



25th world gas conference
"Gas: Sustaining Future Global Growth"

Adding Value to Plant Performance

Integrated Management System on LNG Terminals

By: Olivier DENOUX, HSE Manager of ELENGY

Date: 06-Jun-12

Venue: Plenary Theatre



Patron



Host



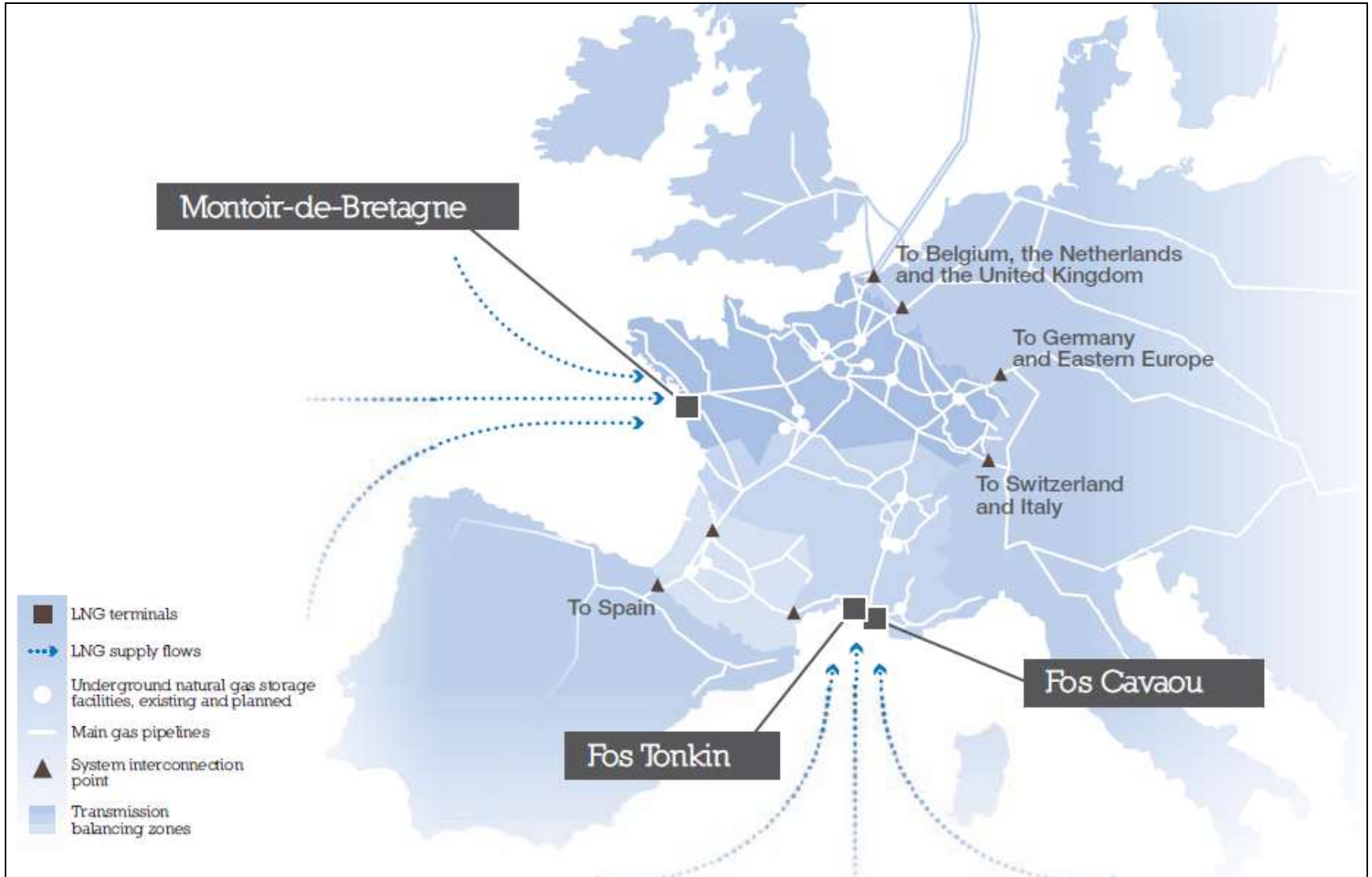
Host Sponsor



Summary

- Presentation of Elengy
- Why an integrated management system on LNG terminals?
- The choice made by Elengy
- The results
- Conclusions







