Minutes of the 270th Meeting of the Scientific Committee of Deutsches Elektronen Synchrotron DESY on September 1, 2015

Present:

DESY Scientific Committee (SComm):

F. Beckmann, T. Behnke (EVO), I. Brock (EVO), M. Diehl, R. Doehrmann, W. Drube, G. Eckerlin, A. Ehnes, E. Elsen, S. Fiedler, T. Finnern, E. Gallo, H. Graafsma, I.-M. Gregor, C. Grojean, J. Haller, K. Honkavaara, K. Jansen (EVO), M. Kasemann, C. Kluth, T. Laarmann, N. Meyners, W.-D. Möller, K. Mönig, B. Murphy, A. Mußgiller, T. Naumann, C. Niebuhr, D. Nölle, B. Petersen, E. Plönjes-Palm, B. Racky, A. Ringwald, R. Röhlsberger, V. Schomerus, S. Schreiber, C. Schroer, H. Schulte-Schrepping, C. Schwanenberger (EVO), A. Stierle, M. Tischer, G. Weiglein, M. von Zimmermann

Directorate: H. Dosch, J. Mnich, E. Weckert, C. Harringa

- Guests: S. Jack, A. Meents
- Works Council: K. Lando
- Minutes: M. Diehl

Agenda:

- Agenda of the meeting

 a) Request to change language to English
- 2. DESY Centre for Innovation
 - a) Project plans, status, legal regulations
 - b) Reports from "X-Spectrum" and "Suna-Precision"
- 3. Reports from the DESY Directors including status of high-level appointments
- 4. Report from SComm Chair and internal affairsa) Election of SComm Chair and Deputy
- 5. AoB: Next Scomm planned for November 17, 09:00 am at CFEL building

1. Approval of the agenda

The agenda of the meeting is accepted without change. The SComm Chair has received several requests from new members of the Committee to change the language of the meetings and minutes to English. This is accepted without objections.

2. DESY Centre for Innovation

In a brief introduction, Helmut Dosch underlines the importance for the laboratory to develop its

overall strategy regarding innovation and industrial research, which has been so far resulted in four to five spinoff companies. The Centre for Innovation is a significant step in that development.

2. a) Presentation by Christian Harringa (slides on Indico). Christian Harringa presents several elements of the DESY concept for innovation.

- The guidelines for spinoffs (Ausgründungsleitlinie), last revised in 2013, provides a written legal setup for the relation between DESY and companies.
- The DESY start-up office has been operating since 2013 and is run by the DESY TT (technology transfer) group. It provides several services to potential startups, including training and help in finding external advice (legal counsel must for instance not be given by DESY itself).
- The DESY Centre for Innovation is foreseen to be founded as a GmbH in 2015 and to start operation in 2017/18. It enjoys strong support from the Hamburg City Authorities, who will pay an estimated 14.2 Million Euro for the construction of the building. Target groups of the Centre are science cased companies; a relation with research on the DESY campus will be mandatory, at least in the starting phase of the centre.
- As a further step, plans for a "Technology Centre Lurup" are being discussed, with a possible start around 2019.
- Plans are underway to establish an industry board named Innovation Strategy Council, which would be an analogue to DESY's existing advisory boards (AAC, MAC, PSC, PRC) with the aim to provide advice to the directorate and to foster exchange. Companies such as Siemens and Philips have signaled support for this project.

Summary of answers to questions on the Centre for Innovation

- Finances: Since the City of Hamburg funds the building, there are no major investment costs for DESY in establishing the Centre. The future income from rents is foreseen to provide for the running costs.
- Eligibility: Software companies with a relation to activities on the DESY campus would fall into the scope of the Centre. If the Centre were to be undersubscribed, space and services might be offered to companies from outside DESY, within the relevant legal limitations.
- The Centre is intended to be a catalyst for startup; tenancy will be limited at the order of 3 to 5 years; details are to be worked out.
- Companies in the Centre should be eligible as industrial partners for EU Research and Training Networks, provided that they are incorporated.
- Two similar centres in the Hamburg area operated by TU Harburg and by HAW Bergedorf. There are plans to start an exchange platform between the three centres; activities such as training courses could for instance be shared with mutual benefits.

Centre building. Lab space is being designed as generic and flexible as possible, with basic technical services being provided. The Centre management will provide shared secretarial services at a basic level. The total surface will be around 3000 m², which should allow the Centre to host between 10 to 20 companies. Whether serial production will be possible in the Centre will be determined on a case by case basis.

General aspects of the innovation concept

- Every DESY employee has the right to start their own company. DESY has, however, no obligation to provide any resources to startups.
- From the experience of DESY TT, inter-campus communication and networking between interested parties is an essential element for successful startups.
- Fully transparent and regular reporting about the use of DESY resources is an essential element in avoiding conflicts of interest for persons that are at the same time working for DESY and for a startup company. Such a simultaneous employment can only be upheld during a spinoff phase and is not intended to be permanent.

