Introduction

1. A TREATY AT THE CROSSROADS

The European Atomic Energy Community (Euratom) Treaty is one of the EU’s founding treaties and it is still frequently applied. Yet, to most EU scholars, the Euratom Treaty is *terra incognita*. It was signed in Rome in 1957, together with the European Economic Community Treaty (‘EEC Treaty’). The two ‘Rome Treaties’ were concluded for an unlimited period and were adopted by the same Member States. The two Treaties were very similar; many provisions were even identical. But there were also significant differences.

The principal task of the Euratom is to create ‘the conditions necessary for the speedy establishment and growth of nuclear industries’ (Article 1). This reflects the high expectations for nuclear energy in the 1950s. As was often said, nuclear power would be ‘too cheap to meter’.¹ Some believed it would even trigger an industrial revolution. In light of these expectations, it is perhaps unsurprising that Jean Monnet, the architect behind European unity, saw the Euratom Treaty as the main instrument for integration.²

Soon after the Treaty had come into force, however, it became clear that the Euratom did not live up to the early expectations. Indeed, the Euratom has only played a minor role in the European integration process. Over the years there have been some vociferous calls not only to amend the Treaty but also for its abolition. Yet, today, the Treaty is still in

¹ Lewis L. Strauss (Chairman of the US Atomic Energy Commission), Speech to the National Association of Science Writers, New York City, 16 September 1954 [*New York Times*, 17 September 1954].
force; moreover, it is largely unamended since its adoption. It establishes a Community with a separate legal personality.\(^3\)

This book is principally concerned with the relationship between the Euratom Treaty and the two core EU Treaties – the Treaty on European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU).\(^4\) The major research question of this book is: *What are the legal implications of the continued separate existence of the Euratom within the EU?* The aim is to establish whether the Euratom ought to be kept separate from the Union or brought into the EU framework. One important sub-question is whether it is still relevant that one of the EU’s founding treaties has the promotion of the nuclear industry as its main objective. A closely related question is whether the Euratom has lost its raison d’être.

### 2. THE RELEVANCE OF EU NUCLEAR LAW

In academic circles, nuclear energy and the Euratom are seldom analysed or addressed alongside the EU’s general energy policy. One reason is that nuclear energy today is regarded as an insignificant matter. This is a misconception. A third of the electricity consumed in the EU comes from nuclear energy. There are 128 reactors in 14 Member States.\(^5\)

Paradoxically, the Chernobyl accident in 1986 – which had a widespread transboundary effect in Europe – seems to have been the ‘turning point’ for the Euratom. Following the accident, several instruments were adopted on the basis of the Euratom Treaty. The Euratom has also acceded to several international conventions, it has concluded many bilateral agreements, and it constitutes the legal basis for financial and technical support to third states. This development has gone hand in hand with the evolution of international nuclear law, which was set up as a response to the Chernobyl accident.

\(^3\) In 2002, the Coal and Steel Treaty expired. The Euratom continued to exist; it had been adopted for an unlimited period. There were now three founding treaties (the EU Treaty, the EC Treaty and the Euratom Treaty), two Communities (the EC and the Euratom), and one Union.

\(^4\) There is no hierarchy between them; they have ‘the same legal value’ (Article 1(3) TEU and Article 1(2) TFEU). This book refers to the TEU and TFEU as the ‘EU Treaties’. When using this term, the Euratom Treaty is not included.

Prior to the Fukushima disaster in 2011, it was widely recognised that nuclear energy was enjoying a ‘renaissance’. The renewed interest is seen all over the world – in Europe, the United States, Russia, China, India and Brazil, and many developing countries. New nuclear power plants are being planned or built. Some countries are reviewing the possibilities of extending the life of existing, old reactors. The renewed interest in nuclear energy was prompted by concerns about climate change and a secure energy supply. But perhaps the main driver that put nuclear power back on the political agenda was the increasing energy demand. Yet, the nuclear renaissance has its sceptics, who argue that the economic costs of building new plants are so high that nuclear energy is no longer economically feasible. Safety concerns and concerns over how to deal with nuclear waste contribute to this scepticism.

