

GUIDELINES AND PROCEDURES USED TO ELIMINATE
THE IMPACT OF THE EARTHQUAKE IN THE SOČA VALLEY

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The earthquakes of May 6th and 9th and later of September 11th and 15th, 1976 which struck Friuli-Venezia Giulia, Resia Valley, a region where a minority of the population is Slovene, and other places in Italy, also reached our region with destructive power. Frequent minor earthquakes throughout the summer between the two major shocks caused additional losses. A large volume of social and communal buildings, houses and industrial premises were destroyed or damaged. Fortunately, there were no fatalities.

Particularly heavy damage occurred in frontier settlements such as the villages in the Breginje corner, Ladra-Smast, Kobarid and places between the villages of Zaga and Tolmin. Many of the areas most severely affected were the less developed regions of the commune, frontier areas with little economic base, where the age structure of the population is very high and from which for many years there has been high out-migration.

The earthquake affected to one degree or another all inhabited settlements in the commune of Tolmin, as ascertained and estimated by the commissions of civil-engineering professionals that inspected all settlements and buildings in the commune. Groups of civil-engineering professionals from all over Slovenia working under the direction of the Secretariat for Town Planning and Institute for Research and Testing Materials and Structures of Ljubljana determined the situation after May 6th and September 15th in 1976 as follows:

Period	Buildings to be Repaired	Buildings to be Demolished		Total
		Industrial	Housing	
May 6th	4,329	226	496	5,050
September 16th	4,467	522	1,187	6,175

The losses were high: 22% of the population in the commune was left homeless, not to mention other losses and the impact on the development of the region. On the basis of an incomplete estimate of damage, because complete data were difficult to obtain primarily for infrastructure and some other buildings, it was ascertained that after the first earthquake, the loss amounted to 243% of annual social production and that 63% of the total housing fund was affected. Special problems existed for schools, health services, child care services, cultural and industrial buildings.

Approaches to Eliminate the Impact of Earthquake

In our political system, the role of the commune and local communities is very important, and the measures for dealing with natural hazards and disasters are the task of all working people and citizens. These tasks and responsibilities are incorporated in the work of all bodies and organizations, with the result that care for human beings is the continuous focus of our work and includes both social property and resources in citizens' ownership. The better the bodies and organizations are prepared to act in the event of natural disasters, the more efficiently the work will be carried out. The functioning of the local community and commune should be understood in the context of other republic or federal bodies, which jointly operate in carrying out required measures. My contribution is intended to show execution of measures taken in the commune and local community and I shall not discuss other bodies.

Immediately after the earthquake on May 6th, 1976 the members of socio-political activities in the commune met and began work. First, jointly with professional staff at the disposal of the commune, we organized inspection of villages and buildings to gather basic data. At the same time that the inspection parties were out in the region, we prepared organizational and other measures which had to be undertaken that day, so action could proceed in a coordinated and effective way.

On the morning of May 7th, the representatives of republic bodies, Yugoslav National Army, bodies of internal affairs and others visited Tolmin to offer us assistance, advise us, coordinate action and to undertake jointly measures which are urgently required when natural disasters occur. The management of action for ascertaining and eliminating the impact of the earthquake was assumed by the socio-political leaders in the commune, and each body executed its tasks, which were required by the conditions and general situation in the commune.

Prior to the earthquake, in the region of Tolmin commune and throughout the whole area affected by the earthquake, civil defense had been organized in accordance with the scheme and doctrine of national defense and social self-protection. Civil defense, in our social system, is the principal form of organizing, preparing and engaging the cooperation of citizens, working people and all other bodies, organizations, and communities in defending and rescuing inhabitants and material goods from acts of war and the effects of natural disasters and other large scale hazards and disasters. In the area of the commune of Tolmin civil defense headquarters and units had been formed, in addition citizens and working people had been trained to take measures for self-protection and self-assistance. Specialized organizations of associated labor (communal, health service, etc.), social organizations and societies were linked with the system of civil defense. Accordingly, before the earthquake, civil defense was organized in local communities, organizations of associated labor and communes.

