Proposal for a new role in IT by/for Maria Dimou (IT/SDC)

Title: IT liaison for Education & the Arts

Part 1 - Objectives:

A. Education:

Enhance the existing CERN education programmes (Teach the Teachers, Summer Student lectures, presentations to CERN visitors) with talks covering the past and current IT technologies adopted at CERN. A critical evaluation of other popular technical options will be included.

Assemble and maintain a web-based inventory of all the valuable material already produced by department members for their presentations at conferences, internal reporting and outreach events.

Understand the level of involvement required by CERN and implement the proposal for an official CERN-W3C collaboration, as explained in <u>http://cern.ch/dimou/personal/CERN-</u> W3C Collaboration.pdf

Collaborate with the CERN <u>Knowledge Transfer</u> and <u>CERN & Society Programmes</u> for the provision of official CERN IT educational material.

B. Arts:

Accompany the artists visiting or in residence at CERN, in a secure way, to the CERN Computer Centre and the sophisticated aspects of physics-related IT. Explain the CERN experiment data handling now and historically. Liaise with artistic events in the region and others taking place in organisations similar to CERN, with the aim to promote the CERN IT high standards in data handling and data preservation.

Part 2 - Maria's motivation:

- To promote the good work being produced by the IT experts, making visible the people and the department.
- To inspire young people, via teaching and presentations to understand the value of knowledge, precision and devotion to a constructive purpose.
- To demystify media "propaganda" about gadgets and fashion movements on the net, which misdirect young people's intellectual and psychological resources.
- To make sure artistic extrapolations do not publish factually wrong information that leads to misunderstanding about the laboratory's work.

Part 3 - Maria's arguments:

• It is possible to identify the relevant experts per subject, having worked in multiple IT groups and international projects/collaborations.

- As the IT Departmental Training Officer (DTO) she meets with experts and expertise across departments in several technical areas, in the new course preparation process.
- As the chairperson of the Academic Training Committee (ATC) Working Group for Applied Physics and Technology, she has met and invited experts from many fields and academic institutions.
- She chaired (and still does) many Evaluation Teams, Task Forces and Working Groups for technical issues (httpd migration to Apache, HyperNews, web calendars, zephyr, VOMS, GGUS, Grid Middleware Readiness) and Organisational aspects (Appeals Committee chairperson, CERN representative at HEPiX, LHC GridFest organiser).
- She organises the <u>White Area lectures</u> and comes across valuable material from openlab presentation, the CERN School of Computing and the inverted one, the IT Technical Forum, CERN guides' presentations repository and other such valuable information scattered all over the web.
- She speaks fluently 6 languages, now learning the 7th.
- She has a spectrum of experience and contacts across disciplines, including the local and international music and dance scene, that can facilitate processes and build collaborations fast.
- The <u>CERN & Society Programme</u> approved by the CERN Council in December 2013 (DG's January 2014 presentation) is, precisely, about Education & Culture. The Teach the Teachers' programme participants have explicitly requested more IT-related lectures and material. There is work to be done in this area and Maria knows where the expertise is.
- The IT-KT innovation day of 2014/02/19 was postponed, nevertheless the collaboration between IT department and the Knowledge Transfer Group can start with concrete steps.

Part 4 – Job migration Process for Maria :

Maria, at CERN since 1988, in the Grid project since 2003, to gradually withdraw from Grid-related technical work, with an *as smooth as necessary hand-over process*, while maintaining the ties with IT/SDC, given that a lot of the development taking place there, is information source for the educational part of her new role. Reporting line can remain unchanged, or be moved to IT/DI, up to IT/SDC leader and the IT Dept. Head to decide.

Appendix 1 – Education Examples:

- CERN's existing Education programme to enhance with IT lectures: <u>http://cern.ch/students-educators/teacher-programmes</u>
- Lectures' material indexed <u>here</u> by IT experts invited by Maria, via the Academic Training Programme can be merged with valuable entries in <u>Computing Seminars</u>, <u>Computing</u> <u>Colloquia</u> and <u>the IT Technical Forum</u>.
- Maria's presentation at HEG Geneva in December 2013, also to the Collège Rousseau de Genève in 2011: <u>http://cern.ch/dimou/Talks/Internet-Web-Grid_20131203.pdf</u>
- Maria's presentation at the Future Library event in Greece: <u>linked from the CERN homepage</u> (more material in greek available from <u>http://cern.ch/dimou</u>).

Appendix 2- Art examples:

• Web artist in residence at CERN via the <u>accelerate@cern</u> programme, to work closely with IT.

- Maria's swiss radio interview (<u>listen here</u>) or scroll down here to <u>the music of physics</u>.
- The performance in the CERN Computer Centre in September 2012, by choreographer G.Jobin (<u>see pictures here</u>) was Maria's proposal. She obtained formal permission by the IT Dept. Head Frederic Hemmer and she did the whole event coordination.
- Next Collide@cern resident, Ryoji Ikeda considers CERN data analysis as the centre of his inspiration (read more here).
- Art in Computer Centres elsewhere: <u>http://www.liberation.fr/culture/2014/01/17/data-centers-art-around-the-bunker_973670</u>
- Links to H2020 projects promoting <u>Science & Humanities</u> and <u>Cultural Heritage</u>. Even if these activities are not in CERN's mainstream profile, these examples show the necessity to have an informed opinion about the requirements and the challenges in the area.
- Evidence of the necessity to have an presence in the area, is a talk given **at CHEP 2013** on trends and development in data services for Science, Humanities and Culture (click <u>here</u> for details).

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