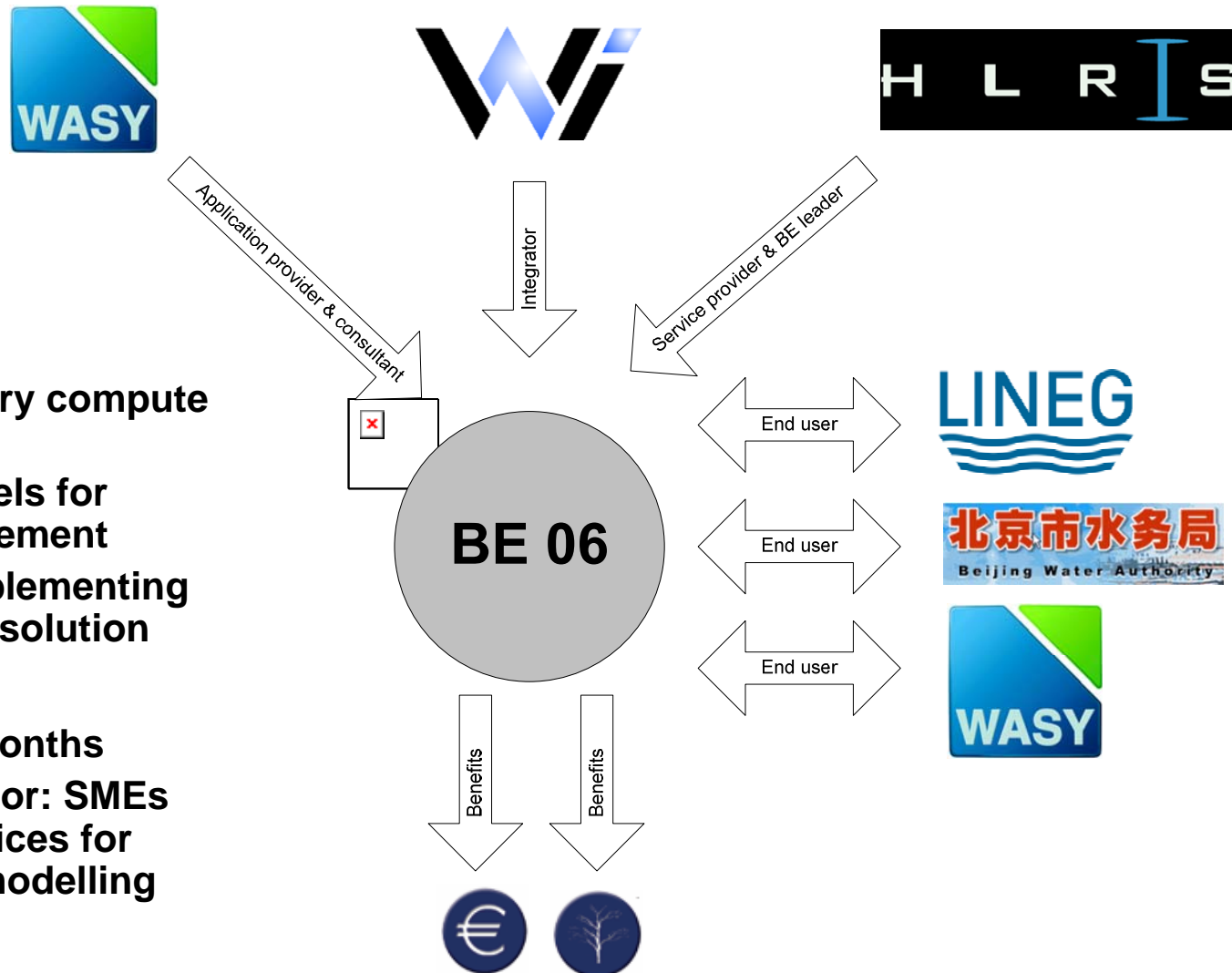




# **BE06 - Groundwater Modelling**

## **UNICORE Summit 2006, Dresden**

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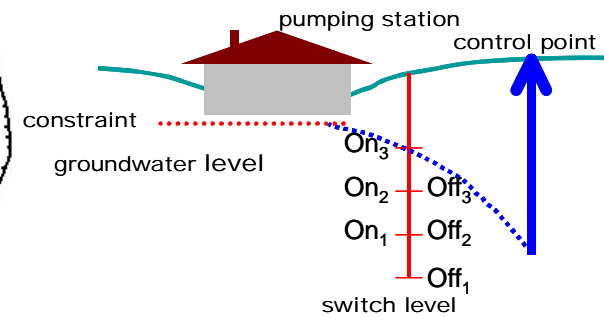
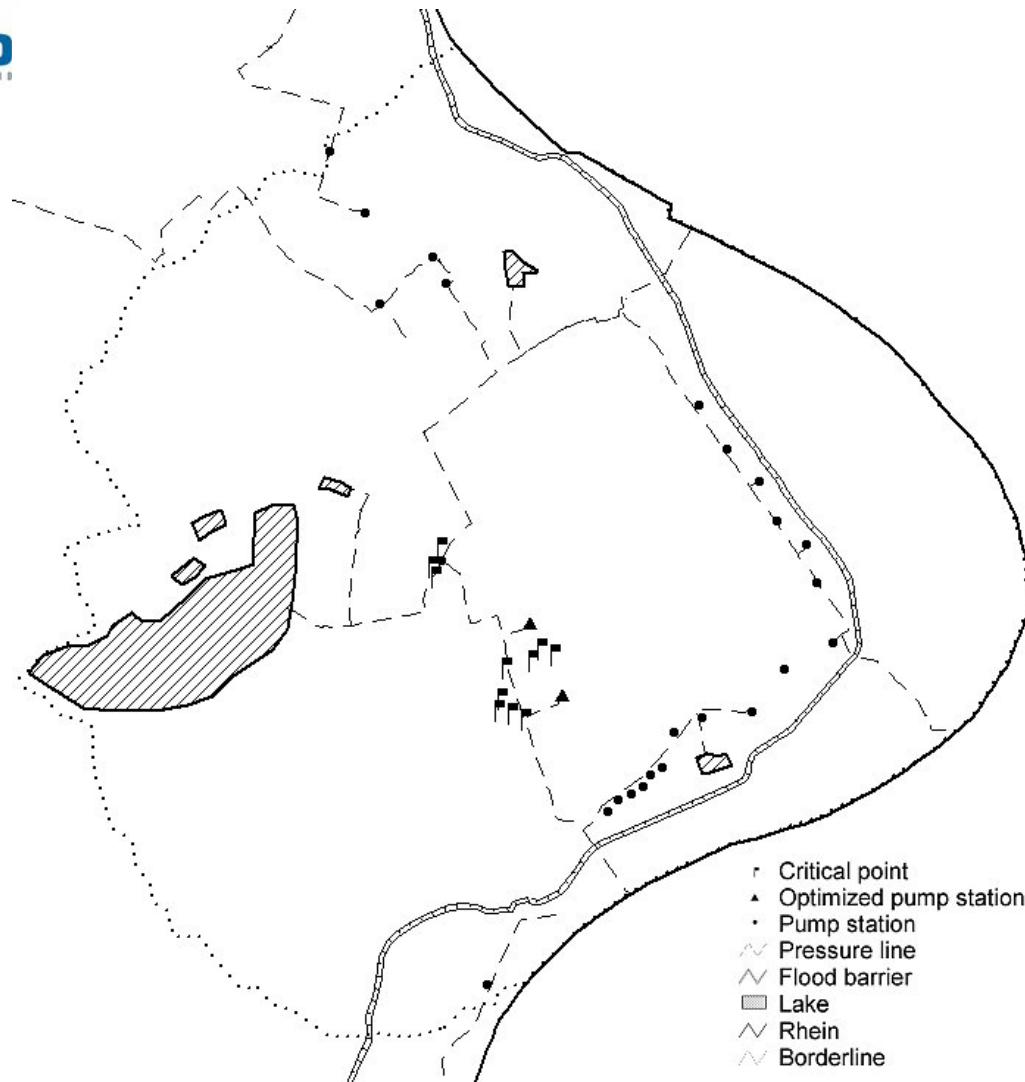
- **BE06 Goals:**

- Large scale multidisciplinary compute grid
- Business models for license management
- Designing, implementing and validating solution

- **BE Details:**

- Duration: 20 months
- Economic sector: SMEs providing services for groundwater modelling

# BE06 - The Problem



# Main Objectives and Challenges

## **Main objectives:**

- Integration of a new discipline on a grid infrastructure: “Groundwater Modelling”
- Combination of numerical simulation with mathematical optimization algorithms
- Integration of Grid based backup mechanisms and data stores
- Development of new business models to solve current license management problems

## **Challenges:**

- Economical suitability for service providers as well as for end customers
- New business models for collaboration in a multidisciplinary international grid-economy

# Expected Results & Impact

- **Anticipated output:**
  - Software package of industrial implementation for groundwater modelling
- **Benefits of using a Grid solution:**
  - Allow cost-effective and optimized solutions
  - Perform more complex computing tasks
  - Thereby provide better forecast possibilities for environmental state
  - Reduce ...
    - ... total cost of ownership
    - ... administrative overhead
    - ... computation time
- **Exploitation intentions:**
  - Adoption and usage of developed solution by other companies
  - Adaptation of developed solution to other scenarios



**THANK YOU**