2. b) Presentation by Stefanie Jack, administrative CEO of x-spectrum GmbH (slides on INDICO)

The company x-spectrum has it origin in the DESY group FS-DS (detector systems) and produces a camera with high spatial, temporal and spectral resolution. R+D of this camera remains within FS-DS; the company is focusing on production and sales. Among the current 8 employees of the company, 4 are DESY employees (and one more was DESY employee when the company was founded in 2014). x-spectrum is being funded by the Helmholtz Enterprise Fund (with 80% of the grant for salaries and 20% for consumables). This is a co-funding scheme, with equal shares of the Helmholtz Association and the hosting laboratory. The company has recently been awarded the first prize of the Hamburg Innovation Awards.

Both in the presentation and in the subsequent questions, particular focus was given to the relation of the company with DESY.

- DESY receives a licensing fee for the sale of each camera, and is a 10% shareholder of the company.
- x-spectrum reports to DESY TT every second month and on the use of DESY equipment every month. An aspect that remains to be developed is a payment scheme for the use of DESY resources such as office space and technical infrastructure.
- Starting from October 2015, company employees will be simultaneously employed by DESY to different degrees (10%, 50%, 100%).
- DESY has also been a customer of the company, with one purchase order so far. With a reduced sales price, it is estimated that the cost to DESY was equivalent to the one incurred if DESY had produced the camera itself, provided that salaries be included in the

calculation.

Presentation by Alke Meents, suna-precision

The company was founded in 2014 by DESY employees and currently has 5 employees. It produces high-precision equipment for X-ray facilities, consisting of about 20 components that can be integrated into full systems.

The company's' business plan has been positively evaluated by DESY TT and by an external consultant, and the company has been granted support from the Helmholtz Enterprise Fund. It received its first development request by DESY and has made its first sales offer to ESRF.

Elements that A. Meents regards as particularly helpful in the development of the business idea were the DESY startup days and the DESY users meeting. He gratefully acknowledges assistance from DESY TT but estimates that it would be a gain if the group had a senior person with experience in company startup. He emphasizes the urgency of establishing a regular billing scheme for the use of DESY resources.

3. Report from the DESY Directors

H. Dosch reports on a number of issues.

- There are no additional delays in the ongoing construction projects.
- Income tax: the German tax authorities have revised DESY's tax status as an entrepreneur, which now covers 95% of its activities. VAT is to be paid on purchases for the remaining 5% of activities, which amounts to about 1.5 Million Euro per year.

The revised tax status is valid retroactively from 2009, and DESY must pay past tax dues of about 12 Million Euros. This poses a serious budgetary problem. DESY has requested that these dues be waived on the grounds of fairness ("Billigkeitserlass"); the request is being examined and its outcome unclear. In case of a negative decision, the entire amount would be due immediately; DESY could then apply for a staged payment over several years.

- Christian Scherf is leaving to become administrative director of EMBL. The search for his succession is ongoing. In parallel, a search is ongoing for the succession of Massimo Altarelli as Managing Director of the European XFEL.
- The German Ministry for Research and Education has issued a call for entries in the National Roadmap for Research Infrastructures, which will define a national strategy on a timescale of 20 to 30 years. DESY intends to contribute to this roadmap with the upgrade of PETRA 3 to PETRA 4. The timescale set by the Ministry, with a very detailed CDR-type document to be submitted to the German Science Council (Wissenschaftsrat) by 2016 and a detailed scrutiny of cost estimates in 2017, is regarded as very tight.
- To accommodate a growing number of research facilities, the DESY directorate is investigating possibilities to expand the DESY campus, in close contact with the Hamburg

City Authorities. Use of the adjacent Lisa-Meitner Park is being discussed. It is deemed indispensable in such a scenario to retain green spaces of the park. The Paul Scherrer Institute provides an example of how this can be successfully achieved.

• The Hamburg City Authorities have earmarked two sites around DESY for the use of accommodating refugees. In the first instance this will be Notkestrasse 25, and later a parking lot close to the football stadium (Parkplatz Grün). The directorate is looking for ways to interact with the future occupants in a positive way, eager to set a positive signal in the context of the current public discussion. Ideas for such interactions are highly welcome.

Questions and Answers

Q: What is the status of preparation for the expected Federal Excellence Initiative by the University of Hamburg and DESY?

A: Preparations are being actively pursued, in a very constructive dialogue between the managements of DESY and the University. They will play a prominent role in the next retreat of the directors, where the President of the University will join as a guest. A joint working group of University and DESY staff is working out the scientific content of the proposal. There is a prospect that there will be a call for institutional (in contrast to project oriented) funding of excellence centres, which might provide support in the order of 10 Million Euro per year until 2035. In such a case it is deemed indispensable to develop new structures that would organise the collaboration between the University and DESY in a more binding, yet sufficiently flexible way. A side activity in this context is the search for possible European partners for a proposal.

