I. Introduction

1. From Bremen into the world

This topic is of much greater importance than it might at first seem to be. At its core, what’s at stake is the free if also strictly monitored transport of radioactive goods and the question of whether regional or even local bodies within a state are able to ban radioactive materials and thus cut nuclear power plants off from the lifeline they need in order to be supplied with fuel elements and to dispose of spent fuel. What happened in Bremen is an example, it could just as well happen anywhere else in the world.

Infrastructure and transport are the lifelines of a modern industrial society. They are the prerequisite for supply with everyday goods, consumer and capital goods, for energy and of course also for nuclear energy. In the case of nuclear energy, specific questions arise that derive from the radioactive potential. Special duties to take care and take precautions, regulations on transport and storage facilities as well as transport containers go without saying, globally, even if as a rule they are set according to national criteria. And everywhere the industry is also adapting to further developments in science and technology. Use of nuclear energy, including its transport, is safe. It is advancing parallel to the increasing importance of renewable energy. The one does not replace the other.

Nuclear energy is now under a threat that derives not from potential nuclear-specific risks but rather from developments in society: a different perception of potential risks. And this perception is directed not only against peaceful use of nuclear energy as an efficient energy provider whose potential for price savings is unparalleled, but also against everything connected with this system. And against transport as well, of course. For one thing is clear: if transporting nuclear material is prohibited (or made incalculably more expensive), then nuclear power plants face the end of their existence too.
2. **Regulatory law and infrastructure**

As well as being location factors in an economy, transport, logistics and infrastructure are crucial factors in supplying a society. Locally, regionally, nationally and also internationally. That applies equally to roads, rail and water as well as for air. Ports are the **gateway to the world**.

The infrastructure grid that **actually** exists is one thing. The **statutory regulatory regime** is another. The infrastructure is only as functional and good as the law that regulates its use. Any restriction has effects on markets with consequences for the location and for production, including energy production.

3. **The dynamics of legal structures**

Because it is embedded in society and the environment and represents the backbone of the economy, infrastructure is subject to many kinds of (social) change. This also means that it is subject to **legal dynamics**. In **Germany**, the following legal developments are significant for the transportation and infrastructure of nuclear fuel at the current time:

- What is called the **nuclear exit**: the 13th amendment to the German Atomic Energy Act (August 2011) reduced the lifespans of nuclear power plants by an average of twelve years to thirty-two years (in Switzerland up to sixty years, subject to the plant’s safe operation); eight nuclear power plants were shut down immediately. In 2022 the last nuclear power plant will be taken off the grid.

- Recent court rulings by the Federal Administrative Court and Federal Constitutional Court on **third party protection** during transportation.\(^1\) Third parties may now take far-reaching legal action against transportation approvals. This makes choosing a route more difficult. Transport is subject to potential delays that in some cases may be substantial.

- What is called the **Final Disposal Site Selection Act**\(^2\) regulates the search for and establishment of a final disposal site for radioactive waste. It will **delay** final disposal by 50 to 80 years and lead to incalculable costs and social conflicts. It will mean that highly radioactive waste will have to be stored at interim sites for decades longer. New interim storage facilities for more than 50 years will have to be constructed. Use of transport and storage containers (**Castor**), for example, will face major problems as their pattern approvals are only limited. The overall concept of transport, transport containers and long-term interim storage is under close scrutiny.

- The change to the Bremen Port Operation Act: This act prevents radioactive material from being shipped in Bremen ports: a dangerous precedent. I will now go into this in more detail.

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II. The change to the Bremen Port Operation Act:

1. Bremen as an all-purpose port

The Bremen ports - Bremerhaven and Bremen - are the fourth largest European all-purpose port. Around 115,000 jobs are linked to the port. Bremen’s tradition of being an all-purpose port goes back centuries, surviving all kinds of social changes. Generally, in all-purpose ports all types of goods are permitted to be shipped on all types of ships, as long as the specific statutory transport regulations and the structure of the port allow this. Correspondingly, the Bremen ports also handled all goods used in constructing power plants, producing energy, renewable energies and also nuclear energy, in particular nuclear fuel, other radioactive material as well as radioactive waste.

2. Amendment to the Port Operation Act

In February 2012 the Bremen Port Operation Act was changed. Section 2 (3) now reads:

“In the interests of an overall economy that is generally geared towards sustainability and renewable energies, shipment of nuclear fuel in the meaning of section 2 subsection 1 of the German Atomic Energy Act is excluded...”

