CREMLIN Closing Conference

Project Overview & Results

Cremlin Connecting Russian and European Measures for Large-scale Research Infrastructures

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CREMLIN Project Overview and Results

www.cremlin.eu

CREMLIN Closing Conference
DESY Hamburg, 05.06.2018

HELMHOLTZ ASSOCIATION

DESY

Before going into any detail

From lessons learned and results

3 Key messages:

1. CREMLIN: by character a truely pathfinding endeavour

2. Major achievement: a much higher level of EU-Russian collaboration around large-scale facilities

3. Main output: clear and specific Recommendations for the further future collaboration

Pathfinder

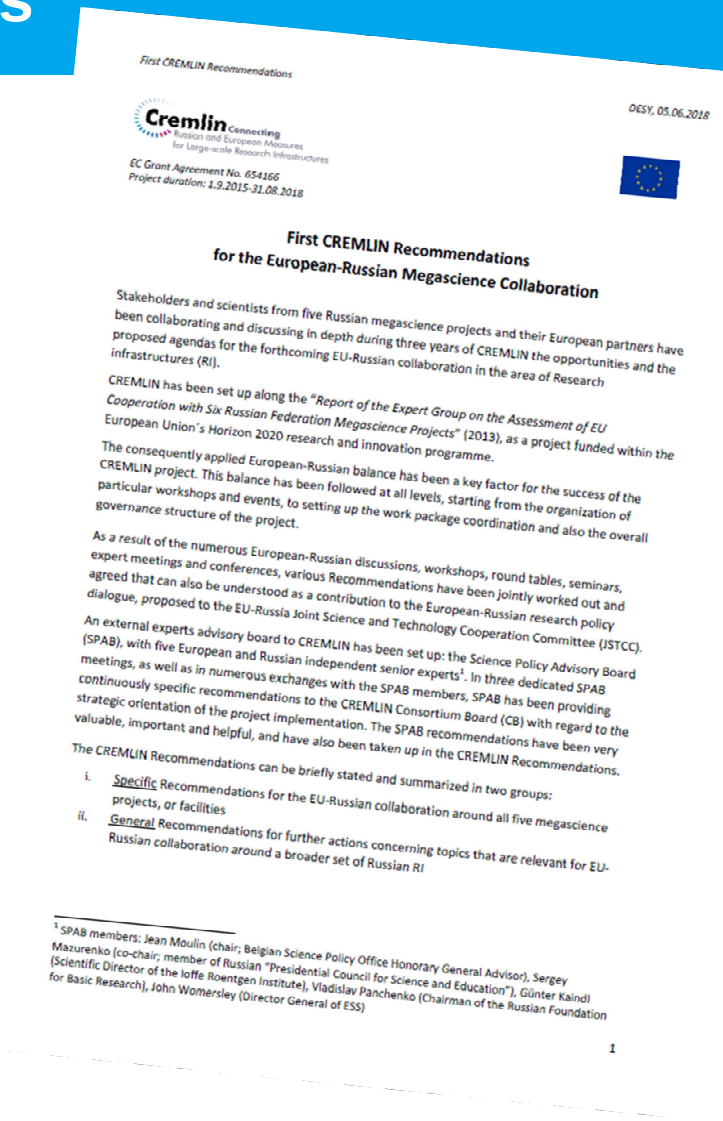
- Before CREMLIN:
- 2011: Russia identified 6 national „megascience“ projects, proposed for international collaboration
- 2013: EU *Report of the Expert Group on the Assessment of EU Cooperation with Six Russian Federation Megascience Projects* ; recommended to start a CSA project for further exploration
- Therefore: 2015 CREMLIN, as a pioneer project
- Exploring pathways towards EU-RUS collaboration along megascience projects

Higher level of collaboration

- Key achievement of CREMLIN:
- EU and Russia have come much closer in the area of RI collaboration through CREMLIN
- We have reached a much higher and improved level of collaboration
- EU and Russian teams are playing well and trustfully together
- Also: CREMLIN has contributed to Science diplomacy in times of political problems between EU and Russia

Main Outcome: Recommendations

- „First CREMLIN Recommendations for the European-Russian Megascience Collaboration“
- 5 page document
- Recommendations for the extended EU-RUS collaboration along the 5 megascience projects
- But also Recommendations for the collaboration with OTHER Russian facilities



First CREMLIN Recommendations

Cremlin Connecting Russian and European Measures for Large-scale Research Infrastructures

DESY, 05.06.2018

EC Grant Agreement No. 654166
Project duration: 1.9.2015-31.08.2018

First CREMLIN Recommendations for the European-Russian Megascience Collaboration

Stakeholders and scientists from five Russian megascience projects and their European partners have been collaborating and discussing in depth during three years of CREMLIN the opportunities and the proposed agendas for the forthcoming EU-Russian collaboration in the area of Research infrastructures (RI).

CREMLIN has been set up along the *"Report of the Expert Group on the Assessment of EU Cooperation with Six Russian Federation Megascience Projects"* (2013), as a project funded within the European Union´s Horizon 2020 research and innovation programme.

