CERN Bulletin

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THE CERN DATA CENTRE READIES FOR RUN 2

While the world waits for Run 2 data with growing anticipation, the CERN Data Centre is battening down the hatches. Run 2 is set to see a significant increase in the amount of data produced by the LHC experiments, with more than one hundred additional petabytes expected over the next three years. How will CERN manage this flood of results? The *Bulletin* checks in with the IT Department to find out...

The CERN Data Centre: the heart of CERN's entire scientific, administrative, and computing infrastructure.

With every second of run-time, gigabytes of data will come pouring into the CERN Data Centre to be stored, sorted and shared with physicists worldwide. To cope with this massive influx of Run 2 data, the CERN Data and Storage Services group focused on three areas: speed, capacity and reliability.

First on the list, the group set out to increase the rate at which they could store data. "During Run 1, we were storing 1 gigabyte-per-second, with the occasional peak of 6 gigabytes-per-second," says Alberto Pace, who leads the Data and Storage Services group within the IT Department. "For Run 2, what was once our "peak" will now be considered average, and we believe we could even go up to 10 gigabytes-per-second if needed."

This increased rate of data storage is thanks, in part, to improvements to the CASTOR storage

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A GOOD WEEK FOR GLOBAL COLLABORATION IN PARTICLE PHYSICS

This has been a good week for global collaboration in particle physics. On Wednesday, the CERN family grew by one Associate Member when we received official confirmation that the accession agreement signed last year had been ratified by the Turkish parliament, and on Thursday, we signed a new cooperation agreement with the US.

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NEWS

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A word from the DG

(Continued from page 1)

A GOOD WEEK FOR GLOBAL COLLABORATION IN PARTICLE PHYSICS

The signature of a new cooperation agreement between CERN and the US at the White House on Thursday, 7 May marks both a renewal of a long-standing friendship and a commitment to take the partnership further. Signed between CERN, the US Department of Energy and the US National Science Foundation, it is a framework agreement that paves the way for detailed accords on continued US participation in CERN's scientific programme, and on European collaboration in projects hosted in the US, including prospective neutrino facilities. It is an agreement that is tacitly renewed every five years, unless one of the signatories signals a need to end or amend it.

I am particularly pleased that this agreement is in place. Not only does it continue a partnership that goes back to the very origins of CERN, but it also recognises the current status of the field, being perfectly aligned with the European Strategy for Particle Physics and the US Particle Physics Project Prioritization Panel (P5) recommendations for the global development of the field.

The accession of Turkey as an Associate Member also cements a long-standing partnership. Turkey became an Observer as far back as 1961, and Turkish scientists have been valued members of the CERN community ever since. Today, Turkey is involved in several CERN experiments along with the Worldwide LHC Computing Grid. Turkish scientists are also involved in CLIC and the Future Circular Collider study.

Science, and indeed society, thrives on collaboration. It is therefore with great pleasure that I welcome these developments.

Rolf Heuer

THE CERN DATA CENTRE READIES FOR RUN 2

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system. CASTOR prioritises storage on tapes, which are more robust and thus ideal for long-term preservation. New improvements to CASTOR software are allowing CERN's tape drives and libraries to be used more efficiently, with no lag times or delays, thus allowing the Data Centre to increase the rate of data that can be moved to tape and read back.

Reducing the risk of data loss - and the massive storage burden associated with this - was another challenge that the Data and Storage Services team set out to address for Run 2. "We wanted to provide experiments with the ability to choose their storage solution based on the type of data they need to preserve," says Pace. "Thus, we've introduced a data 'chunking' option in our EOS system. This splits the data into segments and enables recently acquired data to be kept on disk for quick access."

"This allowed our online total data capacity to be increased significantly," Pace continues. "We have 140 petabytes of raw disk space available for Run 2 data, divided between the CERN Data Centre in Meyrin and the Wigner Data Centre in Budapest, Hungary. This translates to about 60 petabytes of storage, including back-up files."

Now, in addition to the regular "replication" approach - whereby a duplicated copy is kept for all data - experiments will now have an option to scatter the data across multiple disks. This "chunking" approach breaks the data into pieces. Use of reconstruction algorithms means that content will not be lost even if multiple disks fail. This not only decreases the probability of data loss, but also cuts in half the space needed for back-up storage.

"Although this is not the optimal solution for data subject to heavy access, as reconstructing the data from chunks is more input/output intensive, it is an excellent option for data that is less-frequently accessed," says Pace. "We now have a system allowing us to tune to favour performance or reliability, depending on the type of data."

Finally, the Data and Storage Services group is also aiming to further improve the availability of the EOS system. During the first run of the LHC, EOS was available to users for around 98.5% of the time. However, the group now has the ambitious goal of improving this to more than 99.5% for the duration of Run 2.

From quicker storage speeds to new storage solutions, CERN is well-prepared for all of the fantastic challenges of Run 2.

Katarina Anthony

LHC REPORT: SQUEEZING, LOW-ENERGY COLLISIONS AND AN UNIDENTIFIED OBJECT

Commissioning of the nominal cycle – beam injection, ramp, squeezing – with low-intensity (probe) beams is progressing well. In parallel, the operators have started commissioning the machine with higher-intensity beams: a nominal bunch in each beam was taken to 6.5 TeV on Saturday, 2 May and, four days later, collisions were delivered to the experiments at the injection energy (450 GeV).