Montoir-de-Bretagne

Fos-Tonkin

Fos Cavaou



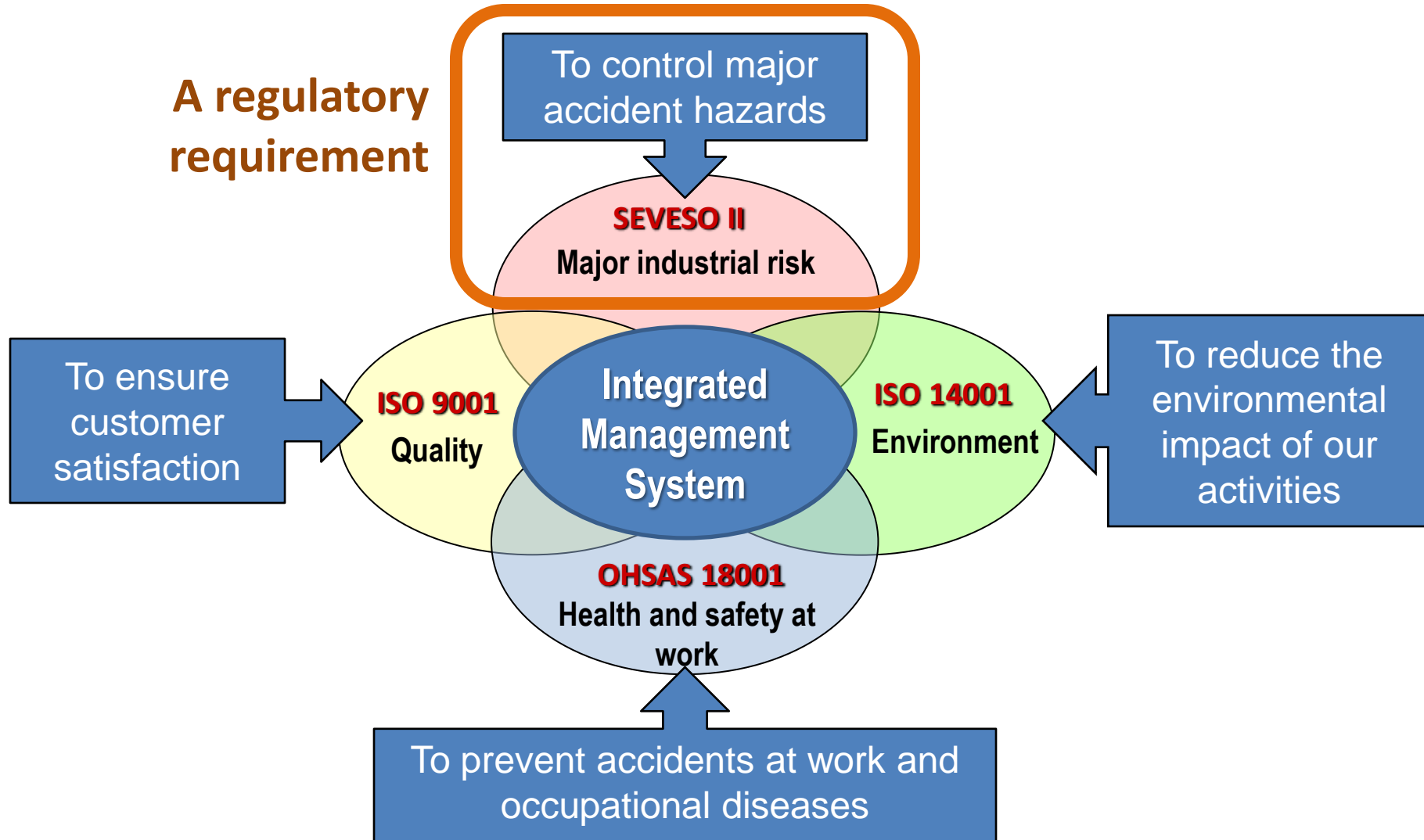
Start in 1980
 Capacity: 10 Bm³/year
 Tank capacity: 360 000 m³
 Ships up to 267 000 m³

