
- Taking necessary precautions to prevent failure of the services/business continuity

 In the disaster planning, all organizations to take service in the plan should be allowed for involvement from the beginning to the end in a framework of governance approach.

Formation of Planning Team

A team consisted of experts from different disciplines is required to prepare and develop the disaster and emergency plan. Size of the team is related to the size of the organization or related area or region, its problems and resources.

Job description of each member of the team should e identified. It is inevitable that the employees of the organization or settlement unit working in a variety of field should take place in the team.

When the team is formed, it should be officially engaged and authorized to take necessary steps to make and develop the plan. Furthermore, authorizations and engagements in the group should also be clearly performed.

Analysis of the Current Status

The next step in the planning is to analyze the current preparations, skills and possible hazards. The organizations should conduct analysis on vulnerability of the settlement units for which they are responsible and identify the capacity to cope with the effects of the emergency case when it occurs. For this purpose, it is required to determine and analyze the hazards and risks and identify the resources that can be used in case of a disaster.

Determination of Targets and **Priorities**

This step is one in which the effect of the risks identified in the previous step in the field of power, identification of the risk priorities and preparation of the scenario related to the plan.

General Outline of Disaster Planning Process



Development of the Plan

After drawing up the scenario, the plan development step is one during which the ways of movement suitable to the situation specified by the plan is developed. Accordingly, the most important study to be performed in this stage is to develop ways of response and solution alternatives to reach the defined targets and priorities.

Preparing/Drawing Up the Plan

This step is one during which the data obtained as a result of the first three steps are written down. However, the most important point in this section is that it should be written in a plain and clear language so as to be understood by everybody and no special codes specific to a certain organization or sector should be used and attention should be draw that the details are kept at sufficient level on purpose-orientation level.

Updating the Plan

Each disaster and emergency plant to be made should be definitely tried. For these reasons, after completion of the writing down stage of the plan, the plan should be tried by operations at various levels and the formulized system should be tested whether it achieves the specified targets.

If there are any changes required to be made in the planning after the operations, these modifications should be marked in the related places of the plan. Besides, other changes as a result of any changes in a resource taken place in the plan or usability of a new resources, change of hazard and risk profile of the area should also be identified and noted down in the plan during the planning process. By the planning process which is generally conducted in this way, we would have a disaster and emergency action plan having the participatory character of a modern disaster management, taking into consideration all hazards.

However, presumably the most important point of the disaster planning today is that even at the first stage of the planning process, all entities to take place in the plan according to the governance should be taken place from the beginning to the end of the process to make them involved. If such involvement cannot be achieved, the plan would not be "a disaster plan for everybody" and become "plan of a certain person/group" and thus become inoperable.

The statement made by Eisenhower, "plan is nothing, but planning process is everything" summarizes the intended purpose in the most clearly way.





ADMIP

In the last 50 years, the disasters occurred in our country have shown he need to develop static disaster and emergency plans prepared by legislation and management structures organized by legislation again.

As Istanbul, so-called heart of the country, is a city having a population of 15 millions, it increases concerns and inquiry into how the former understanding may be effective in the management of a such urban area in terms of disaster management.

For this reason, "Disaster and Emergency Prevention Response and Recovery Plan for Istanbul" was started as per the applicable legislation in Turkey in accordance with the international standard for maintenance of uninterrupted service and performance of the organizations/entities taken place in the emergency and disaster as attached to Istanbul Governor's Office in a quick way. The following operations in this process continue rapidly:

- Preparation of the response plans and of the plans for restoration of the safe life in accordance with the disaster and emergency status, hazards and risks for Istanbul
- Preparation of the procedures, instructions and checklists and forms related to these plans
- Taking into consideration the regional, national and international platforms of the study and formulation of the same with respect to all possible disaster and emergency cases
- Building system, taking service, data gathering, compilation and identification of the characteristic of the analysis programs for making risk reduction planning for Istanbul

Turkish National Disaster Response Plan and ADMIP

Turkish national disaster Response Plan (UAMP) published by DED, Prime Ministry identifies roles and responsibilities of the service groups and coordination units to take office in the emergency operations related to disaster and emergency cases and determines the basic principles before, during and after the disaster.

UAMP is an upper plan putting forward how the emergency operations to be conducted in a national-scale disaster and emergency case and thus give ideas to and supports the local plans with its flexible and modular structure.

ADMIP studies should be further developed in cooperation with all higher organization and committees, primarily the related ministries, by taking into principles specified in UAMP and developed so as to cover all stakeholders in Istanbul.




Comparison of Approaches of the Existing System and ADMIP

EXISTING SYSTEM	ADMIP
APPROCAT FOCUSED ON SINGLE POINT	INTEGRATED APPROACH
UNDERSTANDING OF CRISIS MANAGEMENT ONLY	RATHER RISK MANAGEMENT UNDERSTANDING
EXACT HIERARCHICAL DISTINGUISHEMENTS	A MODULAR, PARTCIPATORY AND INTEGRATING APROACH
STATIC PLANNING STRUCTURE	ACTIVE AND LIVING PLANNING STRUCTURE
COMMITTEE MANAGING EVERYBODY	BASIS OF SPECILIZATION ACCORDING TO THE PHASES

Characteristics of ADMIP

Prepared by Istanbul DED, ADMIP is a plan aiming at achieving cooperation and coordination between Istanbul DED and related entities an organization in the operations for coping with all kinds of disaster to occur in Istanbul with a minimum damage before and after the disaster and in all kinds of operations to be performed in the first 15 days after the disaster.

