



Safety Performance Indicators in Gas Distribution:

A door opener for public acceptance
and guideline for risk-based improvements

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right or wrong ?

„Gas safety performance indicators
and accident statistics
are boring!“



right or wrong ?

~~„Gas safety performance indicators
and accident statistics
are boring!“~~

Gas safety is like football !
fascinating and goal-oriented !



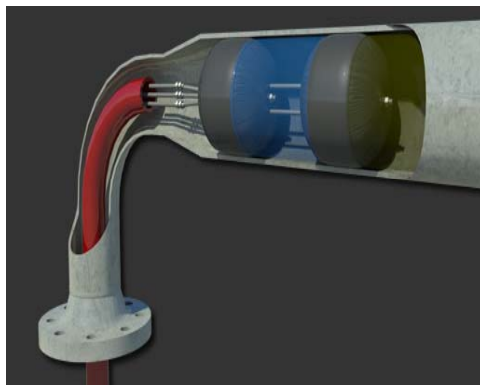
Who will win the championship ?

- The technical superior player
- The technical superior company



Who will win the championship ?

- The fitter player
- The fitter company



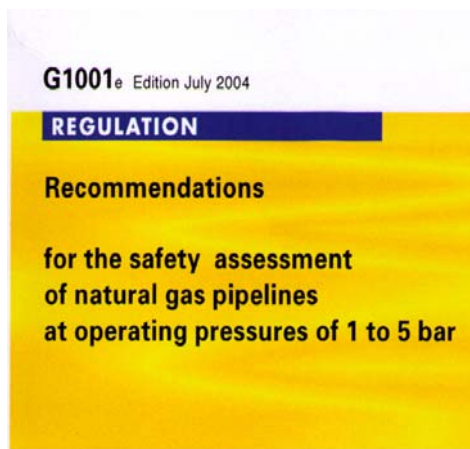
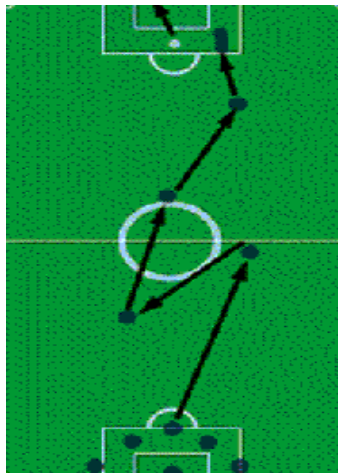
Who will win the championship ?

- The better teamwork
- The better association



Who will win the championship ?

- The cleverer tactics
- The cleverer methods



Who will win the championship ?

- The less penalties
- The less gas laws



Law on Gas Distribution Safety



Who will win the championship ?

- The better identification of the fans
- The better safety feeling of the public





Fundamental question:

**How to make gas safety obvious
to authorities and to the public?**

Strategies of a gas association and of a football club:

As a gas association we are:

- **partner**
in fixing safety goals
- **performer**
in safety methods and training
- **winner**
in adapted safety assessments
- **communicator**
of safety performance
- **leader**
in further safety progress

As a football club we are:

- **partner**
in fixing the ch'ship mode
- **performer**
in playing methods
- **winner**
in performance assessm.
- **communicator or celebrator**
of goals and victories
- **leader**
in improving playing skills

Steps for installing SPI

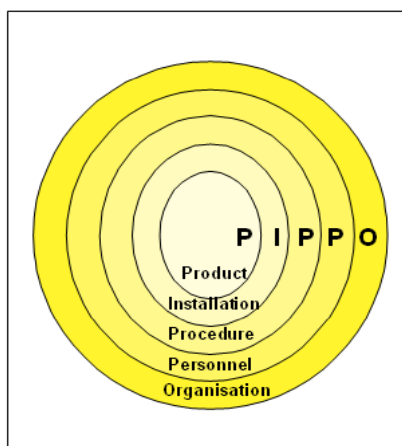
Step 1: Identify the relevant safety influences