The EU Member States are today divided on the use of nuclear energy. Indeed, it is up to each Member State to decide whether to produce nuclear power. There might not be a nuclear renaissance in the EU, yet there are no clear signs that the interest in nuclear energy will fade in less-developed parts of the world. Clearly, questions related to the use of nuclear energy will remain on the table for the foreseeable future.

3. METHODOLOGICAL CONSIDERATIONS

Throughout this book, the discussion focuses on the interaction between the Euratom Treaty and the EU Treaties. The book is divided into two main parts. Part I explores ‘structural’ issues and comprises a theoretical discussion. In particular, it asks on what grounds the Euratom can be said to be separate, and in what ways? This question frames the subsequent discussion. Readers who are less interested in these theoretical issues are encouraged to turn directly to the second part.

Part II maps out the substantive law of the Euratom. The purpose is to illustrate the relationship between the Euratom and the EU. Before explaining how this will be done, a few words must first be said about how the Euratom Treaty is constructed.

The Treaty is divided into six titles: The tasks of the Community (Title I); Provisions for the encouragement of progress in the field of nuclear energy (Title II); Institutional and Financial Provisions (Title III);

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Specific Financial Provisions (Title IV); General Provisions (Title V); and Final Provisions (Title VI). 7

The Euratom sets out its general tasks in Article 1 Euratom:

It shall be the task of the Community to contribute to the raising of the standard of living in the Member States and to the development of relations with the other countries by creating the conditions necessary for the speedy establishment and growth of nuclear industries.

The Euratom’s various activities are listed in Article 2, which reads:

(a) promote research and ensure the dissemination of technical information;
(b) establish uniform safety standards to protect the health of workers and of the general public and ensure that they are applied;
(c) facilitate investment and ensure, particularly by encouraging ventures on the part of undertakings, the establishment of the basic installations necessary for the development of nuclear energy in the Community;
(d) ensure that all users in the Community receive a regular and equitable supply of ores and nuclear fuels;
(e) make certain, by appropriate supervision, that nuclear materials are not diverted to purposes other than those for which they are intended;
(f) exercise the right of ownership conferred upon it with respect to special fissile materials;
(g) ensure wide commercial outlets and access to the best technical facilities by the creation of a common market in specialised materials and equipment, by the free movement of capital for investment in the field of nuclear energy and by freedom of employment for specialists within the Community;
(h) establish with other countries and international organisations such relations as will foster progress in the peaceful uses of nuclear energy.

Each of the Euratom’s activities is detailed in a Treaty chapter under Title II:

Chapter 1 – Promotion of Research;
Chapter 2 – Dissemination of Information;
Chapter 3 – Health and Safety;
Chapter 4 – Investment;
Chapter 5 – Joint Undertakings;
Chapter 6 – Supplies;
Chapter 7 – Safeguards;

7 The Euratom Treaty originally contained 225 articles, a number comparable to the original EEC Treaty, which contained 248 articles (cf. the TFEU with its 358 articles). The Lisbon Treaty repealed a considerable number of the Euratom Treaty articles and replaced them with references to the EU Treaties.
Chapter 8 – Property Ownership;  
Chapter 9 – The Nuclear Common Market;  
Chapter 10 – External Relations.

The book examines all of these Treaty chapters. Here the book takes a descriptive and analytical approach. Let us start with the descriptive approach. The book examines a range of closely related questions. The first set concerns the type of actions adopted on the basis of the Euratom Treaty. Is it largely a question of harmonising measures or is the scope of Euratom power more limited? Are the activities supplementing, coordinating and supporting the Member States’ activities? Are there special rules and procedures that are only applied within the Euratom? Another closely related set of questions concerns the form of measures. Are the instruments under the Euratom Treaty the same as under the EU Treaties (i.e. are there regulations, directives and decisions, etc.)? What institutions are involved? How are the decisions made? A comparison will be made to legislation and measures adopted with the EU Treaties as a legal basis.

