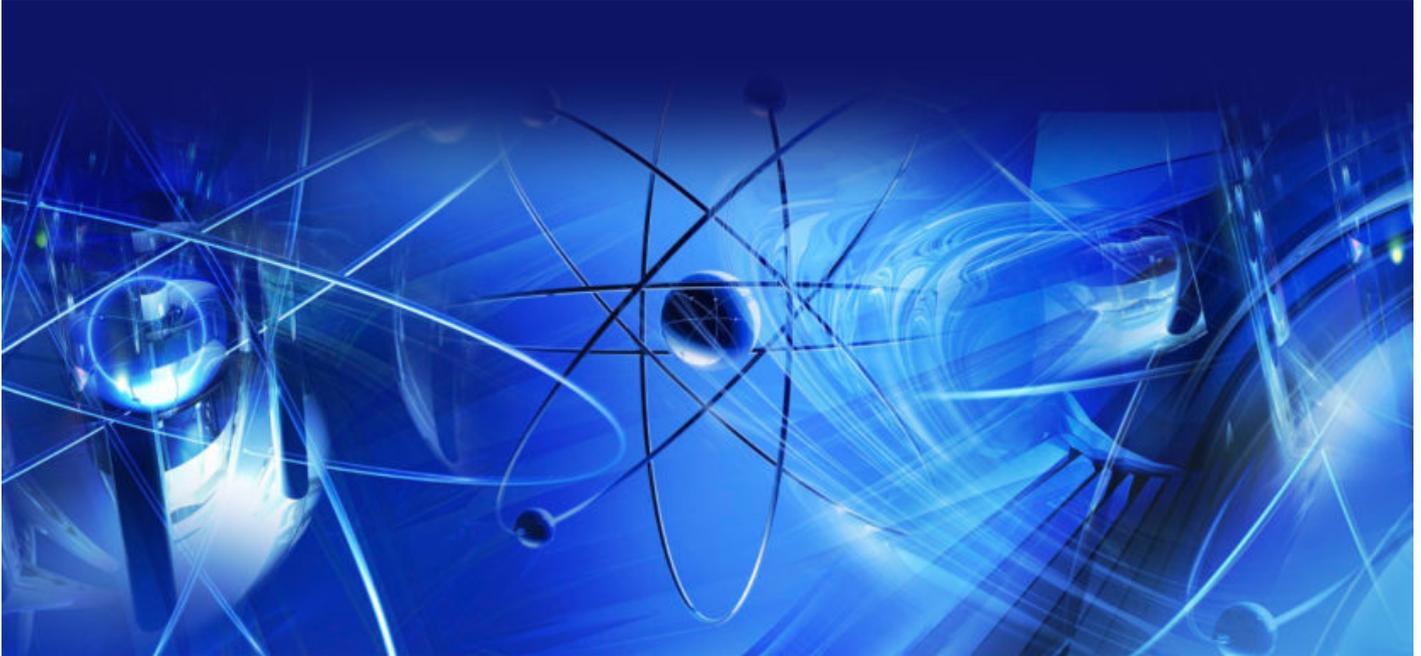


Nuclear decommissioning business – what it takes to succeed?

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Decommissioning and dismantling of nuclear power plants will be a great opportunity but also a challenge in the decades to come. According to the European Commission, the decommissioning and dismantling market may reach EUR 2.2 billion annually in Europe alone in the next 20 years. Despite this tremendous market potential, it is not clear how individual companies could get involved in these megaprojects.

To kick-start the business side of [the dEComm](#) research project, we organized a series of company-researcher workshops this spring (2020). The aim of this workshop series was to map existing solutions that are suitable for nuclear decommissioning and dismantling. We also envisioned future offerings and cooperation forms such as alliances, coalitions, and ecosystems that could serve as cooperation platforms for interested companies. The outcome of these discussions is clear and encouraging. To realize the exciting prospect of dEComm project – high market potential, digital solutions and co-innovation activities in nuclear decommissioning – five focus areas seem particularly exciting: digital tools and solutions, business model innovation, proper ecosystem understanding, novel cooperation forms, and roadmap thinking.

1. Digital tools and solutions – *And ‘yes’, we can do it*

Decommissioning and dismantling practices, including conventional demolition, are not always based on the latest technologies in many of the potential target countries. Digital tools and solutions such as VR/AR applications, 3D modelling, and robotics could bring real benefits, for example, through accelerating the pace in planning. Thus, offering a competitive advantage to those who can apply them in practice. And ‘yes’, we in dEComm can do it.

2. Business model innovation – *Beyond product development*

According to contemporary business wisdom, it is not enough to innovate products alone but we need innovative business models too. This is certainly true in nuclear decommissioning. International markets are fiercely competed and national actors often have the upper hand for various reasons. To succeed, one needs

to have a tempting business model that appeals to the client, for example, through flexibility, partnerships, or finance.

3. Proper ecosystem understanding – *Who is who in nuclear decommissioning*

As an industry, nuclear decommissioning is characterized by certain roles including plant owners; large, international, decommissioning companies; smaller, highly specialized expert organizations like engineering offices; local actors for various and often less specialized tasks; and research organizations like VTT. To be part of the game, one needs to know who is who in the field and even more importantly, what is or could be one's own role.

4. Novel cooperation forms – *Mastering rules of the game*

Proper ecosystem understanding leads us to ask in what sort of cooperative arrangements a particular company should be involved. Nuclear decommissioning of full-scale plants is an enormous project that inevitably requires cooperation between multiple parties. Possibilities for cooperation are numerous. Whether the chosen model is a coalition, alliance, joint venture, conventional sub-contractor relationship, or ecosystem membership, rules of the game need to promote value creation and share the profits fairly.

5. Roadmap thinking – *Building a winning path*

A vast majority of the decommissioning projects still lie ahead. Building capabilities to succeed in these projects requires determination and long-term vision. For most of the companies, nuclear decommissioning is a relatively new area that could benefit from thorough roadmap thinking. For example, to sketch a growth path for extending own expertise, get first (smaller) projects underway, achieve references, build partnerships, enhance capacities, and so forth.

We believe that all these themes should be of interest to both practitioners and researchers. Importantly to our co-innovation project, most of these, if not all, lend themselves well to be discussed and developed in a co-creative manner between multiple companies and researchers.

Of course, this was the first snapshot of our work on decommissioning business development that we have just started. If succeeding in nuclear decommissioning interests you, please stay tuned, and follow us in our project [Blog](#), [Twitter \(#dEComFI\)](#), and [LinkedIn \(#dEComFI\)](#).

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