Start in 1972
 Capacity: 5.5 Bm³/year
 Tank capacity: 150 000 m³
 Ships up to 75 000 m³

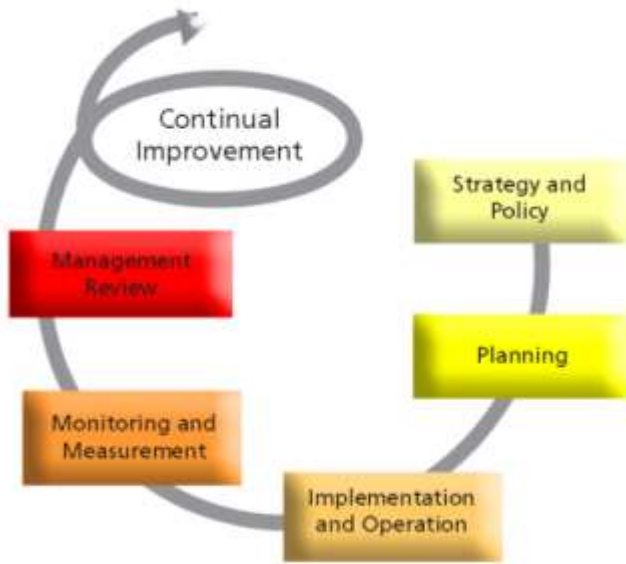
Start in 2010
 Capacity: 8.25 Bm³/year
 Tank capacity: 330 000 m³
 Ships up to 267 000 m³

72% owned by Elengy
 Operated by Elengy through an O+M agreement

Why an integrated management system on LNG terminals?



The choice made by Elengy



- ISRS© - Det Norske Veritas (DNV)
 - ✓ A collection of good practices and an assessment tool
 - ✓ Initially based on Frank E. Bird's works
- Structure based on 15 processes embedded in a continuous improvement loop
- Includes the main standards:
 - ✓ ISO 9001
 - ✓ ISO 14001
 - ✓ OHSAS 18001
 - ✓ OSHA 1910.119 – Process Safety Management
 - ✓ Seveso II Directive – 96/82/EC
- Level of performance between 1 and 10
 - ✓ Target level of performance decided by management team
 - ✓ **Target for French LNG terminals: 6 or 7**

