



OGP International Standards Workshop

11th - 12th March 2010

PTTEP

Engineering Specification Initiative

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PTTEP Vision & Mission



VISION

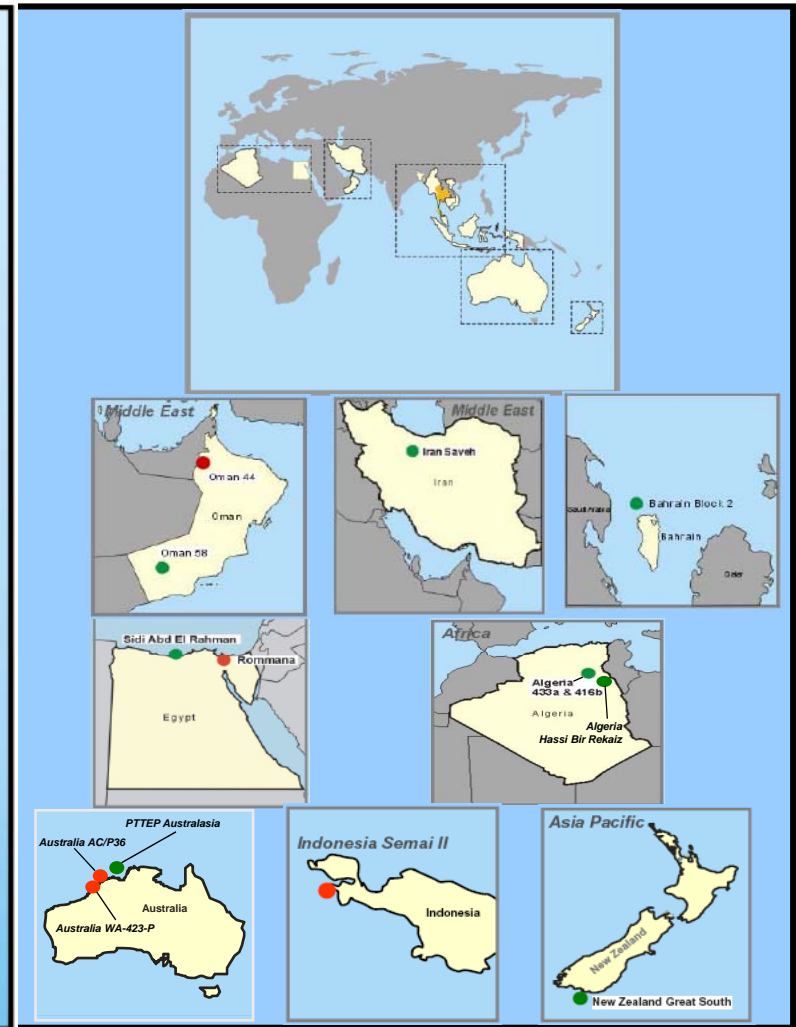