Frank Lehner reports on the status of high-level appointments. Details can be found in his slides on the INDICO agenda (password protected). He informs the committee that at Humboldt University an appointment procedure has been initiated for a W2 position, which is partly financed by DESY. As this is not a common appointment and not a position at the level equivalent to a leading scientist, the SComm and the Scientific Council (Wissenschaftlicher Rat) of DESY are not being involved. He points out that several DESY staff members are members of the search commission.

Q: The directorate recently decided that the leading scientist position currently held by Wilfried Buchmüller [DESY Theory Group, until 2016], including associated positions, will be transferred from the elementary particle to the photon science division. Can the directorate explain this decision?

A: At the beginning of the POF2 funding period [2010-14] there were strategic discussions to strengthen photon science at DESY. An immediate change of the personnel portfolio was not deemed necessary, given the relatively high annual budget increase of 5% at the time. This situation has changed with the current financial pressures on the laboratory, such as the future contribution to XFEL operation of around 10 Million Euro per year. The transfer of the leading scientist position that has now been decided is a relatively mild change. A modern laboratory such as DESY must be able to react on challenges, and one must give up thinking in terms of entitlements and traditions.

Q: Should the SComm not have been involved in the succession of this position?

A: Yes, it will be involved in the appointment procedure.

Q: Can the directorate comment on the relation between this decision, which regards the internal re-organisation of DESY base funds, with the recent activities in acquiring additional funding, in particular from the Helmholtz Recruitment Initiative?

A: These are two different issues; there was in particular no relationship between this decision and the successful recruitment of two leading scientists in the Theory Group within the Recruitment Initiative.

Q: What is the timeline for filling the new position?

A: Wilfried Buchmüller's term has been extended by one year; the succession of his position is to take place in 2017.

4.) Report from SComm chair and internal affairs

Only committee members were present in the remaining part of the session.

• The SComm chair reports on the status of the Guidelines for scientific work at DESY (Leitlinien für wissenschaftliches Arbeiten am DESY). It had been sent from the SComm to the directorate in January, who approved it after adding a section on the "responsible use of our research facilities". The Scientific Council endorsed the principles of the guidelines and recommended that its text be condensed, which was subsequently done by the SComm chair and secretary. The resulting document was approved by the directorate and well received by the DESY Foundation Council (Stiftungsrat). It is attached to the INDICO agenda. An English translation is being planned.

Q: The guidelines emphasise that military research must not be conducted at DESY, neither by internal nor by external groups. Who is controlling this?

A: This is not within the scope of the guidelines. A possible control instance could an ethic committee, whose establishment was recommended by the Scientific Council. It would be natural for the SComm to be represented in such a committee.

Two further points were discussed by the Committee:

- Appointments for W2 university positions in which DESY is involved are not being covered by the recently updated rules for the appointment of leading scientists (Berufungsordnung), a preliminary version can be found on the INDICO agenda of the 267th session of the SComm (September 2014). The SComm notes that according to §13 of the DESY Statues its advisory role covers in particular questions concerning the collaboration of DESY with universities. Given the significance of a W2 university position, the Committee would deem it adequate to be involved in corresponding search commissions in the same way as it is for common W3 appointments.
- The Committee considers that it would have been adequate to inform and consult both

the SComm and the DESY Scientific Council prior to the directorate's decision to transfer the leading scientist position currently held by Wilfried Buchmüller from particle physics to photon science. It is the statutory role of both committees to give advice on the scientific programme of DESY (1), and according to rules for the appointment of leading scientists (2) both committees should be consulted before the topical profile of a leading scientist position is determined. The SComm therefore considers it logical that the transfer of such a position between major research directions is of concern to both committees.

The SComm requests to be involved more closely in future decisions regarding the scientific profile of leading scientist positions at DESY.

(1) DESY Satzung, §12 and §13

(2) Berufungsordnung für wissenschaftliche Mitarbeiter/innen mit Leitungsfunktion bei DESY, §2

4. a) The regular two-year terms of the present SComm chair and deputy chair end in September 2015. The election of the new chair and deputy was done by secret ballot, organised by Ingrid Gregor and Carsten Niebuhr. 33 Committee members were present at the vote, and votes by remote participants were transmitted via P Hendrikman-Verstegen. Nominations were collected in the session; sole candidate for the chair was M. Kasemann (CMS), and sole candidate nominee for the deputy chair was Ralf Roehlsberger (FS-PS). The results of the vote are

Committee chair: Matthias Kasemann 36 "yes", 0 "no", 2 abstentions

Deputy chair: Ralf Roehlsberger 35 "yes", 0 "no", 0 abstentions

5. The next SComm meeting is planned for **November 17, 2015**, 09:00 am at the CFEL building, meeting rooms II + III.

Proposed topics are the strategic plans and preparations of DESY and the University of Hamburg for the federal excellence initiative. It is foreseen to invite guests from the University on this occasion.

Suggestions for topics of future meetings are welcome and should be sent to the SComm chair or his deputy.

Minutes: M. Diehl, September 8, 2015