In the afternoon of May 7th we dealt with the report of the situation and conditions in individual local communities (to the extent it was possible to ascertain during the morning inspection).

It was found that:

- the headquarters of civil defense in the most affected local communities had been activated;
- citizens in the local communities were taking steps to find possibilities for setting up shelters and adopting measures for protecting property.

The following tasks were adopted:

1. Civil defense headquarters must be activated in all local communities. A group of workers was formed that immediately visited all local communities for the purpose of assisting and advising the civil defense headquarters so their work would be efficient and directed at the most urgent problems in the local community.
2. Permanent on duty service was brought into the communes and local communities.
3. Commissions for accepting aid were initiated to transact aid to local communities:
 - commission for receiving and distribution of caravans, tents and other material,
 - commission for catering,
 - commission for defense, demolition and clearing of buildings,
 - commission for inspection of all public buildings, with special attention to schools, child care facilities and buildings for public assembly,
 - commission for social matters,
 - information centers.

Later, headquarters for evaluation of losses was established to estimate the loss caused by the earthquake, and other working bodies were also appointed, which I shall discuss later.

The position was adopted that each commission must have an overview of the position in the local community. All aid and assistance was to be offered only through the bodies of the local communities so that the aid would be allocated to the most affected villages and most needy citizens. In addition to permanent connections among the management of the activities and the commissions, on the level of the commune in the local community special groups of active members were formed by the Conference of the Socialist Alliance of Working People. In that way, for each local community one active member was responsible (for larger ones, two) to assist, follow, and submit problems to the management of activities in the commune with the aim that adopted measures would be really executed in each settlement of the commune.

Monetary assistance, which was immediately arranged, was collected on special account-funds for basic disasters of the commune of Tolmin. I have not described the tasks of individual commissions, as they are apparent from the purposes for which they were appointed. Let me stress that each commission carried out its work very well, enabling us to normalize the position rapidly, if we can use that term for such conditions.

In addition to the above tasks, the following were also undertaken:

1. Social health services had to find places in homes for the elderly from the most affected areas that had no shelter.
2. All women in advanced pregnancy and all sick people had to be admitted to the general hospital "dr. Franc Derganc" in Šempeter pri Gorici.
3. Common canteens had to be organized in Breginja and Podbela.
4. An adequate number of caravans and tents had to be immediately assured through the republic civil defense headquarters, the republic Red Cross, the republic Conference of Alliance of Socialist Youth of Slovenia and Alliance of Scouts' Organizations.

Commissions for information had to follow on a current basis the impact of all actions and performances and they had to inform citizens of these matters through the means of the media. They were also responsible for giving available data to representatives of the media.

We also organized:

1. vaccination of the population in damaged settlements against infectious diseases,
2. daily checks of water supply sources and chlorination of drinking water,
3. extraordinary measures for sanitation and hygiene in all settlements, tents, other public places, and dumps,
4. lessons in all elementary and secondary schools in premises that were safe (tents),
5. permanent telephone connections with all local communities--civil defense headquarters (later on also permanent radio connections),
6. health service worked continuously in all areas with the assistance of Yugoslav National Army group,
7. groups of scouts, members of Yugoslav National Army were formed to help in setting up tents and caravans at appropriate places,
8. some services operated from temporary locations as the premises of communal assemblies had been damaged.

It is understandable that the execution of these and many other measures in the local community depended on authority of the civil defense headquarters (it was necessary to level unsafe premises). All these activities were very useful, had a calming influence on people, and prevented additional loss and possible victims. In the local community, care was taken for the needs of the citizens, social welfare services were provided, catering and other supplies were arranged, cooperation with the health service was organized, the needs of citizens for financial assistance was assessed and decisions for distribution were made, the assistance of teams clearing ruins was arranged, lists of damaged buildings were prepared, reconstruction plans were developed, reconstruction measures for socially deprived citizens were approved, the help of youth work teams was arranged, etc., participation was arranged in decisions for the distribution of flats

and buildings to be constructed, the services of civil engineering teams in the location and setting up of facilities were also provided.

