





PROTECT YOUR TERRITORY. NEWS. MEDIA REVIEW. TERRITORY AND PEOPLE. ABOUT US.

"PROTECT YOUR TERRITORY"

LOCAL KNOWLEDGE, CREATIVE INFORMATION AND ENGINEERING TECHNOLOGIES OF THE STUDENTS AND MASS MEDIA AGAINST DISASTERS

(Involving School Students into Creative Activities in the Field of
Development and Ensuring Effective Functioning
of Territorial Online Tools
("Protect Your Territory" PYT Web Page)
Through Information and Engineering Technologies)

RESPONSIBILITY AND ACTIVE PARTICIPATION OF EVERYONE IN PROTECTING HIS/HER TERRITORY

"Protect your territory" (PYT Project) – is an online tool for reporting hazards and preventing disasters

BRIEF JUSTIFICATION OF THE NEED
FOR CREATION AND REGULAR FUNCTIONING OF THE
"Protect Your Territory"
REGIONAL Web-pages (sites)

(The case of Armenia)

Send Your Message to Protect Your Territory!

Yerevan, 2023

1. RESPONSIBILITY AND ACTIVE PARTICIPATION OF EVERYONE IN PROTECTING HIS/HER TERRITORY

1.1 In the end of the 20th century and beginning of the 21th century around two billion people that i.e. a third part of the total mankind were found to be affected **by natural disasters.** The number of disaster victims made more than 20 million during that period.

The lessons of the natural disasters, including of the Spitack earthquake of December 7 1988 in Armenia, as well as the first lessons that have already been learned from the consequences of the recent earthquakes (in February 2023) that hit Turkey and Syria, and from the 2023 inundations caused flooding of considerable territories in many countries of the world,

demonstrated, that the scale of the tragic consequences has been partially predetermined by the imperfection of the National disaster management systems, insufficient engaging communities into disaster risk reduction and insufficient level of knowledge and skills of adequate behavior in people at threat of natural disasters and at natural disasters themselves.

1.2 Many natural and other disasters that have affected countries, their individual regions and territories could have been avoided if their territories had been regularly maintained (the risks of probable, often recurring disasters had been reduced).

Many people living in these places were aware of the risks they were exposed to, because those risks were obvious and recurring very often.

People's awareness of risk situations, however, rarely leads to actions (intervention) useful for their elimination.

On the one hand, because preventive actions to maintain territories (reduce the risks of probable disasters) are scarcely covered by mass media. More over before the occurrence of a disaster, media are not at all interested in population's "Local Knowledge", which becomes "news" only after disaster.

As a consequence, if there is no media coverage, the population's "Local Knowledge" about existing risks is out of the spotlight of the politicians, responsible for making decisions on the implementation of preventive actions, and decision-makers do not give priority to the maintenance of the territory.

On the other hand, because there is no system of automatic transmission of information from the one, who is aware of the hazards (often directly from the place of the identified hazard) to the one, who is responsible for their elimination.

And thirdly, because school students and young people, in general, are almost not involved (or weakly involved) in the processes of identifying local hazards and in the activities of the systems for automatic information transmission about them (if such systems are created).

Meanwhile, in modern conditions, young people, who possess skills and successfully operate in the field of information and engineering technologies, provided that they acquired the necessary knowledge in the field of disaster risk reduction and are appropriately motivated can be creatively involved in the processes of development and ensuring effective functioning of the modern territorial (provincial, municipal) systems of automatic transmission of information as for reporting hazards and preventing disasters, as well as for increasing the responsibility and active participation of everyone in the protection of his/her territory and for ensuring its sustainable development, and also for acquisition and consolidation of leadership qualities, necessary for performing successful activities in the various areas of development of their community (province, country as a whole).

The purpose of the Project: "Protect Your Territory" (PYT) Web page (site) is to collect messages from citizens and users about situations related to the presence of hazards that may be found in their territory (a village, a city, a district, a region), and transfer them to the competent authorities: to take appropriate actions to eliminate hazards and reduce risks, and to local media: to monitor (control) subsequent actions. ***

To make **PYT Web pages** an effective tool for disaster prevention, it is important to involve the local community not only in their use, but also in their creation.