The last decade – A period of major changes for the French LNG terminals

1998

2009

2011

2 LNG terminals

Operated by regional entities, parts of a public vertically integrated company

One “internal” customer

Low number of different ships

Organisational changes

Evolution of the market

Strengthening of regulations

3 LNG terminals

Operated by a small subsidiary of a private international group

More than 20 customers

Large number of different ships

THE RESULTS

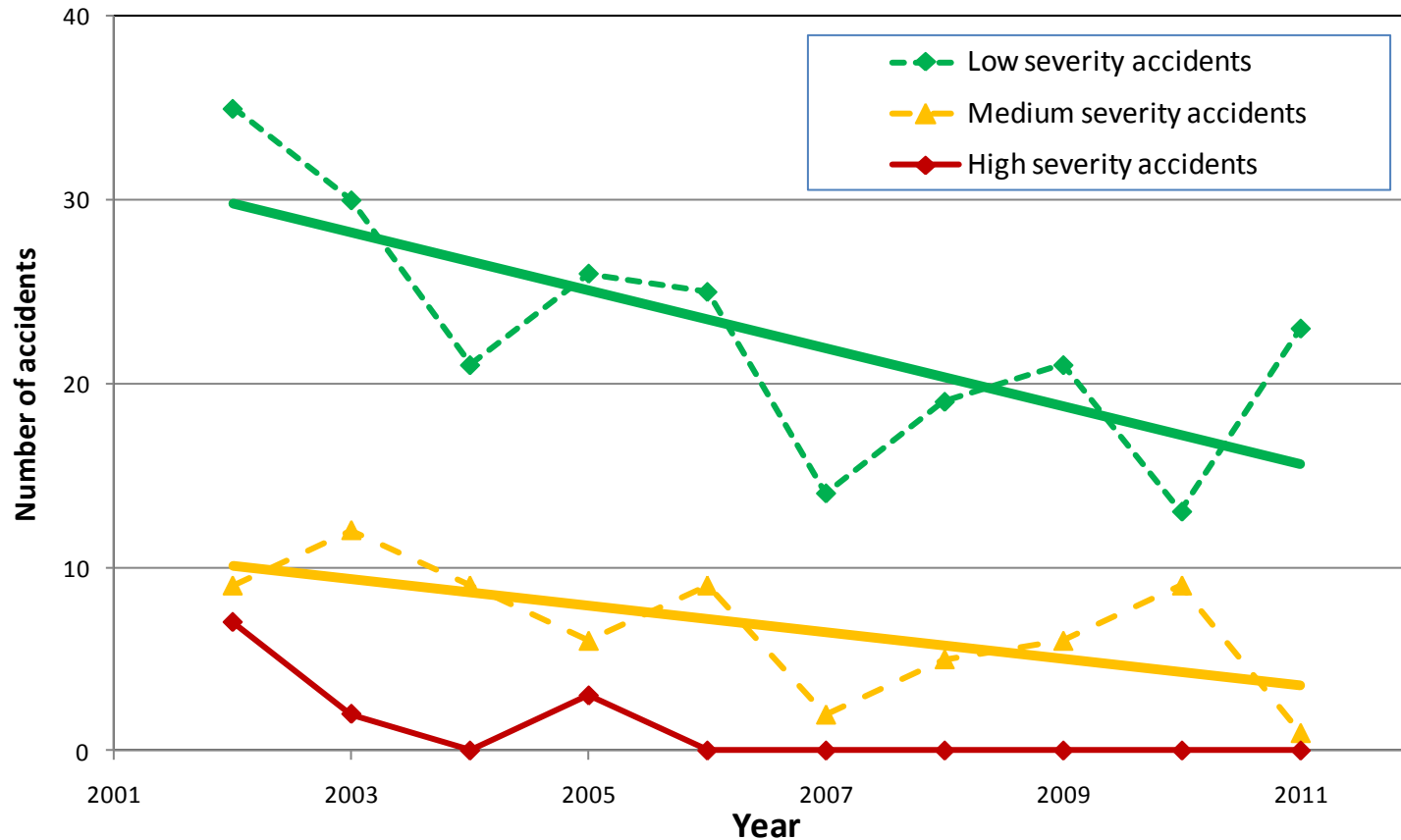
Improvement of safety

1998

2009

2011

Continuous decrease of the number of accidents at Montoir LNG terminal



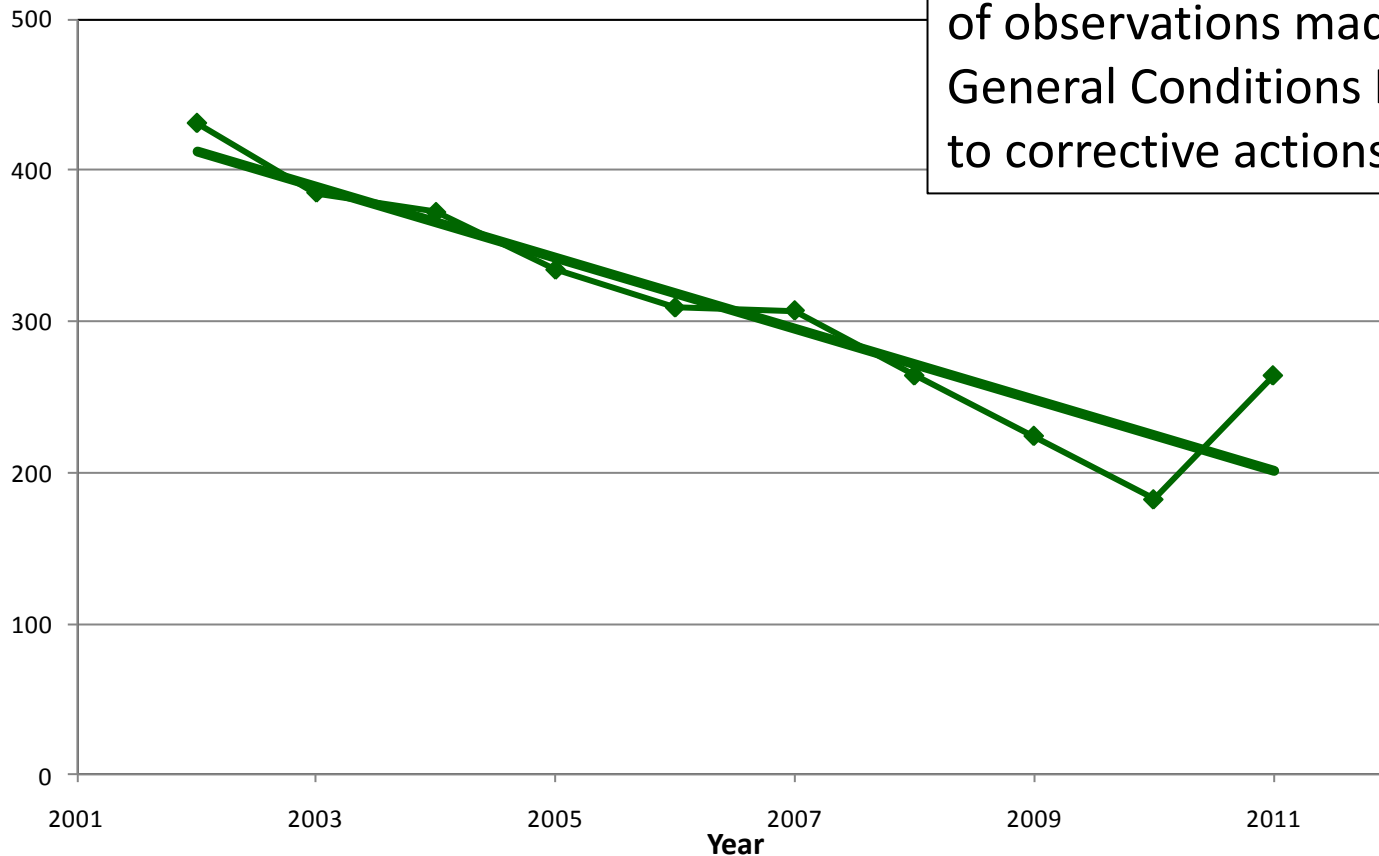
THE RESULTS

Improvement of general conditions

1998

2009

2011



Continuous decrease of the number of observations made during General Conditions Inspections due to corrective actions put in place

