

REVIEWS AND ANNOTATIONS

**Handrlica, Jakub. Jaderné právo a právní futurismus:
jaderné technologie budoucnosti a jejich právní úprava
[Nuclear Law and Legal Futurism: Future Nuclear Technologies
and Their Legal Framework] Praha: Auditorium 2019, s. 256.**

Does nuclear law have a future? This is a fundamental question posed by Jakub Handrlica's new book, which may even be asked by those readers who are not deeply concerned with nuclear law.

In the book, we can find many reflections on the principles of nuclear law and on the developmental moments that this legal industry is undergoing. In this context, the author repeatedly returns to the phenomenon called the futurism of nuclear law.

It cannot be overlooked that reflections on futurism of law have multiplied in the last decade. In this discourse, optimistic views on the predictability of the legislation are sometimes expressed. However, we are also wondering what lawyers will have to do in the future and how this may affect the credibility of their work.

Nuclear futurism is associated with accelerating and slowing down the nuclear industry. In the 1940s, several nuclear reactors were put into operation in two world powers, which started production for war use. Nuclear law then focused on the issue of a ban on nuclear proliferation. Nuclear plants in power engineering were built slowly in the 1950s and 1960s. Legal and administrative regulation in this branch has developed gradually. It wasn't until the 1970s-1990s that nuclear power plants boomed. However, only the Chernobyl accident meant a certain qualitative divide.

In 1945, Albert Einstein commented the future situation apodictically: Since I do not foresee that atomic energy is to be a great boon for a long time, I have to say that for the present it is a menace. It is a rather delicate question of what the term "for a long time" has meant. Einstein once jokingly said that he never thought of the future, because it would come soon enough. In a much more serious situation he wrote that the distinction between the past, present and future is only a stubbornly persistent illusion. Considerations about nuclear futurism do not seem to change the truism that the release of atomic energy has not created a new problem. It has merely made more urgent the necessity of solving an existing one.

The world has changed geopolitically and hope of using safe and clean nuclear fusion is still alive. However, this is still a great technological, economic, and therefore also political problem. 50 years ago, it was considered quite seriously that this problem could be solved by 2020. In reality no one in the world, not even a nuclear superpower, can build fission-based large nuclear power plants at a scheduled time and at a reasonable price. For these reasons, too, it is proposed to reduce nuclear installations and make them mobile.

It is certainly important to ask how much law can be prepared for a relatively uncertain future. Admittedly, the reviewed book cannot respond in a way that goes far beyond the scope of current law. However, it is very valuable that the author expresses himself by inviting to think about many questions that are likely to arise.

The book offers various options. Nuclear law has been dealing with protection against ionizing radiation quite precisely for several decades and this aspect cannot be ignored. The adjustment of liability for nuclear damage is more embarrassing. Nuclear mobility arrangements and nuclear waste disposal remain unresolved in some respects.

From the outset, nuclear law was heavily affected by internationalization. Fragmentation of legislation in multipolar world is of key importance. At the same time, the principles on which the adjustment is based are not equally respected in individual segments of regulation. Moreover, fragmentation is reinforced by the existence of groups of states in which only some common principles are recognized while others are not. In addition, the regulation softens at the same time when the

framework rules or recommendations result in rather different national practices. Many interesting observations are devoted to the management of nuclear safety at the level of international organizations. European nuclear cooperation is also realistically appreciated. The author of the book, however, is not a convinced supporter of the idea that nuclear administration will anchor in the global port in the future.

In the first two decades of the present millennium, nuclear futurism is entering a particularly difficult period. Just as the Stone Age did not end due to lack of stone, it cannot be said that the Atomic Age would run out of lack of nuclear potential. Investment in nuclear weapons development is growing, but the expected renaissance of nuclear power for peaceful purposes did not occur. At the same time, licenses for improved nuclear reactors have been extended to 60 years. Only in the 2040s and 2050s, when some of the world's regions may be strongly affected by overpopulation and water scarcity, can major technological changes utilizing nuclear fusion be expected in the energy sector.

Nuclear law is a multidisciplinary legal amalgam. The work of Jakub Handrlica is considered by reflecting on the grounding of this field in the system of law. These considerations can be appreciated after reading the whole book. Nuclear law can be understood as part of the adjustment of new technologies, especially when we mean the peaceful use of nuclear energy. It is a modification of high-tech industry which is quite different from the regulation of industrial activities in the past. Even in other complex technology projects, it became clear that the results could not become commercially successful. Construction has become more expensive, demand has fallen, yet the project has continued with the argument that it is not possible to end a program that has already swallowed so much money. In this respect, it also makes it difficult to apply common principles of regulation in the commercial sphere.

Here we come to the roots of the belief that nuclear law, as a regulation of new technologies, is perhaps more than the usual segments of administrative or commercial law looking into the future. In addition to what is written in the book, it should be added that we – even as legal theorists – find ourselves on the threshold of post-normal science providing support for risk assessment. Where there is uncertainty, the public is always divided on the efficiency of the solution. Thus, nuclear legal futurism is an entity on the border between science and politics. And politics also decides what advice science should perform. Sometimes those who exaggerate the risks are successful, sometimes the winners are those who downplay the risk. On the whole, this usually means that neither enthusiasts nor sceptics should be excluded from the discussion.

A special question is the relationship between nuclear and environmental law. As has already been stated, nuclear law has focused not only on protection against ionizing radiation. Similarly, environmental law has embarked on a new track. It is not conservative, but proactive with a tendency to create an overly onerous regulatory regime. It also relies on mechanisms of progressive environmental taxation or elimination of competition, as we can see for example in the emissions trading or in the waste business. Environmental law is also oriented on the use of diverse sources for socioeconomic reproduction in the planetary dimension. Of course, environmental regulation cannot protect humanity from cosmic rays, but it can compete with nuclear energy rules.

Although the reviewed book appears to be firm on nuclear law, the futuristic orientation of interpretation in many ways transcends this platform. Therefore, I recommend reading this work to all those involved in the correlation of law and new technologies. Much is also said about legal futurism, or future challenges for lawyers.

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