FPSO PROJECT LOCAL CONTENT CONSIDERATIONS

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WHAT IS LOCAL CONTENT?

SOME DEFINITIONS:

• “Developing local economies, stimulating industrial development, increasing local capability, building a skilled workforce and creating a competitive supplier base”

• “The development of local skills, technology transfer, use of local manpower and local manufacturing”

• “Promoting the establishment of local industry through cooperation with international oil companies and service companies”

• “Local content consists of contractual commitments, embedded in concession contracts (oil licences, or oil licences in some jurisdictions), whereby oil companies are required to procure a minimum percentage of equipment and services from local suppliers”
Commitment to local content will be a major parameter of evaluation for foreign companies wishing to do business in the subject country, in some cases, more so than cost and/or track record.

In many countries, demonstration of local content at prescribed levels is mandatory to proceed in bidding.

Technology-intensive products and services will carry a lower local content percentage rather than low-tech activities.

Investment must be sustainable and ongoing.

Where possible, local suppliers will be favoured over foreign suppliers if services can be shown equal or similar.
WAYS TO ACHIEVE LOCAL CONTENT

PROJECT PHASE

- In-country Fabrication & supervision
- Local supply of goods and services
- Logistics & Training
- Engineering
- Regulatory compliance

OPERATIONS PHASE

- O and M services
- Equipment Supply
- Services Supply

LONG TERM

- Training
- Investment (incl. loans)
- Community Support
- Establish local presence
SUSTAINABILITY

- Establish and grow local engineering teams
- Establish industrial hubs to promote growth of industry
- Small business loans and micro-loans (help start-ups)
- Establish supply chain and logistics networks
- Establish and maintain O and M infrastructure
- Technology Transfer
- University and Technical School sponsorships
- Placements and undergraduate training/ exchange programmes
- Social and Community Initiatives
- Strategic partnerships
- Training
- Investment (incl. loans)
- Health/hospitals (i.e. HIV clinics)
- Establish local presence
Pioneer – Still Going Strong

BACKGROUND
-60’s-70’s; ministers started implementing policy to protect the interests of communities and the economy.
-Government introduced legislation necessitating that companies using natural resources also contribute to economic development.
-Advent of Oil & Gas necessitated development of infrastructure and skills- not easily imported
-One of few markets available for O and G investment, foreign companies keen to invest – lucky timing??
-Overseas firms' commitment to and strategies for technology transfers made crucial and determining factor in licensing process by the Ministry of Petroleum /Energy. Local content at heart of investments.
-Foreign operators arriving in late 1970s, strongly encouraged to R&D partnerships and joint development programmes.
-Access to finance (GIEK/Export Credit)
-Shipbuilding heritage

CURRENT SITUATION
Govt policy means Norwegian O and G companies developed leading class, state-of-the-art technologies and, as a result, many international companies have located part of their R&D chain in the country and Norway is established international supplier.
Brazil

Very Mature with high focus on in-country investment:

RECENTLY ANNOUNCED TARGETS

-Ambitious targets for developing colossal deepwater “pre-salt” fields off the coast of SE Brazil. Increasing “local content is a basic requirement of the nation and of Petrobras”, “

-Company has the world’s largest corporate capital expenditure programme, valued at $225bn over five years.

-Petrobras aspires to ensure local content up to 75% and considers it already close.

-Company and its partners need to build or buy more than double the number of the ships in Britain’s Royal Navy, about 250, – as well as other equipment – to meet its needs

IN-PLACE

-Established Manufacturing facilities (Next 8 Petrobras FPSO projects will use domestically built hulls) – in JV or indigenous some rigs 100% built in-country

-Services (incl. supply operations, drilling support etc)

-In house design resources (incl. R & D facilities)

-Finances
Huge Potential and enormous projects- Political Instability has slowed progress

RECENTLY ANNOUNCED TARGETS
- Completion of facility at Dorman-Long, Snake Island
- Nigeria's Local Content Act 2010 placed stringent obligations on upstream oil companies in the areas of finance, community and the local workforce.
- Requirement obliging upstream oil companies operating in Nigeria to place 10% of their annual profit in Nigerian banks
- Must contract their legal /insurance services to Nigerian companies.

IN-PLACE & TRACK RECORD
- Established Manufacturing facilities (Onne, Snake Island, previous records of manufacturing piles, buoys, bridges, modules)
- Services (incl. supply operations, drilling support etc)
- AKPO FPSO: 15 million manhrs work in Nigeria, 90% of operators working on the FPSO are locals, hired and trained by TOTAL.

CHALLENGES
- Limited pool of engineering
- Security
Angola

After Nigeria – Slightly Different Approach-Huge projects

OVERVIEW
- Major fabrication facilities developed by main contractors (Hyundai, Heerema, SBM, Saipem)
- Facilities for FPSO integration
- Spool bases (geared to DW infrastructure)
- Better political climate
- Culturally different to Nigeria
- Excellent infrastructure growing for Deepwater mega-projects
- Local Engineering
- Partnering with SONANGOL (Sonangol works in partnership through joint ventures (JV) and production sharing agreements as the sole concessionaire on all oil and gas exploration and production projects.