For this purpose, the first point required to be highlighted is that ADMIP is a new "understanding" and "approach" after all. That is, AMIP has been formulized on basis of the most recent scientific fats under the light of newly developed information and observation.

Basic differences between the existing system and ADMIP are as follows:

Integrated Approach

ADMIP deals with before and after the vent in an integrated way. It has not been formulized to take with only by the understanding of response after the event, but also by an approach to planning, damage reduction and preparation to the event before occurrence of the event. Rather Risk Management Understanding

ADMIP aims at managing hazards to occur as a result of disaster instead of "events" after the disaster, that is, "crisis" as well as the risks associated with them.

As it is, reduction of the damages at time of crisis and increase of the efficiency of response appear as basic gains.

A Participatory, Integrating and Modular Understanding

Rather than strict hierarchical differences, ADMIP aims at giving place to al entities and organizations as "stakeholders" in the system under the light of governance. Thus, participation and involvement is increased.

Active and Living Planning Structure

After prepared, ADMIP is a plan which is tried by operations and constantly updated by ADMIP Information System.

Furthermore, it is a plan indicating a process and understanding and so it s a changing, developing and, consequently, living plan.

Basis of specialization by the Phases

ADMIP uses the event command system in compliance with international standards. In this system, "response", "planning", "logistics" and "finance" all operate both individually and as part of a whole. As it is, it improves governance efficiency because each heading of subject is evaluated under the specialization specific to it.

These five basic principles emphasize spirit and approach of ADMIP and, on the other hand, put forward its differences from the existing structure



Comparison of the Existing System and ADMIP in Terms of Management

Basic Scenario of the Plan

ADMIP process was started by taking the Model C (the worst) scenario earthquake of Istanbul Earthquake Master published in 2003.

Having a risk analysis character also, this plan as well as scenarios it contains reflects the future picture of Istanbul in a clear way. 10.000 – 30.000 LOSS OF LIVES

2.500-10.000 VERY SEVERE DAMAGED/13.000-34.0000 SEVERE DAMAGED BUILDING

85.000 - 150.000 MEDIUM DAMAGED / 250.000-350.000 LIGHT DAMAGED BUILDINGS

20.000 - 60.0000 HOSPITALIZATION / 50.000 - 140.000 SLIGHTLY NJURED

530,000 HOUSES FOR URGENT ACOMMODATION

TRY80-100 BILLION TOTAL FINANCIA LOSS

400 BUILDING DAMAGE CONTAINING EXPLOSIVE AND FLAMMABLE SUBSTANCES

DAMAGE OF POTABLE WATER AT 450 POINTS AND O WASTE WATER LINE AT 1500 POINTS

DAMAGE OF NETWORK AT 650 POINTS /DAMAGE OF GAS BOX OF 17000 IN NUMBER

LOSS OF LIFE AMOUNTING TO 0.1% -0.2% OF THE POPULATION OF ISTANBUL

UNUSABLE BUILDINGS (VERY SEVERY, SEVERE, MEDIUM), 10% - 15%

ADMIP Organization Chart





Five Basic Functions of the Event Command System

COMMAND (MANAGES)	ALL RESPONSILITY BELONGS TO THE COMMAND
OPERATION (PERFORMS, EXECUTES)	IMPLEMENTS THE PLAN
PLANNING (THINKS)	DETERMINES ANY NEEDS TO ARISE; HELPS FORMULATION OF THE STRATEGY
LOGISTICS (SUPPLIES, PROVIDES)	RESPONSIBLE FOR RESOURCES NECESSARY FOR OPERATION OF THE SYSTEM
FINANCE (PURCHASES AND PAYS)	FOLLOWS UP COST AND LABOR FORCE

 In this formulized system, 27 services groups have been established by function. It is not required to use all these service groups in case of each disaster. Some of these service groups may be activated according to the level of response.

Response and Operations Service

Communication Services Group

After a possible disaster, it provides communication throughout the city of Istanbul by all means usable as soon as possible.

Transportation Services Group

It prevents failure of the transportation throughout the city of Istanbul to the extent of facilities; provides transportation y all air, road and sea vehicles as soon as possible and ensures all personnel in charge of emergency aid services to perform their function as soon as possible.

Security Services Group

It builds general order within the authorities given to the law enforcement officers in the city of Istanbul and particularly in the disaster area and takes all precautions in special cases such as espionage (spying and collection of secret information)

Fire and Dangerous Substances Services Group

It extinguishes fires to occur in the city of Istanbul, decontaminates dangerous materials and takes all necessary precautions in this respect.



Five Basic Functions of Incident Command System

Search and Rescue Services Group It actively performs search and rescue activities for the victims in the city of Istanbul and particularly the disaster zone and ensures coordination between all local, regional, national and international organizations, entities and real persons in this respect.

First Aid and Health Services Group

It provides first aid and health services to the victims rapidly in the city of Istanbul and particularly in the disaster zone and ensures coordination between all local, regional, national and international organizations, entities and real persons in this respect.

Infrastructural Services Group

It ensures repair, when required, and keep in operation power, water, sewerage an natural infrastructure in the city of Istanbul and disaster zone and fulfillment of other requirements in connection with infrastructure in the disaster zone.

Social Services Group

It ensures repair and keep in operation of the power, water, sewerage and natural as infrastructure in the city of Istanbul and particularly in the disaster zone and fulfillment of other requirement for infrastructure as required in the disaster zone.

Debris Removal Service Group

It performs removal, transportation, unloading and disposal of the debris in an environment-friendly way in the disaster zone.