The coordinating committee for personnel matters of the communal Conference of the Socialist Alliance of Working People and the commission for nomination and election of the communal assembly created a special committee, 35 members of which were nominated by the communal assembly, 29 members were nominated from organizations of associated labor, self-managing communities of interest, local communities, socio-political organizations, assembly and the executive council, and 6 members were delegated by local communities. The assembly appointed the president and vice-president of the committee.

With the decree, the committee was ordered by the assembly:

1. to determine the losses and estimate the value,
2. to adopt a comprehensive plan for reconstruction and submit it to the communal assembly for approval,
3. to adopt terms and conditions for granting loans and distributing grants,
4. to prepare a balance sheet accounting for all funds,
5. to develop priorities for the reconstruction of buildings,
6. to decide on the use of funds,
7. to develop plans and arrange for the reconstruction of damaged buildings,
8. to supervise reconstruction,
9. to report to the assembly on its progress,
10. to arrange a system for the provision of professional services.

The special committee would continue to function until the assembly establishes that all tasks have been executed, pursuant to the overall recovery plan.

Inter-communal committees were established by the communal assemblies of Tolmin, Nova Gorica and Idrija to coordinate the work for eliminating the impact of the earthquake in the whole area of the Soča Valley.

Procedures to Eliminate Impacts of the Earthquake

1. Housing

As soon as the earthquake occurred, 28 groups of civil engineering professionals were appointed to inspect and evaluate all damaged buildings and classify them into categories depending on the extent of damage. The following procedure for overall recovery and construction of housing was established:

- a) for the first category of damaged buildings (damages which did not affect structural elements) the owners themselves should carry out repairs. They would have access to loans from commercial banks, according to the decree of the executive council, on terms and conditions for consumer credit, granted to persons that suffered losses in the earthquake, in individual communes of SR Slovenia;
- b) for the second category of damages (involving structural damage but not requiring demolition) reconstruction would be carried out under the supervision of the civil engineering service in accordance with the plans prepared by them.

However, consumer credit was not sufficient, nor were the available funds adequate (repayment in 10 years, interest rate: 2%) to meet the carrying capacity of the citizens. Therefore, it was necessary to augment the amount by funds (repayment in 20 years, interest rate: 2%) which were pooled by housing communities in SR Slovenia.

The self-managing housing community has offered tenders of special housing loans for repair and rebuilding and new construction of housing premises which were affected by the earthquake. Within the framework of the housing community, special commissions were set up to expedite granting of loans. The representatives of local communities took active part in these commissions. In that way information was available through familiarity with each individual applicant to supplement that provided by the documents that had to be submitted.

For the housing in social property, the self-managing housing community and basic organizations of associated labour were responsible for the elimination of the impact of the earthquake. A large percent of the Slovene civil engineering profession supplemented by engineers from neighbouring republics, working with specialized groups and youth work teams, the Yugoslav National Army (construction material for 16 building sites was brought by helicopter to the mountainous regions of the commune), one-day actions of trade unions and working organizations and the efforts of the affected population made it possible to accomplish a large volume of work in a very short period, although weather conditions were bad.

The operation was carried out in such a way that civil engineering professionals would be responsible for construction in one or two local communities, depending on the size and capacity of the work force and on the volume of the impact of the earthquake. The housing credits would have been granted in accordance with the Regulations on terms and conditions for loans and grants to citizens affected by the earthquake in the Soča Valley - communes of Tolmin, Nova Gorica, and Idrija.

Regarding the regulations, we must point out:

- a) they were formally adopted by the delegational assemblies in accordance with previous discussions with citizens;
- b) they provided stipulations for grants-in-aid as well as loans; and
- c) eligibility criteria varied with social situation (the lower the personal income of a family the greater the eligibility for various forms of assistance).