In addition, some ‘gaps’ and ‘overlaps’ will be identified. How shall we deal with situations where only the EU Treaties, but not the Euratom Treaty, contain rules in a specific area that appears to come within the scope of Euratom? Can we apply the EU Treaties instead? In other words, if the Euratom Treaty is silent (i.e. there is a ‘gap’ in that Treaty), can we use the EU Treaties to ‘fill the gap’? Further, how shall we deal with situations where there are provisions in both the Euratom Treaty and the EU Treaties, but the provisions in the EU Treaties are more ‘comprehensive’ than those of the Euratom Treaty?8 Could we fill such ‘gaps’ in the Euratom Treaty by using the EU Treaty provisions? And how do we apply Article 203 (the corresponding provision to Article 352 TFEU), the Euratom’s ‘flexibility clause’, when it comes to these ‘gaps’?

The book also identifies some ‘overlaps’ between the Treaties. An overlap occurs when there are rules in both the Euratom Treaty and the EU Treaties that could regulate the same substantive area. This could be a matter of choice between legal bases (i.e. the application of legal bases for the adoption of secondary legislation), but also a choice in the application of detailed rules in primary law. Overlaps are problematic

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8 One example is Article 93 Euratom, which provides for the free movement of nuclear goods. It prohibits ‘charges having equivalent effect’ to ‘customs duties’, but not ‘measures having equivalent effect’ to a ‘quantitative restriction’. Does this omission imply that ‘measures having equivalent effect’ to quantitative restrictions are not prohibited under the Euratom Treaty?
where there are contradictions, and contradictions may occur in both substance and procedure. A contradiction in procedure occurs, for example, if a legal basis in the EU Treaties provides for qualified majority voting in the Council, while the same issue could be dealt with under the Euratom Treaty, which provides for unanimity.

The Court of Justice of the European Union (CJEU) has explained how the choice of legal basis is to be made under the TFEU. The choice ‘must rest on objective factors which are amenable to judicial review’, including in particular ‘the aim and the content of the measure’. If more than one provision fits the content or aim, the provision in the ‘centre of gravity’ of the legal act shall prevail, i.e. the predominant or main component of the legal act. When it is not possible to identify such a main component (because two or more components are ‘indissociably linked’), it might be necessary to use a dual (or multiple) legal basis.

But a dual legal basis can only apply if the decision-making procedures are compatible. If different legal bases are stipulating different roles for the European Parliament (e.g. ordinary legislative procedure or a consultation procedure), then the legal basis with the ‘most democratic’ procedure will take precedence (here, the ordinary legislative procedure). The question is whether this scheme can apply to cross-treaty situations.

As mentioned, Part II not only takes a descriptive approach, but also an analytical approach. The key issue here is whether it matters which treaty is being applied, and what difference it makes. What is the value added of using the Euratom Treaty? In answering this question, the book takes two perspectives: an integration perspective and a Member State perspective.

The integration perspective poses the following question: Is it better from the point of view of integration to use the EU framework when one could use the Euratom? Integration here primarily means integration in any of the policy areas under the Euratom, including the creation of a nuclear common (internal) market. As often mentioned in the literature and by the CJEU, the choice of legal basis can have constitutional
Introduction

significance since it decides the scope of influence of the EU institutions in the law-making process. Indeed, the Euratom Treaty provides a very limited role for the European Parliament.\footnote{The ordinary legislative procedure now applies to the Euratom Treaty, but not a single one of the Euratom’s legal bases identifies the ordinary legislative procedure.}

The Member State perspective poses the following question: What are the implications for the Member States’ use of the Euratom as opposed to the EU Treaties? As already mentioned, we will examine to what extent (and why) different procedures are used within the Euratom. The Euratom procedures may be different because the special nature of nuclear energy requires this. Another possibility is that the Euratom may have different procedures simply because it is ‘frozen’ in time, i.e. because substantive amendments have never been achieved. The Member States might find some advantages in using the Euratom because they see it as a greater protection for their sovereignty.

The choice between the Euratom Treaty and the EU Treaties might also have significance for the type of instrument used. An important aspect is institutional choices. What are the institutions saying about the choices? Is there a path dependency in using either of the Treaties? Further, are the choices of legal basis coherent if there is a possibility to choose either the Euratom Treaty or the EU Treaties (that is, in case of an overlap)? Is the choice of legal basis legally or politically grounded?