The consequently applied European-Russian balance has been a key factor for the success of the CREMLIN project. This balance has been followed at all levels, starting from the organization of particular workshops and events, to setting up the work package coordination and also the overall governance structure of the project.

As a result of the numerous European-Russian discussions, workshops, round tables, seminars, expert meetings and conferences, various Recommendations have been jointly worked out and agreed that can also be understood as a contribution to the European-Russian research policy dialogue, proposed to the EU-Russia Joint Science and Technology Cooperation Committee (JSTCC).

An external experts advisory board to CREMLIN has been set up: the Science Policy Advisory Board (SPAB), with five European and Russian independent senior experts[1]. In three dedicated SPAB meetings, as well as in numerous exchanges with the SPAB members, SPAB has been providing continuously specific recommendations to the CREMLIN Consortium Board (CB) with regard to the strategic orientation of the project implementation. The SPAB recommendations have been very valuable, important and helpful, and have also been taken up in the CREMLIN Recommendations.

The CREMLIN Recommendations can be briefly stated and summarized in two groups:

i. Specific Recommendations for the EU-Russian collaboration around all five megascience projects, or facilities
ii. General Recommendations for further actions concerning topics that are relevant for EU-Russian collaboration around a broader set of Russian RI

[1] SPAB members: Jean Moulin (chair; Belgian Science Policy Office Honorary General Advisor), Sergey Mazurenko (co-chair; member of Russian "Presidential Council for Science and Education"), Günter Kaindl (Scientific Director of the Ioffe Roentgen Institute), Vladislav Panchenko (Chairman of the Russian Foundation for Basic Research), John Womersley (Director General of ESS)

1

SPAB

- External experts advisory board to CREMLIN – SPAB Science Policy Advisory Board
- Extremely valuable advice and Recommendations for the strategic project implementation
- 3 dedicated SPAB meetings
- Recommendations to CB on strategic project implementation
- SPAB members often took part in CREMLIN events, also today

Lessons learned in horizontal activities (WP2 & WP8)

- CREMLIN organised in 5 thematic pillars along 5 RU megas, and in 2 horizontal layers
- Examples of Achievements in **horizontal activities**:
- Big data
  - joint EU-Russian software development
  - European XFEL operational phase started in 2017: connectivity to Russia via high speed data links needs to be enlarged in order to federate compute and storage resources for a seamless analysis environment
  - Russia invited to participate in the GO FAIR initiative (FAIR: “Findable; Accessible; Interoperable; Reusable”)
  - Introduce EOSC to the Russian community

Picture 6: NRC “Kurchatov Institute“. WP2 Workshop on big data management, 15-16/02/2017, at NRC KI

Lessons learned in horizontal activities (WP2 & WP8)

> Innovation

- Awareness raising, strengthening Industrial Liaison Officers Networks, establishing “innovation portals”
- Improving industrial access to facilities
- Encourage innovation-oriented activities at RI
- Install TT offices
- Introduce RI-Industry oriented training and mobility policies
- Pay attention to relevance of legal and regulatory environments (procurement policies, IPR,..)

> Open access and internationalisation of RI

- access policies are necessary; EU Charter on Access; Russian charter needed
- point out science case for complementarities of Mega-projects and ESFRI-RIs
- international SACs for Mega-projects needed

Picture: ESS; Innovation WS

Picture ESS Roger Eriksson; WP2 WS Lund 30/06/2016 Lund

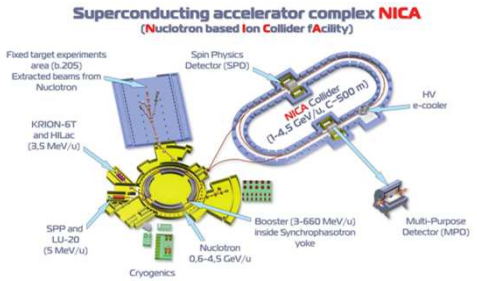
Lessons learned in horizontal activities (WP2 & WP8)

- Dissemination:
- Russia press trip
  - succesfully realised in October 2017
  - linked to GSO meeting in Russia
  - 7 EU science journalists, for instance from „El Pais“ in Spain, „Der Standard“ in Austria, „La Recherche“ in France
  - Visiting NICA, PIK and Kurchatov facilities
- Articles on Russian facilities published in European papers, for instance:
  - *El Pais (Spain)*
  - *Der Standard (Vienna)*
  - *Sputnik mundo* (Spain)
  - *Daily Science* (Belgium)
  - ..