1.3 As follows from the logic and content of the "Protect Your Territory" Project (PYT Project), the main players (parties) of the Project are on the one hand: the relevant structures of the Local Civil Protection, the Local Community and the Local population, on the other hand: Schools (high school students and teachers), as well as local Media.

Both under normal conditions and in emergencies, when the above-mentioned main players (parties) of the Project are faced with the need to solve numerous tasks in everyday life and in the foreseeable future in all areas of human activity, a significant increase in their motivation and specification of their actions is required.

		The	best	motivation	for	involving	schools	in	the	implementation	of	the	Protect	Your
Territory Project (PYT Project) is to involve, as a first step, the school administration, teachers,														

^{***)} It should be noted that the PYT Web pages does not replace the institutional services involved in emergencies, in these cases it is necessary to report a threatening (imminent) danger by calling the appropriate numbers at the local emergency service department.

students and their parents in the joint implementation of a specific Pilot Project related to the safety of their particular school.

- ➤ Given that schools are predominantly located in community areas, in close proximity to residential areas, where the parents of schoolchildren mainly live, an important component of the successful implementation of the PYT Project is **the involvement of the general population**, **including where they live in territorial communities**, as active participants in the processes of Disaster Risk Reduction, and, as noted above, the involvement of parents of schoolchildren in the joint implementation of a specific Pilot Project related to the safety of a particular school.
- As one of the objectives of the PYT Project, aimed at optimizing the operation of the regional "Protect Your Territory" (PYT) Web page (site), is to encourage local Media to use the PYT Web page in the most effective way, especially since experience recent decades in the world shows that in many countries it is necessary to significantly improve the response to major emergencies at all three stages: preventive actions, operational withstanding and rehabilitation through increased interaction between authorities, the media and citizens.
- **1.4** As followers from the content of previous paragraphs of 1.1, 1.2 and 1.3 in modern conditions one of the most important directions for the reduction of vulnerability and improving preparedness of societies to natural, man-made, ecological, biological and other disasters is development and ensuring effective functioning of the territorial (provincial, municipal) **online tools** for reporting hazards and preventing disasters to initiate the involvement of knowledge of local population and schools, and mass media against disasters, to increase the responsibility and active participation of everyone in the protection of his/her territory, to improve communicative informative interaction between authorities, mass media and population in emergencies.
- **1.4.1** For the development of and ensuring regular functioning such a territorial **online tool**: "Protect Your Territory (PYT) Web Page", targeted at improving knowledge of local risks through involvement of the local population and schools, was launched **LoKSAND project**. As it has been already mentioned above: "The main players (sides) of the Project are on *the one hand* Local Civil Protection Structures, Local communities and Local population, on *the other hand*: Schools (High school students and teachers), and also Local Media".

ECRM, Yerevan, Armenia started working on the LoKSAND project as partner-centre, based on the documents of information and methodological nature, kindly provided by the CUEPS, Ravello, Italy the Coordinator Centre of the Project, by given the specifics of Armenia. Due to certain objective reasons work on the Project by ECRM in 2021 was interrupted and decided to be suspended till 2022-2023.

Starting 2023 we began to develop **independently a new, modified pilot Project, by given the specifics of Armenia,** namely:

"LOCAL KNOWLEDGE, CREATIVE INFORMATION AND ENGINEERING TECHNOLOGIES OF THE STUDENTS AND MASS MEDIA AGAINST DISASTERS". (Involving School Students into Creative Activities in the Field of Development and Ensuring Effective Functioning of Territorial Online Tools ("Protect Your Territory" PYT Web Page) through Information and Engineering Technologies).

Naturally the new, modified pilot Project proposed by us is being elaborated, bringing a new quality to the development of ideas underlying the previous Project, and is focused primarily on enhancing creativity and motivation for involving schoolchildren in the processes of increasing the effectiveness of functioning of territorial online tools (PYT Pages) for reporting hazards and preventing disasters, for increasing responsibility and active participation of everyone in the protection of his/her territory.

The elaboration of new Project is being carried out by given valuable experience **of CUEPS**, taking into consideration the European values. However, the facilitation process not a one-way communication process, at the same time it is an interaction process based on the transfer of problems, exchange of experiences and results.

