

THE PI MODEL

VERIFIED, CALIBRATED AND VALIDATED PI OPERATIONS
MODEL: TECHNICAL DOCUMENTATION



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1 Verified, calibrated and validated PI operations model

For this content, we refer to chapter 5 of the Midway report. In this chapter we introduce the PI agent-based model (ABM). In order to understand, measure and test the software proposed in PILL when operating at a greater scale, we need a simulated environment free from real-life constraints. Hence, we developed an ABM model. We start by providing an overview of the model, and what and why we are trying to represent in this simulated environment. It is followed by a description of the agents involved, the simulated world and what processes determine the agent's behaviour with respect to other agents and their surroundings. It finishes with a description of the data inputs needed to run a simulation.