Development of the supply chain: relying on local industrial involvement

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November 2013
Localization must be a national program supported by the Government

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<td>► Professional organizations</td>
<td>► Clear picture on the Program size (fleet approach)</td>
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To support a strong and mature Nuclear Supply Chain

Continuous process to be implemented up front of the Program
Nuclear AMRC: Work Programmes

**Manufacturing Process R&D**
Aimed at ensuring that the UK nuclear manufacturing supply chain has the capability to compete on cost, quality and time to delivery in the civil nuclear market.

**Training & Skills Development**
Aimed at ensuring that the nuclear manufacturing supply chain has the skills required to compete in the global civil nuclear market (Apprenticeships, CPD, etc. to PhD/Eng.D)

**Quality, Codes & Standards**
Aimed at ensuring manufacturers have clarity and knowledge on quality requirements, nuclear codes and standards, and are supported in meeting and exceeding these.
Lessons learned – key success factors for local companies

Selection process

- Safety culture implementation
- Supply chain control
- Quality requirements understanding
- Project management capacity
- Documentation management
- Design monitoring and software qualification
- Manufacturing activity control (test…)

Supplier involvement

- Top management commitment
- Employees safety culture
- Quality Assurance + Quality Control
- Sub-contractor management
- Non-conformance management
- Dedicated team
- Partnership / JV with experimented suppliers

No compromise on quality requirements
Example of successful localization for primary components

**NSSS Taishan 1**
- Pressurizer: AREVA
- Steam Generator: AREVA
- RPV: MHI
- Internals: Skoda JS
- Control Rod Drive Mechanisms: AREVA
- Reactor Cooling Pumps: AREVA
- Primary Lines

**NSSS Taishan 2**
- Pressurizer: DFHM (China)
- Steam Generator: SENPEC / DFHM
- RPV: DFHM
- Internals: Shangai Number 1
- Control Rod Drive Mechanisms: JSPM/ADJV
- Reactor Cooling Pumps: JSPM/ADJV DFEM/SAFAS
- Primary Lines

Investment set up to be able to deliver the most critical equipments
Conditions to decide and reach a realistic target

1. Understand the role of the government and the owner
2. Assess the time needed for qualification of industry
3. Understand the cost for local companies entering a new business
4. Overall program schedule should allow for the development of a local program
5. Regulatory rules must be fully understood by all affected parties
6. Quality is never considered a trade off