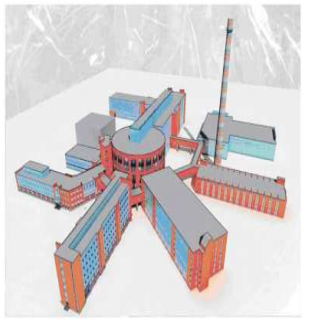
Credits: A. Schmidli ESS;

Achievements thematic pillars (WP 3-5)

- NICA:
  - Progress in detector R&D: Silicon Tracking Systems



- PIK:
  - Preparing proposal for Instrumentation suite; traning for users; exploring user demands; trying to bring PIK to the next ESFRI Roadmap Update

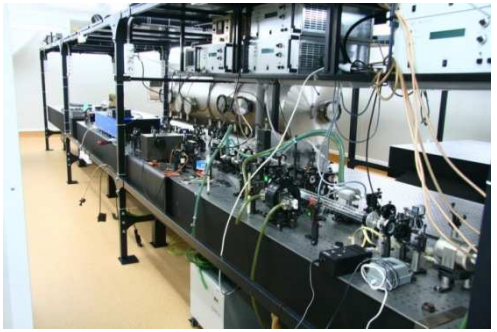


- SSRS-4:
  - Exploring SR user demands in RUS and EU; preparing for collaboration at proposed ambitious

The SSRS-4. Sketch by NRC KI

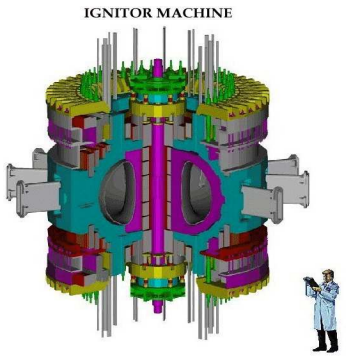
Achievements thematic pillars II (WP6-7)

- XCELS:
  - Several WS on technical issues of XCELS as well as on internationalisation and innovation issues



- SCT:
  - Prepare international IAC for SCT, first meeting May 2018
  - Linking European and worldwide know-how to SCT

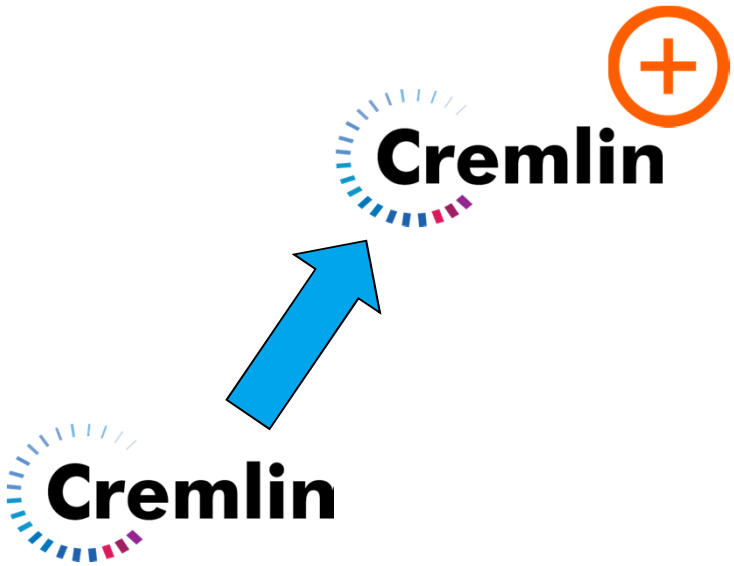
- (IGNITOR):
  - Not in the main focus of CREMLIN
  - One seminar in order to bring the project closer to the attention of the EU fusion community



Recommendations

Look into the future:

- DESY ready to coordinate proposal writing for INFRASUPP-01 call
- Working title: CREMLINplus
- Additional goal: go beyond 5 Russian megascience projects
  - Many other RU facilities interesting for European scientists – but which exactly?
  - These should be prepared for facilitating access of EU and international users
  - Training measures, not only for personnel and users at 5 RU Megas, but also for many other facilities in RU (and EU)
- For RU Megas: Instrumentation; CDR /TDR; Joint R&D projects for generic technologies



Thank you ☺

Big THANK YOU to:

- Grant giver and Project Policy officer:

  for trust and believe in success
- Stakeholders from EC DG Research and RUS ministry: for political support
- CREMLIN CB and PMB: for active collaboration during entire project duration
- SPAB members Jean Moulin, Sergey Mazurenko, Vladislav Panchenko, Günter Kaindl, John Womersley for important strategic advice
- Our key partners at Kurchatov Vladimir Kravchuk and Ekaterina Kolesnikova: for joint project coordination and innumerable exchanges
- Helmut Dosch: for supporting project progress at DESY strategy level
- Project team at coordinator: Frank Lehner, Ute Krell & team, Peter Wibbeling; in WP5 Oliver Seeck, Ivan Vartaniants, Dmitri Novikov; for Big data: Volker Gülzow (IT) and Patrick Fuhrmann
- Project advisor Uwe Meyer: for always valuabale advice at all stages of project implementation

First CREMLIN Recommendations

First CREMLIN Recommendations:

- Two sets:
  1. Specific recommendations: collaboration at 5 RU Megas
  2. General recommendations: collaboration at RU facilities also beyond megascience projects
- „First“, because project is still ongoing until August 2018, and flexibility of further amendment is intended
- More detailed and elaborated Recommendations on collaboration at 5 RU Megas at CREMLIN end in August 2018
- Now: Hand over to European Commission

Thank you!

Enjoy the CREMLIN Closing Conference