The other main commissioning thread involves preparations for higher beam intensities. To safely handle the higher number of protons per bunch and the higher number of bunches, a number of key systems have to be fully operational and set up with beam. These include the beam dump system, the beam interlock system and the collimation system. The latter involves around 100 individual pairs of jaws, each of which has to be positioned with respect to the beam during all phases of the machine cycle. Confirmation that everything is as it should be is made by deliberately provoking beam losses and checking that the collimators catch the losses as they are supposed to (the so-called loss maps). The set-up so far has allowed a nominal bunch in each beam to be taken to 6.5 TeV and collisions to be delivered to the experiments at the injection energy. One of the key phases of the LHC cycle is the squeeze. During this phase, the strengths of the magnetic fields either side of a given experiment are adjusted to reduce the beam size at the corresponding interaction point. In regular operation mode the whole process takes around 15 minutes. During commissioning we perform careful beam-based measurements to verify the correctness of the changes in magnet focusing. With low-intensity bunches (up to 10^{10} protons in each bunch) this has been successfully performed down to the smallest interaction-point beam-sizes planned for 2015.

An unexpected obstacle is sitting at the bottom of the beam 2 beam-pipe in a dipole in sector 8-1. Although it is not causing too many problems for the moment, regular scans are being performed to make sure that the situation remains stable and that it doesn't result in a more serious aperture restriction.

In recent days operations have been dogged by a series of technical problems ranging from cooling problems to a router issue. Despite the rocky machine availability, about half of the planned beam commissioning has been completed and the LHC remains on track for its first high-energy collisions in a few weeks from now.

Mike Lamont for the LHC team

LINAC4: INJECTING NEW LIFE INTO THE LHC

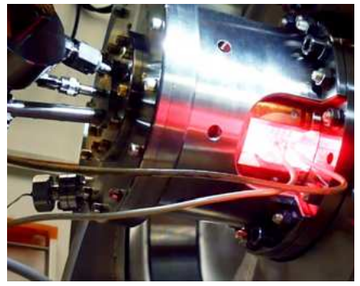
Construction work is nearing completion on the ion source for Linac4, the new linear accelerator that forms part of the LHC injector upgrade programme. Here we find out more about this essential component of the accelerator chain, designed and built at CERN.

The ion source is a key component of Linac4, the linear accelerator that from 2018 will supply H^- ions (hydrogen atoms with an extra electron) at 160 MeV for injection into the accelerator complex.

As the only ion source at CERN, Linac4 must be highly reliable, which requires a full understanding of the production mechanisms, the simulation of physical processes and the validation of those processes through experimentation. "This source is the result of much fruitful collaboration," says Jacques Lettry of the BE department. "Its design was inspired by the many sources of this type that exist all over the world, including the sources for the neutral beam injectors that will supply the nuclear fusion process at ITER. Since 2010, experts from various institutes[1] have shared their simulation tools and their vast experience with us to help us with our decisions."

To date, 23 students and fellows, adding up to more than 30 person-years, have worked on the detailed simulation of all the processes taking place inside the source. The design and production of the prototypes have benefited from major contributions from several departments and services at CERN.

Inside the source, the H^- ions that make up the beam originate in a hydrogen plasma. Ultra-vacuum technology ensures the purity of the hydrogen and pulsed injection produces a density favourable to the ignition of the plasma. The plasma is heated to between 11,000 and 13,000 degrees Celsius by a radio-frequency (RF) wave of several dozen kilowatts. The (neutral) hydrogen atoms present in the plasma collide with an extremely fine layer of caesium (ideally 0.6 of a monoatomic layer thick) coating an electrode; they then have a certain probability



The Linac4 H^- source.

of snatching an electron as they continue on their way, forming an H^- ion, which is then extracted by a positive electrical field. "The quality and purity of the extracted beam depend on the ability to eliminate the numerous electrons present in the plasma," explains Lettry. "In our source, the ions emitted by the surface coated with caesium[2] considerably reduce the number of electrons extracted. Caesium is an alkaline element that must be handled with certain precautions, but we have shown that options without caesium would not allow us to reach the emittance

required by the project, even at a current of 50 mA."

All the systems – RF heating, gas injection, beam production and extraction – have now been successfully tested and the source is ready for the conditioning phase. "The source will be installed in the Linac4 tunnel in the coming weeks, and from August we will be able to start testing the DTL[3], from which the particles will emerge with an energy of 50 MeV," explains Alessandra Lombardi, who is in charge of the conditioning phase of Linac4. "We will then be ready to replace Linac2 if necessary."

The Linac4 schedule now foresees the installation of the remaining RF cavities. By the end of 2015, Linac4 will be producing 100 MeV beams, with final-energy 160 MeV beams not expected until 2016.

[1]BNL, SNS, ISIS, J-PARC, IPP-Garching, as well as the Universities of Augsburg (Germany), Keio (Japan), Jyväskylä (Finland) and Orsay (France).

[2]For more details see G.I. Belchenko, Yu.I. Dimov and V.G. Dudnikov. Nucl. Fusion, 14 (1974) 113.

[3]Drift Tube Linac.

