INOGATE CCs and WG1 Meeting
Tbilisi, 20 October 2010

Project: Harmonisation of Gas and Oil Technical Standards and Practices in Eastern Europe and the Caucasus

Dr. Philip Butler

Background

Project Title
Harmonisation of Gas and Oil Technical Standards and Practices in Eastern Europe and the Caucasus

Completion date
30/11/2010

Beneficiary countries
Ukraine, Belarus, Moldova, Azerbaijan, Georgia, Armenia

Contractor
Fichtner GmbH & Co.KG, SWECO Industry Oy, BSI, DIN

Background, cont.

Main objectives
- to achieve common understanding and rationale associated with the shifting to standards employed in EU countries.
- to develop harmonisation strategies and action plans
- support to standards adoption, including translation of standards
- to increase awareness of EU QI (Quality Infrastructure): standardisation, metrology, certification, accreditation in the O&G sector
- to propose legal and regulatory measures to support adoption of harmonised standards

Project Approach

Main activities
- identification of main players in the Project Countries
  - Ministries, NSBs, NMIs, O&G sector companies, etc
- analysis of O&G sector in the countries
  - current status, development views = > actual needs for standards adoption
- identification of relevant regional, European and international QI organizations
- joint identification of priority standards
- analysis of IPRs related to standards
- identification of standards adoption options
- translation contract with EASC (regional approach)
**Project Approach, cont**

**Main activities**
- support to processing of translated standards
- support to the adoption of standards (submission to electronic voting)
- analysis of institutional structure of technical regulation, standardization, metrology, certification, accreditation
- analysis of international co-operation
- elaboration of harmonisation strategies and action plans
- organisation of four training events, organisation of study tour
- establishment of website
- inter-regional meetings, large number of other meetings
- participation in conferences

**Recommended Strategies & Action Plans of the Countries**

**Adoption of EU directives**
- Recommendation that around 30 EU Directives be adopted by the respective Governments
- EU directives lead to technical regulations (mandatory) – example groups:
  - health and safety, product safety, environmental, air quality (including emissions from vehicles) directives
  - gas directive (third legislative package), critical infrastructure, security of natural gas supply
- Recommend to translate and adopt (around 30 Directives)
- Guideline of adoption of regulations (prepared by the Project)

**Adoption of standards**
- Priority O&G sector standards established by the Project:
  - Priority standards (200+ as recognised by the Project)
  - vocabulary and terminology, metering and measurements, oil product testing, gas quality, gas infrastructure, electrical equipment for explosive atmospheres, production and transmission, safety of gas distribution, management systems
  - The list includes EN, EN ISO, ISO standards
  - “Complete” list much wider (1500+)
- Main fields of interest to be appropriate for each Project country

**Schemes of adoption of standards (harmonisation)**
- There are two main schemes of standards adoption
  - regional adoption (by EASC according to its procedures)
  - national adoption by the NSBs (ISO/IEC or CEN/CENELEC)
- Amendment of existing national standards to comply with international ones (at least a theoretical third option) – but not recommended.
Adoption of European Standards CEN/CENELEC
- All beneficiary countries are affiliates of CEN
- National adoption based on the affiliation
- Or regional adoption through EASC

Recommendations concerning translation of standards
- All Countries should accept adoption of a European or International Standard in the original language whenever possible (English, cover page method) except when safety or other reasons require translation into the national language
- When adopted through EASC, the Russian language is used
- It should not be necessary to translate and adopt all the normative references of a standard

Identical adoption
- Adoption of standards as “identical” is highly recommended. “Modified” adoption only in exceptional cases, “not equivalent” should not be considered

O&G SECTOR TECHNICAL COMMITTEES
National Technical Committees
- Recommendation to establish TCs in the O&G sector or reinforce existing ones to support standards adoption (from one to a few TCs in a country)
- Mirror national committees only if the country participates in some European/International TCs
- Voluntary industry involvement in TCs to be promoted

Inter-state Technical Committees
- Participate in regional TCs to support regional standards adoption
- Example TC523
- Note: Russian involvement in the O&G standardisation important

European (CEN/CENELEC) and International (ISO/IEC) Technical Committees
- Participate only very selectively (such as CEN TC 234, CEN TC 19, CEN TC 12, ISO TC 57, ISO TC 193)
INTERNATIONAL STANDARDS CO-OPERATION

Regional (EASC) co-operation
- 4 year programme (EASC & Project) for harmonisation of the highest priority 200 + standards
- Recommend support to EASC to strengthen it as a regional standards body, counterpart to CEN/CENELEC
- Active participation by the countries in EASC activities

Recommended Strategies & Action Plans of the Countries, cont.

