



## 6<sup>th</sup> CERN Baltic Group General Meeting

Remotely, 12 of October 2020

Agenda and supporting documents are available at  
<https://indico.cern.ch/event/956746/>

### Summary of the meeting

1. Welcome speech to the remote General Meeting participants by Prof. Toms Torims, RTU.
2. Agenda is adopted with no additional points. Participants of the meeting are listed in Annex I.
3. Dr. Christoph Schaefer (CERN), informs the participants regarding the latest CERN activities related to Baltics and the impact of Covid-19 to ongoing CERN activities and the LHC restart schedule. CERN Council has appointed the new directors of CERN for 2021-2025. The Science Gateway project is developing rapidly to stimulate STEM field and expand collaborations with CERN partners. September Council gave its go-ahead to this project and there will be new opportunities for the CBG members.
4. Dr. Jeff Wiener (CERN) provides an update on the CERN Baltic Physics Teacher programme, on-line activities and future events. Baltic Teacher Programme at CERN is planned for spring 2021, meanwhile activity is virtual, including on-line lectures and virtual CERN visits. <https://indico.cern.ch/event/921389/>
5. The Chairman reminds of the overall objectives and the general principles of the CBG and outlines the objectives and discussion points for this meeting:
  - to update and openly exchange information among the partners;
  - to report on CBG activities since the last General meeting;
  - to report on Estonia's, Lithuania's and Latvia's - state-of-play vis-a-vis CERN;
  - to discuss the collaboration of CBG Members within the CMS experiment;
  - to report update related to accelerator technologies-initiatives and EU projects at CERN;
  - to report the status of the CBG Study Programme by the Working Group;
  - to discuss a joint CBG "mission statement" document;
  - to discuss the industry engagement in CERN, CMS and CBG activities;
  - to consider the future CBG participants.

The **Chairman reports** on the CBG work, policy actions, CMS actions, coordination actions, study programme actions and industry engagement activities carried out since

the last General Meeting in spring 2020:

- Despite challenging circumstances caused by the global pandemic, CBG continued to facilitate the integration of the Baltic States into CERN and supported CBG Members' participation in CERN related projects. *Inter alia*, CBG coordinated its Member institution engagement with **CERN Against COVID-19 Task Force** and CERN Knowledge Transfer Group; e.g. CBG pledged significant federated computing resources to the Folding@home project, RTU contributed to the HEV ventilator project and KTU to the development of the washable/biodegradable filters for the Respiratory protective face mask. The above was highly appreciated by the CERN community.
- Due to the CERN policy to restrict the travels of its personnel, the **Baltic School of High-Energy Physics and Accelerator Technologies** was first postponed to September and then cancelled for 2020. However, organisers and the lecturers of CBG School are looking forward to run the school in August 2021, Riga/Ronīši, Latvia.
- Collaboration with the **Baltic Assembly** (BA) is maintained; there is proposal to organise a BA session at CERN Globe, Geneva in autumn 2021, depending on the availability and international travel possibilities. BA Resolution (adopted on 7th November – see extract in Annex II), *inter alia*, states a very clear support to the institutional cooperation with the CERN; it recognises unique opportunities for the development of science, research and technology in the Baltic States yielded by CERN. BA calls on the parliaments and governments of Estonia, Latvia and Lithuania, as well as the Baltic Council of Ministers: to allocate corresponding financial support within the State budgets which should be equal on the national level to the amount of membership paid to the CERN. BA invites CERN to consider possibility to establish CERN Internship Programme for the students of the Baltic states.
- Exploration of administrative and financial EU/National means available for the CBG partner institution integration in CERN – it is an ongoing work. Notably with evident good results for the Baltics High Energy Physics community: substantial **National funding** is obtained in Latvia, along with the progress seen in Lithuania. Participation in CERN projects (incl. H2020) of CBG Members was promoted at CERN, TIARA and EC level. As a consequence, several CBG partner institutions are engaged in major CERN-coordinated H2020 projects: **I.FAST; HITRIplus and PRISMAS-MAP**.
- Impact and visibility of the CBG within CERN and other EU labs was ensured through all available means; e.g. now CBG is a full **TIARA** member <http://www.eu-tiara.eu/> and will, be represented at TIARA Collaboration Council by RTU.