Antonella Del Rosso

HUG SETS UP AN EMERGENCY OPERATIONS CENTRE ON THE CERN SITE

Discussions between CERN and the *Hôpitaux universitaires de Genève* (HUG), under the aegis of the Swiss authorities, have resulted in the setting-up of an emergency operations centre on the CERN site. This will be the operations base for an emergency doctor, a medical emergency vehicle and a driver. Located on the Swiss part of the Meyrin site, close to Building 57, it will be inaugurated on 20 May.

SMUR team based at CERN.

CERN's medical staff and fire-fighters dispense first aid but in medical emergencies they are obliged to call on outside services to treat and transfer patients to hospital. In the Canton of Geneva, this service is provided by HUG via the 144 emergency line.

But HUG is based on the eastern side of Geneva, a long way from CERN, and response times can be substantial. In order to improve the safety of the growing number of people on the site, CERN asked Switzerland, as one of its Host States, to help it reduce the medical emergency response times across the whole site. At the same time, HUG was looking for ways of enhancing its ability to handle medical emergencies on Geneva's western flank.

As a result, CERN and HUG, with the support of the Swiss Confederation and the Canton of Geneva, have now signed a collaboration agreement providing for CERN to host an emergency operations centre run by HUG. An emergency doctor will be based here five days a week, initially 12 hours a day and subsequently 24 hours a day. An emergency vehicle fully equipped to respond to medical emergencies will be able to reach all parts of the CERN site quickly, including those in France, as well as the neighbouring areas.

This agreement also provides for continuous training in emergency care for the staff of CERN's Medical Service and Fire Brigade who hail from different Member States and will henceforth be able to attain a common proficiency level in emergency care, in line with the applicable standards.

The centre, its staff and all the necessary equipment will be installed in suitable premises erected close to the Medical Service and the Fire Brigade on Route Einstein.

This collaboration between CERN and HUG will also contribute to the fruitful interaction between CERN's medical staff and fire-fighters, who will continue to provide first aid, and HUG's emergency team, which will manage the medical aspects of emergency situations in the interests of improving the safety of all the people working on the CERN site.

If you are at CERN,
call 74444 in case of an emergency!

Antonella Del Rosso

THE GLOBE GETS A NEW SKIN

The Globe of Science and Innovation will be closed to the public from 4 May until the end of March 2016 for large-scale maintenance work. The renovation project, which is set to last about ten months, aims to overhaul the general building infrastructure and, above all, to replace a number of ageing components.

Originally designed by Genevan architects Thomas Büchi and Hervé Dessimoz for the Swiss national "Expo 2002" exhibition in Neuchâtel, the Globe of Science and Innovation quickly became a symbol of CERN. In 2004, when it was relocated to its present site, the Globe acted as the venue hosting official delegations at the Laboratory's 50th anniversary celebrations.

Ten years on, thanks especially to the permanent exhibition *Universe of Particles*, the Globe has become THE venue for meetings and interactions between CERN and the general public, and is destined to continue in that vein for many years to come. For this to happen, the structure needs something of a facelift. The manager of the Globe, Bernard Pellequer, explains: "As we all know, the building's structure is made of wood, an organic material that, unfortunately, has a limited lifetime. After more than ten years' faithful service, certain components that were initially designed to last only for the months of the Neuchâtel exhibition need to be replaced if the Globe's own lifetime is to be extended." The eighteen outer cylindrical arcs, each measuring 32 metres in length, will all need to be replaced by new ones of identical appearance but made from a hardier type of wood.

Swiss firm Ducret-Orges SA won the call for tenders and will undertake the impressive dismantling operations from June onwards, under the watchful eye of the GS Department's site manager Amaya Martinez Garcia. Bernard Pellequer adds: "Right now we're in the preparatory phase of the project, which is set to last another few weeks. But once the main crane starts dismantling the Globe's sun baffles and then the main cylindrical arcs, this spectacular and highly complex work will be visible for all to see."

The Globe, during its assembly at CERN in 2004.

In addition to the replacement of the cylindrical arcs, the work will focus on renovating the external ramps, the disabled access facilities, the staircases and the lighting system. "This is all part of a long-term maintenance plan," says Bernard Pellequer. "When the Globe reopens in the first half of 2016, we will be all set to host cultural events, lectures and exhibitions for decades to come!"

**The 18 cylindrical arcs will be taken down and cut up in situ in order to be recycled.*

Anaïs Schaeffer

SITTING INTO THE LIMELIGHT: LONELY CHAIRS AT CERN TURNS ONE

A picture may be worth a thousand words - but a picture of a chair? It's worth a story all by itself. Over the past year, the "Lonely Chairs at CERN" photography blog has let the chairs do the talking. Along the way, these chairs have inspired and enchanted people across the globe with their honest depiction of the Laboratory.

When CMS physicist Rebeca Gonzalez Suarez created *Lonely Chairs at CERN* back in April 2014, she was not expecting the immediate reaction it garnered. Within days, the blog had picked up thousands of followers and was featured in *Gizomodo* and *The Guardian*. "The response inside CERN was very positive, but the response outside was overwhelming," says Rebeca. "I've got a lot of followers who are really into science and are very excited about CERN. They comment about wanting to work here - sometimes on the ugliest chair I've posted."

