

SBIR 06.2 PHASE I - AWARD DETAILS	
ORGANIZATION	CERDEC
TOPIC NUMBER	A06-094
CONTRACT NUMBER	
YEAR OF AWARD	
AWARD START DATE	
AWARD COMPLETION DATE	
PROPOSAL NUMBER	A062-094-2534
TITLE	Models to Address Diplomatic, Information, Military, Economic (DIME) Factors for the Propagation/Evolution of Ideas Through Defined Populations
PROJECT MANAGER	Norman D. Geddes (770) 518-4228 asi_sbir@asinc.com
COMPANY	Applied Systems Intelligence, Inc. 11660 Alpharetta Highway Suite 720 Roswell GA 30076 Minority Owned: No Veteran Owned: No Number of Employees: 42
KEYWORDS	DIME, PMESII, dynamic population model, model validation, beliefs, intentions, psychological operations, effects based operations
ABSTRACT	We propose to evaluate and recommend a set of candidate models of the flow and evolution of population beliefs and intentions as the starting point for developing a deployable DIME Effects Model (DEM) for tactical commanders. DIME (Diplomatic, Information, Military and Economic) seeks to avoid counter-productive and conflicting activities during tactical operations by considering these factors in a coordinated manner during mission planning and execution. A DIME Effects Model will enable better integration of DIME into Effects Based Operations. To develop a DIME Effects Model, we bring depth and breadth of modeling experience and knowledge of Army doctrine and operations. Our team will identify the candidate models from the existing work on dynamic models of populations and select models with the potential for predictive modeling of DIME effects on populations, including effects on the population beliefs and PMESII itself. This effort will also create a framework for comparing disparate population models and an inventory of validation methods that for the models. In Phase 1 Option, we will implement a segment of one candidate model and demonstrate the model execution using one of the validation methods we identified.
BENEFITS	A self-contained model that can estimate the change in ideas and expected behaviors of a population as a result of an informational, regulatory or economic manipulation has broad applicability outside its uses in military operations planning and defense policy analysis. As a result of a successful Phase II outcome, ASI expects to develop and sell a software application for population effects estimation into several markets. For some of the markets.

	<p>ASI would choose to develop the end user product under its own brand. For other markets, ASI will use Value Added Resellers to configure specialty versions of the core product to sell to their specialized markets. To commercialize the DEM system as an end user product, ASI anticipates that a web-hosted, subscriber revenue model is a superior pathway to the markets ASI would desire to serve. Businesses often need to examine possible population responses to advertising, messaging, product launches, news events and perceptions of risk. By maintaining accurate population state data as well as providing the analytical model for effects estimation, ASI can provide a high value service to a broad set of clients from the same product platform with much less product update effort. A major source of revenue is expected from the investment community, who will want to estimate the effects of events and announcements on the perceived value of publicly traded securities before the financial markets can show movement.</p>
--	---