- Institution collaboration with Polish research institutions and labs was enhanced – e.g. INCT Warsaw. Scandinavia still to be explored – which is challenging in these online conditions.
- Invitation for new members from the Baltic States to join the CBG is open and there are initial discussions with several scientific institutions.
- Development of the **High-Energy Physics and Accelerator Technologies Study Programme at the masters' level**: discussions started with the relevant partners and references in the doctoral programme are ensured. Master programme shall firmly stay on the CBG agenda and its Coordination Team and its curricula shall be established in close cooperation with CERN and the relevant National authorities.
- **CBG Industry Group** is now reinforced by participation of Lithuanian and Estonian Industry Liaison Officers (ILO) in its work. ILO's are participating also in CBG General Meetings as well as in the Coordination Team meetings and contributing to the on-going Baltic CERN related industry mapping. CERN industry road show in Baltics and Baltic Industry Days at CERN are postponed *sine die*, due to the Covid-19 restrictions in place. It is expected that now-on work of CGB Industry Group will intensify and could yield tangible results.
- **CBG CMS Group** and its important coordination role now is fully recognised and appreciated by the CMS management, Collaboration Board and leadership of the relevant sub-detectors. However, more coordination and engagement of CBG members is needed on the working level. This Group is still far from reaching its full potential.
- High-efficiency and collegiality of the **CBG Coordination Team** and the CBG Secretariat is of great value. CBG General Meeting thanked the Secretariat and the Coordination Team for the job well done.

Chairman underlined that considerable efforts have been made in order to achieve CBG Objectives. In particular there is a steady progress towards the consolidation and strengthening of **the Baltic high-energy physics community**.

6. Each country presents their progress regarding **CERN-related activities** since the last CBG Meeting and the current state-of-play.

**Estonia:** is in the final process joining CERN in the capacity of an Associate Member State in the pre-stage to full membership. It is foreseen that in December ratification of the agreement with CERN will be finalized in the Parliament and submitted to CERN in January. Estonia is continuing its activities within the CMS experiment and other CERN collaborations, like CLOUD (UT). New activities within FCC are being considered by Estonian scientific institutions. With the new ILO for CERN Ms. Triin Kangro, industry mapping is on-going along with the work on national programs to boost CERN related activities in collaboration with TalTech and TU.

**Lithuania:** continues its engagement in the activities of the CMS experiment with continuing interest in CMS tracker system. CMS pixel lab start-up funding is secured.

New courses are offered at VU – HEP Analysis and on Particles.

Prof. Dalia Šatkovskienė (VU) offers CBG initiative to promote STEM fields for women - organizing Baltic conference in HEP field in collaboration with CERN.

Prof. Brigita Abakevičienė (KTU) is reporting on progress in Lithuania on CERN related activities and joint KTU calls with VU, Academy of Science for particle accelerators.

During discussion, the CBG General Meeting acknowledged a substantial progress made in Lithuania-CERN activities framework since the last CBG General Meeting and offered its full support to the on-going activities in Lithuania.

**Latvia:** to assess Latvia's Associate membership application, the CERN Task Force have visited Latvia on 14-16 October. All CERN activities in Latvia are fully supported by the Government, Scientific community and Industry. There is very solid political, administrative and policy support towards the Latvian membership to CERN by all stakeholders. Thus, Latvian Government is aspiring to join the CERN family as Associate Member State in 2021, as scheduled.

The RTU Centre of High-Energy Physics and Accelerator Technologies is continuing its activities as the CERN National Contact point, with the main task to strengthen the high-energy physics community and capacity in Latvia. It is done via the dedicated Government supported CERN Latvia National Contact Point Action Plan and Communication Strategy for Latvia-CERN.

Latvia is engaging in the MEDICIS collaboration, MoU is signed and funding secured.

Within the State Research Programme in high-energy physics and accelerator technologies, approx. 860 000 EUR, funding has been received for 2020-2023, for scientific capacity building. This activity has been linked with CERN Non-member states Doctoral programme in which Latvia will participate from January 2021 and the CBG Study Programme.

7. Collaboration of the CBG members within the **CMS activities** is discussed. Potential of seeking joint physics analyses in the future is mentioned. Latvia's involvement in the development in the MTD detector and its construction database is raised. As VU is an institute responsible for the database visualisation framework for all detector upgrade projects, some synergies could be explored between RTU and VU regarding this. It is noted that the CBG CMS working group is not yet fulfilling its entire potential, as mentioned in point 5. Action is to be taken by Aurelius Rinkevičius (VU) and Kārlis Dreimanis (RTU) to enhance the activities of this working group. The follow-up actions on this are expected from the CBG CMS Group Convener.
8. Dr. Maurizio Vretenar (CREN) informs on developments in the **CERN accelerator technologies**, with particular emphasis to the initiatives and EU projects. Following the Update of the European Strategy for Particle Physics – more R&D projects for the accelerators, colliders, machines, conductors and magnets are expected to come in the near future. Importance and profile of accelerator societal applications is raising, including environment and medical appliances. Outcomes of H2020 projects, coordinated or related to CERN, soon to be announced (I.FAST, HITRIplus and others).