The blog showcases an older, perhaps grittier side of the Laboratory - one that is very familiar to people at CERN but that can be somewhat surprising to the rest of the world. "I like CERN the way it is and sometimes it's difficult to show what it looks like on the inside," says Rebeca. "What makes CERN so unique, and what I like most, is that it's been here for 60 years and you can tell. That's a good thing. It helps put you and your work into context. People were working here before you, and they were doing the same things that you are doing - maybe even using the same chair."

"Everyone likes to have new things," she continues. "All the new buildings and new elevators are great... but the spirit of CERN is also to be found in the old stuff. New things can be practical and pretty, but they are lacking in history. I like best the character you find in old things."

As *Lonely Chairs at CERN* nears 20,000 followers, Rebeca has no plans to slow down: "I am wondering when people will get tired of chairs, or when I will simply run out of them.

This lonely chair outside Building 32 was one of the first Rebeca photographed.

But so far I still have lots to go." As for her own chair? Rebeca assures us that it's just as bleak: "My chair is really, really old - I have no idea how many physicists have sat on it but... a lot."

To see more of CERN's lonely chairs, visit:
http://lonelychairsatCERN.tumblr.com

Katarina Anthony

Computer Security

USB STICKS - THE SILENT KILLERS

You've just found a USB stick in Restaurant 1. You'd like to return it… but who is the owner? Maybe the contents can tell you? Connect it to your laptop, and you might figure it out. But hold on, what if its content is dangerous…?

USB sticks are an excellent vehicle for infecting countless PCs and laptops. Years ago, several dozen laptops were infected during a conference when someone passed around a USB stick with flight departure information. Unfortunately, this stick was infected. Similarly, we have seen a domino effect of infections in the FP and EN departments after some USB sticks made the rounds, infecting one PC after another. In the end, a massive number of PCs had to be reinstalled.

Some USB sticks are even worse. They pretend to be "just a keyboard" (named "RubberDucky") and, once inserted, they execute a pre-programmed sequence of keystrokes intended to extract information from your computer or take it over. Others have malware compiled into the USB's hardware chips and not into its storage area, for example e-cigarettes that are charged by a USB cable. Even worse, the next generation of fake USB keys might be able to destroy part of your computer! No technical solution can protect your computer from that!

So what can you do? First of all, don't use USB sticks if you don't trust their provenance. If you've found a USB stick, hand it over to **Computer.Security@cern.ch**. We have means of dealing with infected sticks. Secondly, use good antivirus software, which should be able to detect known threats stored on a USB stick. Give the software the time to run a full scan. The CERN antivirus software is available for Windows (**cern.ch/go/GgP6**) and for Mac (**cern.ch/go/wnV6**), and can also be used to protect your computers at home. Thirdly, in order to help your antivirus software, keep your laptop, PC, tablet or smartphone up-to-date with all the recent software upgrades and patches. Have the "Windows Upgrade" or Mac "Software Update" set to "automatically download and install". For Linux use, for example, "yum auto-update". CERN PCs and laptops are centrally kept up-to-date via CMF. Fourth, if you manage your own PC, check the "autorun"/"autostart" settings for USB sticks. If CERN IT manages your PC or laptop, all is fine.

Finally, be vigilant and report suspicious USB sticks to **Computer.Security@cern.ch**. If you are really paranoid and just want to use your USB port for charging e.g. your mobile phone, buy a USB "umbrella", which blocks the data connection and only allows power through.

For further information, questions or help, check: **https://security.web.cern.ch**
or contact us at
Computer.Security@cern.ch

Do you want to learn more about computer security incidents and issues at CERN? Follow our Monthly Report:
https://cern.ch/security/reports/fr/monthly-reports.shtml

Stefan Lueders,
Computer Security Team

Ombud's Corner

RESPECT@CERN - THE DISCUSSION HAS STARTED…

The on-going campaign Respect@CERN was re-launched this year on Tuesday 5 May with a discussion forum led by Alan Richter, an expert consultant in ethics and diversity. Seeing so many colleagues in the Council Chamber for this kick-off event was a clear indication of interest in the topic as well as a willingness to engage in promoting a respectful workplace. Now, the discussion continues through the dedicated website.

"Accelerating Respect @ CERN" was the thought-provoking title of the kick-off event of our campaign and, indeed, the speaker presented several ways of achieving workplace respect with a selection of models that provided us with a springboard for the conversation to start.

Participants were invited through an interactive survey to consider four of the building blocks that serve to shape a respectful working place: swift and deep trust; awareness of possible unconscious bias; awareness of cultural differences in ways to address conflict; and an appreciative inquiry process by which to build on success rather than focusing on what went wrong.

Of course, a one-hour forum could only serve as a taster of these topics, but the speaker provided us with food for thought and a basis on which to start reflecting on their relevance in our daily working lives.

Conversation was buzzing over the coffee break that followed and, from the exchanges that were taking place, it seemed that people had a real need to share their experiences and thoughts on this subject…

You are all invited to visit the webpage dedicated to the Respect@CERN campaign (**ombuds.web.cern.ch/respect**) and to continue sending through your suggestions. You will see that a first series of posters based on your contributions have already been designed and you may download them for yourselves as you wish.

As your Ombud, working with colleagues in Host State relations, diversity, education, health, safety and communications, I will continue to build on your input to further this campaign and reach out to a wider CERN audience.

