

OPTIMATE

A simulation platform to assess existing and innovative electricity market designs in Europe

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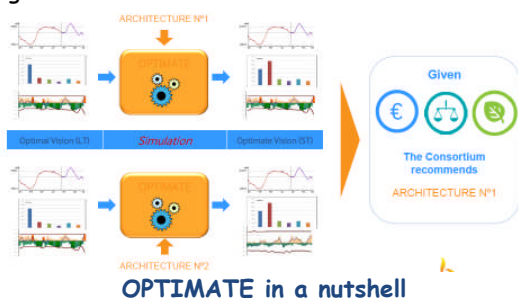
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The OPTIMATE platform in a nutshell

The OPTIMATE platform prototype (developed under the [EC FP7-funded OPTIMATE project](#)) focuses on electricity system and market designs modeling with a view to assessing existing and innovative market designs in order to allow better integration of massive intermittent generation dispersed in several regional power markets. It integrates state-of-the art knowledge on market designs simulation in Europe with the support of five TSOs active in the CWE area.

OPTIMATE can study various market and system rules on a representation of the Western European power markets and systems, modeling a large number of market players' configurations, in order to evaluate different design options based on the three EU energy pillars: economic efficiency, climate policy and security of supply. The redistributive effects among players and geographic areas can also be measured so as to highlight possible issues when implementing a new design.



The OPTIMATE Platform first training session (13-16 May, 2013)

The exploitation phase of the OPTIMATE prototype platform started in early March 2013: the first training session on the OPTIMATE software suite was co-organized on May 13th - 16th in La Défense (France).

This three and a half day session included: an Express session (May 13th, afternoon, May 14th) and an Advanced session (May 15th -16th). The Express session went through the functional aspects of the OPTIMATE platform (mostly on Day-ahead modules) and enabled participants to quickly use the platform. The Advanced session went much deeper into the platform behavior and scenarios' generation.

The training session was attended by *European energy regulators, transmission system operators and academics* involved in electricity market designs and "demonstrated how powerful the model is" (according to a participant).

Participants found the training sessions useful and comprehensive. They gained new insights into electricity market designs and the current OPTIMATE simulator functionalities in order to conduct their own studies.

Both the express and the advanced sessions allowed interactions between the trainers and the participants. The OPTIMATE development team got further feedback from potential users, which will be taken into account in future training sessions and the on-going platform industrialization process.

The OPTIMATE platform is meant to increase the dialogue among all electricity stakeholders on market design issues raised, for instance, by the massive introduction of renewables into power markets at pan-European level.

The fruitful discussions during the training session showed that the OPTIMATE platform can stimulate such cross-fertilization among different experiences and facilitate discussions on electricity market designs.

RTE, with the support of TECHNOFI, will ensure that the interactions started during the May 2013 training sessions will continue, primarily via the *OPTIMATE User Group*.



OPTIMATE at the European Energy Market (EEM13) International conference, 27-31 May 2013 Stockholm (Sweden)

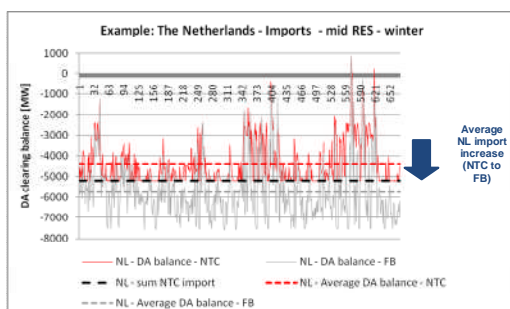
On May 27th-31st, 2013, the 10th edition of the *International Conference on the European Energy Market (EEM)* was hosted by the KTH Royal Institute of Technology in Stockholm, Sweden.

The EEM conference is a premier forum for the exchange of ideas, and for open and direct discussion on the development of the energy markets in Europe.

In the framework of the EEM13 (see [Program](#)), the OPTIMATE paper named "A Modelling Breakthrough for Market Design Analysis to Test Massive Intermittent Generation Integration in Markets: Results of selected OPTIMATE studies" was presented on May 28th, 2013 (F. Beaudé, A. Atayi and J.-Y. Bourmaud, RTE; V. Rious, M. Saguan and J.-M. Glachant, Florence School of Regulation, European University Institute; D. Graeber, TransnetBW AG; E. Rivero Puente, Institute for Research in Technology (IIT) - University Pontificia Comillas; L.Kitzing, P. E. Morthorst and S. T. Schröder, DTU Management Engineering, Risø Campus, Technical University of Denmark; T. Pagano and A. Vafeas, Technofi).