In addition to this discussion of the choice of legal basis, the purpose of examining substantive areas is to discern how the Euratom acquis has evolved in relation to the EU acquis. Has the Euratom become closer to the EU, or has it moved in a different direction? Are they converging, diverging or taking a parallel path? Convergence may mean that the Court can transfer constitutional principles between the Treaties with more ease than if there was divergence. But convergence may also imply one ‘swallowing up’ the other. Is there any requirement of coherence in the relationship between the EU and the Euratom? The divergence thesis poses similar questions. A third possibility is a parallel evolution of the EU and Euratom acquis; while there is some evidence of convergence, there is also some evidence of divergence of the acquis.

The book also examines the external role played by Euratom. This is an important aspect, because the Euratom has a strong framework for external relations, stronger than the original EEC Treaty. One of Euratom’s principal tasks is ‘to contribute … to the development of relations with the other countries by creating the conditions necessary for the
speedy establishment and growth of nuclear industries’ (Article 1). External relations will be dealt with ‘across the board’, i.e. they will not be dealt with separately, but seen as an important part of the substantive areas examined.

The book will explore some of the many international agreements to which the Euratom is a party. There are three main types of agreements: mixed agreements where both the Euratom and the Member States are parties; ‘mixed agreements’ which are ‘mixed’ in the sense that both the Euratom and the EC (or now, the EU) are parties; and ‘Euratom agreements’, where only the Euratom has signed an international agreement with a third party (so-called Community-only agreements). Should the Euratom and the EU be regarded as separate actors or does the Euratom only enjoy a formal meaning, with no real practical consequences? For a full understanding of the Euratom’s external as well as internal role, some international law instruments will also be examined.

There has been surprisingly little written about the Euratom Treaty. Most of the literature is from the 1950s and the 1960s, and not much of the literature is legal. While the early literature was optimistic about Euratom, the literature from the mid-1960s onwards focused on the ‘Euratom crisis’, and later, in the 1970s, on the ‘Euratom as a failure’. Much of this early literature came from the United States, probably because of an agreement the Euratom had concluded with the United States. Let us also not forget that the Euratom was initially deemed as having greater potential than the more uncertain Economic Common Market. From the 1980s onwards, the Euratom Treaty started to attract the attention of European scholars. Most of that literature is published in French and German, and very little in the English language. In recent years, there has been a small but emerging literature on the Euratom. However, few take the approach of EU law, and very few examine the

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13 There are roughly 98 international agreements: 75 are bilateral and 23 multilateral.
14 See, e.g., Scheinman, ‘Euratom: Nuclear Integration in Europe’ (n 2) 5.
15 Droutman writes that the ‘Euratom … has been a failure on all fronts’. See, Lawrence Julian Droutman, Nuclear Integration: The Failure of Euratom (Ann Arbor: UMI, 1982).
Euratom from an institutional/structural perspective.\textsuperscript{17} The latter approach is the focus of this book.

Due to the relative lack of literature on the Euratom Treaty, primary material is an important source for this book. There are roughly 30 cases on the Euratom Treaty, and the whole spectrum of types of proceedings is represented: infringement procedures, rulings and opinions, actions for annulment, actions for failure to act, applications for compensation based on non-contractual liability, appeals on points of law and preliminary rulings. On the basis of such limited yet diverse material, it would be difficult, if not impossible, to draw general conclusions in any quantitative fashion.\textsuperscript{18} However, one conclusion that could be drawn is that the number of cases seems to be increasing; roughly 80\% of the cases were decided in the 1990s or 2000s. Yet, it is very difficult to decide what exactly counts as a case ‘on’ the Treaty; sometimes an issue is only very briefly or incidentally addressed. Other cases do not even mention the Treaty, but they might still have implications for the relationship between the Euratom and the EU. Other cases are directly ‘on’ the Euratom Treaty, but they do not give much information on the treaty relationship.