Look out for future actions - our Respect@CERN campaign has come alive. It is now up to all of us to keep it going…

Sudeshna Datta-Cockerill

Official news

TAXATION IN FRANCE | MEMORANDUM CONCERNING THE ANNUAL INTERNAL TAXATION CERTIFICATE AND THE DECLARATION OF INCOME FOR 2014

You are reminded that the Organization levies an internal tax on the financial and family benefits it pays to the members of the personnel (see Chapter V, Section 2 of the Staff Rules and Regulations) and that the members of the personnel are exempt from national taxation on salaries and emoluments paid by CERN.

For any other income, the Organization would like to remind members of the personnel that they must comply with the national legislation applicable to them (cf. Article S V 2.02 of the Staff Rules).

I - Annual internal taxation certificate for 2014

The annual certificate of internal taxation for 2014, issued by the Finance, Procurement and Knowledge Transfer Department, has been available since 20 February 2015. **It is intended exclusively for the tax authorities.**

1. If you are currently a member of the CERN personnel, you will have received an e-mail containing a link to your annual certificate, which you can print out if necessary.
2. If you are no longer a member of the CERN personnel or are unable to access your annual certificate as indicated above, you will find information explaining how to obtain at **http://cern.ch/go/7dWG**.

If you are having any difficulties obtaining your annual certificate, send an e-mail explaining the problem to **service-desk@cern.ch**.

II - 2014 income tax declaration form in France

The 2014 income tax declaration form must be completed following the general indications available at **http://cern.ch/go/srP8**.

IF YOU HAVE ANY SPECIFIC QUESTIONS, PLEASE CONTACT YOUR LOCAL *SERVICE DES IMPÔTS DES PARTICULIERS* (SIP, PRIVATE CITIZENS' TAX OFFICE) DIRECTLY.

This information does not concern CERN pensioners, as they are no longer members of the CERN personnel and are therefore subject to the standard national legal provisions relating to taxation.

HR Department
Contact: 73903

TAX DECLARATION: FOR THE ATTENTION OF MEMBERS OF THE PERSONNEL AND PENSIONERS LIVING IN FRANCE

Exchange rate for 2014

For 2014, the average annual exchange rate is **EUR 0.82 for CHF 1**.

Human Resources Department

COMPOSITION OF THE JOINT ADVISORY DISCIPLINARY BOARD (JADB) - 2015 EXERCISE

Appointed by the Director-General

Member	John PYM / DG
1st deputy	Gianluigi ARDUINI / BE
2nd deputy	Dante GREGORIO / FP

Appointed by the Staff Association

Member	Sigrid KNOOPS / TE
1st deputy	Olivier BOETCHER / EN
2nd deputy	Nick ZIOGAS / FP

Mr Pym and Ms Knoops have drawn up the following list of staff members from among whom the Chairperson of the Board may be chosen when required:

Simon BAIRD / EN	Stephan PETIT / GS
Ronny BILLEN / BE	Ignacio REGUERO / IT
Sylvain CHAPELAND / PH	Laurent TAVIAN / TE
Doris FORKEL-WIRTH / HSE	Pierre VANDE VYVRE / PH
Alberto PACE / IT	Andreas WAGNER / IT

The composition of CERN official bodies for 2015 is available at **http://cern.ch/go/9j7v**.

HR Department
HR/DHO

COMPOSITION OF THE JOINT ADVISORY APPEALS BOARD (JAAB) - 2015 EXERCISE

Appointed by the Director-General

Member	Nicole POLIVKA / GS
1st deputy	Mats MØLLER / IT
2nd deputy	Ramon FOLCH / EN

Appointed by the Staff Association

Member	Flavio COSTA / IT
1st deputy	Almudena SOLERO / DG
2nd deputy	Eric VEYRUNES / BE

Ms Polivka and Mr Costa have drawn up the following list of staff members from among whom the Chairperson of the Board may be chosen when required:

Sandrine BAUDAT / FP	Pierre CHARRUE / BE
François BRIARD / DG	Joel CLOSIER / PH
François BUTIN / EN	Django MANGLUNKI / BE
Etienne CARLIER / TE	Pedro MARTEL / GS
Philippe CHARPENTIER / PH	Malika MEDDAHI / TE

Mediators [see Administrative Circular N° 6 (Rev. 1) entitled "Review procedure"] will also be selected from this list of ten staff members.

The composition of CERN official bodies for 2015 is available at **http://cern.ch/go/9j7v**.

HR Department
HR/DHO

ANNUAL REPORT 2014 FROM THE HUMAN RESOURCES DEPARTMENT

The 2014 Annual Report from the Human Resources department concerning the settlement of disputes and discipline under Chapter VI of the Staff Rules and Regulations.

1) Introduction

The 2014 Annual Report, under Chapter VI ("Settlement of Disputes and Discipline") of the Staff Rules and Regulations, serves to report:

- cases of submission of requests for review,
- internal appeals,
- complaints before the Administrative Tribunal of the International Labour Organization (ILOAT); and
- cases in which disciplinary action was taken.

2) Requests for Review and Internal Appeals

Under Article S VI 1.01 of the Staff Rules, members of the personnel may challenge an administrative decision by the Director-General where it adversely affects the conditions of employment or association that derive from their contract or from the Staff Rules and Regulations.

