

EURATOM – Considered from an Economic Perspective

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The *European Atomic Energy Community (EAG-EURATOM)*, which was organisationally established on 1st January 1958, is not to the same degree part of an economic discussion as the *European Economic Community*. The *EAG* has a strongly accentuated technical-scientific character and is often economically considered as appendix of major economic integration efforts within Europe.

Still it would be wrong not to suspect economical effective components within the *European Atomic Energy Community*. The opposite is already recognisable as the *EAG* needs to integrate itself into a system of international organisations and institutions, which are already existent in the field of a friendly exploitation of nuclear power and which embrace a larger geographical field as the six –member-states of the *EURATOM*, the *European Economic Community* and the *European Coal and Steel Community*.

Part of these scientific, economical and political institutions are among others the *European Organisation for Nuclear Research (CERN)* in Geneva, the *International Atomic Energy Agency (IAEO)* in Vienna and the *European Nuclear Energy Agency* within the *OEEC*. Along the West European state unions with regards to nuclear energy similar structured unions are established within the Eastern block such as among others the Eastern block “*Joint Institute for Nuclear Research*” in Dubna.

The fact that even the World force conference, which with 40 member states comprises all relevant energy industry countries worldwide, even of the Eastern block, also deals within a subcommittee for “reactor basis and reactor technics” with the question of nuclear energy exploitation, demonstrates that a revolutionary technical development is very difficult to fit into a politically limited circle of participants.¹⁾

Thus from its beginning the *European Atomic Energy Community* needs to consider the worldwide sphere of influence of nuclear developments and has to avoid the risk of entering an institutional isolation. One advantage of the treaty on establishing the European community is that it considers the *Atomic Energy Community* as an important but not independent branch from general economic activity. The organisational bracket for all three European Treaties of Integration will be the common Parliament and – what is to be expected, in its practical impact a – not to be underestimated – joint headquarters for all three institutions.

Within this bracket not only special national interests but also specific national capabilities, technically wise and scientific wise with necessary economic requirements, need to be tackled with in which the Council of Ministers, as federative executive body of the community, must fulfil a very important countervailing task.

Integration being an action programme

The evident omission, resulting from the experimental character of the six-member-state community, to not organise European Integration into a comprehensive economic form for all different institutions, compares the actual structure with the picture of “three sailors without helmsman”

The symbolic danger expressed within this picture should not become reality, thus the original integration work of communities becomes with its formal beginning an action programme.

This also extended over to the relationship with the comprehensive European economic organisation of the *OEEC*. The *OEEC* is one example of the fundamentally different forms of international cooperation of the six-member-state-community. She aims an international, legally relatively informal cooperation compared to the supranational integration. Despite these organisational structural differences cooperation between *EURATOM* and *OEEC* becomes indispensable.

It is an integration task with the same level as the relation between *EWG* and the free trade area. For *EURATOM* this will have an affect with a far-reaching tendency. Due to technical and scientific reasons it is already necessary for *EURATOM*, as nuclear technology especially due to its importance for the economical development, cannot be appropriately operated with the exclusion of such significant countries as Great Britain, the Scandinavian countries and Switzerland, just to name some examples.

Even if the *OEEC* works on a voluntary basis with other principles than the *EURATOM* states which are strictly tied to contractual terms, an integration possibility will inevitable arise due to technical-economical matters.

A first consequence of this determined development is the foundation of “Eurochemic”²⁾. The importance of a common foundation, where an *OEEC*-joint system takes action within the field of *EURATOM*, lies also within a breakthrough of theoretical legal thoughts to the primacy of European rights. National law in comparison takes rather a subsidiary position. Technical fields, which are organisationally recorded by *EURATOM*, pressure on multi-lateral entities, not least because their economical possibilities require great consideration.

In order to guarantee for the three communities not only a technical-economic but also strived political agreement effect within Europe, they will need to act as one with regards to all fundamental questions. This is especially valid for all economic problems whose solution is a precondition for political integration. This supplies certain conclusions for a practical handling of the treaties, whose realisation is unquestionably a success from international efforts. Nevertheless they need to be liberated from aspects of political dreams, which were born due to the emotion-filled efforts to free European states from the post-war mentality after 1945.