Burial Operations Service Group

Determination and classification of the burials of the persons lost their life due to the disaster in accordance with religious an moral values and medical requirements; and operation of identification, tissue sample, fingerprint and similar judicial processes and burials of the dead in a proper way. Agricultural Services Group It ensures all veterinary services, all precautions against possible diseases from living and eat animals as well as all measures required to be taken for agricultural economy.

Information and Planning Service

Information and Damage Reduction Services Group

In the period before possible disaster, it ensures performance of necessary damage reduction activities and planning activities; gives support for decision-taking on strategic scale in case of occurrence of any events that may affect operation of the entire event command system and monitors and evaluations operation of the event command system entirely.

Effect and Need Services Group

It determines effects of the disaster in the disaster zone as well as all possible requirements in connection with such effect.

Damage Assessment And Service Report

After a possible disaster, it performs disaster assessment in the form of preliminary assessment of the structural damage occurred in the disaster zone and final damage assessment.

Publication and Documentation Services Group

It ensures archiving and protection of all reports, documents, orders, messages and all similar documents related to the emergency aid and disaster period of a all units taking place in the event command system in the city of Istanbul.

Evacuation Planning Services Group

After a possible disaster, it ensures planning and coordination between the respective organizations for quick and efficient evacuation of the living victims in Istanbul by air, road and sea of the citizens and foreign citizens in and out of the city.

Logistic and Maintenance Service

Communication Systems Service Group

After a possible disaster, it performs operations for repair of any damaged communication systems in the city of Istanbul.

Temporary Setting Services Group

After a possible disaster, it prepares areas for temporary settlement, provides infrastructure, set up tents, supplies hot meal and forms temporary schools and related requirements for the victims in the city of Istanbul and disaster area.

Grant and Distribution Services Group

It plans and implements distribution process of any grants to be made in the disaster zone in case of a possible disaster as well as collection and management process of the grants.



Health Services Group

It provides and plans property and workforce for the health services and maintains the data updated.

Contracted Organizations Services Group

Before a possible disaster, it provides coordination and supervision between the entities and organizations contracted in a variety of fields and respective service groups.

Personnel, Vehicle and Equipment Supply Services Group

It fulfills personnel and vehicle requirement of all services taking place in the event command system in the city of Istanbul rapidly and cost-effectively.

NGO and Volunteering Services Group

It identifies and coordinates all civil society organizations and other volunteers that may take role in the event command system and engages that in the related service groups as required.

Finance and Management Service

Personnel Affairs Services Group

It monitors and reports operations of all personnel taking place in the event command system during a possible disaster.

Finance Services Group

It determines cost of all operations of the engaged services/groups and teams in the plan before, during and after the disaster.

ADMIP Meeting Service Group Workshop

Purchase, Rent and Seizure Services Group

It fulfills any requirements required by the organizations formed their services groups by their own means by way of purchase, rent or seizure method rapidly during a disaster.

Accounting Services Group

It records and keep accounting for all expenditures made by all units, in the event command system during a possible disaster.

There Are Three Different Plan Levels in ADMIP



With ADMIP, 9 service groups specified in the legislation have been increased to 27 for Istanbul taking into consideration the requirements of the city and their distribution to the respective services has been made according to the service they will provide in the disaster management.

ADMIP Service and Service Groups

As it is seen, the organization consisted of 9 service groups as subject to the Law 7269 and Regulation 88/12777 has been increased to 27 in number for Istanbul taking into consideration of the requirements of the city and their distribution to the respective services was performed according to the service they will provide in the disaster management.

Another point which requires attention in this formulation is that there are no smaller managerial units under these services.

In other words, the managerial differences were made in the upper step of the system according to the basic principles of the command system with a view that services groups should remain as a whole in themselves and in accordance with their specialization fields. Again without any difference between public sector, private sector and civil society organization, all organizations have been organized to bring about these service groups.

These entities called "team" have been organized to be 190 in number in the city of Istanbul.



Application and Operation of ADMIP

Taking the basic principles of the event command system in its organization, ADMIP takes into consideration the international principles in the practice and operation of it. Accordingly, the plans that constitute the foundation of all activities before, during and after the disaster on strategic and tactical level have also been prepared with this dynamic and gradual approach.

As it is seen in the table above, ADMIP has three different plan levels.

First Level Sur Plan

ADMIP defines:

- Operation concept,
- Framework of the disaster
- management, and
- Other general principles.

In this context, all units in the system perform the tasks described to them according to the principles specified in this plan as higher plan.

Second Level SubPlan

Service Group Action Plans actually identifies organizations of the service groups as well as general tasks and responsibilities.

These plans were designed in two different ways:

Service Group Provincial Action Plans

It is planning to be performed only by the city. Besides, it is also identified how things will be coordinated in the province via the District Action Plans.

Service Group District action Plans

It defines the activities intended to be performed in the limits of the district and via the district administrations.

Accordingly, the districts will plan in detail the works they will perform by their own means ADMIP Meeting Service Group Workshop

and capabilities completely. The activities for which they will receive support from the city will be dealt with in the service group provincial action plans.

Third Level Sub Plan

In the Corporate Action Plans, it is specified how the teams will perform the tasks ascribed to them in the Service Group action Plans as well as the decision and response organizations in case of disaster and emergency.

Here the most important point is that the operation and structure of the corporate in the normal time should not be impaired. In this context, the organization will prepare its action plan on regional, city or district level provided it observes the main principles.

Organization System On City Level



SITE TEAMS 8190 TEAMS)

They are managed by the executives of the respective organizations/entities from their own buildings or headquarter of the organization.