If permitted by the Staff Rules and Regulations, a decision may be challenged internally within the Organization:

- through a review procedure, or
- through an internal appeal procedure. In this case, the Joint Advisory Appeals Board (JAAB) shall be consulted by the Director-General prior to taking any final decision on the merits.

3) Complaints before the ILOAT

A decision may be challenged externally by filing a complaint before the ILOAT:

- when internal procedures have been exhausted and the decision is final, or
- when an internal challenge is not permitted by the Staff Rules and Regulations.

Requests for review
From 1 January 2014 to 31 December 2014, there were two requests for a review of administrative decisions taken by the Director-General. The staff members concerned challenged both the rating of their performance as "meritorious" and the related decisions of periodic advancement, i.e. the granting of one periodic step. The administrative decisions were maintained following consultation with the department concerned.

Internal appeals
From 1 January 2014 to 31 December 2014, one internal appeal was submitted against two administrative decisions: the decision not to hold proceedings for the classification of an illness as occupational on account of the staff member's request being time-barred; and the related refusal to open proceedings before the Joint Advisory Rehabilitation and Disability Board (JARDB) due to non-fulfillment of the conditions.

Having consulted the JAAB, the Director-General decided to open proceedings concerning the classification of the illness, but maintained his decision not to launch proceedings before the JARDB.

Discussions held between the HR Department and the person concerned, involving the Staff Association, have succeeded in reaching an amicable settlement.

Complaints before the ILOAT
From 1 January 2014 to 31 December 2014, four requests were filed before the ILOAT:

- one concerned the Organization's decision to dismiss a staff member after the probation period;
- one concerned the Organization's decisions not to hold a classification of illness procedure and the decision not to hold proceedings before the JARDB. The complainant subsequently requested suspension of his complaint pending the outcome of the internal proceedings; and
- two concerned the CERN Pension Fund's decisions not to recognise the partner of the complainant as 'spouse' within the meaning of the Pension Fund Rules.

4) Disciplinary Action

Under Article S VI 2.01 of the Staff Rules, the Director-General may take disciplinary action against members of the personnel who, whether intentionally or through carelessness, are guilty of a breach of the Staff Rules and Regulations or of misconduct that is to the detriment of the Organization.

Article S VI 2.02 of the Staff Rules stipulates that depending on the gravity of the breach or misconduct involved, the disciplinary action may be:

- a warning;
- a reprimand;
- suspension without remuneration or pay for a period not exceeding six months,
- loss of one or more steps; or
- dismissal.

The Joint Advisory Disciplinary Board (JADB) shall be consulted by the Director-General prior to taking any disciplinary action other than a warning or a reprimand (Article S VI 2.04 of the Staff Rules).

In cases of particularly serious misconduct, the Director-General may decide to dismiss without notice and without consulting the JADB (Article S VI 2.05 of the Staff Rules).

From 1 January 2014 to 31 December 2014, there were 13 cases of misconduct:

- a series of cases of, inter alia, conflicts of interest and fraudulent activities in violation of the CERN's Procurement Rules. The cases were investigated and reported by the Internal Audit Services and resulted in disciplinary action against nine staff members. The Director-General decided to agree with the respective recommendations of the JADB and issued sanctions ranging from a reprimand for the milder offences to dismissal in the most serious cases;
- a case of forgery of reference letters resulted in a dismissal without notice and without consultation of the JADB:
- a case of private use of a CERN car resulted in a reprimand;
- a case of transmission of an e-mail containing xenophobic content to several colleagues within CERN resulted in a warning; and
- a case of driving on site contrary to the CERN Road Traffic Rules resulted in a warning.

Moreover, the Internal Audit Service conducted an investigation into a case concerning, inter alia, forgery of official documents and non-declaration to the Organization of external financial benefits received. Following a review of the Internal Audit Service report by the Director-General and the staff member, the staff member's contract was terminated.

HR Department

Take note

CERN ACCELERATOR SCHOOL: REGISTRATION OPEN FOR ADVANCED ACCELERATOR PHYSICS COURSE

Registration is now open for the CERN Accelerator School's Advanced Accelerator Physics course to be held in Warsaw, Poland from 27 September to 9 October 2015.

The course will be of interest to physicists and engineers who wish to extend their knowledge of accelerator physics. The programme offers core lectures on accelerator physics in the mornings and a practical course with hands-on tuition in the afternoons.

Further information can be found at:

- **http://cas.web.cern.ch/cas/Poland2015/Warsaw-advert.html**
- **http://indico.cern.ch/event/361988/**

CHANGE OF MOBILE TELEPHONY OPERATOR AND MOBILE TELEPHONE NUMBERS - 24 JUNE 2015

Following a call for tenders issued in 2014, Swisscom will replace Sunrise as CERN's mobile telephony operator from 24 June 2015. As of this date, CERN mobile telephone numbers will change from the +41 (0)76 487 xxxx format to the +41 (0)75 411 xxxx format and people with a CERN mobile telephony subscription will need to change their SIM card.

SIM card replacement

New SIM cards will be available for collection between 1 June and 30 June from distribution points located around CERN. Please check the list of distribution points to find where you will need to collect your SIM card based on your department and group. After 1st July, you will be able to collect your SIM card from the Telecom lab.

