

THE CHANNELING OF LIABILITY AND SMALL MODULAR REACTORS

IS IT AT ALL ADEQUATE?

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AGENDA

- ▶ The characteristics of SMRs
- ▶ The origins of the channeling rule
- ▶ What leads us to present a question „is it at all adequate?”
- ▶ Advantages and disadvantages the channeling rule for SMRs
- ▶ Alternative solutions
- ▶ *Ad hoc* solutions
- ▶ Final conclusions



THE CHARACTERISTICS OF SMRS

AND WHY THE CHANNELLING MAY NOT BE ADEQUATE

A very large number of projects are currently being developed

identified a total of 98 projects.

It is also not possible for operators to be well informed clients

All knowledge about solutions that cannot be seen in practice at this stage remains with the technology suppliers.

The number of projects shows how difficult it is to update legal frameworks uniformly for reactors

that differ significantly from each other in this group.

Common features of all projects:

innovative and first-of-a-kind nature | modular manufacturing and factory production, in some cases fuel loaded already in factor, which really means a huge impact of suppliers on the implementation with limited influence of the operator | installed capacity up to 300 Mwe per module | various applications, not only for electricity generation, but also for heat or hydrogen production | high level of advancement of the applied technological solutions.

THE ORIGINS OF THE CHANNELING RULE



The channeling principle has been implemented in all applicable international Conventions concerning civil liability for nuclear damage.



Unchanged over the years.



The main reasons for introducing of channeling were:

- on the one hand, to facilitate the pursuit of claims by victims,
- on the other hand, to support the development of nuclear power, as suppliers were reluctant to export nuclear technology outside the supplier's country.

WITH SMRS WE ARE IN A SIMILAR SITUATION AS MANY YEARS AGO, BUT...

- ▶ We are richer by several decades of experience in the peaceful use of nuclear energy.
- ▶ The Conventions were created at a time when reactors were already in commercial use. In the case of SMRs, their practical application in reality is not yet known, and complete knowledge of SMRs is possessed only by suppliers.
- ▶ In the case of Type 2 SMRs, it is the suppliers who will manufacture the components in their factory, load them with fuel, and transport the loaded modules to the site - whether the investor or the future operator will have much less influence on the production and construction process.
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- ▶ The regulator watches over the entire process and must issue appropriate decisions - it will not do so if the SMR does not meet certain standards. Still, again the regulator does not yet have practical knowledge and makes an assessment for the first time.
- ▶ This position of suppliers shows that broader liability for potential nuclear damage may seem justified.



ADVANTAGES AND DISADVANTAGES OF THE CHANELLING RULE FOR SMRS



An obvious advantage for technology suppliers is their protection from liability in the event of a nuclear accident. This means that they do not have to take this liability into account in their risk analysis and can thus reduce the costs of their operations and offers.



Potential investors can also benefit from channeling by transferring risk to a special purpose company dedicated to the operator's function so as not to burden the entire business with risk.



For victims is the lack of uncertainty as to who claimed should be against.



The lack of liability on the part of the entity that is actually responsible, if the nuclear accident results from causes on the side of the supplier (design errors).



If suppliers were liable for nuclear damage according to general rules, this would probably lead to greater diligence at the design and construction stage.



Channeling means that victims have limited opportunities to claim their rights, and the assets of suppliers are not available to them.

**WHAT LEGAL MECHANISMS
CAN BE USED TO ENSURE
THAT SUPPLIERS BEAR
LIABILITY AND WHAT ARE
THE POTENTIAL
CONSEQUENCES OF SUCH
SOLUTIONS?**

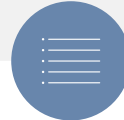


ALTERNATIVE SOLUTIONS FOR SMRS



Solution: Joint and several liability

- A well-known concept in civil law.
- The injured party may demand compensation for damage from one of the persons responsible for the damage, from several of them or from all of them, whereby the fulfillment of the obligation to pay compensation by even one of the joint and several debtors releases the others.
- This is not a complete novelty for this liability regime – art. III.3.a) RVC.