The process has been integrated with the system by making everybody as stakeholders without any difference among public, private sector or civil society organization according to the governance understanding and coordinated by the respective units of Istanbul Governor's Office.

Process Management of ADMIP and Works Performed

Implementation process of ADMIP is a challenging process. However, this challenge stems not from the structure of the system, but change of understanding.

ADMIP is the product of a change of understanding started after 1999.

As it was mentioned earlier, the existing disaster management system of our country is not a disaster management system in real sense; but it is only response after event/disaster, in other words, a crisis management system, resulting in its failure to meet the modern, scientific and integrated disaster management system, which is the common mind of the entire world today. For this reason, ISMEP has reserved one of the headings in its body to fulfill the current conditions of the existing system.

The process has, in the framework of governance, integrated everybody as stakeholders into the system, irrespective of their being public, private sector or civil society organization and was coordinated by the respective units of Istanbul Governor's offices.

In the meetings made with the representatives of the sector, information was given about details of the intended operations and the structure and system summarized here has been shared with them and, most important, distribution of work was made to make everybody become involved with the operation.

As a result of the meetings held in the subsequent stage, a strategy as a common mind of all sectors in Istanbul and their representatives has been adopted and the operations were continued in this direction and infrastructure was formulized to suit this modern understanding.

By means of groups consisted of specialists in their fields and in accordance with the predefined strategy, the sample plan drafts were prepared and presented to the authorizations.



ADMIP Process Stages

Formation of the Outlines of the Plan

ADMIP master plan draft has been formed together with the personnel and advisor engaged by Istanbul DED.

Determination of the Engaged Istanbul DED Personnel in the Plan

Istanbul DED has assigned service principals and project coordinators for monitoring the plan and a list of Istanbul DED personnel (coordinators and service principals) as prepared and then planning studies started.

Plan Evaluation Meetings

In order that the plan studies can be performed in the specified process and time, a series of plan evaluation meetings were held.

Service Groups Action Plan Preliminary Preparation

Preliminary draft was prepared for action plans of 4 service group, for 4 service groups one from each service.

Executive Meetings

Draft text of the master plan was discussed with the service principals and all service group coordinators.

Draft of the service group action plans was presented to the authorities and decision-takers taking lace in the plan.

Works performed were shared with the autorities and decisiontakers engaged in the plan.

Determination of the Engaged Organization and Stakeholders in the Plan

Stakeholder organizations taking place in ADMIP for prevention, response and recovery were incorporated in the organization chart. Furthermore, the corporate executives were determined to generate and update contact list for the organizations.

On the other hand, volunteers, who take place an important place in the plan, and STK lists started to be determined.

Contact with the Organizations

Details of the sample action plans prepared were presented in a meeting.

Vis-à-vis meetings were held with the service groups to develop the action plants.

At request of the service principals, action plan development meetings were made in presence of the organizations as well.

Furthermore, training sets were prepared for all stakeholders covered by the plan.

Formation of the Plan with the Organizations

With respect to the responsible officer at ADMIP, operations were completed for determination of the information transfer, reporting and similar processes; preparation of the directives for the planning process regarding the service principals/service groups and service coordinators and clarification of the plan contents for all service groups.

Test of the Plans by Operations

Desk meetings were held with the organizations.

Plan Evaluation Meetings With the Organizations After Operations Studies were completed to finalize the ADMIP master plan text together with the service principals and coordinators.

Updating and Sharing of the Plan

A presentation meeting was held for presentation of the final version of the plans by outlines to the employees of Istanbul Governor Offices and Istanbul DED, executives of the engaged organizations and the personnel engaged in the plan and expression of the works expected from the organization to keep the plans updated.

As it is seen, ADMIP process is a process which has been prepared and conducted by a new understanding other than hose planning processes usual in our country.

As indicated in the related parts of the study, disaster planning is a process with different Dynamics and mathematics, but flexible at the same time

ADMIP should be considered as a guide and each city should operate this process by its own dynamics.

The reason is that in the determination of ADMIP PROCESS, the specific dynamics of Istanbul has share as much as the general principals of the disaster planning.

As an example for the entire Turkey, in order that this project may be useful for other cities, it depends on evaluation of the dynamics specific to the city correctly.



Outputs of the ADMIP Studies

Master Plan

Istanbul Disaster and Emergency Prevention, Response and Recovery Plan (ADMIP9

Service Plan

It specifies and documents tasks and responsibilities of 4 services taking place in ADMIP before, during and after the disaster or emergency cases; indicates the work completion procedures; prepares the forms to be used and defines the security rules.

Service Group Action Plan

It specifies and documents tasks and responsibilities of each service taking place in ADMIP before, during and after the disaster or emergency cases; indicates the work completion procedures; prepares the forms to be used and defines the security rules.

Executive Targets Handbook

It contains operational procedures to be followed by Istanbul Governor and persons taking place in the event command in the first 15 days.

Process Management Manual

It provides information to the organizations engaged in the plan about ADMIP process management.

ADMIP Meeting Service Group Study

Executive Implementation/ Operation Handbook

It gives information about desk operations.

Istanbul Risk management Strategy Job Description Document

It is a document for formation of an urban disaster risk management strategy for the city of Istanbul.

Public Version of Istanbul Disaster and Emergency Prevention, Response and Recovery Plan

It is a document prepared to share the plan with the people of Istanbul.

ADMIP Meeting 2013 for the Safe Future of Istanbul

Total 21 meeting sessions, including 15 parallel sessions, were held together with all stakeholders. In order to introduce the plan, receive additional considerations from the organizations as well as opinions and recommendations of them and evaluate Service Group Action plans in the activities of organization, presentation, operation and spread of ADMIP, "ADMIP Meeting 2013 for Safe Future of Istanbul" was held between the dates of May 21-24, 2013.