Please open a SNOW request (via **http://cern.ch/go/X6Sv**) if:

- you will not be at CERN in June,
- you are using a SIM card in a modem or other special device for machine-to-machine communications.

New mobile phone numbers

CERN mobile numbers will change from the +41 (0)76 487 xxxx format to the +41 (0)75 411 xxxx format from 9 a.m. CET on 24 June.

As the last 4 digits remain the same, mobile phone numbers will be reachable from a fixed phone or from a mobile phone connected to the Swisscom network via 16xxxx, as is the case today.

We invite you to:

- inform your contacts of your new mobile phone number,
- review procedures, applications, tools and documentation, updating any national (076 487 xxxx) or international (+4176487xxxx) numbering as required,
- note that the "To:" address for the email2sms gateway will change from +4176487xxxx@mail2sms.cern.ch to +4175411xxxx@mail2sms.cern.ch; please also review applications that use this gateway.
- note that the formats of the numbers accepted by the mail2sms gateway will change as well. Messages will only be delivered to a number that uses the full international format (i.e. +4175411xxxx@mail2sms.cern.ch). More information is available on the mail2sms gateway help pages.

Key Dates

→ 1 June: SIM card distribution begins

SIM cards can be collected from 1 to 30 June from the various distribution points; information on where to go, based on your department and group, can be found here.

→ 15 June: Swisscom SIM cards activated

All SIM cards/Swisscom numbers will be activated, so you can test mobile applications, scripts and procedures to make sure that they work.

N.B. : This is a testing phase only; advanced services (e.g. the e-mail to SMS gateway) and short number dialing (16xxxx) will continue to be provided by Sunrise, so please use your Sunrise SIM card and number if you are not testing applications or procedures.

→ 24 June at 9 a.m.: Migration of mobile services

At 9 a.m. on 24 June you must:

- change your SIM card and use the Swisscom numbers (075 411 xxxx) or 16xxxx to make calls;
- update applications and procedures that use national (076 487 xxxx) or international (+41 76 487 xxxx) numbering;
- update applications and procedures using the e-mail to SMS gateway.

All CERN databases will be updated to point to the new Swisscom number, 075 411 xxxx and short number dialing (16xxxx) will be updated to point to 075 411 xxxx as of 9 a.m.

Phonebook, active directory and Lync will be updated to take account of the new numbering. However, your Exchange contacts are considered as private information, so they will not be updated automatically. We are investigating means of simplifying this for users; please visit the gsm migration website for the latest updates.

→ 1 July at midnight: Sunrise subscriptions for CERN numbers (076 487 xxxx) redirected

From midnight on 1 July until midnight on 31 July, calls to 076 487 xxxx numbers will be redirected to a voice message announcing the change of mobile phone numbers at CERN.

Business cards

It is now possible to order business cards with the new prefix. Please use the CERN business card forms available at **http://cern.ch/go/6ClP**.

Contract conditions

- The subscription system, including the monthly subscription charge, will remain unchanged; your current subscription will be automatically transferred to your new number. Similarly, you can manage your subscription via EDH, as is the case today.
- Communication costs will be reduced, especially when roaming. The new tarifs will be published once the contract becomes effective.
- Mobile services in underground facilities will be improved with the introduction of 3G and 4G coverage (high-speed mobile data).

Checklist

- Inform your external contacts that your mobile number has changed.
- Update contact numbers etc. on your phone.
- Review your procedures and documentation if you are using the 076487xxxx/+4176487xxxx national or international numbering; update this as necessary or switch to using 16xxxx.
- Review your scripts, tools, applications, etc. that use the e-mail to SMS service.

*For more information, please visit the gsm migration website (***https://gsm-migration.web.cern.ch***).*

RESTAURANT CLOSURES DURING HOLIDAY PERIOD

CERN restaurant opening times on Whit Monday, 25 May: Restaurant No. 1 will be open from 7.00 a.m. to 10.00 p.m. Restaurants No. 2 and No. 3 will be closed.

ACADEMIC TRAINING LECTURES | THEORIES OF ELECTROWEAK SYMMETRY BREAKING: A POST LHC RUN-I PERSPECTIVE | 26, 27 AND 29 MAY

Please note that our next series of Academic Training Lectures will take place on the 26, 27 and 29 May 2015.

Theories of Electroweak Symmetry Breaking: A Post LHC Run-I Perspective, by James Daniel Wells (University of Michigan (US))

from 11.00 a.m. to 12.00 p.m. in the Council Chamber (503-1-001)

https://indico.cern.ch/event/383514/

"RENCONTRES DE GENÈVE - HISTOIRE ET CITÉ": BUILDING PEACE

How did people conceive, picture or imagine peace in former times? How did they contribute to it in concrete terms? Why and how were they sometimes obliged to fight to promote or enforce it? Which material, symbolic, financial, political and economic means were used to foster cohesion between societies, peoples and communities? The *Rencontres de Genève - Histoire et Cité* festival invites us to learn about the past to better understand the present.

Events taking place at Geneva University (Uni Dufour and Uni Bastions) and elsewhere in the city from Wednesday, 13 May to Saturday, 16 May.

