## Concept of execution.

This paragraph shall describe the concept of execution among the

system components. It shall include diagrams and descriptions showing the dynamic relationship

of the components, that is, how they will interact during system operation, including, as applicable,

flow of execution control, data flow, dynamically controlled sequencing, state transition diagrams,

timing diagrams, priorities among components, handling of interrupts, timing/sequencing

relationships, exception handling, concurrent execution, dynamic allocation/deallocation, dynamic

creation/deletion of objects, processes, tasks, and other aspects of dynamic behavior.

**1.1.1 Powering up or shutting down the System**

When the Cockpit Controll Unit is powered on it will initialize itself and run a selftest. After initialization and selftest it will power up the rest of the system and then enter standby state.

Figur 1 An example of how power up typically will occur.

Powering down goes much the same but in reverse ☺

Arming of the system is done when the plane is airborne AND the safetypin is removed



Figur 2Typical sequence showing how to go into armed mode

When ECU is in armed mode it goes into a process where it repeats calculates a number of aspects in the actual thread status and decides

* If the actual thread patternlevel is above the critical Thread pattern
* What thread pattern from database correlates best to the actual thread pattern



The flow of data when handling Thread data in armed mode is shown below.

When Threadlevel is critical the behavior will be different depending on the mode automatic semiautomatic or manual.

