Europhysics Notes

● Commission of the EC Proposes 1600 MECU R. & D. Complement

In order to avoid a possible pause in funding the "rolling" European Communities' Framework programmes for science and technology owing to more complicated post-Maastricht procedures, F.M. Pandolfi, the Vice-President of the Commission of the EC, indicated in July that the Commission will seek an additional 1600 MECU complement for the the last two years of the present 3rd Framework (F-III budget: 5700 MECU for 1992-4). The human capital and measures and tests programmes (see below) are not affected. The beneficiaries are programmes in energy (complement = 115% of present F-III budget), industrial technology & materials (38%), information technology (28%), and the environment (26%). The CEC had indicated when the F-III budget was adopted that it was some 2000 MECU less than was needed.

● CEC Restructures DG-XII and DG-XIII

Following a three-year evaluation of EC Commission procedures, Vice-President Pandolfi decided in July to restructure the Directorates-General for science (DG-XII) and for communications (DG-XIII) to enhance administrative efficiency by rationalising the hugely increased activities for research. The two Directorates have some long-standing links as today's DG-XIII represents a fusion of a 1986 DG-XII task force on information technologies with the original DG-XIII charged with disseminating the results of research. The first measures will group DG-XII and DG-XIII activities under a board of 12 Directors (9 will be essentially responsible for Framework programmes and 3 for other aspects, *e.g.*, accompanying measures, including relations with international organizations such as EPS).

● Large Response to Human Capital Call

The 3 July deadline for the submission of proposals for the first selection round of the EC Human Capital and Mobility programme netted the following numbers of proposals: host institutes (1260), networks (≈ 1500, all proposals have not yet been fully registered), large-scale facilities (88), Euroconferences (176), fellowships (≈ 700).

The extremely short delay between the call for proposals and the deadline for first selection (about one month) meant that many applicants were obliged to queue up at the DG-XII offices in Brussels on the day of the deadline in order to submit proposals. The programme has only until 5 August to make selections. The former Science programme involved deciding upon 250-300 proposals every three months. Human Capital was delayed for about a year so the Commission of the EC expected 1000-1200 proposals at the first call: nearly 1500 proposals for equivalent actions (networks, large facilities and conferences) were in fact received. So while the number is reasonable, the difference is that proposals must be handled within a month. There is also additional work, namely the selection of host institutes within a month (1260 proposals) and the awarding of individual fellowships. The CEC is therefore tending to bring members of the CODEST-appointed referee panels (there is one for each of eight fields) to Brussels to tackle the mountain of paperwork. It may also be decided to delay the first selection of networks.

● EC Measurements & Tests Call

The 140 MECU Measurements & Tests programme launched on 15 July with a call for proposals is virtually the last of the current EC Framework programmes to eventually get underway. Proposals are due by 11 or 30 September 1992, depending on the domain (see table on page 134 for the contact).

● Physics ERC's Fully Established

K. Bethge, Chairman of the EPS Working Group on European Research Conferences in Physics reports that of the 15 proposals received for 1993 ERC's in physics, the Group put forward the same number of proposals (8) as last year to the ERC Steering Committee (the remainder mainly involved other disciplines). The European Science Foundation which coordinates arrangements is presently aiming to reduce its workload by limiting the number of locations. Several sites well-known for hosting physics meetings are presently submitting offers to the ESF. The trend implies that organizers will be less involved in site selection. Meanwhile, the Commission of the EC which funds ERC's is discussing with the Steering Committee ways to provide more opportunities for "hot" topics by introducing biennial meetings in some fields. This has understandably met with some resistance. An evaluation by an EC panel of 1990-1 ERC's gave a very positive conclusion for the physics meetings. Financing of the 1992 ERC's is assured by the CEC but its medium-term (5-8 year) goal remains to establish the ERC's as self-financing. Finally, the EPS Working Group seeks proposals for 1994 ERC's from the Divisions by **28 February 1993**.

● FSU Survival Grants

Visits by American Physical Society (APS) officials to Russia last Spring led to a committee chaired by L. O'kun being set up in Moscow to channel small grants to individuals and groups in the former Soviet Union. Some 800 applications for "survival funding" were received from 57 institutes in May and June by A.F. Andreev, a commit-

tee member: some 2000 are expected by December. A first selection of 70 approved proposals for one-year grants of typically $US 500.– has been sent to the APS for funding. M. Jacob, EPS President, hopes EPS will become associated with the scheme once it is clear that cash grants can be transferred without excessive tax liabilities and overhead costs. In the case of Russia, finalising arrangements is taking time as the Minister of Science cannot act independently of other ministries.

