

ENEL CONTRIBUTION TO THE IMPROVEMENT OF THE ITALIAN CERTIFICATION SYSTEM

Procurement and Services Department of Enel S.p.A.
Market, Infrastructures and Network Procurement Unit – QMS
San Francisco - march 28th, 2007



1. COMPANY PROFILE
2. ENEL ROLE IN THE ITALIAN CERTIFICATION SYSTEM
3. ENEL SURVEY REGARDING QMS CERTIFICATION RELIABILITY
4. COLLABORATION WITH CERTIFYING BODIES
5. COLLABORATION WITH SINCERT
6. COLLABORATION WITH OTHER BIG PURCHASERS

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1. Company profile - Enel in the world

Europe North and Latin America

- a company focused on electricity and gas
- operates in Europe, North and Latin America, with more than 30 million customers and 53 GW generation capacity
- listed on the stock exchanges of New York and Milan
- largest utility by market capitalization in Europe
- 60,000 employees.

Enel aims to be the most efficient, market driven, quality focused provider of power and gas, creating value for customers, shareholders and people.

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2. Enel Role in the Italian Certification System

- First activity on QS started in the 70's with nuclear power plants management
- Strong contribution to certification system's birth and growth by:
 - providing auditor education and training
 - promoting of several certification field organizations
- Enel representative in Sincert and Certifying Bodies (CBs)
- Strong belief in third party certification, however expected quality should be guaranteed.

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3. Enel Survey regarding QMS certification reliability

Utilization of Certification System

If the third party QMS certification allowed a **systematic** substitution of suppliers evaluation (in qualification and surveillance stage) by ENEL with a certification, it would derive a dramatic cost reduction for ENEL and suppliers as well with mutual benefit.

The **systematic** substitution of a direct Enel evaluation of the QMS with the third party certification is **conditioned to certification reliability and its adequacy to Enel needs**.

Therefore a survey was needed to measure certification reliability.

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3. Enel Survey regarding QMS certification reliability

Survey objective

- To check ISO 9001 certified suppliers for conformity with the standard;

Survey extension

- Companies verified: Enel suppliers of components for the electric distribution grid, verified through surveillance audit
- Period considered: Jan. 2000 – Dec. 2004

Data sources

- ENEL suppliers list
- Enel Audit reports
- Sincert Database and CBs' databases
- Data on non conformity nature (nc reports)

Facsimile of audit report



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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers	Use: <small>admission</small>
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3. Enel Survey regarding QMS certification reliability

Number of audits and suppliers considered
The survey considered 312 audits of 131 suppliers, 115 (88%) of which certified.

Results classification
Satisfactory: situations meeting or exceeding our expectation.
Insufficient: situations that, even though considered still compatible with a certified QMS, in terms of an acceptable number and type of nonconformities, are worrying since they were found in long-certified suppliers where one would expect a higher degree of conformity.
Unacceptable: situations inadequate for assuring product conformity with ENEL requirements and contract specifications, and therefore not compatible with a certified QMS.

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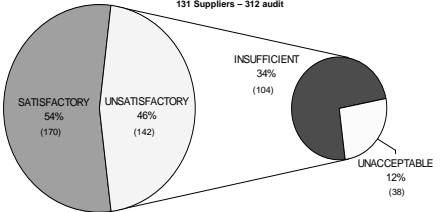


Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers	Use: <small>admission</small>
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3. Enel Survey regarding QMS certification reliability

Survey results related to the period Jan. 2000 – Dec. 2004 (certified and non certified suppliers)

CERTIFIED AND NON CERTIFIED SUPPLIERS
131 Suppliers – 312 audit



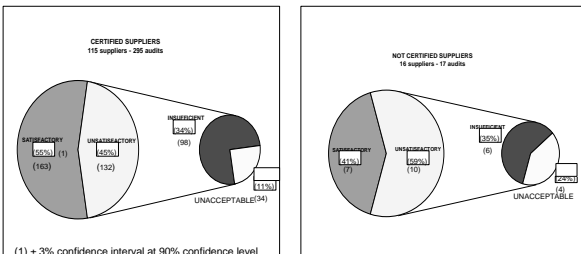
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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers	Use: <small>admission</small>
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3. Enel Survey regarding QMS certification reliability

Survey results related to the period Jan. 2000 – Dec. 2004



(1) ± 3% confidence interval at 90% confidence level

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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers	Use: <small>admission</small>
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3. Enel Survey regarding QMS certification reliability

Survey results

- Collaboration with CBs** → Guidelines applicable by CBs when they audit QMS of Enel suppliers
- Collaboration with Sincert** → Revision of Sincert "Regulation for CBs accreditation"
Guidelines regarding contracts between CB and their clients
- Collaboration with Big Purchasers** → Big purchasers certification scheme definition

