

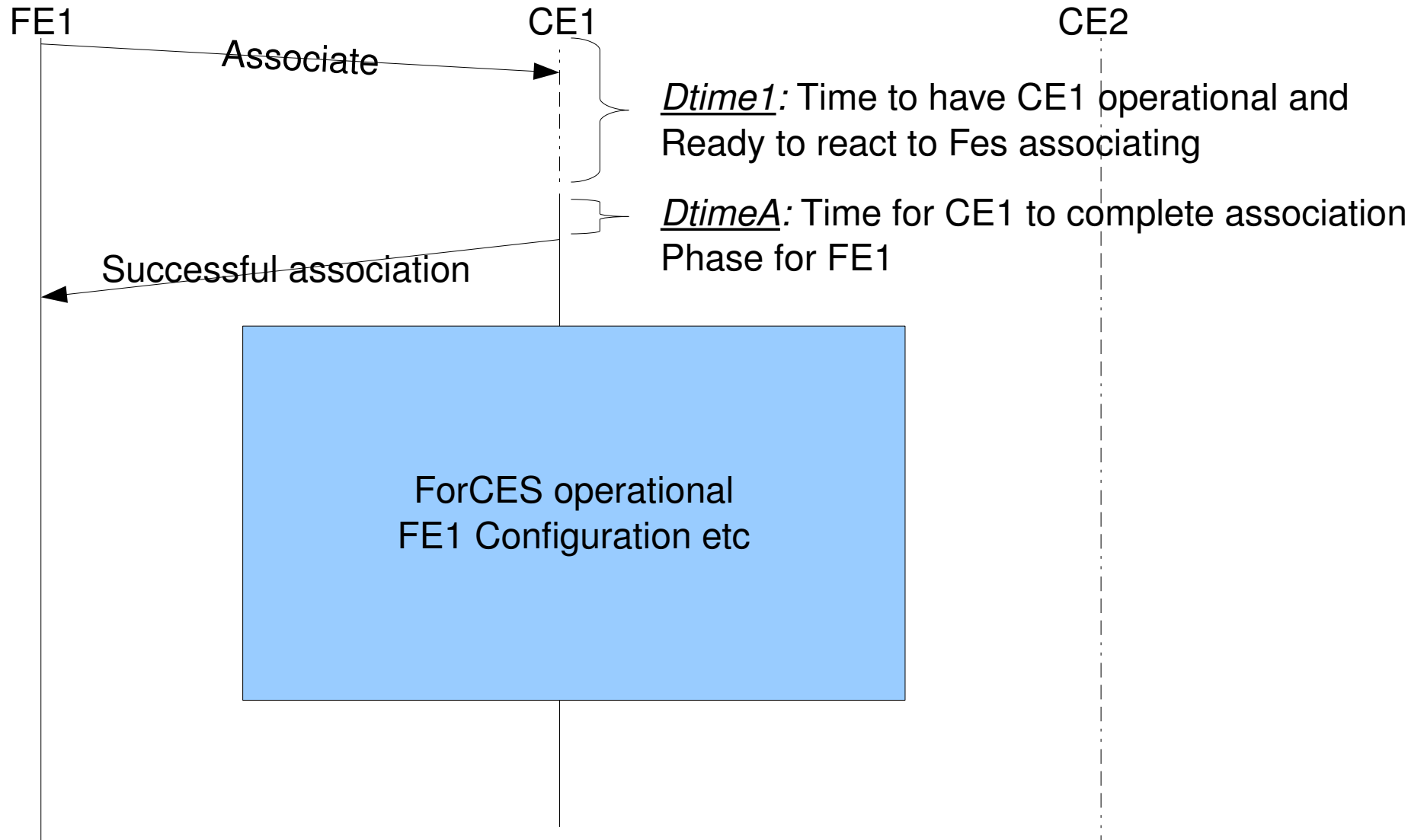
CE CE HA

Kentaro Ogawa

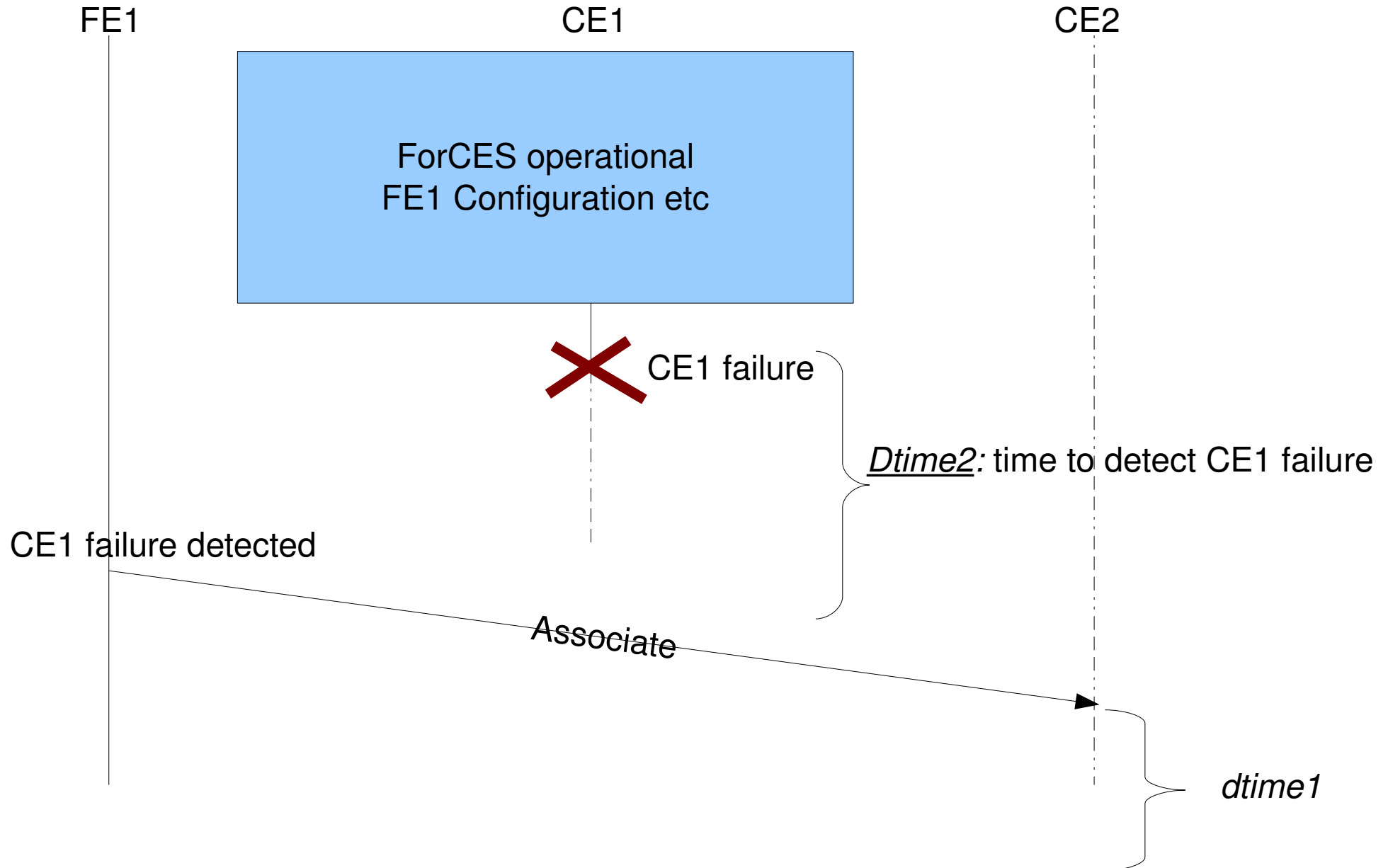
# Objectives

- Provide more detailed explanation of current HA stand by operations
- Add hot standby to improve failover time
- Define minimalist approach to NE/FE state synchronization to allow faster failover

