Proposal: Abstract for the Swipa Conference 2024, Trondheim

Title: **Technology qualification – status and examples Dutch sector** Author: **Jules Schoenmakers, Nexstep Association, The Netherlands**

Format: 20 minutes incl Q&A

Abstract:

A key enabling technology for rigless well decommissioning is the ability to create a competent cement isolation through the tubing without removing it. We have named this Through Tubing Cementation (TTC).

Many wells have been decommissioned with TTC since the 1990's when it was first introduced in the Gulf of Mexico, and then spread to many countries around the world. It had also been used in The Netherlands in the past. Recently, a proposal to re-introduce TTC was rejected by the authorities on grounds of (i) NORM and (ii) uncertainties of sealing quality.

Following a suggestion by the authorities, the Nexstep*) association embarked on a structured process to qualify the TTC technology as per industry standard DNV-RP-A203 to wrap-up the results of studies and TTC pilots in 14 gas wells.

The presentation includes the adopted approach for the technology qualification, as well as expected and unexpected results from Computer Fluid Dynamics simulations, agitator performance, logging, and vertical interference permeability testing.

The work shows that TTC is a suitable P&A technique for many wells, but not for all. A careful screening/selection process is required, and specific risks must be mitigated by good design choices and execution practices.

*) Nexstep is the National Platform for Re-use and Decommissioning in The Netherlands. It is an association in which all Dutch E&P operators and the State participation company EBN collaborate and share knowledge and cost of studies and pilots.