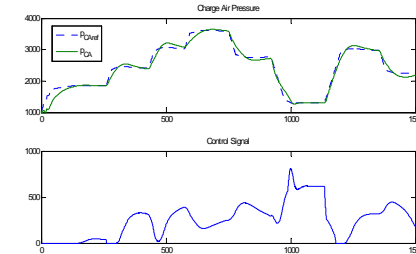


TASK 11.1: Adaptive engine

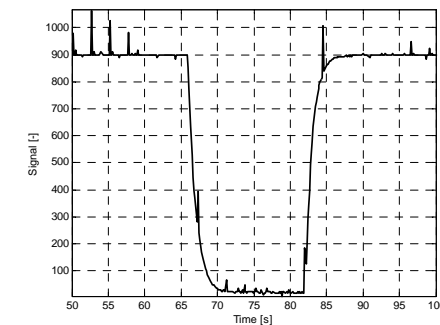
Objectives: To study adaptive and self-learning monitoring and control systems to adapt engine to prevailing conditions and component status

Final Results & Achievements:

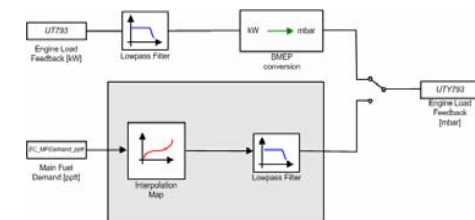
- Advanced control algorithms (H-infinity, adaptive multimodel controllers) evaluated for improved performance.
- New advanced engine balance algorithms evaluated and tested for improved engine stability.
- Advanced monitoring for knock evaluated and knock monitoring reliability improved. Implementation for field-use ongoing.
- Embedded controller for speed/load/timing implemented and evaluated. Implementation for field-use ongoing.



Multimodel adaptive controller operation



Knock-sensor failure monitoring



Adaptive speed/timing control

Partners:



I.P. HERCULES

Final Meeting, Brussels 5/9/2007