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Terror Threats Life Cycles Controlling Using Crisis Management during Environmental Metamorphoses

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Abstract

The appearance of new terror threats is a reality. They manifest themselves as perils which can be replicated as the new use cases on terrorist attack events in surprising sceneries and arenas. In this paper, the behaviour of the relevant entities is blazonry explained, modelled, analysed, evaluated and simulated using the DYVELOP method within the pertinent threat/peril life cycles. They are modelled on looping terrorist attack scenes in pertinent environments and their metamorphoses, operating at real threat/peril scenes. This article helps to clarify and identify the roles and processes of these scene entities, domains, actors, participants, interfaces and users. The DYVELOP method is a fundamental instrument for the objective analysis, understanding, evaluation, interpretation, development and computerized modelling & simulation of emergency/ societal security awareness, performance, continual planning, management, training and intervention. Base upon qualitative research it deduces within a process the necessity for operational cooperation among all participants, collaborating to fulfil the requirements of crisis management stakeholders, controlling the crisis scene in many environments using process systems and use cases.

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1. Introduction

The surprising appearance of new terror threats has been and will continue to be a constant possibility anywhere in the world. They are the actual expression of perils, which are replicated as new threats within the life cycles of terrorist attack events that are distributed in real time (simultaneously, sequentially, continuously, gradually or by anniversary) and in real space (areal, national, geographical, continental, global) and in relative environments. The relevant entities' behaviour can be blazonry modelled, analysed, evaluated and simulated using the DYVELOP method [1] within the pertinent 'Threat/Peril Life Cycle' = <<TPLC>>. The TPLC metamorphoses are modelled looping scenes of terrorist attacks, where the loop number is displayed by the stars <<*>> in Fig. 1 and elsewhere below. The TPLC solutions contribute to the more exact and objective provision of all services which operate at threat/peril scenes in various environments (ENV). They help clarify and identify the roles and processes of these scene entities, domains, actors, participants, interfaces and end users. The TPLCs can be fundamental instruments with which to objectively analyse, understand, evaluate, interpret, develop and computerize modelling & simulation of emergency/ societal security awareness, performance, continual planning, management, training and intervention. They deduce within a process the necessity for operational cooperation among all participants collaborating to fulfil the requirements of crisis management stakeholders, controlling the crisis scene in many environments, using process systems and use cases. Here, controlling is the general capability to have control over situational policy.

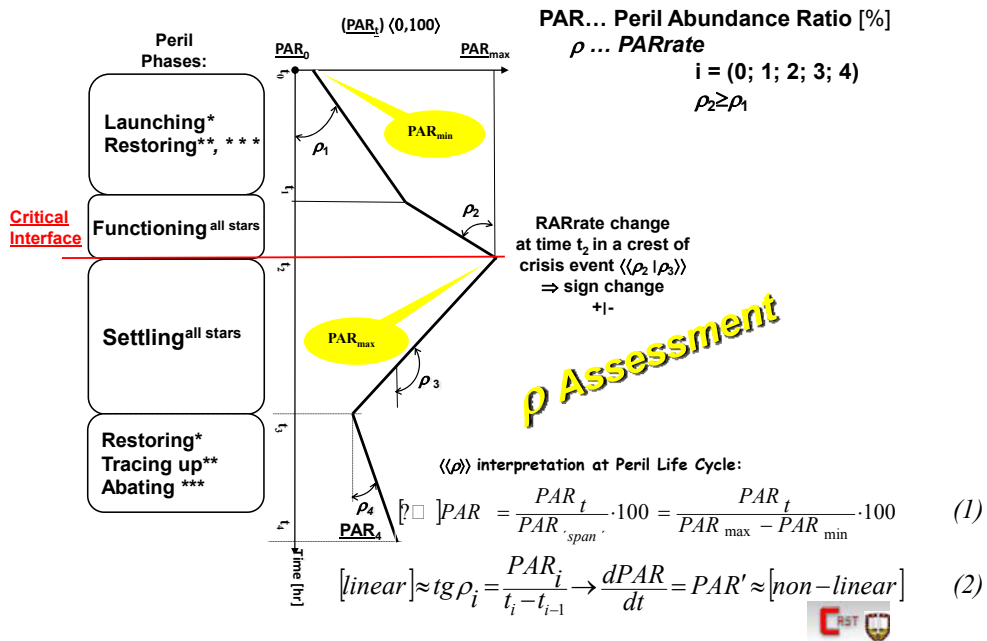


Fig. 1. Threats/Peril Life Cycle (TPLC) interpretation and parameters

The exact dependence of the Peril Abundance Ratio (PAR) in real time (t) - passing from the top of the page to the bottom, as is usual for algorithms - is modelled on the TPLC plotted line in Fig. 1. This brought quite innovative solutions to the problem when the DYVELOP [1] method was first used for the precise purpose of threat/ peril modelling and simulation as part of the FP RS EU 'CAST' grant treatment [3]. Both mathematical relations above the (1) and the (2) follow $PAR_t = f(t)$ expression. This is then followed by $PARrate \rho (0; \pm\pi)$. The Terror TPLC (TTPLC) is modelled on an everyday computer with a MS operating

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