1. **INTRODUCTION**

The proposal for the Organisation for Nuclear Cooperation in Europe ("ONCE") is designed to address the challenges now facing the nuclear energy industry in Europe. The announcement in January of the UK’s forthcoming withdrawal from Euratom ("Brexatom"), a direct consequence of Brexit, took most of the industry by surprise.

Brexatom will remove one of the most important countries from this treaty and will also silence one of the strongest pro-nuclear voices in EU discussions. This is an additional and unwelcome problem for all those who believe that nuclear is an essential part of the energy mix for many countries. It comes at a time when hostility to nuclear energy is worryingly widespread.

New Nuclear Watch Europe ("NNWE") believes that the creation of a larger club of pro-nuclear countries, comprising EU member states and other countries bordering the EU, can convert this challenge into an opportunity. In 1957 when the Euratom treaty was signed neither the threat of climate change nor the urgency of decarbonising the electricity generation industry were understood. Today the need for new investment in nuclear plant is clear and is supported by, among other evidence, the conclusions of the International Energy Agency.

ONCE will therefore have at its heart, alongside the establishment and enforcement of rigorous standards of openness, competition and safety, the recognition that nuclear energy is an essential element in Europe's response to climate change. It will seek ways of ensuring that nuclear energy helps to deliver secure, sustainable and affordable electricity for the benefit of humanity.

Unlike Euratom, ONCE will include among its primary aims the safe delivery of nuclear energy at a price which is competitive with other low carbon technologies. ONCE will compensate for the problems which Brexit imposes on the nuclear industry and create new opportunities for the sector.

2. **MEMBERSHIP**

Membership of ONCE will be open to any EU member state which:

a) Has existing nuclear plant, or is building or planning to build new nuclear plant;
b) Recognises that nuclear is an important part of the energy mix in many countries;
c) Do not explicitly discriminate against nuclear technologies compared to other sources of low carbon power generation in the way of additional taxes on nuclear or otherwise; and
d) Does not oppose the construction of new nuclear plant in Europe or elsewhere or introduces any kind of cross-border barriers for power supply from nuclear energy sources.

In addition, neighbouring countries around the borders of the EU which have, or plan to have, nuclear plant as part of their energy mix will also be eligible for membership.
3. **OBJECTIVES**

As indicated above ONCE will aim to make nuclear energy cost competitive, open in its practices, economically beneficial in its impact and safe throughout the whole cycle of its operations. By doing so it will set a standard for other energy industries, and particularly for other electricity generation technologies, to match.

To achieve these objectives ONCE will actively promote maximum harmonisation of requirements among all its members. This will include full cooperation on spent fuel and Generation IV projects. ONCE will aim to reduce "transactional costs" for nuclear new build, to simplify the approval process for new designs, and to encourage existing efforts to accelerate and improve collaboration between national regulators.

ONCE recognises that public confidence in nuclear energy, and in its safety, is a prerequisite for the industry's success. Maintaining that confidence may in some countries be helped by international acceptance of the role of an independent national regulator whose jurisdiction in that country is not affected by ONCE membership.

The success of ONCE will be judged in part by whether its existence helps to make the construction and commissioning of new nuclear plant quicker to commence, cheaper to complete, and more attractive to private investors, without tolerating any compromise on either environmental or safety standards.

ONCE will aim to maintain and extend a single market in goods and services among all its members for nuclear build, ongoing generation, research and development, decommissioning and waste activities, across all its member countries. At present all trade in nuclear materials, including isotopes used in cancer treatments, is governed by Euratom, for which a replacement regulatory regime requiring up to twenty separate deals, is now urgently needed.

Dame Sue Ion, chair of the Nuclear Innovation and Research Advisory Board, recently warned that "*We would be crippled without these deals in place*".

4. **SCOPE OF ONCE**

ONCE will:

a) Promote common standards for new build. These will be based on Gen III+ characteristics, post-Fukushima requirements and WENRA recommendations.

b) Promote harmonisation of licensing systems, including the adoption of a common approach to generic design assessment (GDA) and to the issue of site licences.
c) Explore ways in which GDA approval can be fast tracked for reactor models which have an established record of safe operation in one or more other ONCE member countries.

d) Promote common safety standards for inspections on construction sites and for safety monitoring.

e) Establish a European nuclear fuel bank time sufficient to ensure the security of supply of enriched uranium and ready fresh fuel for all reactor types in ONCE countries.

f) Work towards R&D agreements between ONCE members on SMR, Gen IV and back end.

h) Promote free trade in the nuclear supply chain.

i) Promote free trade in nuclear decommissioning, spent fuel management and reprocessing and waste treatment services.

j) Ensure that its members develop policies for management and disposal of radioactive waste.

k) Promote the free movement of skilled nuclear industry workers between all ONCE member countries.

5. BREXIT AND BREXATOM

ONCE will be designed to minimise the damage which will result from Brexit. The UK referendum campaign completely ignored the implications of Brexatom but it is extremely unlikely that a new regime for the nuclear industry, which must now be negotiated from scratch, will be established within the two year timetable set by Article 50.

Maintaining as much continuity and consistency in nuclear policy as possible should therefore now be a priority for the UK government. This aim should inform the basis of the transitional arrangements which will be needed.

The UK nuclear industry relies extensively on employing skilled workers from other EU member states. Ensuring that these workers remain free to travel to and work in the UK without any obstacles is essential. Confirmation that they will be able to do so should be given at the earliest opportunity.

Similarly the STEM undergraduates and postgraduates from EU member states who are attracted by the strong research base in nuclear technologies which exist at UK universities must continue to be able to work in the UK without restrictions.

Brexit will bring freedoms as well as challenges and the UK should now take advantage of these. Not being subject to Article 41 of the Euratom Treaty will mean that EU member states no longer have any right to review UK nuclear new build proposals.

ONCE will not need to offer any opportunity to entrenched opponents of nuclear power like Austria to obstruct investment in new nuclear capacity because all its members will support the use of nuclear energy. This will remove a potentially significant cause of delay for future projects.

6. LEGAL FRAMEWORK FOR ONCE AND ITS RELATIONSHIP WITH EURATOM
ONCE will develop a legal framework within which its members will operate. Consideration will now be given in more detail to its relationship with Euratom. Membership of ONCE will be on the basis that it does not compromise or conflict with any of the obligations of Member States under the Euratom Treaty.

It would be desirable if some of the functions currently performed by Euratom on behalf of its member states could be performed by ONCE on behalf of its members, such as providing a safeguards regime to ensure compliance with the non-proliferation treaty including inspection, reporting and accounting.

Importantly they include the management of the Nuclear Cooperation Agreements with non-EU countries which are currently handled by Euratom. These will be an important element in trade deals to be negotiated with USA, Canada, Australia, China and South Africa.

7. CONCLUSION

The nuclear industry in Europe faces what is possibly its biggest existential challenge since the Euratom Treaty was signed sixty years ago. Brexatom not only threatens the delicate balance of pro and anti-nuclear countries in the EU. It also disrupts the complex and important trading and other relationships between countries with existing nuclear power plants.

NNWE believes this challenge requires an urgent response from governments and industry alike. Its proposed new international architecture is designed to strengthen and expand the ties between the pro-nuclear countries. It will also ensure that the UK, one of the few European nations where new build projects are actively under way, will be able to continue to play a leading role in the industry's future development.