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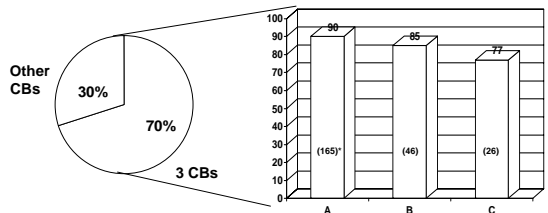


Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers	Use: <small>admission</small>
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3. Enel Survey regarding QMS certification reliability


Survey results related to the period Jan. 2000 – Dec. 2004

Verified certifications **CB reliability level**



(*) Number of audits

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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers	Use: <small>admission</small>
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3. Enel Survey regarding QMS certification reliability

Possible reasons why second and third party QMS assessments are not equivalent. ENEL (second party) auditors :

- more man days;
- more focused on product realization;
- are experts in high, medium and low voltage equipment for electric energy distribution grid;
- give more importance to nonconformities impacting product quality and reliability;
- directly select areas and samples to audit and verify independently to those suggested by the supplier;
- act as clients of the supplier organization being audited

CB (3rd party) auditors act as suppliers of the organization to be audited and this suggest a possible conflict of interest in certification process.

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Company profile | Enel Role in Italian Certification System | Enel survey | Collaboration with CBs | Collaboration with Sincert | Collaboration with Big Purchasers | Uso: interno

4. Collaboration with Certifying Bodies

Guidelines for CB to audit ENEL suppliers

We prepared guidelines for CBs:

- requiring the use of competent auditors
- providing criteria for selecting samples to verify.

We provided each CB with:

- the guidelines
- the list of our suppliers they respectively certified.
- Enel document: "Supply condition"

The three principal CBs agreed on the need to:

- specialize a suitable number of their auditors
- use the guidelines by the end of 2004

The Guidelines are applicable to audit the suppliers of **ENEL Distribution**.

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Company profile | Enel Role in Italian Certification System | Enel survey | Collaboration with CBs | Collaboration with Sincert | Collaboration with Big Purchasers | Uso: interno

4. Collaboration with CBs

Check list

Taken for granted that CB auditors already have technical basic competence in electromechanical components designed for the electricity distribution grid, ENEL provided specific check lists, prepared by competent personnel. Check lists contain the most significant controls.

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Company profile | Enel Role in Italian Certification System | Enel survey | Collaboration with CBs | Collaboration with Sincert | Collaboration with Big Purchasers | Uso: interno

4. Collaboration with CBs - Follow up

At the beginning of 2007 took place the planned verification aimed to determine the effectiveness of actions implemented since the end of 2004.

The adopted criteria (data sources, involved auditors, evaluation methodology survey procedure) were the same of those used in the previous verification.

As regards the verification extension, it has been taken into consideration suppliers audited in the period **Jan. 2005- Oct. 2006**, namely **102 audits on 93 suppliers, 88 of which certified (equal to 95%)**.

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Company profile | Enel Role in Italian Certification System | Enel survey | Collaboration with CBs | Collaboration with Sincert | Collaboration with Big Purchasers | Uso: interno

4. Collaboration with CBs - Follow up

Comparison between verification results related to Jan. 2000 - Dec. 2004 and those related to Jan. 2005 - Oct. 2006

Period	Satisfactory	Insufficient	Unacceptable
2000-2004	55%	34%	11%
2005-2006	55%	40%	5%

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Company profile | Enel Role in Italian Certification System | Enel survey | Collaboration with CBs | Collaboration with Sincert | Collaboration with Big Purchasers | Uso: interno

4. Collaboration with CBs - Follow up

Comparison between verification results related to Jan. 2000-Dec. 2004 and those related to Jan. 2005 - Oct. 2006

Category	2000-2004 (%)	2005-2006 (%)
A	90% (165)	92% (39)
B	85% (46)	94% (16)
C	77% (26)	100% (8)

16/23 Inq. Carmine Reda (*) number of audits

Company profile | Enel Role in Italian Certification System | Enel survey | Collaboration with CBs | Collaboration with Sincert | Collaboration with Big Purchasers | Uso: interno

4. Collaboration with CBs - Follow up

New meetings with CBs

In order to make their audit closer to our need, all of the three CB gave their availability to:

- let Enel auditors participate to their audits as observers
- invite Enel experts to their auditor calibration days
- make a conjoint examination of Enel individual reports, in order to better understand the different approaches
- analyze different interpretations of the non conformities gravity

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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers
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5. Collaboration with SINCERT
Power of the Accreditation Body

Enel urged a revision of the Regulation for CB Accreditation to give Sincert more power.


Action undertaken
 SINCERT document "Regulation for CB Accreditation" was revised and approved on Oct. 2005.

It includes clearer requirements related to:

- ✓ Competence of auditors, audit team, and members of certification Committee
- ✓ Audit duration
- ✓ Certification issued in spite of presence of major nonconformities or of law violations
- ✓ Separation between certification and consultancy activity
- ✓ Possibility of additional audits
- ✓ Certification scope
- ✓ Infringement of the above requirements implies sanctions;
- ✓ Possibility for Sincert to require CB to suspend the certification of an offending CB client.