On the first day of the meeting, 450 persons from about 100 organizations, including a corporate executive have attended to the group studies and more than 300 persons have attended the meeting on the other days.

In the meeting, in order to secure opinions and recommendations of the organizations and evaluate Service Group Action Plans, parallel sessions were held in 4 meeting hall where each 4 services would make evaluations simultaneously as per the coordination structure of ADMIP.

In this line, total 21 meeting sessions, including 15 parallel sessions, were held with all stakeholders. In the meeting which has lasted 4 days, Service Groups Plan Studies were made for evaluation of 7 sections individually:

- 1 Evaluation of "General Principles"
- 2 Evaluation of Formation and Tasks of Service Group
- 3 Evaluation of "General Status and Preparations"
- 4 Evaluation of "Operational Procedures and Check Lists"
- 5 Evaluation of "Mutual Assistance and Cooperation – Expectations from Other service Groups,
- 6 Evaluation of "Training and Operations"
- 7 Evaluation of "Forms"



On the first day of the meeting, after introduction of ADMIP, information was given to the attendants in 2 sessions about "Basic Principles Of Disaster and Emergency Planning". And then E-ADMIP application, put into life for plan generation and updating studies, was shared.

The last session on the first day of the meeting has passed in form of parallel sessions. The first one of these sessions has been the meeting held with heads of 27 services groups in the organization of ADMIP.

In other parallel session, "Safe Life Training 1" was given as prepared by Istanbul Governor's Office.

The second day of the meeting has passed with parallel sessions for examination, evaluation and completion of the deficient parts of the plans for the service group. Parallel sessions has covered desk studies in 4 different halls where 27 Service Groups under 4 service, namely, Response/Operation, Information and Planning, Logistics and Maintenance, Finance and Management were deployed.

On the fourth day of the meeting continued with Service Group Plan Studies.

Documents taking place in the Annexes part of the service group actions plans were evaluation and the required documents have been determined.

Following these parallel sessions the meeting program has completed with the closing speech delivered by Günay ÖZDEMİR, Deputy Governor, Istanbul.

In the meeting held, ADMIP and Service Group Plans were evaluation by means of e-ADMIP, a web-based system developed in electronic media.

ADMIP Meeting for the Safe Future of Istanbul

Service group plans were uploaded to this system before the meeting and made ready for evaluation during the meeting.

Especially representative of each entity/organization taking place in the plan has presented their opinions and recommendations and made comments under the management of the head of Planning Service Group.

Each evaluation and modification was colored on the plan text observed in the system and recorded in the system.





Continuity of ADMIP

Istanbul DED also designs things that complete and maintains ontinuity of ADMIP studies. Continuity of the planning is not something that can be achieved only by a group or a person. If ADMIP is not developed in accordance with its targets or necessary works are not performed in accordance with the changes in the strategic target, the operation of the planning is doomed to fail.

At this point, correct understanding of the plan by the target mass of entities and persons, support and adaptation to the organizational culture is a key step. In order that the stakeholder organizations taking place in the plan may continue their functionality and fulfill their legal liabilities, it should be always updated and able to address to the requirements.

The outstanding matters for continuity of ADMIP are detailed as follows. In addition to them, Istanbul DED also designs the matter to ensure continuity of the works.

Ensure the Business Continuity for Organizations

Just like a chain is powerful as much as its weakest link, a disaster plan prepared on basis of governance is also as powerful and enforceable as the capacities of the organizations to implement them. For this reason, ADMIP aims at improving capacities of the organizations to this effect.

Approach to this matter worldwide has been through a change and development as emphasized during the process. And today, the best concept to describe the point arrived by the world countries on organizational scale is business continuity.

The approach of business continuity, a new concept originated in 2000's has become a ISO standard (ISO 22301) and well recognized today.

Distribution of Important Public Buildings in the Risk Zones



Although rather used in Information Technologies sector in our country, business continuity is essentially defined as "maintenance of functional continuity of an organization to the predefined acceptable extent as a result of increase of its capacity to respond to an event or events".

With the corporate planning logistic and strategy it recommends and incorporates in its body, ADMIP also contributes to building this capacity of the organizations by means of the works it performs and recommends on organizational basis.

Applicable regulations in our country make it mandatory of the organizations having a variety of conditions to make planning for disaster and emergency cases.

The related organizations prepare emergency and evacuation plans in terms of civil defense plan, antisabotage plan and, in some cases, fire plans and health and safety at work and submit them to the concerned authorities for approval. Aim of all these works is, in summary, to protect the said organization against certain circumstances specified in the regulations and overcome certain circumstances when they occur with a minimum loss. In this way, the organization survives.

Adverse results arising from "unity and uniqueness" in the legislation and applications performed in this respect are known well. However, "availability and sustainability" of the new approach tried to be brought by ADMIP is in direct proportion to success of the organizations.

First of all, the organizations should be kept available after a possible disaster or emergency and then their active contribution to the activities to be performed by ADMIP should be provided. In this context, contribution to ADMIP of facilities of critical importance such as schools, hospitals, facilities for meeting purpose, food-beverage production facilities has utmost importance in capturing the desired success. In this respect, ADMIP also brings precautions to blend the existing structure with the new approach. Accordingly, the related facilities prepare the plans required by the respective provisions of the regulations and present the same to the concerned authorities for approval. These plans, as mentioned before, are plans prepared to assure the facilities own availability. And adaptation to ADMIP is assured by an interface document.