According to the law’s explanatory memorandum, it is intended to protect the safety of Bremen’s population by limiting nuclear transport. In addition, following the statutory nuclear exit in Germany, the Act is intended to stop the export of nuclear fuels for producing nuclear energy. In their parliamentary discussions the members of the Bremen parliament were aware that they were entering into new legal terrain by taking this step and that the law’s constitutionality was doubtful from the outset. Above all, they were aware that the law was setting a precedent. The landmark nature of the Bremen law extends far beyond the original facts at hand, namely shipping of nuclear fuels at the Bremen ports. The parliamentary discussions in Bremen and voices being raised elsewhere have shown that similar prohibitions on shipping other goods are being aimed at in the near future. What nuclear fuels are today, other politically discredited goods can be tomorrow, for example genetically modified food, palm oil, tropical wood, tobacco products or other goods. And what is happening in Bremen today can happen tomorrow in other port cities, in other municipalities anywhere in the world. By using the back door of transport regulations, matters can be regulated on the local or regional state level for which other authorities or bodies are constitutionally competent. For constitutional reasons, such regulation is only permissible if it has been assigned to the legislative body (in this case, Bremen) by

3 Act of 31 March 2012, Bremen Legal Gazette, p. 10; the section 2 subsection 1 German Atomic Energy Act referred to reads: "(1) Radioactive material (nuclear fuel and other radioactive material) in the meaning of this Act is all material containing one or more radionuclides and whose activity or specific activity in connection with nuclear energy or radiation safety cannot be ignored under the provisions of this Act..."

4 A member of the parliamentary party of the SPD pointed out that “it’s not a secret” that other port cities such as Cuxhaven, Wilhelmshaven, Emden, Rostock and Lübeck are considering whether to prohibit the transport of nuclear fuels via seaports.
the federal constitution (German Basic Law) and, in addition, if it is legally compatible with higher-ranking law such as constitutional law, European law and international law.

III. Unconstitutionality of the Bremen law

In several ways the change to the Bremen Port Operation Act is in breach of the German constitution (Basic Law):

– It is in breach of the division of legislative powers between the federal parliament and the regional states.

– It is incompatible with the constitutional principle of the legal system being free of contradictions.

– And finally, the Act breaches the constitutional principle of what is termed loyalty to the federal state (Bundestreue).

1. Breach of exclusive federal competence pursuant to Art. 70 et seq., 73 (1) no. 14 German Basic Law (Grundgesetz)

1.1 Legislative competence

Germany is a federal state. Its constitution regulates when the federal parliament is competent and when the regional states are competent. This applies both to the legislature as well as to the executive and judiciary. The legislative competence of the federal parliament and of the regional states is provided for in Art. 70 et seq. German Basic Law. The regional states have the right to legislate unless the Basic Law assigns such legislating to the federal parliament. If such legislating is assigned solely to the federal parliament, then the regional states have no legislative competence. This applies even where the federal parliament does not make use of its legislative competence. If one of the state legislatures nevertheless issues regulations, then these regulations are unconstitutional because they breach Art. 71 of the Basic Law, and are thus null and void.

1.2 Nuclear energy

Art. 73 (1) no. 14 Basic Law provides that the federal parliament has the sole power to pass legislation on “the production and utilisation of nuclear energy for peaceful purposes”. This power covers the entire sector of nuclear energy and all laws relating to nuclear safety and security. These include the construction and operation of corresponding facilities such as nuclear power plants or storage facilities as well as all procedures connected with the transport and storage of radioactive materials. They are an inseparable part of nuclear energy use. So this means that the federal parliament has sole legislative competence for everything directly connected with nuclear energy. This includes transport by rail or road, by air or sea. Regulations concerning transportation...
of nuclear energy can only be decided upon by the federal parliament. Regional state legislatures have no powers in this regard. So for this reason alone, the Bremen law is unconstitutional and therefore null and void.

2. **Exercise of legislative competence exacerbates the breach**

The unconstitutionality of the Bremen regulation is all the more evident because in fact the federal parliament used its legislative competence.

In the German Atomic Energy Act and its numerous implementing ordinances, use of nuclear energy is regulated in detail. This includes regulation of carriage (section 4 German Atomic Energy Act). Section 4 German Atomic Energy Act sets out a standardized statutory framework for carriage of nuclear fuels. Section 4 requires a specific approval under nuclear law for carriage of nuclear fuels. Section 4 (2) of the Act regulates the conditions under which approval can be granted. These conditions cover the personal reliability of the people involved, the professional knowledge of those undertaking the carriage, compliance with legal regulations on carriage, protection against interference by third parties and the issue of liability (insurance cover). The power to issue the approval lies with a federal authority (Federal Office for Radiation Protection). The regional states do not possess any powers in this regard.