After this has been – even not perfectly – achieved within a welcoming and chronological unexpected dimension, priority is given to the economic and technical scientific handling of treaty instruments with regard to practical activities. The results of these rather dry and rarely

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1) Cf. articles by H. Haerich. EURATOM im Aufbau, H. Costa “OEEC-Vorhaben werden Wirklichkeit” and A. Hocker “CERN – ein Beispiel europäischer Zusammenarbeit” published in in AtW2 (1958) as well as by H. Costa. “Die erste Generalkonferenz der internationalen Atomenergie-Organisation” AtW 2 p. 353 (Nov. 1957)

2) Cf. articles by H. Costa “OEEC – Vorhaben werden Wirklichkeit” and E. Pohland “Europäische Gemeinschaftsanlagen” published in AtW 2 (1958)

highlighted efforts by press will only make enough room for far-reaching international integration efforts, when also politics remains with its role as critical observer and admonisher.

The position of the Federal Republic of Germany

The conviction of an inevitable necessity for integration pragmatism is also nourished by the fact, that the Federal Republic of Germany being a partner of the six-member-states supports a certain “economic philosophy” which for all usual principles and practical implications will not at all be adopted by the other member countries. Hence the market economy of the Federal Republic is not yet in an integration-ratio with the economic structures of the other countries.

Due to this fact integration will be very difficult and not because of bureaucratic competence and technology of institutions. This task also provides a chance for European institutions, to balance economic structures into one best possible European system. The federal construction of Europe can be kept as a principle and the market economy, an economic instrument, has the possibility to stand the test on a larger scale.

The success of efforts to reach a settlement would also dispose all fears that this inherent dirigisme, stated within the treaties, would turn out as disturbing factor for integration. These fears are specially within the Federal Republic of Germany very much developed with regards to the role of the *EURATOM* agency, which shall establish the common market in the field of nuclear energy- with an obvious lead of France and Belgium.

An example of the appearing irregularities is the indication, that according to article 52 organs of the commission are not allowed to tread consumers differently according to their intended purpose of use when delivering raw materials. This excludes for instance the possibility to prefer the peaceful usage of nuclear energy at the expense of its military usage. The French point of view asserted itself completely, as is known, within the final version of the *EURATOM* Treaty.

The Federal Republic of Germany, which renounced the production of atomic arms within the Paris Treaties, is the only member state at which a supervisory power by the *EURATOM*-commission can become effectively.

Technology and science force adaptation

The establishment of a bureaucratic “apparatus” will essentially influence the practical activities of each single institution assigned within the treaty by the *EURATOM*. This apparatus will be dealing with the actual work, in which the large sovereign position of the commission represents an essential factor. Practice, however, will need to accept, that the *EURATOM* Treaty being determined by its nature and by the fast and progressive technical development, needs to adapt its legal form. The dependency of fulfilling the *EURATOM* Treaty and the time of scientific technical development can be proven by several examples.

The possibility of a thermo-nuclear fusion played in the original idea, which leads to the *EURATOM* Treaty, at the most only a theoretical role. Nevertheless as recent scientific developments revealed, it can achieve earlier than expected the level of a primary energy carrier within the meaning of the *EURATOM* Treaty.

The importance of the uranium supply achieved a reverse development. Its difficulties mentioned in the “Spaak report” in 1955 lead to the proposal of a central supply system. Since then it has been proven, that contrary to the expectations a large offer of uranium is available on the world market and it is perhaps typically, that an important British financial paper proposed by the end of 1957 market-controlling and restrictive agreements against a sudden fall of price for uranium.

Due to European uranium discoveries, mainly in France, the existent pre-eminence of the USA, which relies on a far reaching system of treaties, where the original planned management monopoly of *EURATOM* was supposed to be fit, as well as the quantitatively unrestricted uranium offer from South Africa and Canada, has been extensively moderated. The foresight of the German delegation with its proposed amendments for the activities of the supply agency was successful, which should protect the interplay of supply and demand for sourcing uranium.

