## 1a.ii: Detailed Paragraph (Technical, Structured)

The derived stochastic policy π specifies an efficient allocation for the heterogeneous agent collective A={w1​,w2​,r1​,r2​}. The human agents prioritize the t1​ and t3​ tasks, executing them along non-overlapping, optimized path sequences to ensure complete spatial coverage of the grid. Concurrency is achieved through the parallel deployment of robotic agents r1​ and r2​, who collectively address the entire set of t2​ (Soil Analysis) tasks, a critical bottleneck. The solution space is characterized by the **Pareto Front P**, which is the locus of non-dominated solutions minimizing the joint objective function f(π)=(P(π)−1,E[C]). This boundary rigorously defines the optimal trade-off between maximizing system reliability and minimizing resource expenditure. To satisfy the mandate P(π)≥0.91, the system selected the optimal knee-point solution, **ID 15**. This policy yields a P(π)=0.916 with an E[C]=37.10. Robustness is ensured by strategically allocating the local fault tolerance budget Nmax​(ti​), where the most uncertain t2​ instances (e.g., t2​l5 and t2​l9) are assigned **9 and 8** maximal re-executions, respectively, to maintain the requisite system reliability.