European (CEN/CENELEC) co-operation
- All six countries are affiliates of CEN
- Affiliation with CENELEC recommended (currently only Georgia & Ukraine)

INTERNATIONAL METROLOGY CO-OPERATION

Regional (COOMET) co-operation
- All six countries are members
- Support and strengthen COOMET as a regional Metrology Body

European metrology co-operation
- Co-operation with WELMEC (European organisation of legal metrology) through COOMET
- Co-operation with EURAMET (European Association of National Metrology Institutes), only Ukraine a correspondent member; others could consider

International metrology co-operation
- OIML (International Organisation of Legal Metrology); Belarus is a member, Moldova and Ukraine correspondent members; recommended that potential advantages be considered by the beneficiary countries
- Recommend that the countries consider introducing legislation based on OIML D1

Recommended Strategies & Action Plans of the Countries, cont.
NATIONAL INSTITUTIONAL STRUCTURES

Recommendations that separate entities exist for a national QI structure, namely:

- standardization (NSBs)
- technical regulations (Government)
- metrology (NMI)
- conformity assessment (private or Governmental)
- accreditation (NABs)

Recommendation based on EU practice, avoidance of conflicts of interest etc.

ACCREDITATION

- Regulation (EC) No 765/2008 setting out the requirements for accreditation and market surveillance as a guideline how to organise the functions in the countries
- International recognition of laboratories etc very relevant
- ILAC – the International Laboratory Accreditation Co-operation; all project countries should become affiliates

ACCREDITATION, cont

- IAF – the International Accreditation Forum
- EA – European co-operation for Accreditation

International co-operation in accreditation should be developed for the countries. Establishment of a regional (comparable to EASC, COOMET) accreditation co-operation body should be considered. Such body should develop co-operation with EA first of all, leading ultimately to mutual recognition.

O&G INDUSTRY CO-OPERATION

- There are some O&G industry associations, in which the companies of the Project Countries should consider participation. Such associations are active in standardization and also a large amount of information about industry practices would become available.
- The most important such associations are
  - OGP (International Association of Oil & Gas Producers)
  - Marcogaz (Technical Association of the European Natural Gas Industry)
FINANCING AND CAPACITY BUILDING

- Sufficient state financing to be secured
- Self-financing (sale of standards and services)
- Twinning and other TA projects
- Planning for full-scale adoption

Achievements

Main achievements

- common understanding of standards harmonisation reached, positive opinions in the Countries
- large, effective and active co-operation network in the Project countries and stakeholders established
- joint identification of priority standards (200 + standards)
- regional solutions for the adoption of standards by way of (i) translation of standards by EASC and adoption by the NSB (EASC voting system) or (ii) national adoption via CEN and ISO. Tangible results by translation of standards (100 + expected prior to completion of the project)
- Analysis of legal and institutional framework undertaken, facilitating strategic conclusions
- comprehensive training arranged, active participation

Achievements, cont

Main achievements, cont

- focus on sustainable results
- constructive and practical work associated with a large number of standards covering the whole oil & gas chain from production to consumption
- in the context of the Project and its objectives, supporting existing national and regional institutions (NSBs, NMIs, TCs, universities, regional standards bodies etc.) or recommendations as to their establishment/strengthening
- promote and support co-operation of stakeholders at European and the international level
- comprehensive training and assistance in the selection of appropriate trainees

Comments/recommendations

Comments/recommendations

- Benefit brought by the Project
- Principal consideration is how to provide for continuation of the harmonisation process in the O&G sector and maintain momentum set by the project.
- continuing dialogue at regional level (maybe follow-up in some form of the three harmonisation projects)
- possible support at national level (there can be significant differences in national circumstances; twinning options etc.)
- note: O/G is just one of the many sectors where standards harmonisation is desirable but may not be given the highest priority (funding).
- a lesson learnt: harmonisation of standards is a long process and requires resources and strong political support to achieve full scale implementation
- in future standards harmonisation initiatives, the role of project financiers and insurers may be considered.