For the approval to be granted, section 4 (2) no. 3 German Atomic Energy Act also requires that the relevant traffic regulations for hazardous goods are complied with. As regards the maritime sector, binding international rules apply in this regard, deriving from the International Maritime Dangerous Goods Code (IMDG-Code)\(^5\) of the International Maritime Organisation (IMO). In order to implement these international rules in national law, the federal parliament defined the safety and security requirements for transporting hazardous goods by passing the Act on the Carriage of Dangerous Goods\(^6\). Based on this law, the Ordinance on Transporting Dangerous Goods by Sea\(^7\) was passed. The regulations of the Ordinance on Transporting Dangerous Goods by Sea refer explicitly to handling nuclear fuels, meaning transfer of these dangerous goods to be transported by ships. We don’t need to go into further details in these requirements here. The regulations show that as regards laws on dangerous goods too, the federal parliament has defined how radioactive materials and nuclear fuels are regulated.

The wording of section 2 (3) Bremen Port Operation Act alone shows that its regulatory purpose is diametrically opposed to the policy decision taken by federal legislators in the Atomic Energy Act in favour of nuclear energy. For the Bremen regulation excludes shipping of nuclear fuels in the Bremen ports. The regulation prevents the transport provider from taking a particular transportation route for nuclear fuels, namely port use and shipping from Bremen. So the

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\(^5\) Most recently amended by Resolution MSC.294 (87) in the official German translation of 30 November 2010, Transport Gazette (VkBl) 2010, 554.

\(^6\) In the most recently amended version of 07 July 2009, Federal Law Gazette I, p. 1774, 3975.

\(^7\) In the version of 19 December 2012, Federal Law Gazette I, p. 2715.
regulation prohibits what is allowed by the federal regulation. Bremen legislators have no power to do this. So the law is unconstitutional and thus null and void.

3. Breaches of further constitutional principles

The regulation in section 2 (3) of the Port Operation Act also breaches two further principles of German constitutional law.

3.1 Lack of contradiction

Firstly, the principle of the legal system being free of contradictions. This means that the federal parliament and the regional states (even when they have powers) are obliged to harmonize their regulations in terms of content and concept. Regional state legislators are prohibited from counteracting or distorting a regulation concept standardized by federal parliament legislators. Legislative competence under the federal system obliges “all legislative bodies both at the federal and regional state levels to harmonize their regulations such that their subjects are not faced with opposing regulations, making the legal system contradictory. Such contradiction is clearly given here. The Bremen state legislators consciously caused this. This is unconstitutional. So for this reason too, the law is null and void.

3.2 Loyalty to the federal state (Bundestreue)

Finally, the regulation in section 2 (3) of the Port Operation Act breaches the constitutional principle of what is termed loyalty to the federal state. In a federal state, there are obligations between the individual subunits to take due consideration of each other. At the same time, this means a prohibition on circumventing or subverting the distribution of powers in the federal system. The Bremen regulation breaches this prohibition too.

IV. Incompatibility with European Union law

1. German legislators bound by EU law

The Member States of the European Union are obliged to comply with the EU’s higher-ranking law. This applies to all state bodies and organizations, irrespective of the federal structure. All legal acts and regulations by the state, on whatever level and whatever authority or body performs them, must be in harmony with EU legal regulations. EU law takes precedence. It has primacy. National law in conflict with EU law may not be applied.

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8 Federal Constitutional Court 98, 106, 119.
2. **Incompatibility with free movement of goods**

The shipment prohibition pursuant to section 2 (3) Port Operation Act is incompatible with the guarantee of free movement of goods under Art. 93 of the Euratom Treaty (EAEC) and Art. 34 of the Treaty on the Functioning of the EU (TFEU).

2.1 **Harmonization of basic freedoms under EAEC and TFEU**

As regards **Art. 34 TFEU, Art. 93 of the Euratom Treaty** contains a special regulation on free movement of goods for the products listed in the annex to the EAEC. The EAEC is the key agreement on nuclear energy.\(^9\) Where the EAEC applies, the same standards apply to free movement of goods as in the TFEU’s area of application. Restrictions on volumes and measures with the same effect are prohibited. Restrictions are only permitted in very limited circumstances. Whether Euratom or TFEU is applicable, is irrelevant in terms of the consequences.

2.2 **Area protected for free movement of goods**

The free movement of goods is one of the Community’s cornerstones. It guarantees realization of the **common market**. Free movement of goods guarantees that goods can circulated freely without hindrance. **Goods** are all products that can be the object of a commercial transaction. This wide concept of goods includes even waste, irrespective of whether it has a positive or negative trade value.\(^10\) Nuclear fuels are goods within the meaning of free movement of goods.\(^11\) This applies in the same way to spent fuel or radioactive waste.