In addition to these plans with its preparation and template specified by law previously, a separate guide and plan is generated for integration with ADMIP.



Corporate planning efforts will facilitate spread of ADMIP on the base, contribution to its adoption and embracement. Here the purpose is to previously establish how the contribution will be made on organization basis to the activities performed across the city under ADMIP. Of course, such contribution will not be same for all facilities. Accordingly, for example, a plan to be made by a unit in charge of traffic management at a certain zone during the disaster under ADMIP will be of different characteristic and nature with that of a civil gas station in charge of supply fuel to the rescue vehicles.

Same logic is applicable for the schools and hospitals, which are of great significance for the activities planned to be performed after disaster can be conducted properly and according to the intended purpose.

Basing on the requirements, a school building may be used for temporary accommodation, logistic support or for other purpose. It is also of great importance that hospitals should functionally remain available during this process. Of course, performance of all these functions depends on the success of these facilities to survive the event with a minimum loss, available in both organizational and structural terms and, eventually, in good harmony with ADMIP, which represents the system as a whole.

Corporate planning efforts to be performed according to this logic and integrity will facilitate spread on the base, recognition and adoption of ADMIP and, furthermore, the "whole" will operate as desired with availability and contribution on organization basis.

Map Road of Sample Planning Works Performed at the Schools



Sample Emergency Plan Works

With the realized project, disaster and emergency works have been performed at the pilot schools.

Similarly, it is also among targets of the project, to prepare sample projects for the tourist facilities and buildings in the scope of historical-cultural heritage, if requested.

Steps of the Planning Works Performed

- Plan of building evacuation plan
- Identification of emergency exit doors inside the building
- IIdentification of the gathering places for personnel and students in emergency
- Formation of emergency Services consisting of fire extinguishing, rescue, protection, first aid, logistic support, communication, information and evacuation units
- Generation of forms for use in case of disaster and emergency
- Preparation of Emergency Standard Operation Procedures and Scene Control List

Gains of the Planning Works Performed

- Establishment of the event command system used worldwide by review of literature and thus formation of a plan as per international standards
- Establishment of a format compliant with civil defense plan and applicable by all users in order to make the plan adaptable to the regulations already in effect
- Preparation of the plan so as to cover other hazards
- Making event command system and services taking place in the plan and formulated compliant with the existing Disaster and Emergency Plan of Istanbul

Social, Environmental and Economic Effects of ADMIP

ADMIP is an initiative playing key role in creating "Social Resilience to Disaster", the main target of the disaster risk reduction operations. One of the basic reasons that disasters reach to such great sizes is lack of public knowledge and awareness.

When encountered with a natural-, technological- and human-sourced event that people are not aware of what kind of hazards they are face to face and what should be done on local, corporate and social basis to reduce damages arising from them, it is inevitable for the societies to suffer considerable loss and damages with the event giving way to disasters.

For this reason, it becomes mandatory to focus the operations with a great density and weight on the activities aiming at communicating and awareness building on part of the society.

While, in this line, capacity to cope with disasters is developed with the disaster management operations with ADMIP, the aim is also to conduct the efforts to contribute to safe life together with the respective parts of the society.

And, in this way, it would be possible to create a society ready and resistant at any level on individual, family, corporate, quarter and city basis.

ADMIP is an initiative playing key role in creating "Social Resilience to Disaster", the main target of the disaster risk reduction operations.

Effects of the Disasters

MEASURABLE EFFECTS

- Loss of life and injuries,
- Buildings and goods in them,
- Infrastructures,
- Plants, tools, devices and equipment,
- Stocks
- Soil yield,
- Loss of living animals,
- Environmental degradations,
- Etc.

IMMEASURABLE EFFECTS

- · Long-term health problems,
- · Dislocation of the generic integrity and order,
- Social structure,
- · Psychological loss and damages,
- Historical and cultural values,
- · Impairment of environmental and ecologic balance,
- Etc.

ADMIP is implemented with a comprehensive and multi-facet planning understanding taking into consideration the disasterdevelopment interaction for the city of Istanbul, heart of the national economy and a metropolis building international relations.

While it is intended with the intended structure that the disaster executives of Istanbul should act rapidly and use the resources and budget efficiently to produce flexible solutions, the organizations and public are also encouraged to participate in the risk reduction operations. In addition to the organizations in charge of the disaster management, ADMIP also participate the private sector organizations and civil society organizations and public by way of volunteering system into the operations, thus providing a corporate structure gathering the stakeholders of the matter in a systematic way.

When ADMIP operations complete, it will provide a significant contribution in reducing the economic loss, estimated to be USD80 billion in some resources in addition to the human, cultural and environmental damages to be given by an expected Istanbul earthquake.

A variety of corporate and technical capacity development investments are made for coordination of the preparation operations conducted in a wide range from city management through organizations and to the society Furthermore, it is also planned to increase operatibility by means of activities such as development of information management systems for the plan.

Furthermore a unity of language and understanding is provided by means of the training programs and their roles and responsibilities before during and after the disaster, highlighting the areas where they can contribute to the city disaster management.

ADMIP contributes to safe future of ISTANBUL by creating permanent mechanisms built on scientific foundations and social involvement. The project "Integrated Urban Disaster Risk management Strategy for Istanbul" aims at developing strategies on basis of an integrated approach to all possible threats, building on findings and propositions derived from the studies conducted on national scale and specifically for Istanbul.