Step 2: Collect safety statistics for relevant influences

Step 3: Evaluate safety performance indicators

Step 4: Show safety performance indicators

The Gas Safety Onion



Steps for installing SPI

Step 1: Identify the relevant safety influences

Step 2: **Collect safety statistics for relevant influences**

Step 3: **Evaluate safety performance indicators**

Step 4: Show safety performance indicators

American Gas

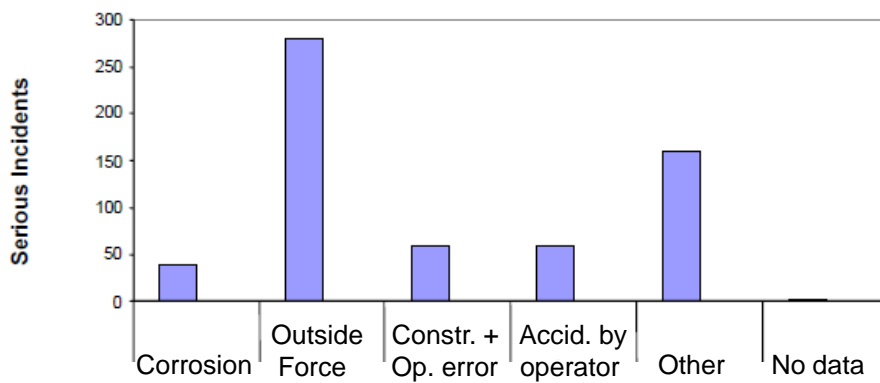


Foundation

Safety Performance and Integrity of the Natural Gas Distribution Infrastructure

January 2005

**Distribution Serious Incidents (601 Total)
By Cause