9. Prof. Mārcis Auziņš (UL) and Dr. Kārlis Dreimanis (RTU) provided updated status report on the **CBG Study Programme**. Progress of the main activities of the study programme: the general agreement between RTU and UL is signed, the document package will be submitted to the Senates of UL and RTU till December. Very productive and high-level content meeting of CBG Study Programme Working Group took place on September 10, where the content of the programme curricula was discussed and endorsed by the CBG partner institution representatives.  
<https://indico.cern.ch/event/952272/>

Until May, 2021, the programme will be licensed, and programme approbation will start. First Doctoral student admission is planned in September 2021.

10. Prof. Mārcis Auziņš (UL) informs about engagement in the **AEGIS Collaboration** within the Anti-Proton Decelerator at CERN. It will commence with the secondment to CERN/AEGIS of the one master level student from LU in the beginning of the next year. Subsequently, it is foreseen wider collaboration.
11. Development of the joint **CBG Mission statement** is discussed by the Meeting. Proposed idea is to elaborate policy document (Community paper) which would echo and encompass in the context of the Estonia, Latvia and Lithuania, the key initiatives and activities of the updated European Strategy for Particle Physics and would provide a unified vision of collaboration to the particle physics and accelerator technology research and education community in Baltic States. Overall objectives and principles (higher values) of the CBG shall serve as a basis of such document. Target auditory of this document would be national policy makers (Parliaments, Governments and Ministries), BA as well as relevant scientific and industrial stakeholders at large. This Community paper shall elaborate on the CERN related topics and to outline mechanisms on how all parties involved could benefit, in medium and long term, from the membership of Baltic States to CERN. It was suggested that this document shall be maximum one-two pages long. This paper shall provide broader view on how CBG activities and membership to CERN will contribute to the respective national development strategies and goals in the science, industry, R&D and economic development in the broader sense. See policy actions below.
12. **Industry engagement** in the CBG activities is discussed - see relevant decisions below. ILO of Estonia is working on Industry mapping for Estonian companies with potential for CERN and on Strategy document for Estonian Industry. Industry partners in Lithuania have been invited to register in the CERN data base. No additional Industry mapping is organized so far. Need for joint Baltic Strategy for the industrial engagement with CERN was discussed and it was agreed to explore this topic further as soon as ILO institution (probably Latvian Investment and development Agency of Latvia - LIAA) for Latvia is known. The follow-up actions on this are expected from the CBG Industry Group Convener.
13. UT proposed to organise a **CBG Conference** under auspices of UT in 2021. Idea was genuinely supported by the Meeting; the scope, topics and format of the potential Conference were briefly discussed - see decisions below.  
<https://indico.cern.ch/event/970609/>
14. Chairman informs General Meeting that CBG has received on this day a written application, from the Vytautas Magnus University (VMU, Kaunas, Lithuania), expressing the wish to join the CBG and thereby confirming the VMU will and



readiness to effectively contribute to groups efforts. Chairman confirms that VMU is meeting eligibility criteria for CBG membership and taking into account that this is not unexpected but rather anticipated development, asks General Meeting institutional representatives whether they need time to reflect, or, are they ready immediately to decide (vote) on the VMU membership to CGB. Institutional representatives confirm their readiness to decide immediately following the procedure outlined in the MoU of CBG. In the subsequent vote majority of CBG members voted (7 votes out of 8 with RSU representative repeatedly absent) in favour of VMU membership to CBG. Chairman congratulated the newest CBG member. According to the Article 3.3.3 and Annex I of CBG MoU an Addendum to the MoU shall be signed by the CBG Chairman and authorised representative of VMU. In current circumstances this will be concluded via surface post. VMU shall also officially nominate and communicate to the CBG Secretariat its institutional representative to CBG and to CBG Coordination Team.

15. The Chairman of the CBG provides a summary of the meeting and its decisions - no comments are made.

**The following decisions have been taken and further actions collegially agreed during the General Meeting:**

**1. Policy Actions - strengthening and development of the Baltic High Energy Physics community:**

16. CBG expresses its full support to the **Baltic Teacher Programme** at CERN and its efforts to provide the national physics teachers with unique international professional development opportunities. This allows to promote STEM in the Baltic region, to update teachers regarding the latest developments in particle physics and related areas. CBG acknowledges importance of the international and regional exchange which is happening among the teachers during these programmes. CBG offers its institutional expertise and potentially also lecturers of its members on the related topics to the Programme.
17. CBG endorses organisation of the **Baltic School of High-Energy Physics and Accelerator Technologies** in summer/autumn 2021 under auspices of RTU in Ronīši/Riga, Latvia. This has to be standing agenda item for the Coordination Team meetings until event takes place.
18. To continue successful liaison with **Baltic Assembly**, in order to maintain Parliamentary support of Estonia, Latvia and Lithuania for CBG and CERN related activities. To facilitate organisation of the BA session at CERN, when epidemiologic situation allows (tentatively in autumn of 2021).
19. To mandate RTU to represent CBG at **TIARA** Collaboration Council and to authorise Chairman to sign MoU with TIARA on behalf of CBG. To continue active engagement with TIARA in order to promote CBG member institution participation in the relevant accelerator community projects.
20. To support and encourage member institution participation **Future Circular Collider** (FCC) project. To seek synergies between partners of CBG (e.g. RTU and NICPB) and to explore avenues for the join scientific and technical projects within the FCC framework.

