Literature Review List

Integrated Project/Program Management (IP2M) Maturity and Environment Total Risk Rating (METRR) using an Earned Value Management System (EVMS)

Report No. 1, Annex A

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LITERATURE REVIEW LIST INTEGRATED PROJECT/PROGRAM MANAGEMENT (IP2M) MATURITY AND ENVIRONMENT TOTAL RISK RATING (METRR) USING AN EARNED VALUE MANAGEMENT SYSTEM (EVMS)

Report No. 1, Annex A

by

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Executive Summary

This document consolidates a list of 433 literature sources dating from 1962 to 2022 and collected as part of the process for developing the Integrated Project/Program Management (IP2M) Maturity and Environment Total Risk Rating (METRR). The consolidated references here may not be an exhaustive list of literature related to Earned Value Management Systems (EVMS) but are all relevant to IP2M METRR.

Earlier findings of the literature review were published by Cho et al. (2020) as part of the American Society of Civil Engineers (ASCE) Construction Research Congress 2020 proceedings. By following a systematic literature review methodology, 160 publications relevant to EVMS covering a diverse set of backgrounds and perspectives from the past decade were identified for closer review. These publications are bolded in this document. The findings of the analysis of the 160 publications were published in the Journal of Management in Engineering by the ASCE in 2022 by Aramali et al. (2022).

The literature list is provided in alphabetical order. This document is part of the deliverables for the research project sponsored by the DOE and has been approved by the research steering committee and Arizona State University (ASU) joint team.

The IP2M METRR is a novel assessment mechanism developed as part of a DOE-sponsored Joint Research Study led by ASU and representing 19 government, industry, and academic organizations. The research team members are 41 individuals who have a diverse background including owners, contractors, consultants, academia, and so forth. The list of the research team members is provided at the end of this document. The tool assesses a spectrum of EVMS maturity and environment issues centered around the EIA-748 EVMS Guidelines, while also referencing the Project Management Institute's American National Standards Institute (ANSI) standard for EVM (2019) and International Organization for Standardization (ISO) 21508:2018 guidance. By using the IP2M METRR (pronounced "IP2M meter") to assess both the maturity and environment of an EVMS, project leaders and personnel can understand the efficacy of that EVMS to support integrated project/program management. It also helps identify opportunities for improvement. The ultimate goal of performing this assessment is to assure project/program participants are working with accurate, timely, and reliable information to manage their work, leading to successful project/program performance.

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(Note: those references that are bolded below were further analysed by Aramali et al. (2022))

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IP2M METRR Research Team

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