Organised by Geneva University's *Maison de l'histoire* in collaboration with the Geneva Graduate Institute of International and Development Studies and the University of Applied Sciences and Arts of Western Switzerland (HES-SO), this first festival of history in Switzerland features a comprehensive programme of events taking place at various locations.

The city of Geneva will become a focal point for discussion and reflection, hosting some forty conferences and round-table discussions on the subject of peace from ancient times to the present day, on all five continents, as well as a cinema festival, the *Journées du film historique*, during which over 30 films will be shown, plus history cafés, a historical book and comic book fair, exhibitions, a concert for peace, educational gatherings and a "Digital Humanities" salon.

The full programme can be consulted here: **histoire-cite.ch/programme**

Three opportunities to meet people from CERN
As one of the event's partners, CERN will be taking part in two round-table discussions on Friday, 15 May:

- 9 a.m. to 10.30 a.m., *Uni Bastions*, Room B101: The Web and peace: to the origins of the Internet.
- 11 a.m. to 12.30 p.m., *Uni Bastions*, Room B106: Science for Peace: from CERN to SESAME.

The discussions will be open to the public and will take place in English, without simultaneous interpreting.

CERN will also be taking part in a history café the same evening:

- 6.30 p.m. to 8 p.m., *Café Restaurant du Parc des Bastions:* Science for peace.

Laurianne Trimoulla

THE PORT - HACKATHON AT CERN | APPLICATION: 1 MAY - 1 JUNE

CERN RELAY RACE | 21 MAY | TAKE PART!

Training

PERSONAL DEVELOPMENT AND COMMUNICATION COURSES

Please find below the list of courses in the field of Personal Development and Communication which are scheduled before the end of July.

Personal Development and Communication, in English

	Next Session	Duration	Availability
Personal Awareness & Impact	10-12 June	3 days	2 places
Personal Awareness & Impact - Follow-up	11-12 May	2 days	2 places

In addition, the following courses are scheduled in French

Développement personnel et communication, en français

	Prochaine session	Durée	Disponibilités
Négociation efficace	19-20 mai	2 jours	7 places
Techniques d'exposé et de présentation	10-11 juin + 6 juillet	3 jours	2 places
Les enjeux de la voix et du comportement non verbal dans la communication orale	29, 30 juin	1 jour ½	3 places

For more details about a course and to register, please go to the Training Catalogue at **http://cern.ch/go/GxG8**.

If you need a course which is not in the catalogue, please contact your supervisor, your Departmental Training Officer or HR-LD at **Communication.Training@cern.ch**.

PLACES AVAILABLE - TECHNICAL MANAGEMENT COURSES (UP TO END JULY)

Please find the courses in the field of technical management scheduled up to the end of July and which have places available.

Upcoming Technical Management courses (in chronological order)

		Language	Next Session	Duration	Availability
New	Procurement of supplies at CERN up to 200 000 CHF – e-learning	English	n/a	1 hour	n/a
New	Achats de fournitures au CERN jusqu'à 200 000 CHF – e-learning	français	n/a	1 hour	n/a
	Dealing with Media questions!	English	6 May	1 day	2 places
	Dealing with Media questions!	English	7 May	1 day	4 places
Change of date	Introduction to knowledge transfer tools	English	29 May	4 hours	23 places
	PMI Project Management	English	26/27 May + 18/19 June	4 days	8 places
	Quality Assurance	English	15-16 June	2 days	9 places
	Selecting the right person for CERN	English	4 June	1 day	1 place
	Project Engineering	English	29-30 June	2 days	8 places
New	Building up a good Marie Sklodowska-Curie project and writing a successful proposal	English	1-2 July	2 days	18 places
New date	Selecting the right person for CERN	English	9 July	1 day	4 places

For more details about a course and to register, please go to the Training Catalogue at **http://cern.ch/go/GxG8**.

If you need a course which is not in the catalogue, please contact your supervisor, your Departmental Training Officer or HR-LD at **Communication.Training@cern.ch**

SAFETY TRAINING: PLACES AVAILABLE IN MAY AND JUNE 2015

There are places available in the forthcoming Safety courses. For updates and registrations, please refer to the Safety Training Catalogue at http://cern.ch/go/GxG8.

Safety Training, HSE Unit

Seminars

SUNDAY MAY 17, 2015

15:00 **3rd Thematic CERN School of Computing**

MONDAY MAY 18, 2015

01:00 **KISTI Computing Schools : KIAF Tutorials**

TUESDAY MAY 19, 2015

09:00 **TE Seminar: Bratislava Top Group meeting** FMFI F1-364
11:00 **EP Seminar: Ultra cold neutron experiments for precision electroweak tests** Main Auditorium

THURSDAY MAY 21, 2015

14:35 **Miscellaneous: MD scripting tools** 874-R-018

FRIDAY MAY 22, 2015

14:00 **CERN Computing Seminar: How to ship a data product: from conceptualization to prototyping to production** IT Amphitheatre

TUESDAY MAY 26, 2015

08:00 **CERN Accelerator School: Accelerators for Medical Applications 2015**
11:00 **Academic Training Lecture Regular Programme: Theories of Electroweak Symmetry Breaking : A Post LHC Run-I Perspective (1/3)** Council Chamber
11:00 **LHC Seminar: Observation of top-quark production in the forward region with LHCb** Main Auditorium