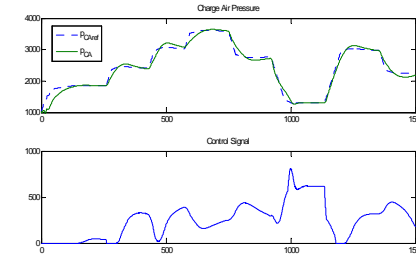# TASK 11.1: Adaptive engine
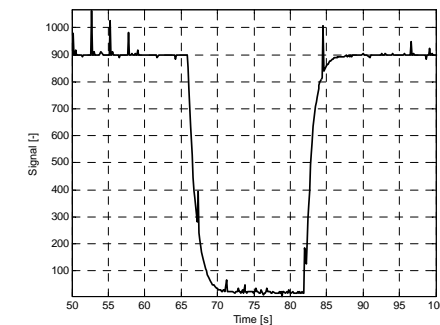
Objectives: To study adaptive and self-learning monitoring and control systems to adapt engine to prevailing conditions and component status

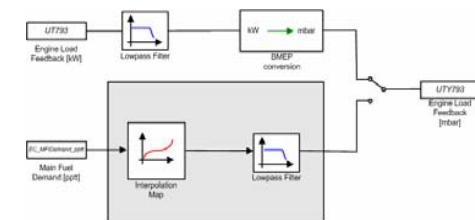## Final Results & Achievements:

- 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