Totals for Years 1990-2002**

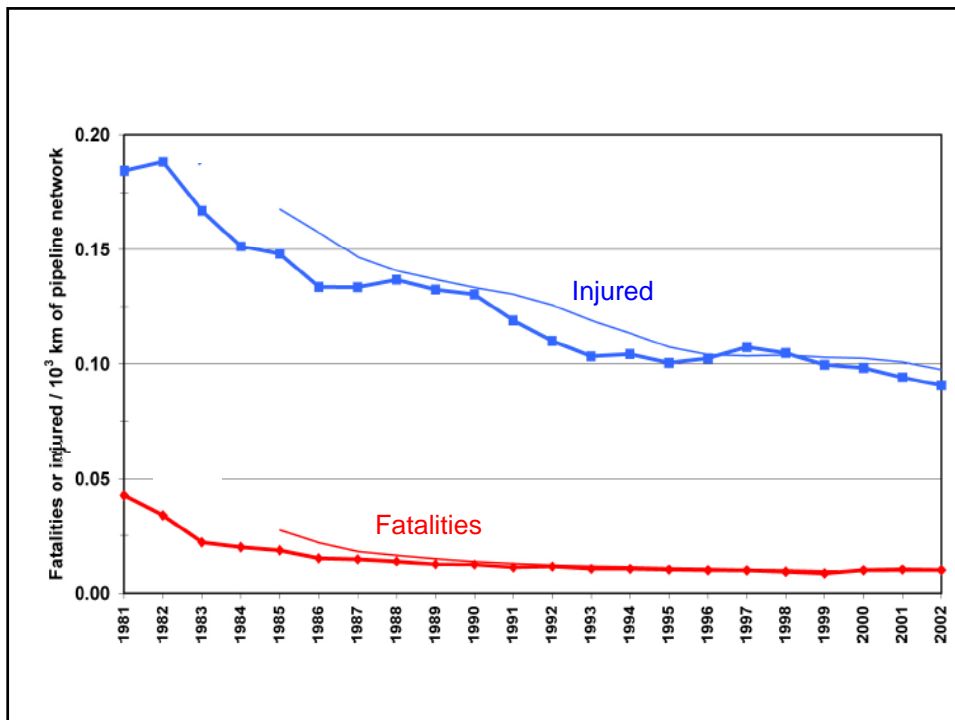


PAUL SCHERRER INSTITUT



**PSI Bericht Nr. 05-01
January 2005
ISSN 1019-0643**

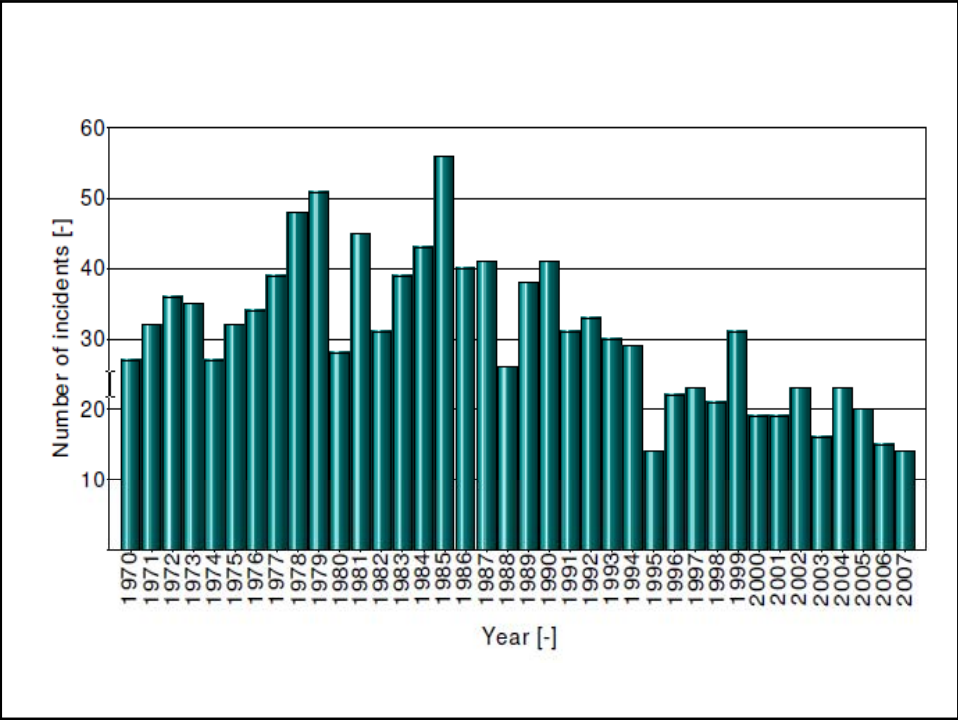
**Comparative Assessment of
Natural Gas Accident Risks**



7th EGIG-report
7th EGIG-report
 1970-2007

GAS PIPELINE INCIDENTS

7th Report of the European Gas Pipeline Incident Data Group



EGAS = European Gas Safety Statistics

Steps for installing SPI

Step 1: Identify the relevant safety influences

Step 2: Collect safety statistics for relevant influences

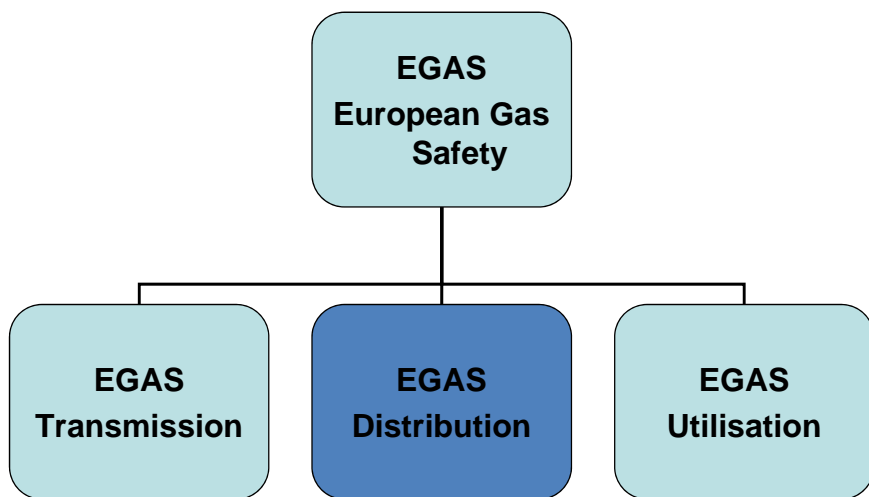
Step 3: Evaluate safety performance indicators

