Part 2: Methodology

The DMP system and physical architecture

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A development approach, where ideas, requirements, and architectural co-design are interleaved and iterated, has been applied. Two phases are used as suggested in Figure 2. The architectural layering philosophy is quite different from the normal, and intends to support efficient hardware design. The approach has something in common with the XP (Extreme Programming) methodology and other methodologies, and can be illustrated by the verses below:

"XP is the evolutionary design approach
Make something that works ASAP,
iterate and refine when requirements pop up
Show them who is the Coach!"

"UML is so beautiful, no one can really fail
And OO is a virtual world, the holy high-tech grail
The phases are so wonderful, they simplify it all,
But iterations, get away, nail them to the wall!
Time has come, and spec shall start,
seems as easy as ringing a bell
This is the portal to hell!"

"System architects, you know best,
20 years of Co',
has shown the way to go
Partition your design,
use hardware for fast and fixed,
use software for fuzzy and mixed
Architects, clever and brave, thump your chest!"

Leif Arne Rønningen, 2006
Figure 2-1. Design approach