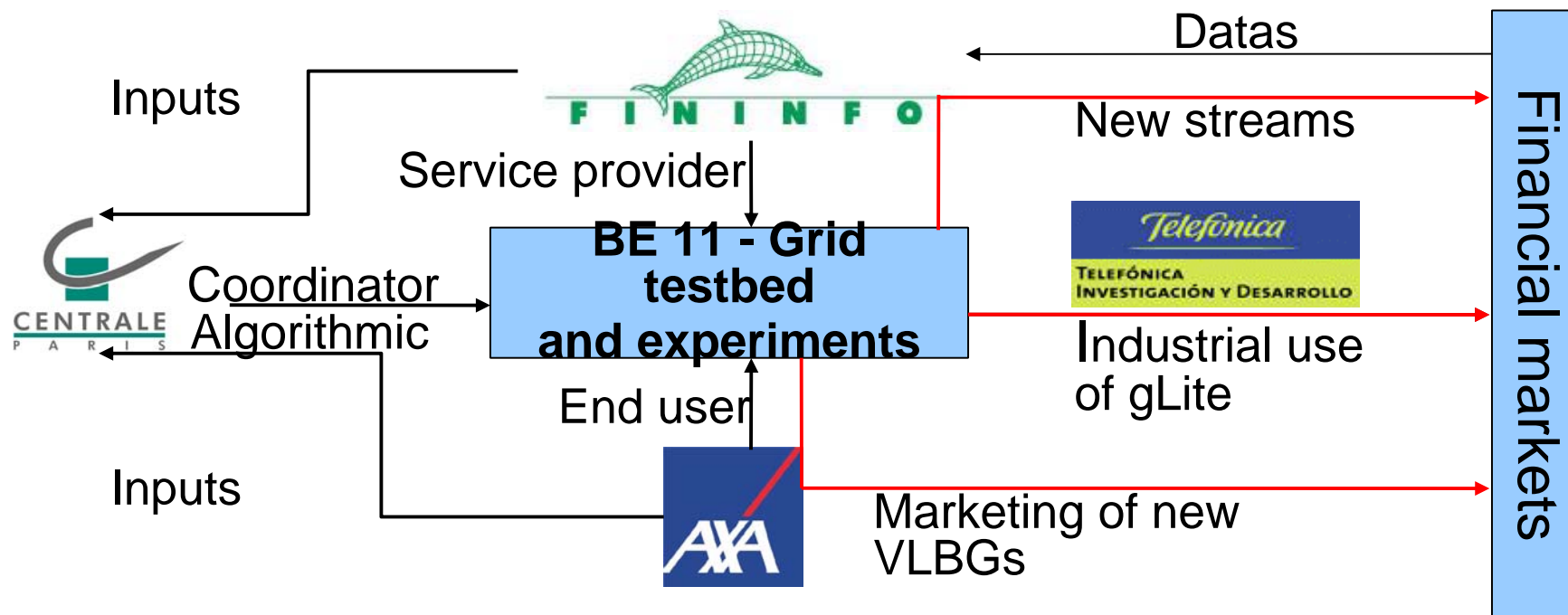




**EGEE'2006 – ITG Session
BE11- Risk Management in Finance**

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Grid Technologies for time constrained problems arising in finance and insurance sectors



An 18-month experiment to prove the benefits of the Grid for financial products pricing

Main Objectives and Challenges

The goal of BE11 is to exhibit the benefits of Grid Computing for financial problems requiring cumbersome computations (exotic equity derivatives, variable life benefits guarantees)

- **Business Innovation**
 - Integrate Monte Carlo based pricing kernels with Fininfo real time data streams
 - Achieve an accurate pricing of new products never traded before in Europe
- **Strengths**
 - Ideal complementarity of BE partners
 - CRSA's past experience in the field exotic pricing on Globus
- **Technical Challenge**
 - Prove the possibility of an industrial use of the gLite middleware

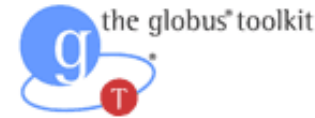
Expected Results & Impact

- **Outputs**
 - **Scientific** : Parallel algorithms for PDE pricing
 - **Technical** : Monte Carlo pricing kernels on two middlewares
 - **Business** : Integrated librairies for real-time pricing
- **Business Impact**
 - Increase the liquidity of the studied exotic products
 - Allow the the creation of new products

Any additional information about BE

- **Grid Technology**

- Globus Toolkit 4.0 and gLite 3.0
- Support from EGEE project



- **Computational Financial**

- Low-level “gridification” of financial algorithms
- Innovative PDE pricing for high-dimensional case

- **BE11 gLite training**

- gLite Installation, Paris, October 10-12
- Training in Paris, October 13
- API training, Paris November 15

Application needs

- **Organisation**
 - 2 middlewares
- **gLite fonctionnalités needed**
- **External testbed vs EGEE resources**
 - Installation at Ecole Centrale, then at BE11 partners'
- **Timescale**
 - Installation October 2006 at Ecole Centrale, later on at Fininfo and Axa
- **Training**
 - Training sessions on October 13 and October 15
- **Support**