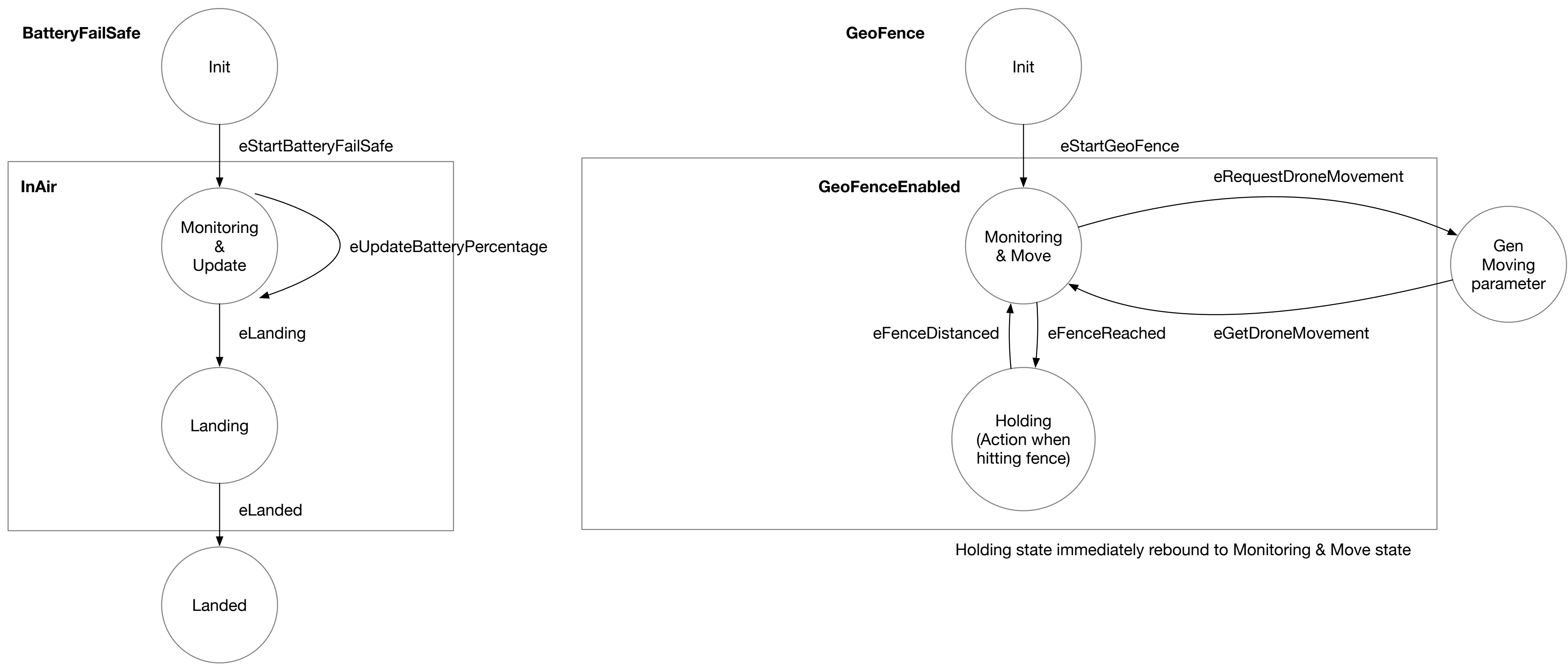
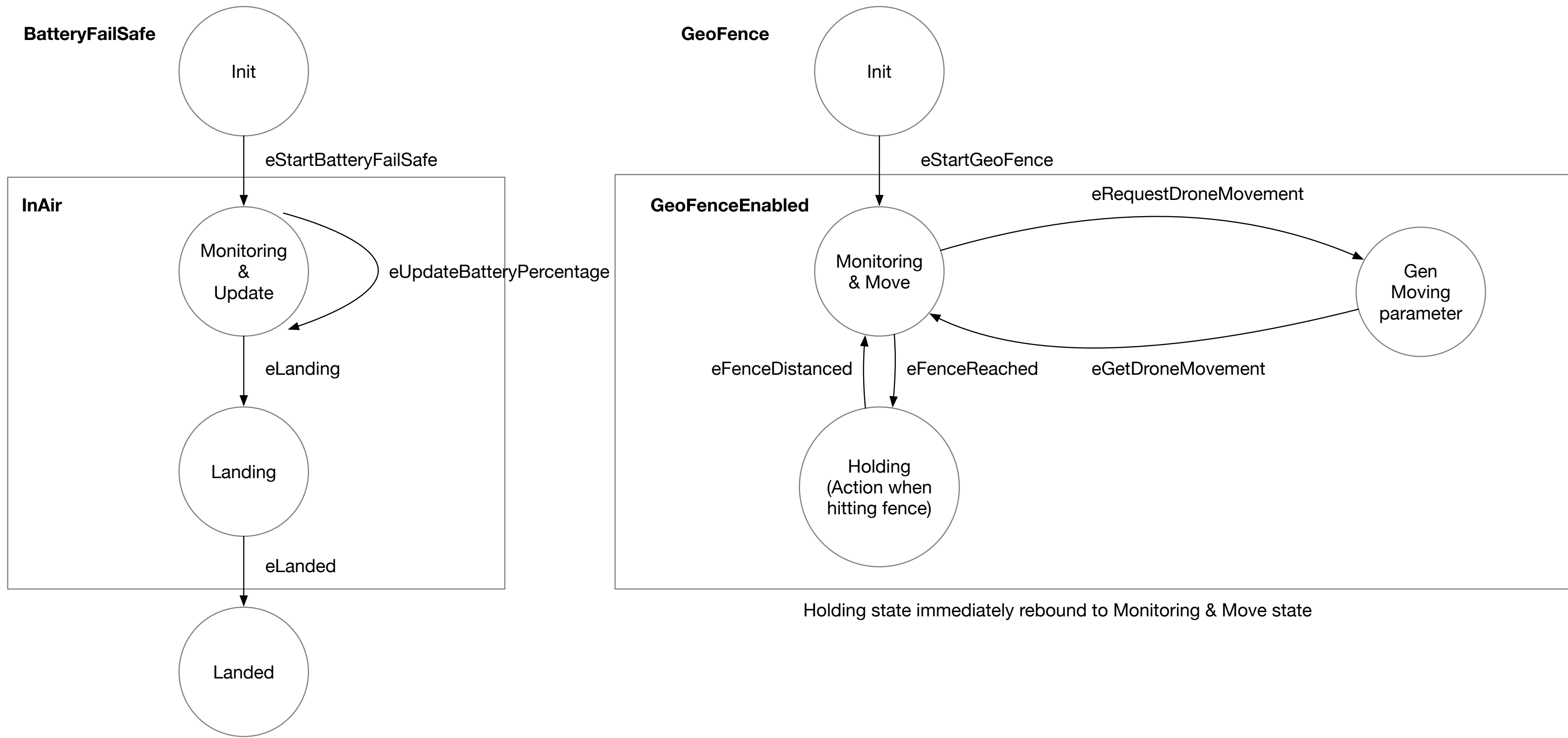
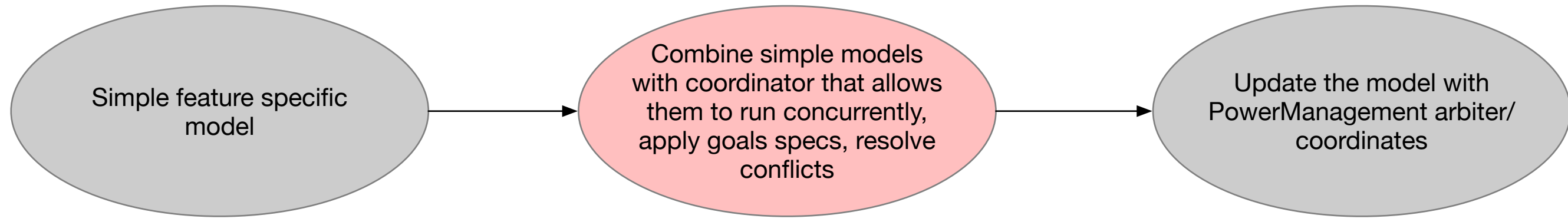