Step 4: **Show safety performance indicators**

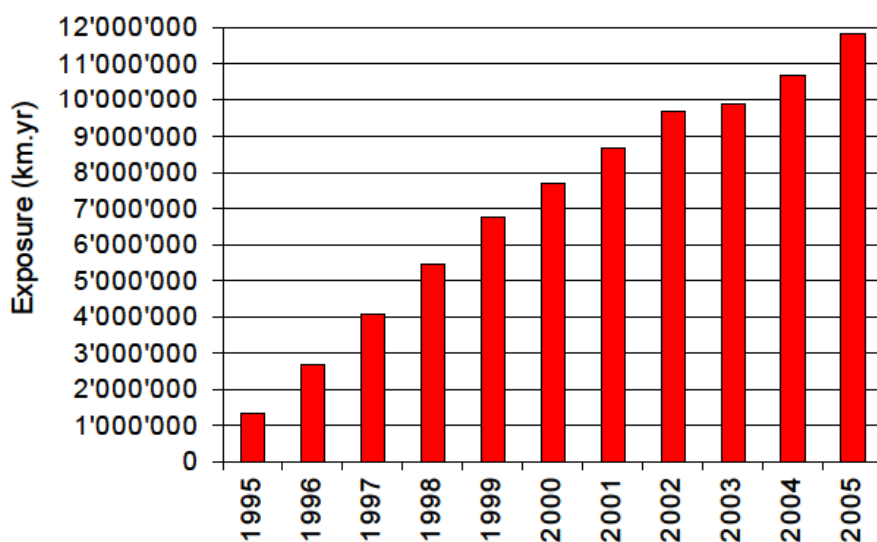
Main findings for gas safety communication:

- Using excellent gas safety statistics only internally is an unacceptable PR weakness today
- Talking about gas safety performance sounds much better than talking about accidents
- External safety communication has to be based on irreproachable and representative statistical facts
- Highlighting only a part of the gas chain is politically no longer accepted
- Showing improving Safety Performance Indicators over many years improves credibility

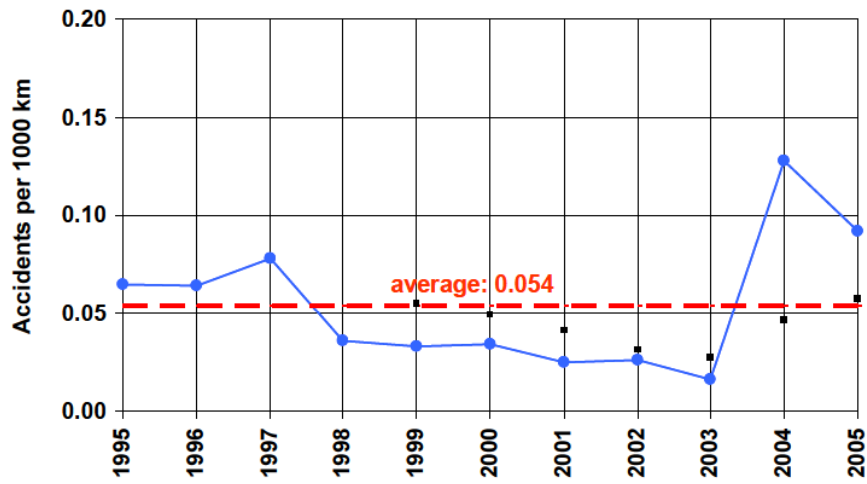
Structure of European Gas Safety Statistics