1.4.2 The effectiveness of the Project will be largely predetermined by the degree of motivation, creative involvement and preparedness of students, which is a task that requires a regular solution.

Fortunately in Armenia at school level have been set up unique educational structures successfully operating in the field of information and engineering technologies "TUMO" Centres for Creative Technologies and the "ARMATH" engineering laboratories.

"TUMO" Centres for Creative Technologies.

"TUMO" centres are a new kind of educational experience at the intersection of technology and design that combines the newest technologies with local cultural heritage to provide young Armenians with a cost-free education. At "TUMO" 12 to 18 years-olds from all backgrounds are engaged into around 14 learning targets such as: Animation, Game Development, Web Development, Graphic Design, 3D Modeling, Programming, Robotics, Music, Writing, Filmmaking and ets.

The educational method applied by "TUMO" is highly innovative: it alternates between independent learning activities, (e-learning), hands-on workshops and project labs. This hybrid

educational model helps students to develop a variety of soft skills ranging from teamwork, initiative-taking and empathy to effective communication.

Currently, on the way around 20 technically equipped "TUMO" centres are already opened in major cities in all provinces of Armenia together with 110 "TUMO" boxes in small rural settlements. At the result TUMO project has become accessible for all young people in Armenia.

With the help of Armenian "TUMO" Centre for Creative Technologies international "TUMO" Centres were opened in partner - countries: in Paris, Luxemburg, Berlin, Beirut, Tirana, Los Angeles, Tokyo, Moscow, Kiev.

The "TUMO" Centre in Paris was opened on October 15, 2019 on the initiative of Mayor of Paris Anne Hidalgo, who visited Yerevan in January 2018. In Parisian "TUMO" have been trained more than 4000 students. Mayor of Paris noted: "With the help of "TUMO" we provide the youth of Paris with all the tools necessary for shaping the future world".

"ARMATH" engineering laboratories.

Currently near 10 000 students, starting from the age of 10, study at it's more than 300 "ARMAT" engineering laboratories, functioning at public and secondary schools of all provinces of Armenia and equipped with computers, robot parts and 3D printers. They learn to code and program and build robots. But, more than that, they learn how to approach a challenge from multiple angles. The works of Armenian young engineers from more than 280 schools in the field of robotics, in particular, 3D Modeling and 3D Printing, were presented at 2019 Digi Tec Expo. Armenian technology education model presented by "ARMATH" have already been implemented in the schools of such countries, as: India, Ethiopia, Afghanistan. Moreover, the number of countries such as *Greece, Bulgaria, Lithuania, Estonia, Bangladesh, Malaysia, Brazil, Iraq* and a number of other countries as well showed great interest towards the "ARMATH" project.

Based on a brief description of unique educational structures in the field of information and engineering technologies: "TUMO" Centres for Creative Technologies and "ARMATH" engineering laboratories, set up and being successfully operated in all provinces of Armenia at the level of public and secondary schools, due to highly innovative educational methods applied by "TUMO" and "ARMATH", taking into account the presence of training centres, such as inter - municipal educational complex in Debed village of the Lori province, where students from dozens of villages among other things are elaborating a Pilot project for the creation of models and Web Sites aimed at the development of rural municipalities,

> students mastering the developed varies of soft skills, have a high degree of preparedness and motivation sufficient for successful involvement in the processes of reporting hazards through mobile phones to territorial (provincial) PYT Web Page for preventing disasters, as provided by the LoKSAND project methodology,

➤ however the uniqueness of "TUMO" and "ARMATH" lies in the fact that students have the necessary skills and teamwork experience in the field of Robotics, including in the field of designing unmanned aerial vehicles and various ground - based robots with a wide range of activities.

And thus, subject to a clear gradation and description of probable hazards characterizing of a particular province, opens up wide opportunities for involving students also in the design and use of both: flying vehicles and ground - based robots to detect and monitor hazards and online transfer of more visual and complete information and to report about risks, including from hard-to reach for human territories and hazardous areas, on the modified provincial "PYT Web Page",

> students from training centres, such as the inter - municipal educational complex in Debed, can be also involved in improving the territorial (provincial) "PYT Web Page", the online tool, created within our proposed modified Project, taking into account the specifics of particular province and municipalities.