The “Spaak report” also placed the assumption, that electricity production would be the essential factor for an economic exploitation of fission reactions, while it has been proven in the few years since 1955, that the usage of radioisotopes “hot chemistry” and radiochemistry will be no less important economic factors within the new field of nuclear technology.

Certain economic events in the USA which lead to a realistic assessment of immediate future prospects of nuclear power plants and to a market adjustment in this field, find a parallel in the objective assessment of existing possibilities in different European countries, of which the in the *EURATOM* report by “the Three Wise Men” recognisable optimisms did not remain untouched. Evident is also that the currently appointed President of the *European Atomic Commission* only counts with economical operating nuclear power plants within the field of *EURATOM* until the year 1975.

Even if due to a lack of precise documents which state the expected real energy demand within the *EAG*-area optimism and pessimism needs to be given sufficient leeway work on technical, economic and optimal usage of fission reactions, independently from the possibility of a fusion, need to be continued. With it an incalculable volume of scientific and technical developments need to be achieved. This proves the usefulness and necessity of European teamwork in the bounds of *EURATOM*, especially in form of basic research and scientific work for protection against radiation damage.

Political forces

The herewith resulting tasks can only be appropriately mastered, if the organisation of *EURATOM* will be handed over to specialists which without a doubt will have to deal for a couple of years with ungrateful hard work in order to lead integration work to a political coronation. The final objective remains to organisationally growing together economic important European institutions into one European economic instrument, in which the European Coal and Steel Community and the *EURATOM* come off.

Only thus a real supranatural institution would be created, worth giving the term of „integration“. A common special task would grow which can only be carried out if the constitution of the European Parliament is adapted to the scope of task. Anyhow in its present structure it is not able to serve as real collective parliamentary controlling body, like national parliaments.

Hence political forces from member countries should see their tasks in providing an intended but not feasible real possibility of control during its common meeting and its formation. Integration within the internal frames of the six-member-states by setting up a “European group” of politically related parties could be unquestionably supported, as political forces could be mutually and effectively “European” influenced. The need of such new forms of integration in the non-parliamentary environment has at least been acknowledged by the trade unions, which decided the formation of a common secretary’s office, while employers react with a misplaced reserve and political-economic associations recognised only in a few areas the need of such organisational support of integration efforts.

The economic significance of *EURATOM* therefore not only lies in the expected economic assets of different technical forms achieved by mutual work but also within the contribution of the EAG for an effective integration in Europe, for which the six-member-states-community can build a focal point.

A specific “process technology” for integration still needs to be developed with a bottom-up approach, in which the organisational responsible bodies of political integration need to take this task as serious, as it is required and expected from political and executive authorities. *EWG* and *EAG* can only be effective in an „integrated“ sense, for which in each single member state intrinsic and practical conditions still need to be created. The task is set. In modification of a popular English word with the motto: Integration begins at home.

Excerpt of the preamble of the Treaty establishing the European Atomic Energy Community

His Majesty the King of the Belgians, the President of the Federal Republic of Germany, the President of the French Republic, the President of the Italian Republic, her Royal Highness the Grand Duchess of Luxembourg, her Majesty the Queen of the Netherlands,

Realising that nuclear energy constitutes the essential resource for ensuring the expansion and invigoration of production and for effecting progress in peaceful achievement,

Convinced that only a common effort undertaken without delay can lead to achievements commensurate with the creative capacities of their countries,

Resolved to create the conditions required for the development of a powerful nuclear industry which will provide extensive supplies of energy, lead to the modernisation of technical processes and in addition have many other applications contributing to the well-being of their peoples,

Anxious to establish conditions of safety which will eliminate danger to the life and health of the people,

Desirous of associating other countries with them in their work and of co-operating with international organisations concerned with the peaceful development of atomic energy,

Have decided to establish a European Atomic Energy Community (EURATOM) and to this end have designated as their plenipotentiaries.

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