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To:

Ministry of Social Affairs of the Republic of Estonia

## **Support Request for Feasibility Study of Advanced Particle Therapy Centre for the Baltic States (APTCB)**

We are pleased to present the initiative of national and regional importance in scientific research excellence – "Advanced Particle Therapy Center for the Baltic States (APTCB)". As the initiative has reached the stage of launching the dedicated Feasibility Study, we would like to invite Ministry of Social Affairs of the Republic of Estonia to consider possibilities of co-funding this next stage.

APTCB initiative aims to strengthen the economic competitiveness of the Baltic States by fostering broad, multi-disciplinary research programme development, contributing to the breakthrough innovation development and strengthening integration of the Baltic States in a broader European scientific research network. Additionally, the initiative aims to minimize inequalities in access to advanced cancer care in the Baltic States, by enabling high precision radiation oncology modalities - improving therapeutic outcomes, minimizing side effects, and elevating the standard of care.

To address these aspects, the main goal of APTCB initiative is the development of a large-scale scientific research infrastructure in the Baltic States. With dual functionality, proposed infrastructure enables the state-of-the-art clinical cancer treatment with particle therapy. The initiative aligns closely with the strategic European Union priorities in healthcare innovation and cancer treatment, contributing to the reduction of regional disparities in research and development capacity.

The initiative is developed by the <u>CERN Baltic Group</u> – union of 14 universities and research institutions within the Baltic States – in close collaboration with NIMMS (*Next Ion Medical Machine Study*) group in CERN (*European Organization for Nuclear Research*). An interest in support of APTCB has been expressed by the following research institutions of CERN Baltic Group, providing solid ground and leadership on academia side for successful cooperation:

- in Estonia: Tallinn University of Technology, National Institute of Chemical Physics and Biophysics, and University of Tartu.
- in Latvia: Riga Technical University, University of Latvia, Riga Stradins University, Ventspils University of Applied Sciences, and Daugavpils University.
- in Lithuania: Vilnius University, Kaunas University of Technology, Vytautas Magnus University, Lithuanian Energy Institute, Lithuanian University of Health Sciences, and National Cancer Institute.

Recognizing the multi-disciplinarity, high complexity and investments associated with such infrastructure, the next essential step in the development of the APTCB initiative is the launch of a comprehensive Feasibility Study. To support sustained involvement of researchers from the Baltic States, national co-funding of approximately 300,000 EUR to 400,000 EUR per country

(Lithuania, Latvia, and Estonia) over a period of two to three years is estimated, based on recommendation by the Baltic Assembly (see below).

The Feasibility Study for the APTCB initiative at large would act as catalyst for development of high-impact research and regional innovation ecosystem, contribute to long-term healthcare improvement and development of highly skilled professionals, while attracting regional and international talent.

Feasibility Study will be conducted within the framework of CERN Baltic Group and performed by personnel of involved scientific institutions in the Baltic States, while ensuring strong collaboration on technology development with CERN NIMMS group throughout the duration. The aim of the Feasibility Study is to provide a comprehensive, scientifically and factually driven Feasibility Study Report, that would be used as the basis for informed decision-making on further development of APTCB initiative. For a more detailed plan of the Feasibility Study, please, consult the enclosed brochure.

As indicated in the brochure, the initiative has been presented and discussed at various national and regional stakeholder levels. It should be noted that since 2022, the initiative has received strong formal support from the Baltic Assembly, underscoring the strategic importance of APTCB for strengthening scientific research excellence and regional collaboration in the Baltic States:

- Resolution of the 41st Session of Baltic Assembly (2022);
- Resolution of the 42<sup>nd</sup> Session of Baltic Assembly (2023);
- Resolution of the 43<sup>rd</sup> Session of Baltic Assembly (2024);
- Resolution of the 44<sup>th</sup> Session of Baltic Assembly (2025) (in progress).

Baltic Assembly calls on the parliaments and governments of the Republic of Estonia, the Republic of Latvia, and the Republic of Lithuania, as well as the Baltic Council of Ministers to:

- Secure the necessary funding for the implementation of a full-scale Feasibility Study of the joint initiative of the CERN Baltic Group and CERN on the APTCB;
- Engage the corresponding ministries, national agencies and relevant stakeholders and jointly apply for co-financing from the European Union for implementing the joint initiative of the CERN Baltic Group and CERN on the APTCB;
- Recommendation of national co-funding of approximately 300,000 EUR to 400,000 EUR per country (Lithuania, Latvia, and Estonia) over a period of two to three years.

The Feasibility Study Strategy Group (FSS) of the CERN Baltic Group would welcome the opportunity to present the APTCB initiative and the planned Feasibility Study in more detail - please use the contact data below for further arrangements.

We are confident that the initiative aligns with **Ministry's of Social Affairs of the Republic of Estonia** strategic priorities in science, healthcare, and innovation. In this context, we kindly ask for your involvement, providing political and financial support for the implementation of the Feasibility Study.

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Thank you for your consideration.

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