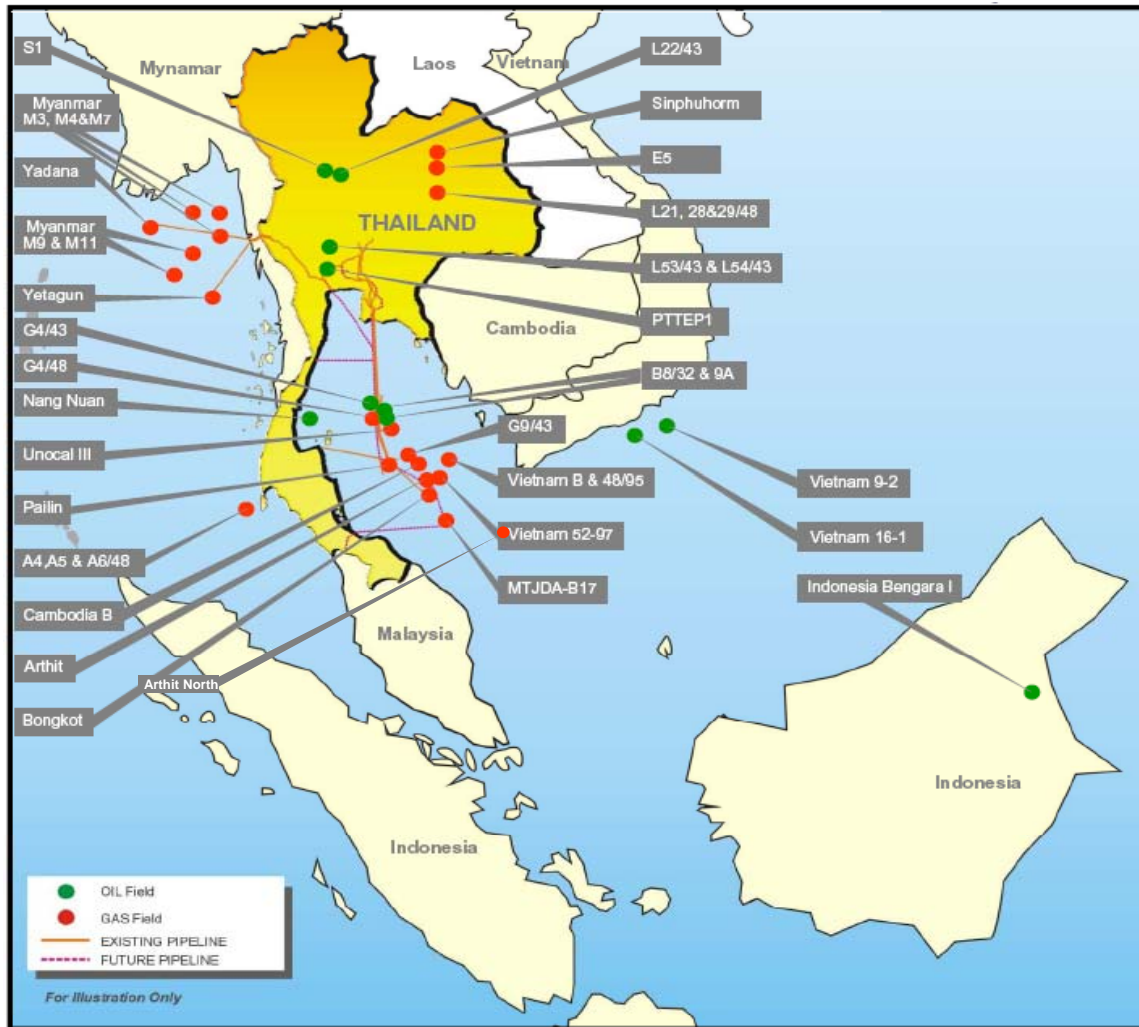
PTTEP will be a leading Asian exploration and production company emphasizing value creation and sustainable growth through operations excellence, strategic investments, and our ability to change.