The above will serve as the best motivation for involving students into creative activities in the field of disaster risk reduction and protection own territory through information and engineering technologies.

And since "TUMO" Centres for Creative Technologies and the "ARMATH" engineering laboratories have been set up and successfully operate in all provinces of Armenia, results and valuable experience of suggested *new modified pilot Project* on the example of selected province can be successfully implemented in all other provinces of the republic.

In turn, thanks to the close cooperation of "TUMO" and "ARMATH" structures of Armenia with the structures of the same name in partner-countries, the experience of CUEPS, Ravello, Italy in the developing and operating LoKSAND project, as well the experience of ECRM, Yerevan, Armenia in suggested modified Project taking into account the creative possibilities of the students of the "TUMO" and the "ARMATH" in the field of information and engineering

technologies, can be transferred to the partner-countries mentioned above, as well as other concerned countries.

1.4.3 We will address the ways of solving the issues, indicated in section **1.** (paragraphs 1.1, 1.2 and 1.3) in a little more detail below, in section **3** of this document, but for now, *in the next section 2., we will briefly consider the content of the PYT regional Web page.*

2. BRIEF CONTENT of "Protect Your Territory" Regional Web Page

2.1 The PYT Web page *explains* the purpose of the Web site, *contains* a "MESSAGE FORM", mechanisms for transmitting a message and subsequent actions regarding the message itself.

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WHAT TO REPORT? HOW TO REPORT? WHO SENDS THE MESSAGE?

WHAT IS HAPPENING TO THE MESSAGE?

.....

ADDITIONAL INFORMATION ON THE REPORTED

RISK RELATED SITUATION.

TRACKING THE FOLLOW-UP REPORT RELATED ACTIONS.

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2.2 The page *also contains* educational information about the territory and people, about effective steps aimed at disaster risk reduction, increasing the attractiveness of the territory for living, for effective application of forces and means, and tourism development.

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NEWS

ABOUT EFFECTIVE STEPS FOR DISASTER RISK REDUCTION.

MEDIA REVIEW.

AWARENESS OF PROBABLE, FREQUENTLY REPEATED IN THIS AREA

DISASTER RISKS.

.....

TERRITORY AND PEOPLE

.....

ABOUT EFFECTIVE STEPS TO:

- INCREASE THE ATTRACTIVENESS OF THE TERRITORY
 - FOR LIVING,
 - FOR THE EFFICIENT APPLICATION OF FORCES AND MEANS,
- AND FOR THE DEVELOPMENT OF TOURISM.

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ABOUT US

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2.3 A more detailed reference to the content of the "Protect Your Territory" universal regional *Web page* (the case of Armenia), as well as to issues related to its development and ensuring regular and effective functioning, is made in the following section **3.** of this paper.

3. THE MOST IMPORTANT DOCUMENTS THAT SHOULD BE DEVELOPED AND TASKS TO BE SOLVED FOR THE CREATION AND REGULAR FUNCTIONING OF "Protect Your Territory" (PYT) REGIONAL Web pages (sites)

- 3.1 Here it is advisable to give a brief overview of the steps taken in this direction and the priority documents already developed. Further, in the next paragraph 3.2, additional documents partially developed and to be developed are briefly considered.
- **3.1.1** Tasks, necessary documents of methodological and informational nature and expected results are defined taking into account the specifics of Armenia, as well as a pilot region for which the Regional Web-page (site) "Protect Your Territory" will be developed.
- **3.1.2** Three sufficiently voluminous documents have been developed: "Guidelines for the creation of a "Protect Your Territory" Web page (site) (PYT Web page)", necessary to clarify in the upcoming presentations (views) of the PYT Web page for interested parties of the essence of the Project, mechanisms for building, managing and using the PYT Web-page, "Technical Task for the development of a universal PYT regional Web-page (the case of Armenia)", taking into

account its further specification, by given the specifics of specific regions of Armenia, as well as the present document itself: "Brief justification of the need for creation and regular functioning of the "Protect Your Territory" regional web-pages (sites) (the case of Armenia)".