Issues:

- The establishment of key principles governing such liability, including its prerequisites.
- Necessary to introduce a new definition of the supplier.
- The circumstances under which they would be liable, whether on the same restrictive principles as the operator or whether the supplier's fault would have to exist.
- Time limitation or indefinite.
- Whether limiting liability in terms of amount would still be justified.
- The right of recourse.
- A revolutionary solution.



Implications:

- Increase the potential coverage of damage.
- The inhibition of the development of SMR projects, and even the discontinuation of some of them due to the significant additional burden for suppliers.
- BUT natural selection.
- A significantly impact the claims process.



Solution assessment:

- The enhanced financial protection to victims of nuclear accidents.
- Challenge to the development and deployment of SMRs.
- This could potentially lead to a slowdown in SMR projects or even the discontinuation of some initiatives.
- The implementation of joint and several liability could also introduce greater complexity into the claims process for nuclear accident.

ALTERNATIVE SOLUTIONS FOR SMRS



Solution: Right of recourse

- Expand the scope of permissible recourse beyond the possibility of including such a right only in a contract.
- Liability for the defectiveness of the supplied design or equipment caused by the supplier's negligence or willful misconduct, similar to the principle of liability for a defective product.



Issues:

- Structural elements would need to be introduced and specified.
- What circumstances would allow such recourse.
- Whether in this situation limiting liability would still be justified.
- Whether the right of recourse could be contractually excluded.
- Balance of power between operators and suppliers.



Implications:

- Greater investor interest.
- The element of fairness reappears.
- The introduction of the recourse rule will increase costs for suppliers, and therefore also a possible slowdown in the development of SMRs BUT will also again trigger a natural selection of numerous projects;
- Duplicating insurance costs without any clear benefit to the injured parties if the limit of available funds to satisfy claims remained at the same level.



Solution assessment:

- Less revolutionary solution
- Allowing the channeling principle to be maintained while at the same time spreading the risk between entities potentially actually responsible for the damage.



PROPOSED *AD HOC* SOLUTIONS



Nuclear law is rather reactive than proactive.



There are already ways for SMR technology suppliers to share the risk of liability for nuclear damage, and consequently, the solidarity contribution to the development of these projects would be borne by all stakeholders on the basis of applicable regulations.



SOLUTION: CAPITAL INVOLVEMENT OF SUPPLIERS IN SMR PROJECTS

▶ In return for a capital contribution to the construction of an SMR, the supplier could receive better contractual terms, but crucially - shares in the entity operating the nuclear power plant and both benefit from this, but also indirectly participate in the liability risk associated with operation.

▶ This is a solution only for suppliers with a strong financial position.



SOLUTION: PROMOTING THE USE OF CONTRACTUAL RECOURSE

▶ Can have a positive impact on SMRs widespread use, in particular by improving the situation of investors other than large energy companies and making such an investment within their reach.

▶ A huge role is to be played by specialized organizations such as the IAEA or the NEA, which have the tools and resources to create soft law regulations or propose analyzes and specific solutions, such as model recourse clauses for use in contracts.

FINAL CONCLUSIONS

A complete departure from the channeling

may currently be impossible and pointless due to economic, political and international conditions.

There are justified grounds

for imposing a certain scope of risk associated with SMR development on each of the stakeholders.

None of the goals discussed will be achieved

if we do not strive for a global, uniform nuclear damage liability regime. Otherwise, the legal situation will be uncertain for each of the stakeholder involved and difficult to assess in terms of its consequences.

The large number of SMR projects under development makes it difficult

if not impossible, at this stage to create new categories and exceptions for them in terms of the principle of channeled liability.

Introducing any revolutionary changes at this stage of SMRs development is not advisable

and could have more negative consequences than benefits.

This does not mean

that the channeling principle should not be subjected to critical analysis and discussion.

This is not about whether one is on the side of operators or suppliers

but whether one is on the side of the Net Zero by 2050 goal.

The channeling rule is very imperfect

but no one has yet come up with anything better.

THANK YOU
FOR YOUR
ATTENTION!



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