2. Industrial buildings

The loss to the economy was of various types:

- a. direct losses of buildings and equipment which varied from partial damage to total destruction and amounted to din 221,060,000;
- b. losses from lack of income, since for varying periods operations were shut down completely because of damaged fixed assets as well as the absence of workers who were engaged in reconstruction;
- c. losses of revenue in production, which is objective, due to:
 - absence of workers, who were engaged in reconstruction of their own living premises (in some organizations this amounted at times to 80% of the workers),
 - decrease of productivity and work quality from psycho-social effects on workers,
 - reduction of production when emergency premises had to be used which did not permit normal conduct of work,
 - lower productivity since personnel were overburdened with reconstruction and their efficiency in the direct tasks of their jobs was decreased.

Although the importance of the recovery and further development of the economy was constantly recognized our main attention was directed to the problems of the population. Economic recovery was postponed until the most urgent housing problems had been dealt with. To assure appropriate working and living conditions for the population, it was necessary to anticipate implementation of development plans for work organizations, so reconstruction results would approach the objectives of middle-range plans. Recovery represents only one aspect of economic development. Reconstruction should be carried out in such a way as to facilitate transition.

We agreed on the following principles:

- a. Work organizations should develop plans which combine recovery with development, recognizing that reconstruction of obsolete technology and production processes is irrational and inappropriate.
- b. Direct losses should be completely covered by pooling investment funds of all commercial banks in SR Slovenia under the following terms and conditions:
 - repayment period: 10 years
 - beginning of repayment: 1979
 - interest rate: 5%
- c. Loss of revenues due to the earthquake must be covered by work organizations from their own funds. In the case they operate at a loss because of such circumstances, coverage will be ensured in the form of grants or by taking out loans.
- d. When implementing economic recovery and development programs in less developed frontier regions, the Fund of common reserves of SR Slovenia should participate to the extent of 10% of total investment value. The funds of the reserve should be given as grants to individual users, allocated according to the financial position of the individual

investor on the basis of previous consideration of the request to the bank, and in agreement with communal and inter-communal committee for ascertaining and eliminating impacts of the earthquake in the Soča Valley.

- e. It is necessary to execute all procedures that are required for implementing individual programs.

Work organizations developed plans and submitted them to the Bank of Nova Gorica which adopted procedures for pooling funds.

3. Infrastructure

Damage to infrastructure (roads, water-supply networks, sewerage systems, electric supply networks) was extensive. It was agreed that the management of these systems had to prepare plans for reconstruction and repair and immediately start to implement them. That was executed also.

Social Activities

To satisfy their personal and common requirements to implement common interests in the field of social activities, working people and citizens jointly with the workers of organizations of associated labor that conduct these activities, self-managing communities of interest, in which they are implementing free exchange of work, equally and on self-management basis, together decide on the execution of such activities. Through their common interests they develop a development policy and policy for pooling funds for operating and developing such activities. The workers of organizations of associated labor which conduct these activities are assured equal socio-political positions with workers in other organizations of associated labor.

On the basis of the procedures adopted for eliminating impacts of the earthquake in the field of social activities, self-managing communities of interest and organizations of associated labor from those activities assumed responsibility for eliminating impacts of the earthquake. The funds were collected through solidarity action, pooling of funds and other approved measures to restore the activities as rapidly as possible.

The losses after the May and September earthquakes were very great. First of all we assured normal operations of organizations of associated labor in health services, schools, and child care services. The activity of these services was maintained in the following way:

- a) buildings which were damaged but useable were operated for schools, child care services, and health services,
- b) newly set-up premises (mainly tents) were used where buildings were destroyed.

The principle was adopted that only in extraordinary cases should schools be relocated to other places. As a result, only:

- the pupils of the branch of the elementary school Žaga were transferred to Pokljuka:

- the pupils of the branch of the elementary school Breginj in Ladna-Smast were transferred to Lovran.

Socialist republics and autonomous provinces significantly participated in the construction of new educational and training buildings. Each participated in the construction of one building.

In this manner, from solidarity aid, there were constructed or completely restored:

- 5 educational-training buildings in Tolmin commune and,
- 2 educational-training buildings in Nova Gorica commune.