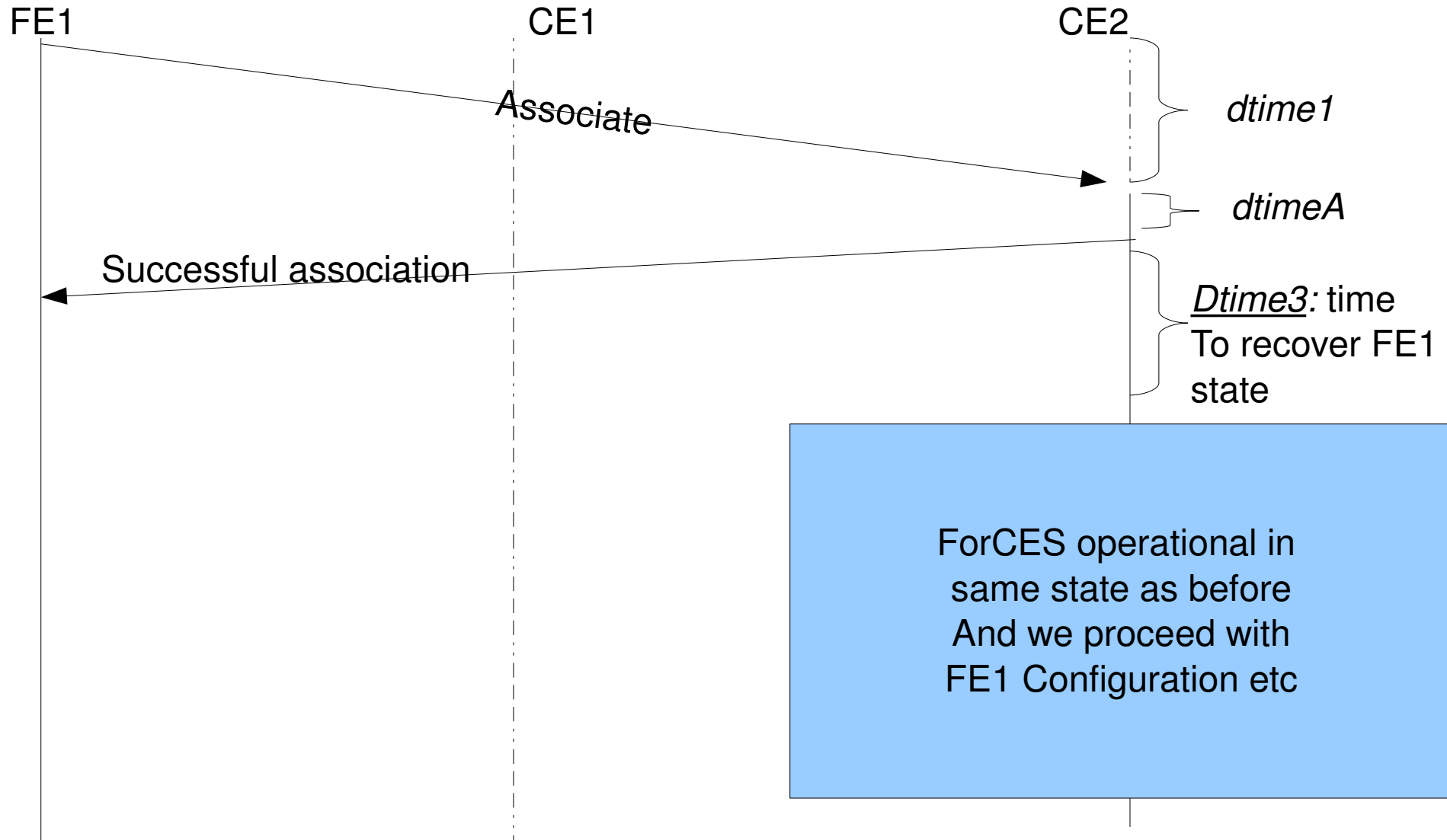
# Current CE HA: Cold Standby



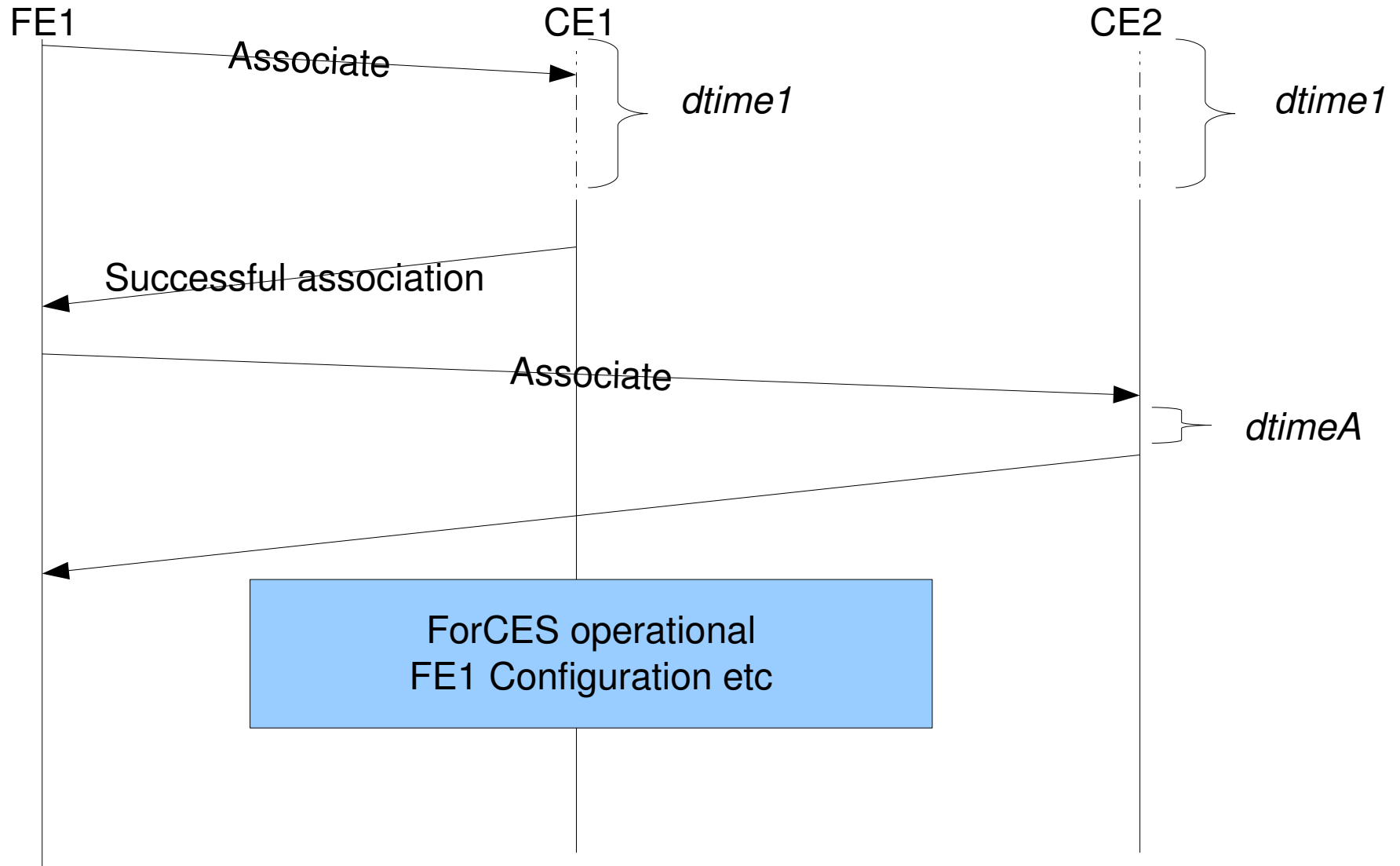
# Current CE HA: Cold Standby



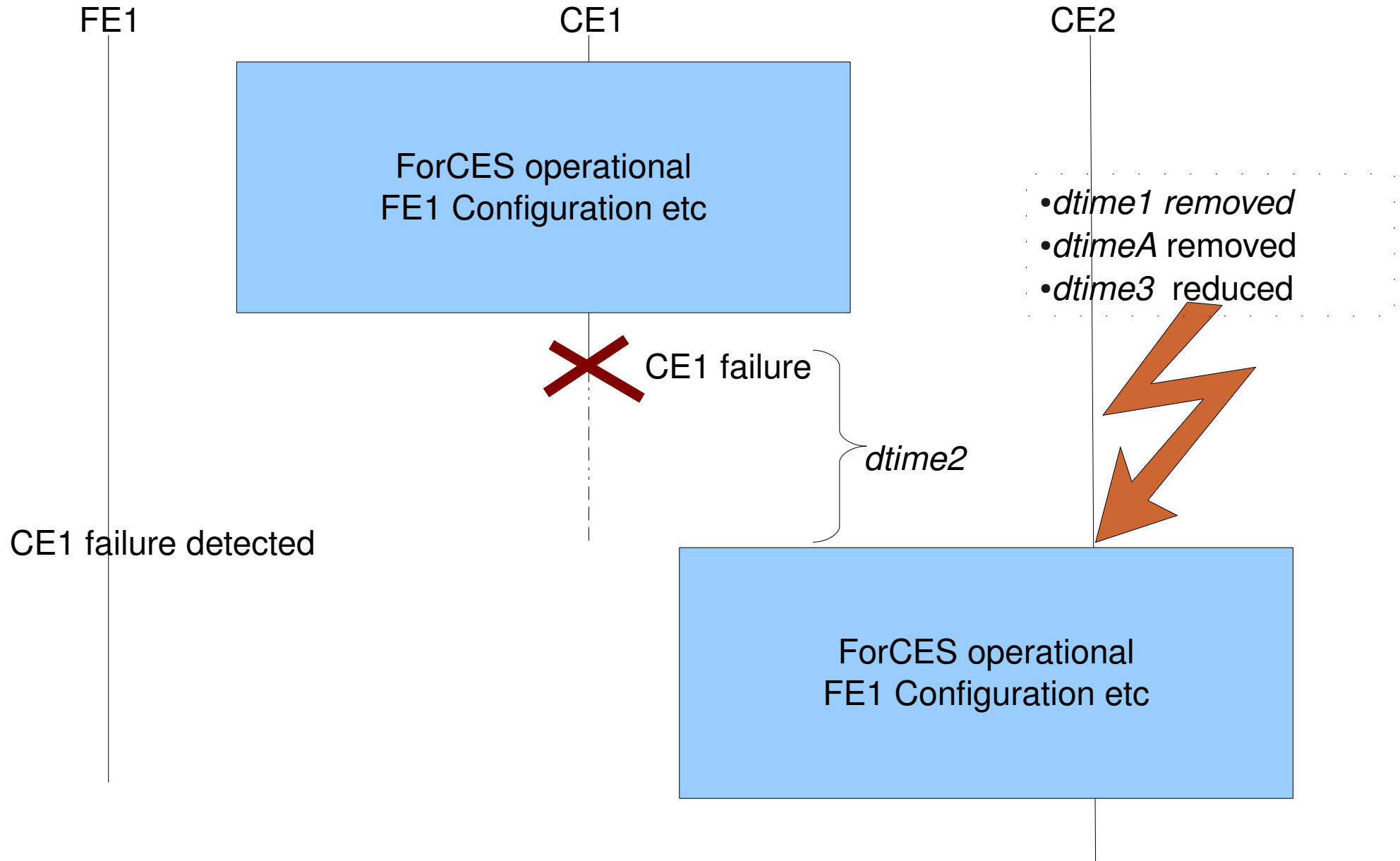
# Current CE HA: Cold Standby



# CE HA: Hot Standby



# CE HA: Hot Standby



# Changes Needed

- FE MUST associate to one or more CEs in FEPO BackUPCEs table
  - New state field to show if CE is associated or not
- An FE should be able to accept commands from all CEs it has associated with
  - FE should send events only to its master CE
- At least one or more backup CEs MUST be online



# Removing *dtime3*

- We need to have CE2 to have synchronized information from CE1 on state of FE1
- At failover time CE2 proceeds where CE1 left off
  - No need to discover missing state if transition was planned
  - Need to discover lesser state than hot standby if unplanned failover

# Optional CECE synchronization

- We have left this out of the draft for now but we would like to revisit
  - Should be very simple
  - Possibly use ForCES protocol and architecture
  - Goals
    - Zero out dtime3
    - Improve CE failure detection time
- We are soliciting for opinions

# WG solicitation

- We would like to make this a WG document