# Diagnostics of Gas Transmission Lines and Risk Management

**Geneva**

**25th January 2007**

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# The Purpose of the Questionnaire

- Growing importance of gas transportation
- Necessity to assess the reliability of Gas transportation pipelines
- Prevention of breakdowns
- Enhanced maitenance and lifetime of pipelines
- Need to unify rules for security of supply
- Choice of diagnostics methodologies
- Selected approach to risk management


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# Risk Analysis

1. Potential sources of risk
2. Identification of risks
3. Safety Reports
4. Emergency Plans
5. Utilization of Safety reports and Risk analyses
6. Risk assessment methodology by TSO
7. Work security under gas pressure
8. Geographic Information System


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# Legislation

- National risk management legislation
- Licence granting under binding condition
- Obligatory insurance
- Legal definition of responsibilities in risk and emergency conditions
- Legal safety of gas transportation
- Legal difference between transit and inland transportation


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# Prevention

- Maintenance system by TSO
- Minimum operational and emergency standards
- Maintenance control information system
- Prescribed inspections and tests included in IS
- Prevention of third party damages
- Regular aerial inspection
- Standards for construction of transportation pipelines


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# Diagnostics

- Regular inspections of selected facilities
- Registered check of cathodic protection
- Internal pipeline inspection
- External insulation checkout
- Extent of Stress-tests
- Interval of RCM procedure
- Continuous monitoring of possible leakages
- Monitoring of sulphur and its impact?


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# Conclusion

- Only high level of maintenance with sophisticated risk management and selected diagnostic methods together with skilled people can prevent from hazards and serious accidents in high pressure gas transportation pipelines


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# Thank You
# for
# Your Attention

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