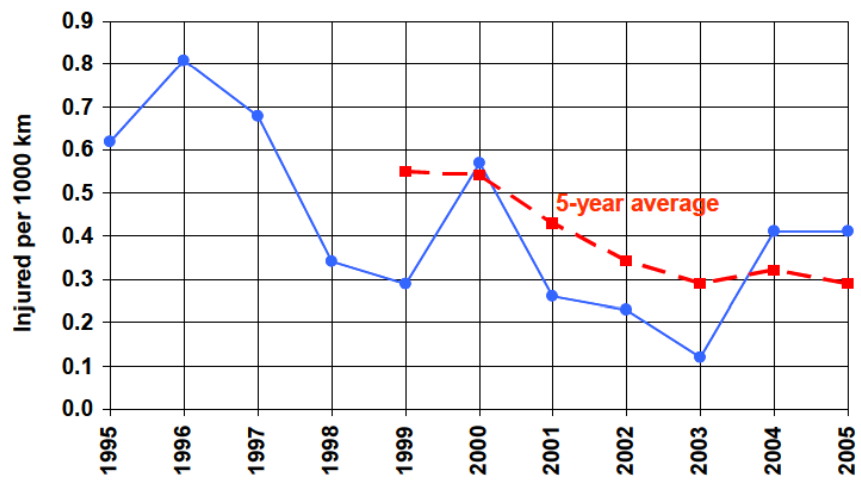
Cumulative exposure of EGAS Distribution



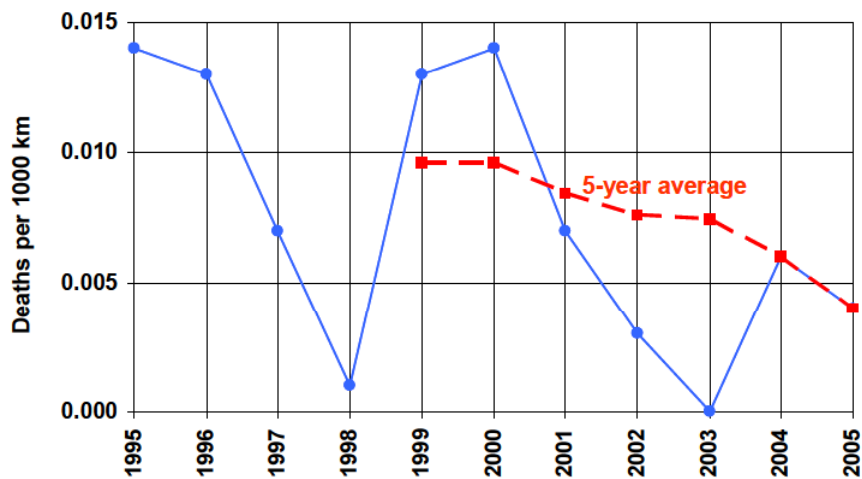
Number of accidents in EGAS Distribution



Number of injuries in EGAS Distribution



Number of fatalities in EGAS Distribution



24th World Gas Conference
ARGENTINA | 2009
5-9 October

The Global Energy Challenge:
Reviewing the Strategies
for Natural Gas

Conclusions out of SPI considerations:

Conclusion A :

There is no better and no more convincing proof of gas safety than representative Safety Performance Indicators



Conclusions out of SPI considerations:

Conclusion B:

*European Safety Performance Indicators
in the EGAS-system show excellent values.*

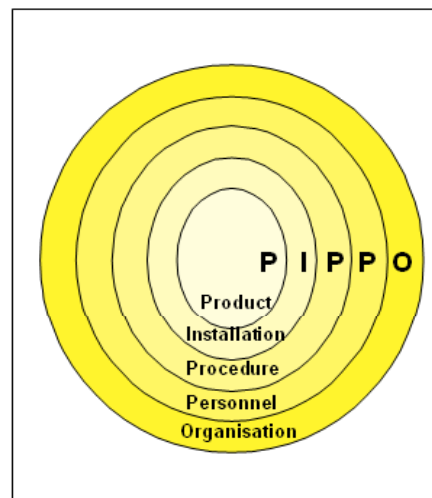
Excellent SPI values are a valuable asset.



First appeal:

**Remember
the Gas Safety Onion!**

→ Think about it
and make use
of all the shells !





Second appeal:

**Install Safety Performance Indicators
in your company !**

→ Convince authorities
and improve yourself !





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Thank you for your attention!

And if you have any question.....

.... please contact me personally after this session