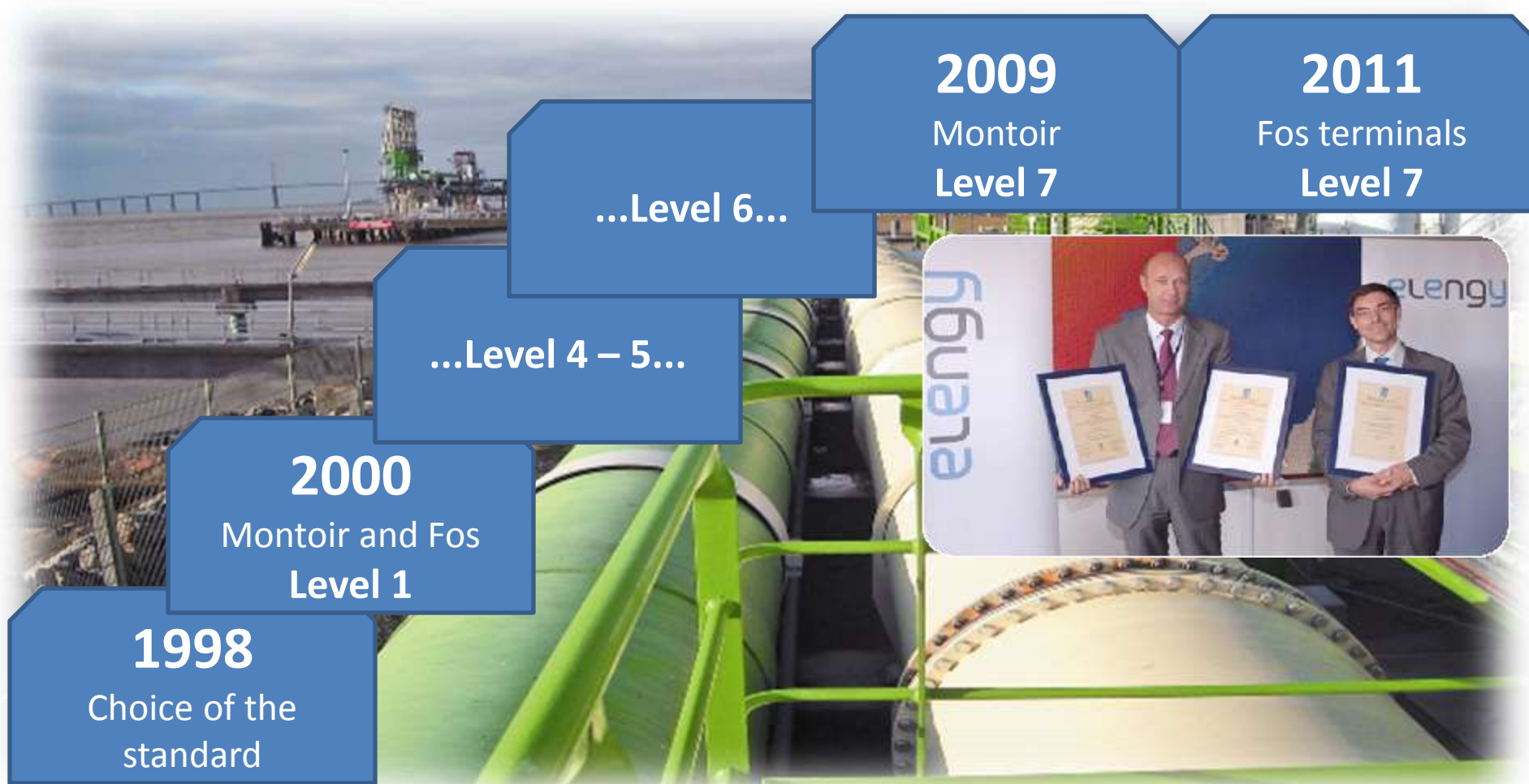
THE RESULTS

Evolution of the ISRS© level

1998

2009

2011



CONCLUSION



Establishment of an integrated system

- ✓ To comply with a regulatory requirement (Seveso II European Directive)
- ✓ To comply with standard based on an improvement loop (ISO 9001 / ISO 14001)
- ✓ To enable a better identification of risks
- ✓ To have a better control of these risks

Since 1998 and despite major organisational changes, ISRS© has been the point of reference, adding value to plant performance whatever the reorganisations

*THANK YOU FOR YOUR
ATTENTION...*

GOOD SAFETY IS
GOOD BUSINESS