> The first document (N1), is entitled:

"Guidelines for creating a "Protect Your Territory" (PYT) Web Page (Site) — "LOCAL KNOWLEDGE, CREATIVE INFORMATION AND ENGINEERING TECHNOLOGIES OF THE STUDENTS AND MASS MEDIA AGAINST DISASTERS".

Document N1 is developed in the form of SLIDES on 62 pages, in Armenian and English.

The document quite adequately illustrates and reflects the specific features of Armenia as a whole, at the same time it is universal in nature and can be used for any region of Armenia, taking into account its specific features, as well as for any concerned countries.

Document N1 contains:

- Possible clarifications that may be required by the participants of the upcoming presentations (views) of the universal regional PYT Web page for stakeholders regarding various points of the "Guidelines", including the nature of the Project, mechanisms for building, managing and using the PYT Web page.
 - An illustration of the objectives of the PYT Web page.
- An illustration of the form of the message compiled and sent by citizens (users of the PYT Web page) about situations related to the presence of hazards that they have discovered on their territory (village, city, district, region).
- Proposals for the formation of a message, taking into account the characteristics of a particular pilot region.
- ➤ **The second document (N2)** was developed, as already mentioned above, as a TECHNICAL TASK for the development of a universal regional "Protect Your Territory" (PYT) Web page for Armenia, taking into account its further specification, by given the specifics of the respective regions of Armenia, and titled:

"PROTECT YOUR TERRITORY" – "LOCAL KNOWLEDGE, CREATIVE INFORMATION AND ENGINEERING TECHNOLOGIES OF THE STUDENTS AND MASS MEDIA AGAINST DISASTERS".

"Protect Your Territory" (PYT) is an online tool for reporting and preventing disasters.

"TECHNICAL TASK FOR THE DEVELOPMENT OF THE "PROTECT YOUR TERRITORY" UNIVERSAL REGIONAL PYT WEB-PAGE (THE CASE OF ARMENIA)"

Send Your Message to Protect Your Territory!

Document N2 has been developed in **Armenian** (on 15 pages) and **English** (on 13 pages).

- When developing the Technical Task and constructing, at a first approximation, a universal regional PYT Web-page, we, among others, were also guided by the ideas kindly provided to us by the Project partner the European University Center for Cultural Heritage (Ravello, Italy). And although the relevant documents were in Italian, nevertheless, they turned out to be quite useful.
- It should be noted that along with the mandatory sections that are minimally necessary in accordance with the main goal, objectives and logic of building the PYT Web page, we **provided_in** the Armenian version of the document, additional sections, that are designed to increase the information capacity and attractiveness, and thereby stimulate visits to the PYT Web page and help find additional financial resources to ensure the regular operation and improvement of the Web page (see above, in paragraph 2.2 of this document).
- > The third document (N3) is the present document itself: "BRIEF JUSTIFICATION OF THE NEED FOR CREATION AND REGULAR FUNCTIONING OF THE "Protect Your Territory" REGIONAL Web-pages (sites) (the case of Armenia).

Document N3 has been developed in **Armenian** (on 18 pages) and **English** (on 14 pages).

> 3.1.3 Development of a Universal Regional "Protect Your Territory" (PYT) Web Page (the case of Armenia).

In order to develop and further improve the Universal Regional PYT Web page for Armenia, we have entered into an agreement with *the Armenian company* "G DESIGN" GROUP Company, which, along with a number of works in this area, also completed 2 projects for the Council of Europe in 2020, which were highly appreciated.

The Universal Regional PYT Web Page for Armenia, developed on the basis of the above Technical Task, is temporarily hosted at: http://protect.landing.am/administrator.

3.2 Paragraph 3.1 of this document provides a brief overview of the priority documents we have already developed, which are necessary for the creation and regular operation of the PYT regional Web pages.

Here, in paragraph 3.2, additional documents that have been partially developed and are to be developed are briefly considered, which are necessary for the implementation of projects aimed at significantly strengthening the motivation and concretizing the actions of the main players (parties) of the Protect Your Territory (PYT) Project.

The main players (parties) of the "Protect Your Territory" (PYT) Project and ways of the best motivation for their involvement in the implementation of the PYT Project are briefly discussed in paragraph 1.3 of this document.

