

Industry Sector	RTD Thematic Area	Date	Deliverable Nr
Power & Pressure		13-Nov-01	

FENET 1st Annual Workshop

12-13 November 2001

Weisbaden, Germany

Power & Pressure Systems

Summary Report by the Coordinators

Nawal Prinja, NNC Limited

Iain Davidson, DTLR



Industry Sector	RTD Thematic Area	Date	Deliverable Nr
Power & Pressure		13-Nov-01	

Power & Pressure Systems

SCOPE

- High integrity pressure vessels and containments for nuclear power sector
- Industrial pressure vessels
- Piping systems (HP and LP)
- Steel, reinforced concrete and composites (GFRP)

FEA routinely used and fully integrated in the development process

Technology Readiness Level 8 or 9 in most of the areas



Industry Sector	RTD Thematic Area	Date	Deliverable Nr
Power & Pressure		13-Nov-01	

Technical Issues

- How to satisfy the regulatory bodies
- Modelling issues
 - Bolts, seals, connections
- Validation & verification
- Promote and improve the Design by Analysis manual
- Use of probabilistic methods
- Life extension- Fracture mechanics

Industry Sector	RTD Thematic Area	Date	Deliverable Nr
Power & Pressure		13-Nov-01	

Proposed Workshop Topics

1. Regulators view on the use of FEA
2. Benchmarks for validation & verification
3. Design by Analysis

Industry Sector	RTD Thematic Area	Date	Deliverable Nr
Power & Pressure		13-Nov-01	

Technology Matrix

Design-by-Analysis

Education &
Dissemination

Sensitivity Studies

Product & System
Optimisation

Life Extension

Durability & Life
Extension

Fluid/structure
interaction

Multi-Physics



Industry Sector	RTD Thematic Area	Date	Deliverable Nr
Power & Pressure		13-Nov-01	

End