It is needed Sincert exerts his power and systematically verifies the compliance of all CBs to these requirements.

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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers
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5. Collaboration with SINCERT
Requirements in contracts between CB and their customers

Enel and, independently, the Associations of the major CB has pointed out there was too much homogeneity among the standard contract clauses of the different CBs.


Action undertaken
 SINCERT, with the contribution of CB Associations, Enel and other stakeholders prepared Guidelines for a correct and homogenous management of the relation between accredited CB and their customers. The Guidelines were published on Sincert web site on 23rd January, 2006.

According to the Guidelines, contracts must include:

- ✓ CB statement about its status of accreditation to certify in the specific sector
- ✓ CB statement about impossibility to assure positive result and certification
- ✓ Provision for access to the Org. premises and relevant information also for AB auditors
- ✓ Clarification about CB and Organization accountability as far as the compliance to the applicable regulatory requirements
- ✓ Obligation for the organization to inform CB about any relevant judicial proceeding
- ✓ Clear definition of contractual number of audits, man days and fees
- ✓ Possibility of additional audits

It is needed Sincert systematically verifies the compliance to these requirements.

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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers
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6. Collaboration with other big purchasers

To activate a more effective action, Enel promoted a collaboration with other Italian Big Purchasers, all feeling the need for it.

In the first meeting all the attendees agreed to the opportunity to keep meeting in order to:

- share the verification results of purchased products quality and suppliers QMS certification (through qualification and/or surveillance audits)
- work out provisions aimed to improve the certification reliability.

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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers
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6. Collaboration with other big purchasers

We explored several possibilities:

- To create a proprietary scheme;
- To qualify CBs with reference to a specific set of requirement, in order to select the reliable CBs;
- To create a certification scheme maintaining ISO 9001 as reference standard, enforcing conformity assessment requirements and adding further stricter requirement.

Preferred

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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers
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9. Collaboration with other big purchasers

Some critical topics have been identified:

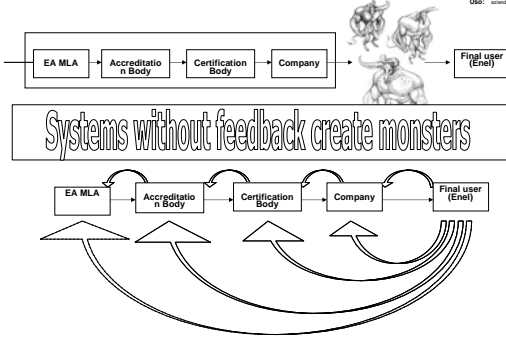
- clearer requirements for auditor work experience in the specific sector and its accurate verification (how many years and how recent the experience has to be)
- auditor rotation
- effective use of competent auditors
- audit focused on process approach
- fulfillment of required audit time
- non conformity grading
- veto power exertion in CBs' certification committees
- witness audit (participation as observer to audit carried out by CBs)
- prerequisite for certification
- sampling criteria

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Company profile	Enel Role in Italian Certification System	Enel survey	Collaboration with CBs	Collaboration with Sincert	Collaboration with Big Purchasers
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Systems without feedback create monsters



For a system to work properly active feedback is needed at every step of the process, above all, focusing on the final user's feedback breakdown at each level.

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Company profile	Background knowledge	Enel policy	Enel survey	Collaboration with CBs	Follow up	Collaboration with Sincert	Collaboration with Big Purchasers
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Data: 2006/06


1. Company profile

GENERATION
42.047 MW

- +36.837 MW Thermal
- +14.318 MW Hydroelectric
- +562 MW Geothermal
- +200 MW Wind and other renewable


TRANSMISSION

Enel owns 9% of Terna that owns 90% of the transmission assets of Italy's national electricity grid.




GAS

Import, distribution and supply of 5,2 billion m³ to nearly 2 million Italian customers.
Low and medium pressure gas pipelines: 30.000 Km



DISTRIBUTION


82% of the total electricity distributed in Italy



SUPPLY

•Energy distributed 261.2 TWh
•Nearly 30 million customers
•Electric lines 1.006,129 Km

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Company profile	Background	Enel policy	Enel survey	Collaboration with CBs	Follow up	Collaboration with Sincert	Collaboration with Big Purchasers
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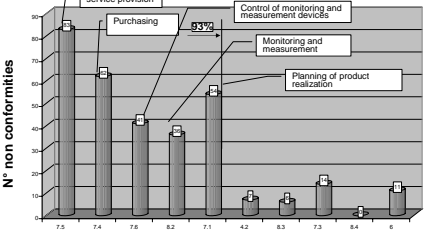
Data: 2006/06

6. Follow up

Verification results related to 2005-2006

NC distribution per item of ISO 9001: 2000 Standard

DISTRIBUZIONE IN SERVIZIO DELLA NORMA
Periodo gennaio - giugno 2006



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ISO 9001:2000 Requirements