Based on the above in paragraph 1.3, within the framework of the PYT Project, we have begun developing, as a first approximation, the following three additional pilot projects aimed at increasing the motivation and specifying the actions of the three main players (parties) of the PYT Project: schools (school administration, teachers, students and their parents); broad sections of the population, including by their place of residence in territorial communities; local Media.

3.2.1 "Special Tests for school administration, teachers, students and their parents, aimed at assessing the safety of schools and other educational institutions from natural, man-made and other emergencies."

The results of the project can serve as a basis for the development of key recommendations to reduce the vulnerability of schools, increase the preparedness of school staff, students and their parents to adequately respond to emergencies, as well as to review and improve school preparedness plans for specific disasters.

3.2.2 "Initial actions of the population at the place of residence in territorial communities in case of natural disasters and emergencies of a different nature".

The project proposes new ideas aimed at increasing the interest of residents in preparing for and responding to disasters, and also offers recommendations aimed at involving them in disaster risk reduction processes in local communities through the creation of organizations of residents of territorial communities aimed at increasing resilience to disasters.

Their interaction and assistance to local governments, territorial administration and central government.

Preparing residents to deal with disasters: "self-help" and "mutual assistance" (Some approaches to solving the problem).

3.2.3 "Recommendations aimed at analyzing and strengthening communication and information interaction between the authorities, the media (media) and citizens in emergencies."

Analysis of the state of communication and information work with the public in critical circumstances.

Some recommendations for improving communication and information work with the public in emergency situations.

4. By summering up, let's note once again that the purpose of the "Protect Your Territory (PYT) Web Page" is to collect messages from the citizens and users about the situations associated with the presence of hazards found on their territory (village, city, district, region), and transfer them to the competent organizations (institutions) to undertake appropriate actions to

eliminate hazards and reduce risks; and to local media to monitor (keep control over) subsequent actions (every three months the management of reports by the participating institutions is checked, then the audit report is transmitted to the local media. At the same time, a mechanism is provided for the author of the message to trace the follow-up actions, taken in connection with his/her message). ***

As it has been stated above, in order to make the PYT Web Page an effective tool for disaster prevention it is important to involve the local community (and especially young people who have good command of creative information and engineering technologies) not only in their use, but also in their creation and provision for effective operation.

The PYT Web Page explains the purpose of the Page, describes the most frequently occurring situations associated with emerging hazards and potential risks in a given area by categories, which may include a hazard related situation reported by a citizen (user), contains a "Message Form", message transmission mechanisms and subsequent actions, regarding the message itself.

Providing for a preventive check on the reports to be published and disseminating the criteria with which to assess dangerous situations would make the PYT Page much more effective. But these costs, and the media cannot shoulder the burden.

Promoting collaboration, on the one hand, with the Civil Protection (CP) for verification, on the other with schools to disseminate the criteria, would optimize the impact of PYT Page and stimulate the media to adopt it.

The PYT Page also contains cognitive information about the territory and people, about the risks of probable, often recurring disasters in this territory, about effective steps aimed at reducing disaster risks, increasing the attractiveness of the territory for living, effective application of forces and means, and tourism development.

Here it seems expedient mention once more, that

"Guidelines for the creation of a "Protect Your Territory" Web page (site) (PYT Web page)", also contains:

Possible clarifications that may be required by the participants of the upcoming presentations (views) of the universal regional PYT Web page for stakeholders regarding various points of the "Guidelines", including the nature of the Project, mechanisms for building, managing and using the PYT Web page.

An illustration of the objectives of the PYT Web page.

An illustration of the form of the message compiled and sent by citizens (users of the PYT Web page) about situations related to the presence of hazards that they have discovered on their territory (village, city, district, region).

Proposals for the formation of a message, taking into account the characteristics of a particular pilot region.

A Full Turnover of the Messages' Movement received from the Citizens (Correspondents)

On the protection of their territory:



Cycle includes:

Sending a message by a correspondent.

Acceptance of the message by the PYT Web page (site) operator and its verification by the regional emergency service.

Transfer of the message to the competent management authorities.

Sending a message to the media.

Taking follow-up action.

Sending a reply to a correspondent.