IN-PLACE & TRACK RECORD
- TOTAL have huge investment:
  PAZFLOL FPSO- 7m manhrs
  DALIA/ROSA – 5m manhrs
  Majors very active (BP, ExxonMobil, ENI, Chevron)
Malaysia

Mature market in SE Asia for FPSO

OVERVIEW
- Market regulated by Petronas
- FPSO/FSO projects previously ruled by MISC (over 90% units owned by MISC alone or in JV)
- Potential providers must have Petronas License to own/operate FPSO (this has ownership/Bumiputra requirements)
- New and future projects may be open to other providers
- New initiatives (RSC=Risk Service Contract)
- Govt ownership in yard facilities

FUTURE
- Short term requirements may mean opening market up, recent bids/awards suggest different SE Asian owners will enter
- Petronas to provide guidance on future local content initiatives
Regulated with Local Service suppliers from client

OVERVIEW

- State oil company has stake in all fields
- Oil company affiliates also have ownership/operation stake in existing FSO/FPSO units
- Requirement to partner with local organisations
- Numerous Government controlled service companies:
  - PV Drilling
  - PTSC (owns and operates FPSO)
  - PVTrans (owns and operates vessels and tankers)

- No explicit local content requirements for FSO/FPSO projects
- Limited indigenous resources for construction
- Growing and expanding market
Less-regulated with limited local Service suppliers

OVERVIEW

-Approx 5 FPSO/FSO units
-Limited infrastructure to develop projects
-Limited engineering/technical pool
-No explicit local content requirements for FSO/FPSO projects
-Limited indigenous resources for construction
Heavily Regulated Cabotage Laws

OVERVIEW

- Regulated by BP Migas
- Recent cabotage laws introduced for all oil and gas production and support vessels
- FPSO must be Indonesian flagged (and owned)
- Extremely limited in-country facilities for FSO/FPSO projects to maximise local content
- Limited number of incumbent FSO/FPSO owners/operators – partnering required
CHIM SAO FPSO - SCOPE OF WORK

**FPSO Scope**
- FPSO Hull
- Topsides, LQ, Helideck, etc
- Turret/Swivel
- Risers/Umbilical
- 2 x Midwater Arches
- Mooring lines
- Anchor piles
- Offload hose & hawser

**T and I Scope**
- Install risers & umbilical
- Tow FPSO
- Hook-up moorings
- Hook-up risers
- Test/pre-comm
- Tie in and test export line

**Operations Phase**
- O and M of FPSO and WHP
POVO (Field Operator)

Single contract with guaranteed minimum bareboat payment feature

Guaranteed minimum Bareboat Charter Payment

BLK 12W

Santos 31.9%

Prem. Oil 53.1%

PVEP 15%

SPV

EZRA(Supplier Credit)

PVTrans

EZRA(Supplier Credit)

PVTrans 50%

O & M Provider

EOPS 50%

Viet Bank Consortium

X%
RISKS

**TECHNOLOGY & SKILLS**  
- Many regions are frontier, i.e. deepwater, difficult process, mega-projects,  
- Need cutting edge technology, manufacturing and personnel.  
- Do people really have the requisite skill sets? – need to import skills from other industries (i.e. power, telecoms, marine etc)  

RESULT IN: DELAYS, RE-WORK, OVERSPEND

**CAPACITY**  
Countries lack domestic capacity to meet its local content requirements. Outgoing Petrobras head Mr Gabrielli:  
“*What’s going to be the main constraint that we face is the speed of the supply chain worldwide to provide the goods and services that we need.*”

**PRODUCTIVITY**  
Not all people work the same way, cultural differences, different work ethic

**COMPETITIVENESS**  
Even if Brazil did have the manufacturing capacity, its industry not yet internationally competitive – a mid-range tanker can cost $66m to build in Brazil – twice as much as in China,

**ECONOMICS**  
The “Dutch effect” – where industry grew too rapidly that huge foreign investment destabilised currency and economy

**POLITICS**  
- Government instabilities, Agendas used to make policy decisions
SUMMARY

- LOCAL CONTENT REQUIREMENTS WILL CONTINUE TO BE A MAJOR SELECTION CRITERIA FOR OIL AND GAS PROJECTS
- PROMOTING LOCAL CONTENT IS NOT JUST A MORAL OBLIGATION BUT MAKES GOOD BUSINESS SENSE TOO.
- EMBRACE PARTNERSHIPS AND DEVELOP LONG TERM INFRASTRUCTURE
- RECOGNISE LOCAL ISSUES AND CULTURES
- WATCH HOW OTHERS HAVE BEEN SUCCESSFUL OR ENCOUNTERED PROBLEMS
- BE CAREFUL TO UNDERSTAND WHERE CAPACITY CRUNCH POINTS MAY COME
- UNDERSTAND THE REQUIREMENTS – CLIENTS MUST ENSURE TOTAL VISIBILITY!