Integrated Urban Disaster Risk Management Strategy

Another study performed for availability of ADMIP is the project "Integrated Urban Disaster Risk Management Strategy for Istanbul"

In fighting against disasters, identification of the origins of the hazards and consideration of the items under threat of those origins of hazards is very important for identification of the disaster risks. In other words, "diagnosis before treatment" appears as the process which requires careful study for correct response.

Many disasters today have dramatically shown need of an integrated approach in evaluation the risks and taking precautions against those risks. While the hazards to which the cities are face to face can el examined individually and in detail, it is required to generate integrated hazard maps, by taking into consideration the possibility of them to trigger each other or occur together.

Consideration of the different vulnerability components and identification of the interaction of them will help identify weak points of the settlements and society against the possible threats and take reinforcing precautions

These two summarized data set (hazards and weaknesses) would contribute to generation of comprehensive and realistic risk analyses, identification of emergency response areas and manners and formation of integrated urban disaster risk management strategies.

Earthquakes occurred in Marmara Region is a milestone for transition from disaster management to risk management in Turkey.



While, as it has been mentioned before, the basic point in the former disaster management was restructuring and restoration by government after the disaster, the foundation of the modern disaster management is built on risk management, previous identification of hazards, prevention of them, if possible; precautions against these hazards, if it is not possible to prevent them; minimization of all kinds of urban, structural, social-economic an ecologic; development of cooperation and coordination among the organizations and public involvement in order to prevent conversion of the hazards to disasters.

To this purpose, numerous scientific studies have been made since 1999 and new legal regulations have been put into effect.

The project "Integrated Urban Disaster Risk Management Strategy" aims at developing strategies with an integrated approach to all possible threats, basing on the findings and propositions derived from the studies performed on national scale and specifically for Istanbul up to now.

As identification of all other hazards, which pose threat to Istanbul and not been dealt with systematically yet is very important for taking precautions to minimize the damage, Integrated Urban Disaster Risk Management Strategy is developed by support and contribution of the public organizations and entities, local administrations, universities, civil society organizations, media and private sector.

Integrated Urban Disaster Risk management Strategy outlined here takes the information derived and propositions made by the leading projects performed previously as basic input, showing a method compliant with the fundamental strategies laid down in KENTGES (Integrated Urban Development Strategy and Action Plan). Furthermore, "disaster database system" has been made usable, updatable and shareable in many settlements under natural and technological threats in term of its outlines, approach and data.

Purpose of the Integrated Urban Disaster Risk Management Strategy is integration of the methods and approaches taking into consideration hazards and risks of disasters with the planning system and structuring process and integration of these aspects with new legal regulations and organizational structuring in order to create a sustainable, safe, livable, prepared against disaster and resistant living environments.

In line with these purposes, in addition to the earthquake hazard put forward by the previous studies, all hazards posing threat to Istanbul and not systematically researched yet and he risks associated with them will be identified and precautions will be taken to minimize damage.

The following operations are performed in this respect:

- Identification of the profile of the hazards posing threat to the city and collection of such data that may be input for planning activities of any kind and scale at a single point.
- Identification of the principles for detection of types, scopes and possibility of realization of the hazards in connection with different sectors and areas in cooperation with the related organizations ad research units + and preparation of documents concerning them.
- Development of disaster scenarios for the sectors and fields under threat; identification of principles for preparation of them.
- Description of urban hazards, weaknesses and identification, documentation and analysis of the risks.

- Identification of urban risks and interested parties; institutionalization of risk reduction/management works for determining extent of loss and priorities in each sector.
- Regulation of the principles for preparation of Risk Reduction Strategic Plans (Prevention Plans), planning system and integration with other regulations with a view to creating foundation for urbanscale plans and minimizing the risks.
- Identification of principles for methods to identify and reduce risks associated with macroform, settlement, urban texture, open field in the settlements, types of use and dangerous use, emergency service facilities and gathering places, evacuation axis, historical and cultural assets and special hazard areas and for avoidance planning for coordination of them

• Arrangements for integration of the preparation principles of Disaster and Emergency Response, Risk Management and Loss reduction plans with the application and legislation in order to create foundation for city-scale emergency and crisis management.

As stated above, Integrated Urban Disaster Risk Management Strategy constitutes a significant part of ADMIP related works, providing significant input for some works as well. The activities performed are a must for a modern disaster management.

Stops to be taken by taking into consideration the results and recommendations of the risk management strategy with the outlines and fundamental principles stated will improve livability of the urban areas and resistance of them against disasters, on the one hand, and ensure the plans prepared on city scale to be applicable, on the other hand. An important poi nt with respect to the works is that both operations should be conducted by specific experts, coordinated and cooperation of the experts should be assured.



Basic Work Packages under the Project Integrated Urban Disaster Risk Management Strategy for Istanbul

IDENTIFICATION OF HAZARDS AND GENERATION OF THE RELATED DATABASE

It includes generation of database for production of integrated hazard maps and scenario activities related to possible results of the hazards having characteristics to trigger each other.

EVALUATION OF VULNERABILITY OF URBAN (IN STRUCTURAL, ECONOMIC, ENVIRONMENTAL TERMS, ETC.

Identification of the items constituting the urban structure and the vulnerability criteria arising from interaction among them and correlation with the space .

3 IDENTIFICATION OF URBAN RISKS

It concerns description of the urban risks on sector basis and integrated illustration of them in the space by using the outputs of the 1st and 2nd packages.

