Gale-Stewart games and Blackwell games differ in the timing of *monitoring* – the observation of the opponent's actions: whereas in Gale-Stewart games monitoring is immediate, in Blackwell games player 2's monitoring is delayed by one stage. Both setups satisfy a property that I call *eventual perfect monitoring*, which means that the entire history of the game is known to every player at infinity. One example of eventual perfect monitoring, of which Blackwell games are a special case, is *delayed monitoring*, introduced by Scarf and Shapley [12], when the action of stage m is monitored after some lag d_m. But the setup of games with eventual perfect monitoring is more general than the setup of games with delayed monitoring. First, the former setup allows the length of the lag to depend on the history of the games. Second, it allows the information to be revealed in pieces; for example, a player can observe some function of the previous actions of his opponent before he observes the actions themselves.

1.2. **Definition.** The information partitions $\{P_n\}_{n\in\mathbb{N}}$ satisfy *eventual perfect monitoring* if for every $u, u' \in A^{\mathbb{N}}$ such that $u \neq u'$, there exists an n such that $u \nsim_k u'$ for every $k > n$.

The purpose of this paper is to prove the following theorem.

1.3. **Theorem.** *Let $\Gamma = (A, (P_n)_{n\geq 0}, W)$ be an infinite game with a finite action set, a Borel winning set, perfect recall, and eventual perfect monitoring. Then Γ is determined.*

The proof of the theorem relies on the stochastic extension of Martin's theorem about the determinacy of Blackwell games. However, except for the simple case in which the stages are divided into blocks and previous actions are monitored at the end of each block, I was unable to find an immediate reduction of the eventual perfect monitoring setup to the Blackwell games setup, nor was able to adapt Martin's proof to the eventual perfect monitoring setup. The difficulty stems from the fact that Martin's proof uses the existence of *proper subgames* – occurrences along the play path where the current partial history is commonly known. However, even under simple monitoring structures, such as when one