2.3 **Impairment of free movement of goods**

Prohibiting radioactive material from being shipped in Bremen ports represents an impermissible impairment of free movement of goods. In this connection, it is irrelevant that there are other ports where radioactive material can continue to be imported and exported. Any **restriction** on shipping these goods is a potential impairment of trade. And according to court rulings by the Court of Justice of the European Union (CJEU), that suffices.\(^12\) A specific regulation of trade is not required. Any potential suitability to hindering cross-EU trade is sufficient. Objectively **minor** (potential) impairments are also sufficient.

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\(^9\) It should be said that it is disputed whether nuclear fuels themselves fall under the EAEC, as they are not explicitly listed in Annex IV to the EAEC. Ultimately, this is not important, however, as the free movement of goods is regulated in the same way in the two treaties (Art. 93 EAEC and Art. 34 et seq. TFEU).

\(^10\) CJEU Rsc-2/90, Commission/Belgium, ECR. 1992, I-4431, established case law.

\(^11\) In this connection, it is irrelevant that according to Art. 86 EAEC nuclear fuels are the property of the Community. For in any event they can be the object of a commercial transaction.

\(^12\) According to the ‘Dassonville’ landmark decision, CJEU Rsc-8/74, Dassonville, ECR. 1974, 837, established case law.
2.4 No justification for impairing free movement of goods

The shipping ban cannot be justified either on the grounds for justification provided for in Art. 36 TFEU or based on other “mandatory requirements” in the meaning of the CJEU’s Cassis ruling.\(^{13}\)

**Art. 36 TFEU** defines the protection of public policy (public order) or public security, the protection of health and life of humans, animals or plants as providing possible grounds to restrict free movement of goods. **None** of the legal interests mentioned are relevant here. The grounds of protecting **public policy** are interpreted restrictively by the CFEU. Only state interests of fundamental importance are recognized. They have to be essential to the state’s existence. The same applies to the protected interest of **public security**. The shipping ban on nuclear fuels in the Bremen ports is not required to protect public policy and security. The reason for this is that shipping nuclear fuels endangers neither the regional state of Bremen nor the people who live there. Requirements for securing transport have been defined and set by federal laws. According to international standards as well, a **very high level of safety** applies in Germany. Shipping nuclear fuels in the Bremen ports does not create any risks. Nor did the Bremen state legislators present any such risks. Simple suppositions or assertions are insufficient. Nor are political or ideological goals, even if they correspond to majority opinion in the population. Such goals do not serve to avert danger or to protect public policy and security. They are unable to restrict free movement of goods.

Nor is a restriction justified according to the **Cassis-de-Dijon formula**. According to this, intervening in the free movement of goods can by justified by mandatory requirements of commerce, in particular the requirements of effective taxation, commercial fairness and consumer protection, also environmental protection. All these protected interests presuppose a **genuine danger**. Specific evidence needs to be presented, based on scientific insights. No such evidence is given here, nor is it even claimed by the Bremen legislators. Politically motivated prevention of nuclear fuel transportation and nuclear power use alone is not a goal that can be recognized by EU law as justifying restriction of the common market.

3. Incompatibility with freedom to provide services

The general prohibition on shipping nuclear fuels in the Bremen ports also breaches the **freedom to provide services** under Art. 65 TFEU. Not only the free movement of goods but also the freedom to provide services is relevant here. Together with cross-border movement of goods, cross-border services rendered as part of transportation are also restricted. The shipping ban affects service providers in particular that specialize in transportation. Just like the free movement of goods, the freedom to provide services can be restricted. However, the strict preconditions that could justify such restriction do not exist in this case. So here too, the same applies as in the guarantee on the free movement of goods.

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\(^{13}\) CJEU Rsc-120/68 Cassis-de-Dijon, ECR 1979, 649.
V. Conclusion

For a number of reasons, the Bremen Port Operation Act is incompatible with the German constitution and with European Union law. It is astonishing how such frivolous political considerations at the regional state level have managed to overcome constitutional rules and principles at the federal level. It is reminiscent of when German municipalities created nuclear weapon-free zones in the 1970s, before the courts declared this to be unconstitutional. This kind of extremely locally focussed thinking conflicts not only with sensible political policy. It is also incompatible with specific regulations of the system brought into being by the German constitution. That’s clear. Specialized service providers have brought an action against the Bremen regulation before the Bremen Administrative Court.14 As the Bremen Administrative Court cannot itself declare the Bremen port law to be null and void, it can be expected to pass the case onto the Federal Constitutional Court (Bundesverfassungsgericht). The Federal Constitutional Court can then declare the law null and void. Parallel to this, an application has been made to the Administrative Court to put the case before the Court of Justice of the European Union. However, the CJEU cannot declare the Bremen regional state law to be null and void but only rule that the Act is in breach of European law. The result of this, of course, is that the Act can then no longer be applied.

14 The action is pending under case nos. 5 K 171/13 and 5 K 303/13.