ESTABLISHMENT/EVALUATION OF MITIGATION AND DISASTER RISK MANAGEMENT STRATEGIES

It concerns development of strategies on basis of the findings derived from the first three work packages as well as activities to offer alternatives.



e-admip Interface Display

 e-admip, a web based application, has been developed for facilitation of monitoring, updating and use of ADMIP.

e – admip

Information age in which we live makes it mandatory to combine technology and information. This fact also applies for ADMIP operations. As a natural result of this situation, a we-based application has been developed to facilitate monitoring, updating and use of ADMIP.

The following have been achieved by "e – ADMIP"

- Definition of the users, organizations and the planning personnel of these organizations systematically
- Access of the authorized personnel to the related plans on the web for development operations of ADMIP master plan and service group plans
- Opportunity for each organization to generate, revise and update of the service group plans for which they are engaged in the same media
- Opportunity for the organizations for spontaneous exchange of knowledge on their own service group plans and those of the other service groups
- Communication with other service groups related to plan via this channel



ADMIP master plan as well as plans of 27 service groups have been integrated into "e-ADMIP".

Other plans such as third level action plans may be incorporated into the system when desired; furthermore, volunteering activities and training activities intended to be created under the operations for reinforcement of the corporate structure of Istanbul DED will be monitored and integrated into the analysis systems

Importance of Media in the Planning Works

Media has a great role to play in having access to the public in the matter of disasters and reduction of the planning approach from the urban level to the houses.

The targets include involvement of and preparation of the projects together with the media for communication, building awareness and getting prepared the public about disasters.

Istanbul Safe Life Volunteering System Wokshop

Communication Strategy

To make ADMIP a mobilization and social contract, it is important to perform communication works.

Besides the planning operations, projects have started to be developed for communication of things required to be performed before, during and after disaster and involvement of the public with respect to these activities, conduct of encouragement efforts for volunteering and opportunity for the public to have access to the updated data.



Istanbul Safe Life Volunteering System Wokshop

ADMIP as a modern disaster management has a structure that requires social involvement.

Volunteering System

As it has been in the world, the new focus of the disaster management in our country has shifted to giving more place to prevention and preparation operation in such a way to minimize rescue operations after occurrence of disasters, thus reducing social, economic and environmental loss. These operations, called reduction of disaster risks, will, when supported by social based systems, be able to cope with disasters in a structure basing on local community and social union of force.

ADMIP as a modern disaster management has a structure that requires social involvement. The plan is based on reinforcement of social capacity for a Istanbul resistant to disasters.

In order that ADMIP may fulfill this function, a disaster volunteering system has been developed under the leadership of Istanbul DED.

With this volunteering system, which will operate in complete harmony with ADMIP, the target is development of volunteer organizations for reduction of disaster risk, encouragement of the public for involvement with the risk reduction operations voluntarily and achievement of a level enabling that Istanbul to be a self-contained city by means of preparations and performance of the operations by solidarity and in a systematic way.

Disaster Volunteering System



References

Lucien G. CANTON, (2007) "Emergency Management: Concept and Strategies for Effective Programs", John Wiley & Sons Inc., ABD

Damon P. COPPOLA, (2007) "Introduction to International Disaster Management", Elsevier Inc, ABD

"Yokohama Strategy and Plan of Action for a Safer World" http://www.preventionweb.net/english/

professional/publications/v.php?id=8241

Dr. Polat TUNÇER, (2012) "Yönetim ve Organizasyon", Beta Yyaınları, İstanbul

Bekir PARLAK, (2011) "Yönetim Bilimi ve Çağdaş Yönetim Teknikleri", Beta Yayınları, İstanbul

Ali Utku ŞAHİN, (2011)

"Türk Afet Yönetim Sistemi İçin Bir Model Önerisi", Yayımlanmamış Yüksek Lisans Bitirme Tezi, İstanbul Teknik Üniversitesi

Dr. İsmail GÜNDÜZ, (2009) "Dünyada ve Türkiye'de Afet Yönetimi" Erdem Yayınları, İstanbul,

William L. WAUGH, JR, (2003) "Living With Hazards Dealing With Disasters An Introduction To Emergency Management" M.E.Sharpe Inc., ABD

Prof. Dr. Mikdat KADIOĞLU, Doç. Dr. Emin ÖZDAMAR, (2005) "Afet Yönetiminin Temel İlkeleri"

JICA Türkiye Ofisi Yayın No:1, Ankara

Prof. Dr. Polat GÜLKAN, Dr. B. Burçak BAŞBUĞ ERKAN), (2009)

"Perspectives In Disaster Management" Middle East Technical University Disaster Management Implementation and Research Center, Ankara, Turkey

Prof. Dr. Mikdat KADIOĞLU, (2011) "Afet Yönetimi Beklenilmeyeni Beklemek, En Kötüsünü Yönetmek", Marmara Belediyeler Birliği Yayınları,

Betül ŞENGEZER, Hatice KANSU, (2001) "Kapsamlı Afet Yönetimi", Yıldız Teknik Üniversitesi Mimarlık Gakültesi, Şehir ve Bölge Planlama Bölümü, Türkiye,

İstanbul Deprem Master Plani, (2003) İstanbul Büyükşehir Belediyesi

ISMEP Toplum Eğitim Modülleri, (2013) www.guvenliyasam.org

ISMEP Araştırma Raporları

ISMEP Proje Dokümanları, İlerleme Raporları

ISMEP Guide Books





Retrofitting and Reconstruction Works









Enhancement of **Emergency Preparedness** Capacity





Reduction of Urban Risks



M. Kemalettin Mah. Tiyatro Cad. No: 8 34126 Beyazıt İSTANBUL T : +90 212 518 55 00 F : +90 212 518 55 05 info@ipkb.gov.tr www.ipkb.gov.tr