● ESRF Advances while Monitoring Floor Stability

The European Synchrotron Radiation Facility's 6 GeV storage ring in Grenoble reached its design current (multi-bunch mode) of 100 mA for the first time on 16 June 1992, ahead of schedule and only four months after the start of commissioning. The beam lifetime is approaching the design value as outgasing continues and the emittence is close to targets. The effects of dust in the vacuum vessel of a high intensity synchrotron source has always been a concern. The ESRF thinks particles give X-ray emission peaks and momentary dips of a few percent in the beam current, but more work is needed to understand the phenomena. A back-up power supply for the beamline magnets is to be installed to cope with tripping owing to lightning in the surrounding mountains. This will avoid having the beam in a different position after a failure in the supply and the subsequent recycling of magnets. A major problem has been to overcome the effects of the curling of the experimental hall's concrete slabs (the floor is in sections to stop the propagation of vibrations). It was confirmed in June 1991 that they had lost contact with the sub-surface. The injection of grout has re-established contact and vibration levels are back to where they were before site development began (30% of the floor has been treated so far). As a result of doubts about the long-term stability and the possibility of having to replace the entire floor (15 000 m^2), the ESRF management has decided to proceed with the installation of less sensitive, and easily dismantled, beam lines. The ESRF expects to have beams in these lines before the end of 1993 and will monitor the floor situation before committing itself on an earlier than scheduled (March 1994) availability for users.

F. Mills of the Fermi National Accelerator Lab who has been closely involved in the design of the almost identical 7 GeV Advanced Proton Source (APS), speaking at CERN in July, thought the floor problem may not have materialised if the ESRF had adopted the US approach of having all the necessary expertise in-house instead of contracting out to industry. This is a familiar argument. The APS itself is entering an "interesting" phase: the building at the Argonne National Lab to house the storage ring is now one-third complete and dipole magnets and beam tube extrusions have entered production, with equipment installation set to begin in September 1993 (a fairly relaxed schedule is dictated by the availability of DoE Basic Energy Sciences funding of 800 M$US which includes beamline equipment). The APS is exploring an ambitious 20 Hz feedback system with 60-70 beamline monitors to control micron ground vibrations. Unlike the ESRF, it has opted for a double vacuum chamber.

The ELETTRA synchrotron under construction near Trieste.

The building for Europe's other new major synchrotron light source, the 2 GeV Elettra machine in Trieste is about two-thirds complete and associated laboratory facilities are aready in operation.

● New Director for JINR

The 11 Members States of the Joint Institute for Nuclear Research (JINR), Dubna, 150 km from Moscow, elected V. Kadesheveski, formerly Deputy Director of JINR's theory lab, as the new JINR Director. The other candidate was proposed by the Russian Minister for Science. Founded in 1956 and having six main laboratories, the JINR is Russia's only major international physics facility. German support stemming from unification commitments is due to be reconsidered next year and east and central European countries are thought to be examining options. CERN Council voted unanimously on 26 June to **admit Hungary** as its 18th Member State as from 1 July 1992. Hungary's contributions will follow the Polish and Czech models, *i.e.*, modest (600 kSFR) for three years, then doubling for one year, and then rising linearly to full value at a yet-to-be-determined rate.

● JET UK Staff Maintains Pressure

The long-running dispute between JET's British staff and the CEC over low salaries relative to EURATOM employees entered a new phase with the appointment by the CEC of a four-person panel in response to the Petitions Committee of the European Parliament's request to the EC Budget and Energy Committees to act. The former deferred to the latter which put a motion to Parliament, passed last December, seeking a report by June 1992 on recruitment practices in EC labs, including proposals that would solve the JET problem. The EC Council of Ministers passed an extension of JET to 1996 on this basis. Meanwhile, JET has only 50% of its expected 1992 budget owing to what P.-H. Rebut, the JET Director, calls a technical "misunderstanding" in the CEC's JET budget ratified Parliament. He says the situation should not be "overdramatised" as Parliament will vote a supplementary budget once the panel has reported. The CEC and JET have reinterpreted fine print to allow salaries to be paid from July and letters of intent for suppliers to the New Phase (see page 123) to be sent. The British staff started a series of one-day professionally managed strikes in June.

● Physics Olympiad

China won this year's Physics Olympiad in Helsinki on 5-12 July, followed by Russia, the Ukraine and the UK. The top student was Han Chen from Beijing University.

● Controls Group Expands

Three more institutes joined the EPS Interdivisional Group on Experimental Physics Control Systems bringing the total number to 42. The Group originally intended to deliver a DEC workstation to the Czech Technical University's (CTU) regional computer centre in Prague to upgrade facilities — a move designed to help central European colleagues. Digital Equipment has recently agreed, however, to provide the latest equipment and full support directly from its Czech subsidiary. Meanwhile, a loan agreement has been finalised for shipping the EPCS's fully upgraded Hewlett-Packard workstation to the CTU. The two machines will fill the gap between a new IBM mainframe-based network and PC's. An Indian group developing controls for a cyclotron in Calcutta is interested in borrowing the DEC workstation.