



Good Practices in Supply Chain Localization

OPPORTUNITIES FOR PARTICIPATION IN THE INTERNATIONAL SUPPLY CHAIN FOR
THE CONSTRUCTION AND MAINTENANCE OF NUCLEAR POWER PLANTS

6 March 2024



| GOOD PRACTICE

A “good practice” can be defined as follows:

A good practice is not only a practice that is good, but a practice that has been proven to work well and produce good results, and is therefore recommended as a model.

| GOOD PRACTICE

RVCH Replacement at NPP Krško

- Early engagement
- Define goal - SOW
- Identify Stakeholders
- Perform gap analysis
- Develop skill, competence, experience, reference, QA program, supply chain, resources...
- Execute flowless
- Next related opportunity





KPI #	Metric	Measure	Target	Weightage			Criteria
				Yr-1	Yr- 2	Yr- 3	
5	Localization/ Sustainability	% of Localization / Sustainability Achieved	<p>Expectations are based upon Contractor's Tender Submission outlining what they can do and this to be captured as the KPI. This Contractor shall highlight objectives on limitations on 'new to BNPP' resource etc. in each Work Order</p> <p>Example:</p> <p>F - => 20% Total FTE M - > 10% Total FTE N - <= 10% Total FTE</p>	0%	10%	10%	<p>This KPI is not tied specifically to one outage, it is ongoing KPI as the Supplier is to provide an annual plan (calculated from the sum total of localization throughout the calendar year. This includes multiple refueling outages averaging localization across multiple outages per year to meet KPIs.). The majority of value to Nawah does come from the outage scope however.</p>

| POLAND CASE

Poland's target is to maximize local participation to 40 % +

Key differences:

- Poland is first in a line
- Poland plans to build up to 9 units
- Poland has 40 million people



I TO BE CONSIDERED

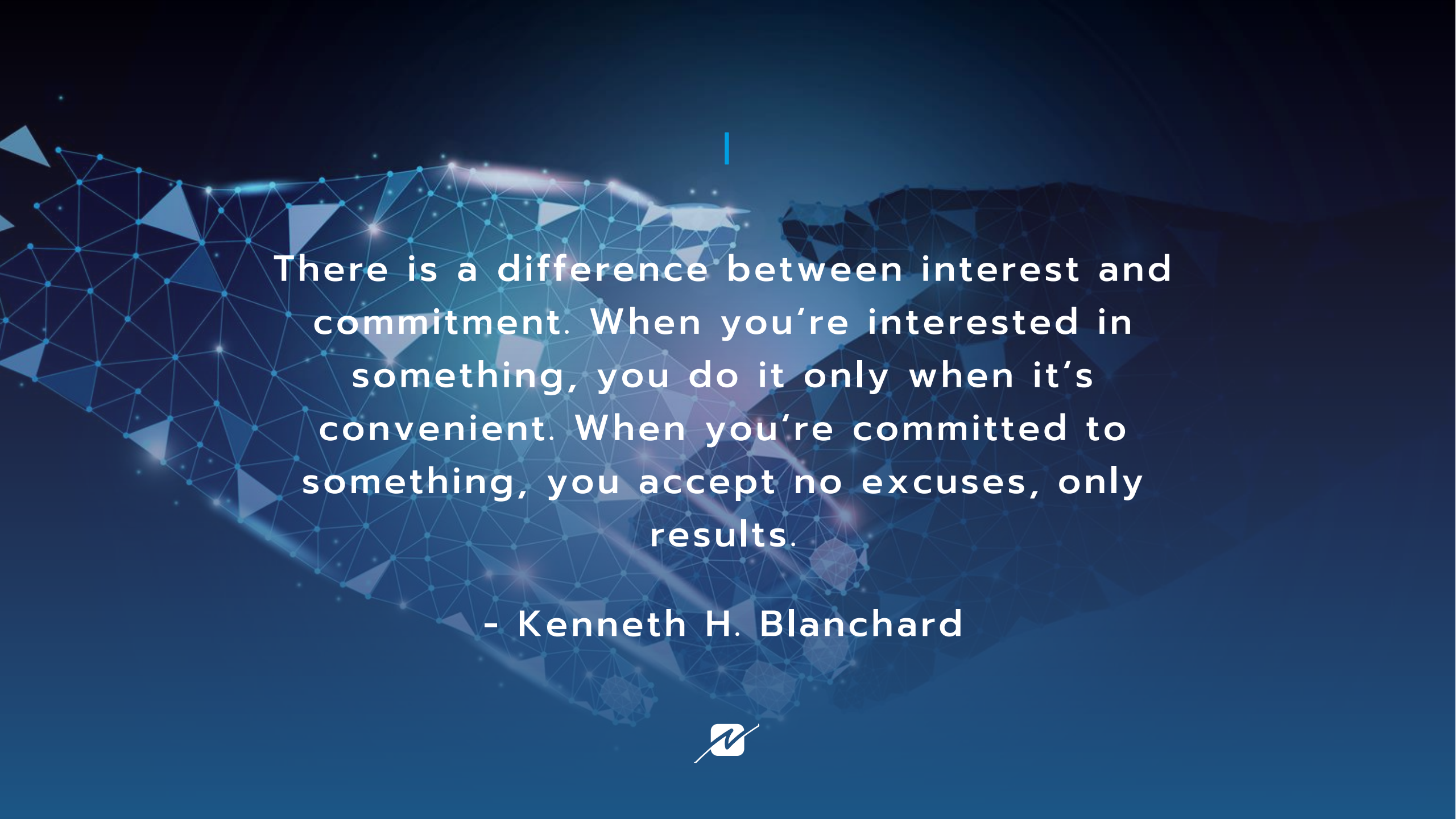
- Selected reactor supplier standard (ASME, RCC-M...)
- Current supply chains (W, EDF, KEPCO)
- Know-how transfer (readiness vs. local capacity)
- Slovenia currently does not educate nuclear engineers
- How long does it take to train a nuclear engineer?
- Local cost competitiveness
- Supplier Qualification – Proof of Reference
- Supply chain globalization effect – first in first serves
- Cultural difference - language
- ROI



| WHEN, WHAT, HOW?

- What to do until 2028?
- When do we start activities related to new builds?
- How do we start?
- Who do we focus on?
- Can we only serve local needs?
- What to focus on (P&S)?





There is a difference between interest and commitment. When you're interested in something, you do it only when it's convenient. When you're committed to something, you accept no excuses, only results.

- Kenneth H. Blanchard





The construction workforce includes about 3,800 employees from 500 companies. **80% of the workers are foreigners**, mostly from Eastern European countries. In 2012 it was reported that one Bulgarian contracting firm was owned by the mafia and that Bulgarian workers were required to pay weekly protection fees to the mafia, wages were unpaid, employees were told not to join a union, and employers also reneged on social security payments.

| LOCALIZATION

SUPPLY CHAIN

Localization does, in many situations, reduce and lower supply chain costs.

- Localization strategies, and the resulting costs and benefits will depend on the extent of a country's nuclear program.
- Localization does, in many situations, reduce and lower supply chain costs.
- Maximizing local content must be negotiated in the early stages and reflected in the price

(presented on IAEA forum, 2018)



| RELIABLE PARTNER



ALSTOM



IDOM



HITACHI

SIEMENS



CALCIT



KONECRANES®



framatome



Thank You

Franc Škrabec

Head of Nuclear Energy Program

+386 41 208 006

franci.skrabec@numip.si