→ Increase in Realism →

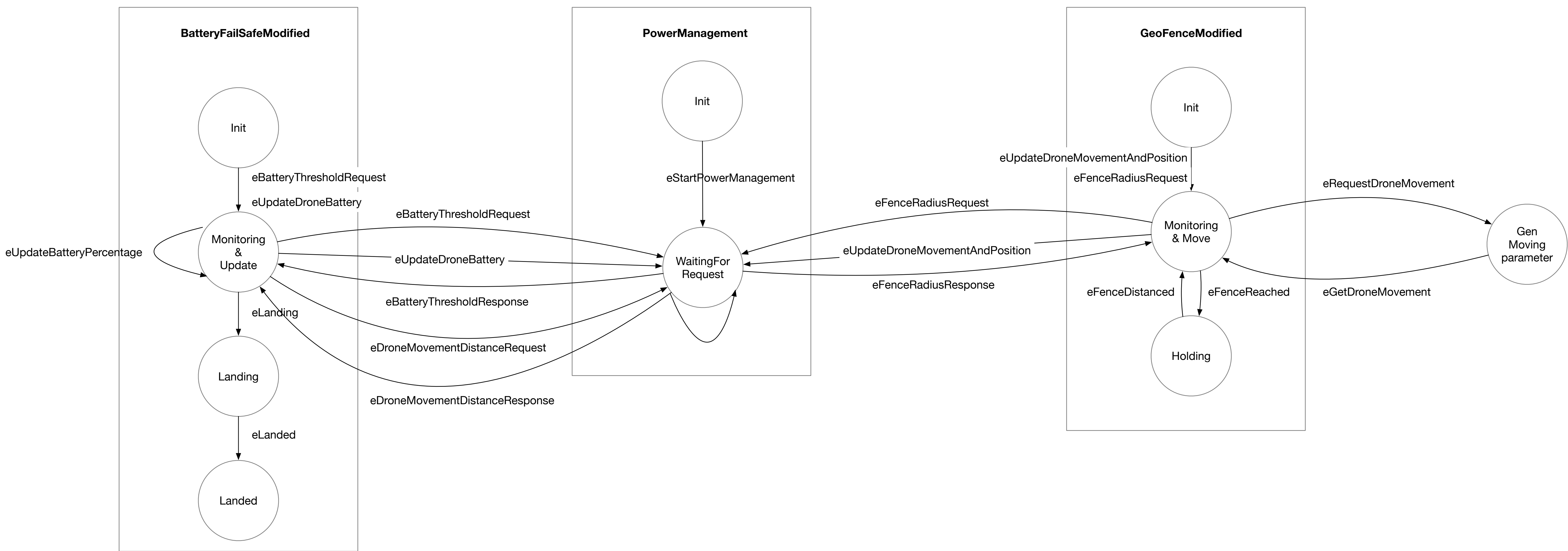
Workflow

Battery will keep updating while in geo fence
When landing, the drone coordinates remain unchanged except altitude decrease

Synchronize on events like landing (stop updating horizontal distance)
Ensure battery keeps ticking regardless of drone moving or holding when hitting the fence



Enable the message passing between these two state machines



BatteryFailSafeModified use the cumulative drone movement parameter
In the PowerManagement machine to update the battery percentage.
It lands the drone when the battery is below a certain threshold

PowerManagement state machine serves as a hub for storing all the relevant parameter
And transfer it between the two different state machine.

- WaitingForRequest has multiple functionalities
1. Supply battery threshold
 2. Supply fence range
 3. Cache battery percentage (for calculating the fence)
 4. Cache drone position relative to origin (for calculating the battery threshold)

GeoFenceModified response from the power management state machine to set the geoFence, and prevent the drone from
Flying out of the fence boundary

eFenceDistanced indicate that the drone just get out of the holding pattern