There is a lot of legislation adopted on the basis of the Euratom Treaty. This book examines this legislation, and also legislation adopted on the basis of the EU Treaties. Importantly, the aim is not to examine legislation in any material sense or to provide a comprehensive account of the Euratom acquis; the aim is rather to provide an understanding of the Euratom’s role in the EU structure.

Besides cases and legislation, a lot of ‘background materials’ are examined, in particular Commission documents. In Euratom’s first 10 years of existence, the Commission adopted a report for each year with an overview of Euratom’s activities: the Euratom General Reports. Following the merger of the institutions in 1967, such individual Euratom reports were no longer made. Subsequently, it became more difficult to study what the Euratom was actually doing, and to examine how its acquis has evolved.


\textsuperscript{18} See, however, Sebastian Wolf, ‘Euratom Before the Court: A Political Theory of Legal Non-Integration’ (2011) 15 \textit{European Integration online Papers} (EIoP) \url{http://eiop.or.at/eiop/texte/2011-010a.htm}. 
Therefore, it was necessary to find a balance between describing the evolution of the acquis and describing the Euratom’s current activities. That balance is a fine one, because, on the one hand, the book is not about legal history, and on the other hand, it is hard, if not impossible, to examine EU law without an understanding of where it comes from, i.e. the rationale behind the provisions and the context in which it has been shaped.

Some caveats are necessary. The book’s two main parts – the structural issues and the substantive issues – can be read separately, but only together do they provide a complete picture of the legal implications of the Euratom Treaty as a separate treaty. Understanding the relationship between the Treaties requires an overview of the various substantial areas. The second part, on the substantive law, is about a general mapping. It would be an overstatement to claim that the account is exhaustive, yet it is much more than illustrative.

Finally, it should also be pointed out that the book is not concerned with political or economic issues, but about legal ones; the future of nuclear energy from an economic perspective or political perspective is dealt with elsewhere. Its primary concern is with the relationship between treaties, and what it means that within the EU there are separate treaties and (less so) separate organisations.

4. STRUCTURE

Chapter 1 revisits the Euratom’s historical background. It addresses the legal, political and economic context in which the Euratom was shaped. The aim is to provide a deeper understanding of the Euratom, which helps to better examine the role of the Euratom in the EU today.

The book is then divided into two parts. Part I, which is subdivided into two chapters, analyses structural issues. Chapter 2 explores and sheds light on the structural relationship between the EU and Euratom. The purpose is to map out the institutional differences between the EU and the Euratom and to explore the links between them. Chapter 3 can help us to understand how to make the choice of legal basis, and in particular, how this choice is different from the choice between different policy areas under the TFEU. The chapter also examines the ethos of the Euratom and the question of whether ‘constitutionalisation’ is discernable in a Euratom context. The chapter includes a discussion on the possibility of ‘partial membership’, an issue that became relevant in the aftermath of the Brexit debate.
Part II deals with substantive issues over six chapters. Chapter 4 prefaces the discussion by giving some context of EU energy policy more generally. Chapters 5 and 6 consider the Euratom’s central objective, which is to promote the nuclear industry. Chapter 5 asks what the relevance of this objective is today. It shows that policy areas that could be regarded as ‘dirigiste’ are only applied in a limited fashion. Chapter 6 deals with functions that are ‘market oriented’. It also examines whether the provisions in the TFEU on competition law and State aid apply to the nuclear sector.

Chapters 7 to 9 deal with measures that seek to control the civil use of nuclear energy. Chapter 7 explores the Euratom competence in the area of ‘radiation protection’, which concerns the protection of workers and the general public. The focus of this chapter is on the relationship between radiation protection and other policy areas within the competence of the EU, e.g. environmental protection, work safety and public health. Chapter 8 discusses nuclear safety, which is the Euratom’s most significant activity area today. The chapter is less concerned with gaps and overlaps than with the Euratom’s added value.

Chapter 9 outlines the functional division between the Euratom and EU in the field of nuclear non-proliferation. It examines a variety of different areas: nuclear safeguards, export controls and physical protection of nuclear material. Finally, it explores the measures adopted under the common foreign and security policy and how they relate to the Euratom measures.

The Conclusion summarises the main findings and provides some reflections on the implications of these findings.