

University of Turku, Turku, Finland, 30 July - 1 Aug 2014

On the Probability of Predicting and Mapping Traditional Warfare Measurements to the Cyber Warfare Domain

Grobler M and Swart I

Abstract

Cyber warfare is a contentious topic, with no agreement on whether this is a real possibility or an unrealistic extension of the physical battlefield. This article will not debate the validity and legality of the concept of cyber warfare, but will assume its existence based on prior research. To that end the article will examine research available on traditional warfare causes, elements and measurement techniques. This is done to examine the possibility of mapping traditional warfare measurements to cyber warfare. This article aims to provide evidence towards the probability of predicting and mapping traditional warfare measurements to the cyber warfare domain. Currently the only way of cyber warfare measurement is located in traditional information security techniques, but these measurements often do not adequately describe the extent of the cyber domain. Therefore, this paper aims to identify a set of criteria to aid in the prediction of cyber warfare probability.