MISSION

PTTEP reliably and safely delivers competitively priced oil and gas with responsibility to society and the environment, adhering to good corporate governance and financial discipline.



PTTEP Assets – 42 Projects in 13 Countries



PTTEP Engineering Specification Development - Project Background

- As PTTEP evolved, engineering practices were based mainly on JV partner design specifications and engineering practices, e.g. heritage practices
- For acquired operating assets, design specification and engineering practices are typically based on the company's documents that were in effect when the asset was developed.
- For newer projects, preferences lay with the in-charge individual's experience and background.
- It is now a challenge for PTTEP to establish their own General Specification for the future



PTTEP – Researching the way forward ...

Research showed us that;

- Many companies utilise a *Steering Committee* to handle company specifications and strategy on the use of International standards.
- Different operating companies hold a significantly different number of company specifications (*On average 770 and growing¹*)
- Many companies utilise a *document management process* with quality control and KPIs.

¹ Inferred from Total E&P Report OGP, Oct 2009

Company engineering document requirements

With PTTEP's vision for the future, we understand the need to;

- Ensure consistent engineering practices across all assets operated by PTTEP
- Consolidate existing design specifications and engineering practices
- Recognise that use of International Standards (ISO, IEC) ensures consistency and more efficient operations
- *Establish our own suite of “PTTEP General Specifications”*

PTTEP and the OGP / ISO TC67 initiative

- PTTEP strongly supports and intends to participate in the development of ISO Standards for the industry
- For all our projects and operations, PTTEP plan to follow the OGP initiative by adhering to International Standards (ISO¹, IEC², ITU³) wherever practically possible.
- PTTEP will seek support from our JV Oil and Gas company partners in the development of these Standards

¹ *International Standards Organisation*

² *International Electrotechnical Commission*

³ *International Telecommunication Union*



Development Basis for 2010 PTTEP General Specifications

The need to consolidate/develop our own set of general specifications for PTTEP is clear, i.e. to enable consistency in engineering design/practice and improve efficiency in all concerned business areas. Basis for the initial push are:

- To cover existing facilities, i.e. onshore and offshore, domestic and international
- Minimize additional company requirement/deviations/variations
- Ensure company requirement/deviations/variations are justified and based on “Fit-for-Purpose” philosophy
- Allowance for engineering creativity and flexibility.
- To ensure continuous improvement, e.g. updating, lessons learned, and to allow for further expansion as PTTEP continues to grow.

What are PTTEP General Specifications

PTTEP General Specifications

will be developed to support a full life cycle of business opportunity:

➤ **Engineering**

- Feasibility study
- Conceptual design
- Pre-project study
- Basic engineering
- Detailed engineering
- Safety engineering

➤ **Procurement**

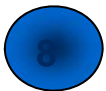
- Bulk materials
- Major equipment
- Engineering services