21. CBG acknowledges very good progress made towards certification of the **High-Energy Physics and Accelerator Technologies doctoral Study Programme** between RTU and LU as well as expresses its gratitude to all CBG member institution experts who have substantially contributed to the development of the curricula of this programme. CBG is looking forward to the certification of this programme and the recruitment of students in September 2021. CBG reiterates importance of the linked master level study programme. CBG invites involved parties to commence the work on the **development of the masters' programme curricula**, and in this regard to clearly confirm the prospective support of the Ministry of Education and Science of Latvia. This has to be standing agenda item for the Coordination Team meetings.
22. To actively explore opportunities of CBG members participation in the **CERN Science Gateway (CSG)** project and to engage directly with the CSG management.
23. To support idea of the **CBG Mission Statement** document and to task A. Rinkevicius (VU) to be a Convenor of this Activity and to propose the draft version of the document for the CBG consideration. This has to be standing agenda item for the Coordination Team meetings, until such document is ready for the formal consideration at the CBG General Meeting. If agreement is reached Coordination Team level, this paper to be voted for in the upcoming General Meeting.
24. To support the organisation of the 1<sup>st</sup> **CERN Baltic Group Conference (CBGC 2021)** under the auspices of UT in Tartu, Estonia, in June 2021. To task V. Zadin (UT) to be a Convenor of this Activity and to coordinate scope, content, organisation and scientific aspects of the CBGC 2021 with CBG Coordination Team and CBG Secretariat. This has to be standing agenda item for the Coordination Team meetings. Convenor of this Activity shall report back to the General Meeting on this subject within the next General Meeting.
25. To maintain a good work of the **CBG Coordination Team** and the **CBG Secretariat**.

## **II. Industry engagement Activities**

26. To intensify work of the **CBG Industry Group** by engaging more ILO's and partner institutions. To kindly ask CBG Industry Group Convener to closely follow-up on this.

## **III. CMS Activities**

27. To intensify work of the **CBG CMS Group** by engaging partner institutions and personal working in relevant sub-detectors - more coordination and personal encouragement is needed. To kindly ask CBG CMS Group Convener to closely follow-up on this.

CBG agreed to organise the **next General Meeting** in the first quarter of 2021, if circumstances allow – two days, in person – in Riga, Latvia under auspices of the LU.

06.11.2020  
By CBG Secretariat  
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Participants of the **6<sup>th</sup> CERN Baltic Group General Meeting**  
Remotely, 12 of October 2020

**The Representatives of CBG Members with the voting rights**

1. Prof. Toms Torims, RTU – Chairman of the CBG
2. Dr. Mario Kadastik, NICPB – Deputy Chairman of the CBG, Conveyor of the CBG Industry Group
3. Prof. Mārcis Auziņš, UL– Conveyor of the CBG Study Programme Group
4. Dr. Aurelijus Rinkevicius, VU – Conveyor of the CBG CMS group
5. Prof. Brigita Abakevičienė, KTU
6. Prof. Fjodor Sergejev, TalTech (by delegation from Prof. Renno Veinthal)
7. Dr. Stefan Groote, UT (by delegation from Prof. Marco Kirm)

**The Representatives of CERN**

8. Dr. Christoph Schaefer
9. Dr. Jeff Wiener
10. Dr. Maurizio Vretenar

**Other contributors invited by Members**

11. Dr. Andrius Juodagalvis, VU
12. Mr. Adomas Jelinskas, ILO for Lithuania
13. Dr. Kalvis Kravalis, UL/RTU
14. Dr. Kārlis Dreimanis, RTU
15. Dr. Vahur Zadin, UT
16. Bernardas Satkovskis, VU
17. Prof. Dalia Satkovskiene, VU
18. Diana Adliene, KTU
19. Dr. Lauris Bisenieks, RTU
20. Saulius Mickevicius, VMU
21. Triin Kangro, ILO for Estonia
22. Dr. Viesturs Veckalns, RTU
23. Prof. Renno Veinthal, TalTech

**CBG Secretariat**

24. Ms. Aija Rūse, RTU
25. Ms. Elīna Grate, RTU