The paper describes the results of the first validation studies conducted with the tool during the OPTIMATE FP7 project. These studies deal with day-ahead market rules, load flexibility, cross-border management and intermittent renewable support schemes with a view to better integrating large amounts of renewable energy in Europe.

The OPTIMATE presentation was attended by several stakeholders from European institutions, industries, market agents and prominent academicians. It raised much interest about the OPTIMATE platform and fruitful discussions.



Example: Dutch imports (DA clearing balance) under different cross-border capacity models (mid-RES/winter)

First users' access to the OPTIMATE Platform

First access to the platform was opened for users who signed the OPTIMATE yearly license agreement.

Trainees attending the May 2013 training session were granted a one-month free access to the platform, right after the session.

Current users of the OPTIMATE platform include: European regulators, Transmission System Operators and academics interested in conducting studies about electricity market designs.

Some experienced users, i.e. users who conducted studies during the FP7 OPTIMATE project, also signed license agreements.

The cost of a yearly, standard OPTIMATE user license is 1700€ (VAT excluded).

A user license gives access to the OPTIMATE platform, user manuals and cases as well as users' groups meetings to share experiences and build an OPTIMATE network.

European energy regulators, transmission system operators, academics, and public entities interested in using the OPTIMATE platform are invited to contact info@optm.eu.



OPTIMATE Platform core



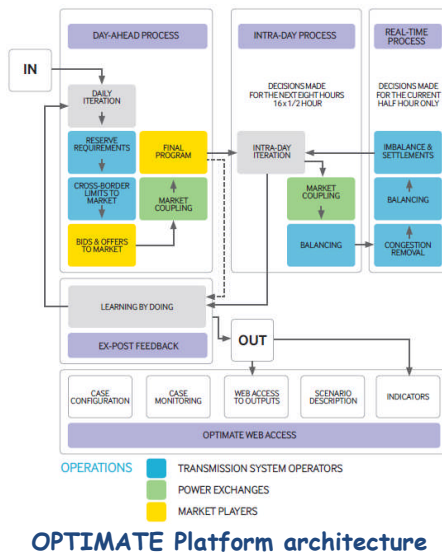
OPTIMATE platform update

The OPTIMATE platform prototype is regularly updated thanks to new developments and industrialization activities led by RTE and by users' feedback.

The July 2013 release includes several new features:

- Management of data confidentiality by users
- Implementation of a simplified Imbalance and Settlements module ;
- Flow-Based and learning improvements (Day-Ahead process).

Current platform users are granted access to this new release **free of charge**.



Don't miss!

4th-7th November 2013, OPTIMATE training session

A second OPTIMATE training session is planned from November 4th to 7th 2013 in Paris area (France).

The session addresses energy regulators, transmission system operators, academics, and public entities involved in electricity markets designs who deal with issues such as:

- *How do different variable RES feed-in regimes affect the electricity system efficiency?*
- *Will flow-based market coupling outperform NTC coupling?*
- *How do CO₂ prices affect the whole system?*

This three and a half day training course includes two sessions:

- Express session: November 4th (early afternoon) - November 5th 2013
- Advanced session: November 6th- November 7th 2013

The costs of training session (per trainee) are:

- Full three and a half day training package: 1980€ (VAT excluded)
- Express session: 1350 € (VAT excluded)

The attendance of the Express session is required in order to participate in the Advanced session.

In order to ensure a good training quality, the number of participants is limited. Register now!

Registrations are open until October 18th 2013

[Readmore](#)

OPTIMATE FP7 EC-funded project application for EEGI Label

The OPTIMATE FP7 project applied for the EEGI (European Electricity Grid Initiative) Label in 2013.

The [EEGI Label](#) acknowledges that a specific project is in line with the spirit of the EEGI (i.e. knowledge sharing of results, system level innovation, etc.) and an EEGI Functional Objective as specified in the EEGI Research and Innovation Roadmap.

It provides a methodology for identifying the list of projects that form part of the EEGI Roadmap.

EEGI labeled projects will be linked to the EEGI and included in its communication materials.

For further information concerning this publication, please contact: info@optm.eu

OPTIMATE (An Open simulation Platform to Test integration in MARkeT design of massive intermittent Energy) was an FP7 collaborative research and demonstration project (2009-2012).

The research and demonstration activities leading to the existing prototype simulation platform received financial support from the Seventh Framework Programme [FP7/2007-2013] under DG ENERGY grant agreement n° 239456

OPTIMATE FP7 EC funded Project consortium

