ESS Council Stays Steady as Project Moves Into Most Intense Phase

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Governance. The European Spallation Source ERIC Council voted for continuity as the project reaches its peak, re-electing the current Chair and choosing a leading European research expert as Vice-Chair. As the project reaches one-third complete and adds €9.3 million of In-Kind Agreements, attention turns to operations.

WARSAW—The Council of the European Spallation Source ERIC met for the ninth time at the beginning of June. Sweden’s Lars Börjesson was re-elected as chair ensuring continued leadership as the project enters its busiest phase to date. In addition, Dr. Beatrix Vierkorn-Rudolph of Germany was selected as the new Vice-Chair.

Lars Börjesson (l) of Sweden was re-elected Chair of the ESS Council and Beatrix Vierkorn-Rudolph of Germany was elected as Vice-Chair. PHOTOS: ESS

‘This solidifies our stakeholder leadership at a critical stage in the project,” says ESS Director General John Womersley. ‘She [Vierkorn-Rudolph] is a European expert when it comes to large research infrastructure projects, and will be a strong complement to the Chair.”

Dr. Vierkorn-Rudolph is former Deputy-Director General for Large Research Infrastructure at the Federal Ministry of Education and Research, Germany (BMBF), where she oversaw five Helmholtz Research Centres, XFEL, FAIR, CTA and ELI, as well as ESS. Dr. Vierkorn-Rudolph is responsible for nuclear fusion research in Germany and sits on the CERN Council. Since 2006 she is a German representative in the European Strategy Forum for Research Infrastructure (ESFRI), which she chaired from 2010-2013. Both the Chair and
Vice-Chair were elected unanimously for two-year terms.

**In-Kind Moves Toward Goals**

That experience will be useful in the coming months and years, as the project shifts focus to on-site installations and In-Kind deliveries. In-Kind Agreements with partner institutions in Norway, Estonia, Italy and France were approved at the meeting for a total of €9.3 million. That includes a €6.8 million agreement to develop LINAC magnets with Italy’s National Institute for Nuclear Physics (INFN) and Elettra Synchrotron.

‘Overall the Council has approved over €200 million of In-Kind contributions,” said Allen Weeks, Head of In-Kind. ‘That’s already 40% of the total In-Kind, but we still have a long way to go.” He added that partners have been identified for over 80% of the potential In-Kind and many agreements are expected to be completed this fall.

The 9th European Spallation Source ERIC Council meeting was hosted in Warsaw, where members of Council, guests and ESS management had an opportunity to tour Poland’s Reaktor Maria, a nuclear reactor for research with neutrons named in honor of Maria Skłodowska-Curie. PHOTOS: ESS

Still, ESS Project Manager John Haines emphasised how critical on-time deliveries are to the Project Schedule and milestones. ‘The critical path to the first beam goes through the construction of the Target building,” said Haines, ‘but that could change if Accelerator in-
kind issues affect the start of beam commissioning.”

**Initial Operations Focused on Early Scientific Success**

Even as ESS solidifies its collaboration with In-Kind partners and ramps up construction activities, the Council is already preparing the transition into operations by January 2019. Outgoing Vice-Chair Caterina Petrillo of Italy, outlined conclusions of Council’s Operations Working Group two-year effort to create a basis for contributions to operations. That was complemented by a report from the ESS Initial Operations Review Committee held in May.

That Committee was led by CERN’s Austin Ball, who presented the findings to Council. Ball reported that the 13-person panel endorsed the scope of work ESS proposed to include in Initial Operations, but noted that contingency funds would probably need to be increased to accommodate the inevitable unknowns in operating a new facility of this size. The panel made recommendations for the transition from Construction to Initial Operations during 2019-2025, including priorities to obtain high-level scientific achievements as early as possible in the Operations Phase.

‘Any priority measures shouldn’t compromise ESS’ ability to deliver world-class science,” Ball told the Council. ‘Planning [for Initial Operations] needs to emphasise early scientific success.”

Science Director Andreas Schreyer echoed that idea, reporting rapid progress on instrument construction and planning. He emphasised the urgency to resolve key open questions regarding instrument construction and upgrades during the Initial Operations Phase.
Cooperation With ILL
The Director of Institute Laue-Langevin (ILL) in France, Helmut Schober, and the ILL Steering Committee Chair Grahame Blair spoke to ESS Council on future ESS-ILL cooperation. John Womersley and Lars Börjesson will return the visit and attend the upcoming ILL Steering Committee meeting later this month, where the intention is to sign a Memorandum of Understanding between the two labs.

‘Good cooperation between ESS and ILL is critical for the future of Europe’s neutron community,” said Börjesson. ‘We have the same stakeholders and the same users, so we have to work closely together to come to optimal opportunities for the future of science and researchers using advanced neutron techniques.”

The busy two days in Warsaw also saw approval of both the 2016 Annual Report, to be submitted to the European Commission, as well as the Vision and Mission statements for ESS. The Spanish delegation was joined by two representatives from the Basque Region, Vice Minister Adolfo Morais Ezquerro and Vice Minister Estibaliz Hernáez Laviña.

The ESS management team then put forward for Council’s consideration a policy for sharing operations costs among Member States. A path to agreement was established intended to reach a resolution toward the end of the year.

One-third complete, the European Spallation Source has now moved into its most intense two years of construction. Council’s early engagement with operations planning keeps the project’s focus steady on the goal of enabling scientific excellence across the research spectrum.
Vision

Our vision is to build and operate the world’s most powerful neutron source, enabling scientific breakthroughs in research related to materials, energy, health and the environment, and addressing some of the most important societal challenges of our time.

Mission

To do this, we commit to deliver ESS as a facility that:

- Is built safely, on time and on budget
- Produces research outputs that are best-in-class both in terms of scientific quality and in terms of socioeconomic impact
- Supports and develops its user community, fosters a scientific culture of excellence and acts as an international scientific hub
- Operates safely, efficiently and economically, and responds to the needs of its stakeholders, its host states and member states
- Develops innovative ways of working, new technologies, and upgrades to capabilities needed to remain at the cutting edge

Core Values

- **Excellence** We provide the world’s leading neutron science facility and world-class support for the science community. We advance the use of neutrons in science and technology by supporting and developing instrumentation and tools for the highest quality application of neutrons in research. We always aim for scientific, technical and operational excellence in the safest environment.

- **Collaboration** We are an integral member of European society and we engage with the scientific and industrial communities to help build and operate ESS. In our everyday work and all our interactions, we seek to build and maintain relationships that create a shared sense of ownership among our stakeholders. Internally and externally we are committed to act and speak with one voice, as one ESS.

- **Openness** We perform our work in an open and transparent manner. In this way we build trust with our partners, our stakeholders and with each other. We are willing to collectively and directly address challenges and celebrate success. We demonstrate on all levels, internally and externally, that we stand for what we say in the way we act.

- **Sustainability** We act and make decisions with a long-term perspective and strive to safely and responsibly use natural, human and monetary resources. We take the full life cycle of ESS into account, and view sustainability from environmental, social and economic perspectives.