In the years since the earthquake, through this organized procedure, the following number of buildings has been constructed or completely restored:

- | | |
|------------------------------|--|
| - for education and training | 19 new buildings
8 restorations |
| - health service | 3 new buildings for medical care
(first-aid station in Breginje))
2 new pharmacies |
| - child care service: | a) in the construction of new
schools, premises were provided for
child care service;
b) new premises for kindergarten
in Kobarid and Volarje |
| - social-welfare service: | a new home for elderly people in
Tolmin
one home for elderly people in
Podbrdo was reconstructed |
| - culture: | 4 new buildings
2 restorations
A vast amount of funds was invested
in reconstruction of monuments
damaged by the earthquake in various
places |
| - recreation: | on the same principles, the funds
were invested in reconstruction or
construction of recreation halls and
grounds. Gymnastics requirements
were taken into account when new
schools were constructed. |

This procedure made possible starting restoration of buildings for social activities during the reconstruction of the housing stock. As early as 1977, but mostly in the following years we had eliminated impacts of the earthquake on those buildings.

Working Group of Socio-Political Workers

Fast and efficient communication of measures adopted assigning tasks and rights and defining duties of citizens is very important in the process of reconstruction. The Communal Conference of the Socialist Alliance of Working People involved one socio-political worker for each local community, for some even two, in order that relations among communal bodies and local communities should become more effective. The task of these active members was to assist the bodies in local communities in interpretation of rights and duties, informing common bodies of inadequate work, seeing how responsible bodies progressed with their work, etc. At regular meetings they reported the position of local communities and proposed, if necessary, additional measures.

During the first months of reconstruction these active members were out in the region. They offered invaluable assistance to the bodies in the local communities after finishing their other work obligations. This provided communal bodies regular and direct connections and relations with the local community, which beside implementing tasks for reconstruction, enabled consistent procedures. A single front was formed in that way, combining all forces, all following efficient procedures.

Only so united and closely linked to the larger solidarity support of all working people and citizens of SR Slovenia, as well as of Yugoslavia, were we able to perform the work which will be remembered by later generations in Tolmin commune.

Solidarity

The catastrophe that struck the Soča Valley and with it the whole Tolminsko, was deeply felt in the hearts of the whole population of SR Slovenia and Yugoslavia. This is attested by:

- conduct of solidarity action,
- measures undertaken by the working collectives and individuals,
- continual visits of different delegations that inspected the conditions in individual settlements and reported to the bodies of self-management and on that basis adopted concrete decisions.

The knowledge that all working people and citizens of Slovenia were with us encouraged us, and we worked hard and approved tasks and in an extremely short period life returned to normal. One cannot describe the feelings of warmth, care, and solidarity that spread through our whole society and which could be implemented only in the self-managing socialist society. The solidarity is present in all approved measures. In this disaster the solidarity among working people was once again tested and will be proven whenever required. All measures undertaken are part of our solidarity which is built into the base of our socialist society, from the first day of its beginning, representing its strong cohesive power and strengthening the feeling of security of individuals and families and implementing actual division of labor, it opens perspectives of human self-managing society.

Eliminating impacts of earthquakes does not mean only construction of new housing, but also human relations towards other persons. In such a situation, one discovers rapidly who is prepared to subordinate his own

problems and difficulties to common requirements and tasks. The self-confidence of people was increased through testing the actual self-managing organization of the commune and local communities, and their initiative and readiness was strengthened to solve common problems with joint powers. This cannot be put into figures. These are elements of humanity among people and generations that should have lasting validity and positive influence on the lives and perspectives of people in those places.

Conclusion

Good organization, division of labor, coordination of all elements in the commune, and close connections with bodies in the republic and other communes were pre-conditions for successful work, which in Tolmin commune gained complete importance during the recovery from the earthquake. We must again mention the steps carried out by every citizen, the special engagement of the Yugoslav National Army and bodies of internal affairs which so largely compensated for insufficient equipment. The solidarity of the whole society in moral and material ways has most happily influenced the success of action.