For mitigating the risk and the adverse situation caused by natural disasters, I contribute to the Call with a proposal for constructing, firstly on a wide perspective, a system composed of multiple intelligent, mainly software, components that altogether will implement and support an indicative pipeline, which will enforce the defense against the detrimental impact of such phenomena.

The suggested pipeline will be composed of the following basic stages: 1.Collection and Processing of information in order to establish a good understanding of the incident of the phenomenon, 2.Construction of plan for securing people and critical resources, 3.Execution and Completion of the plan, 4. Control and Recovery, 5.Causal Analysis (on the phenomenon itself and on the response of the defense system) and 6.Prevention and Improvement of the defense mechanism.

We suggest a decentralized type of architecture where anyone can be registered to the system. Individual users, institutions, companies, anyone.

In fact at this point, it is important to notice that since the system will be called upon to address any adverse situation, irrespective of geographical region and due to its inevitable large scale, considering that a national disaster affects many societal sectors and has far-reaching repercussions, anyone should be encouraged to participate and develop a binding to the system in their products and have profit of the system, too. Clarifying further this point, living in an environment that experiences such natural conditions, it is very well suited to organized societies to develop and maintain a mode in their operations for addressing extreme conditions, while still having adequate presence in their function.

In addition, I can identify special value in developing software components that implement and support such loop of stages, as this kind of loop can be applied to and benefit systems of other sectors. I see the implementation and support of such loop of stages as a promising upcoming stream of solutions' production, after Cloud Infrastructure, Analytics, CI/CD and Blockchain have set the stage for this.

In my work for the proposal, I have given a particular focus on the critical issue of "communication" and "orchestration" that often are inflicted in systems and operations/processes of large scale. Good "communication" between the constituent parts of a system, a decision and its goal set, operations and time, is key for the success of a product, for customer's satisfaction and for the good operation of the proposed system.

Hence, I am suggesting the implementation of a mechanism, which deploys AI techniques for achieving good "communication" with the goal, the parts and timing of a system, which resembles the way endocrine system functions in our body in its basic principles of function.

The method is presented for the case of Plan Construction, where it is applied for the "communication" of the plan across the various levels of the execution hierarchy and for achieving good alignment of all levels with the strategy that has been decided.

This approach can have significant benefit also in other fields of decision making and orchestration of efforts.