➤ **Construction**

- Preservation
- Inspection
- Testing
- Commissioning

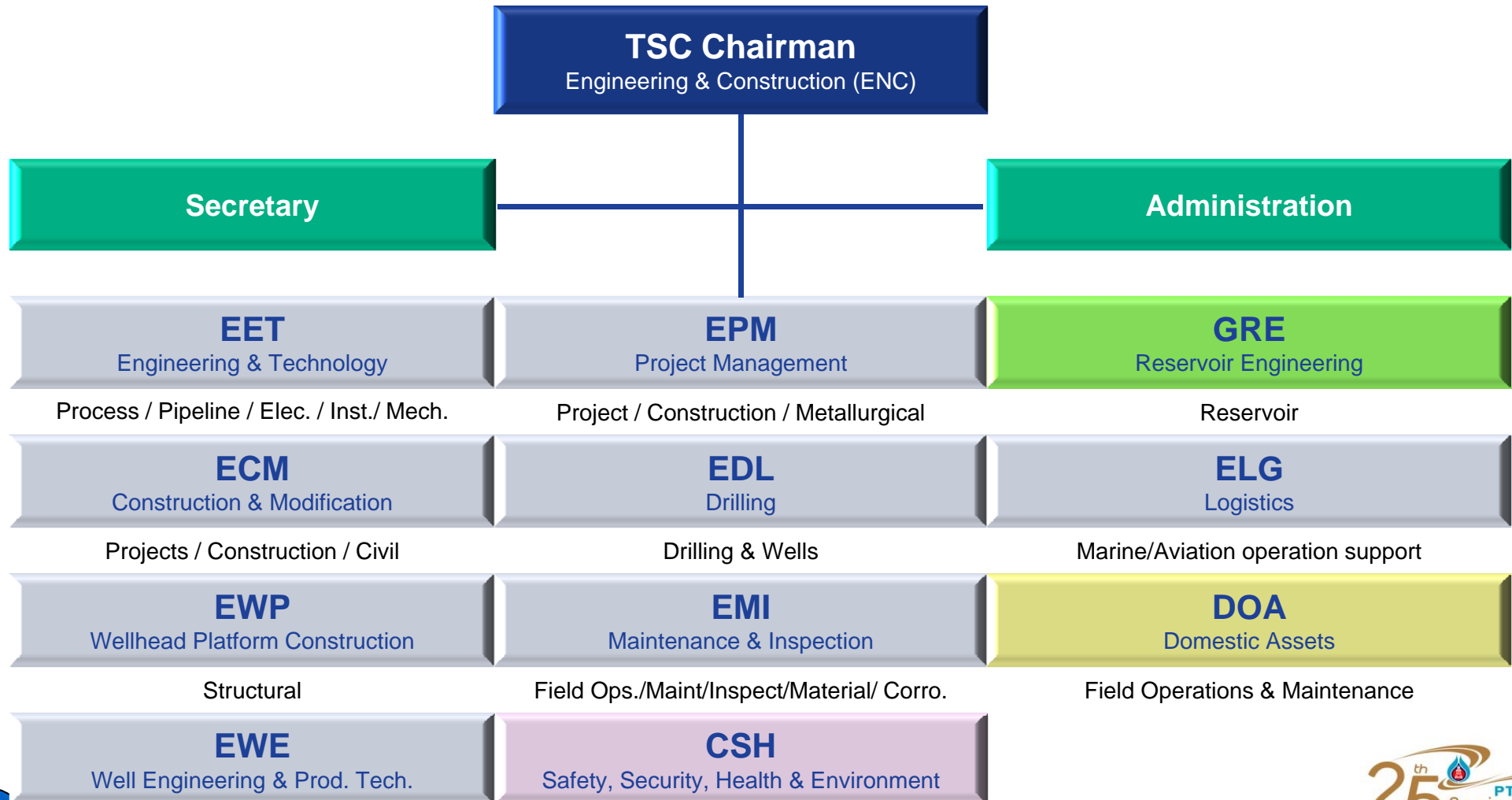
➤ **Operations and Maintenance**

- Consumable and spare parts
- Field operations
- Maintenance and inspection
- Drilling and wells
- Operations supports
- Modification and upgrade



Technical Steering Committee (TSC)

The Technical Steering Committee (TSC) will be chaired by ENC and comprised of Subject Matter Experts (SME) solicited from the following departments/divisions:



Execution Strategy

Start-off Basis

- Existing documents within PTTEP (e.g. PWGS, EMI's, ELG's, CSH's)
- Best practices from JV partners
- Lessons learnt from PTTEP previous projects

Framework & Structure

- Encompass all technical disciplines
- Package to be called "PTTEP General Specification (PGS)"
- Maximize use of common industry standards by adopting ISO/TC67.
- PTTEP technical community participation in OGP

Phasing

- Work to be prioritized and split into two phases:
 - Phase 1: To consolidate and update existing documents
 - Phase 2: Prepare new documents

Resources

- Technical Steering Committee (TSC) consisting of experienced engineers in all disciplines with clear accountability and PA measurement
- Engineering consultant to perform the task under TSC supervision
- Budget to be determined

Endorsement & Administration

- Endorsement by ENC and, where applicable, by line VP.
- Maintained & administered by EET
- Effective for all new projects undertaken by PTTEP
- Available on PTTEP Intranet

Expected Benefits from PTTEP General Specifications

Design and Engineering Consistency

- *Common practice company-wide*
- *Reduce design work and accelerate facility development and delivery*
- *Ease of HR transfer and rotation*

Cost Reduction (Capex & Opex)

- *Common design practice leads to standardization of material specifications*
- *Common spec through a global standard improves procurement leverage*
- *Interchangeability of materials and equipment among Assets leads to reduction of spare parts*

Enhance Technical Integrity

- *Maximize availability and minimize lost time/revenue*

Support Company Future Growth

- *New development projects*
- *Improve competence of workforce*

The End



The End

Thank you for your kind attention

