

# KELPO-project

Developing the licensing and qualification of industrial standard components in Finland

Energiforsk seminar "Industry standard components in nuclear I&C applications"  
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# Background

- ▶ The licensing and qualification processes are considered heavy which leads to difficulties in modernization of ageing systems and components.
- ▶ Modernization projects are long and time consuming.
- ▶ Existing plants require modernizations but the original equipment is no longer available.
- ▶ The nuclear supplier network is thin and equipment suppliers' interest to participate in nuclear projects is decreasing.
- ▶ Quality development in other fields of industry is not utilized in the nuclear field - the need for nuclear-specific requirements has decreased in the past decades.

# KELPO-project

- ▶ Finnish project on developing the licensing and qualification practices in Finland.
- ▶ The project is co-operation of the Finnish nuclear industry.
- ▶ STUK participates as an observer and supports the work.



# KELPO - objectives

- ▶ Put the Graded Approach into practice.
- ▶ Enable use of high-quality industrial-standard equipment.
- ▶ Ensure a comprehensive supplier network.
- ▶ Ensure availability of high-quality equipment.
- ▶ Increase co-operation between license holders - in Finland, Nordics and Europe.

## As a result:

- Ensure viability of modernization and new-build projects.
- Secure the feasible operation of nuclear power also in the future.
- Ensure and enable continuous development of nuclear safety.

# KELPO - key development areas

- ▶ Utilize high-quality standard equipment manufactured, tested, inspected and documented according to normal, well-known industry standards.
- ▶ Harmonized practices and documentation between license holders → Clear and harmonized requirements towards suppliers.
- ▶ Increased license holder's role in lower safety classes - Regulatory control focus on plant overall safety and SC1 and SC2 equipment.

## PILOTING:

- Mechanical, electrical, I&C
- Joint effort of license holders and STUK.
- Test and further develop the proposed new licensing and qualification processes.
- Identify change needs in regulations and company practices.

STUK's new strategy:

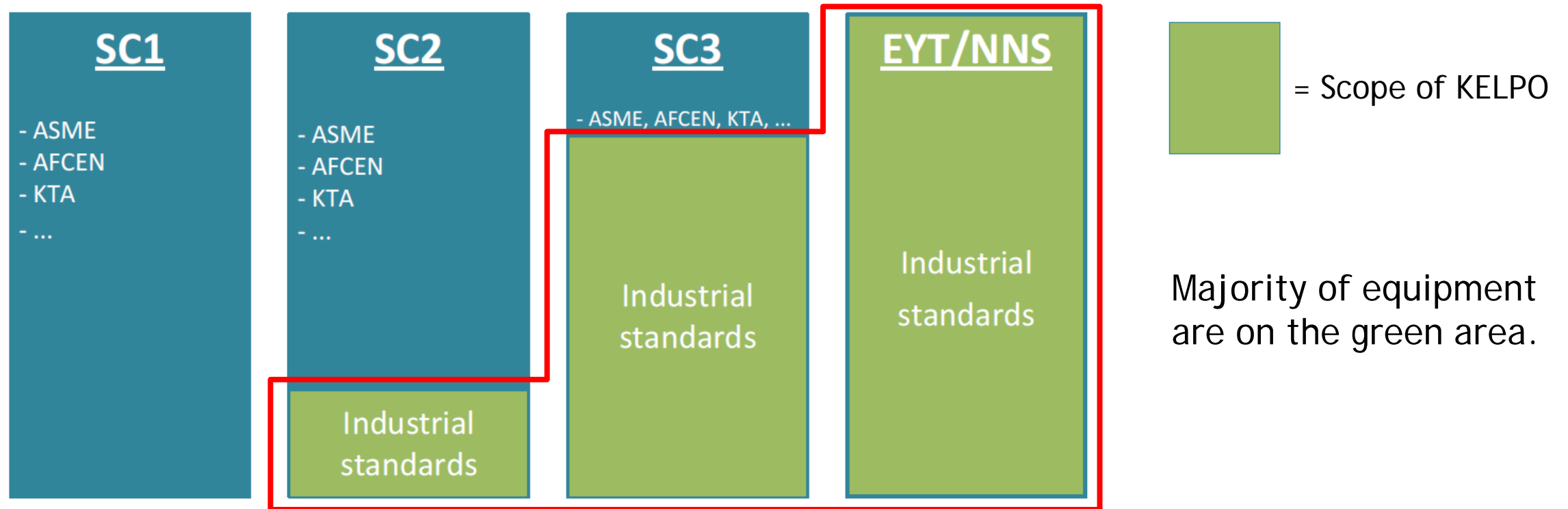
*"Safety is not achieved through control, but as a result of good work of responsible operators."*

# Co-operation – an important part of the project

- ▶ Co-operation between Finnish license holders / applicants:
  - ▶ Fortum, TVO, Fennovoima
  - ▶ The KELPO-project is a platform to build and develop co-operation
- ▶ Co-operation with the authority (STUK):
  - ▶ STUK is an observer and supports the project
  - ▶ STUK is involved in discussions, pilot projects and gives comments and opinions
  - ▶ KELPO-project is an input to STUK's development work
- ▶ International co-operation:
  - ▶ FORATOM
  - ▶ License holders in other countries
  - ▶ Learning from each other, sharing experiences and practises, harmonizing

# KELPO - Scope

## SSC of a Nuclear Plant



# KELPO - key benefits

- ▶ Ensure **availability of equipment** (keep old suppliers and attract new ones).
- ▶ Attract the **best suppliers** with **high-quality equipment**.
- ▶ Enable **smooth and timely modernization projects**.
- ▶ Increase **co-operation** and establish **clear and harmonized practices** between the license holders - **cut overlapping work**.
- ▶ **Streamline** license holder's, suppliers' and the authorities' work.
- ▶ Focus on the areas where **nuclear safety** is affected.

→ **ENSURE HIGH LEVEL OF NUCLEAR SAFETY**



# Next steps

- ▶ Intermediate report in December 2019.
- ▶ Pilot projects continue and proceed into procurement and installation.
- ▶ Co-operation between license holders is developed - a separate project planned for 2020.
- ▶ Discussions and sharing information with equipment suppliers planned.
- ▶ Co-operation continues
  - ▶ Happy to co-operate and share experiences also in the future, within I&C or about the topic in general!

# Thank you!

KELPO-project

 fortum

 TVO

 FENNO  
VOIMA

