# Meeting of the TIARA Management, 5-Oct-09.

Present: Roy Aleksan (chair), Oliver Brüning, Phil Burrows (via Phone), Franco Cervelli, Erk Jensen, Ken Long (via phone), Waldemar Singer

Excused: Sébastien Bousson, Marica Biagini

The agenda of the meeting is <u>here</u>.

# **General information and work plan**

After approval of the agenda, Roy gave an introduction TIARA proposal. The main purpose of TIARA is to integrate the accelerator R&D infrastructures in a sustainable, complementary and well coordinated way. He explained the interplay between infrastructures, R&D programmes and education and training. To reduce administrative overhead, the number of participants is kept at a minimum (10), primarily representing key players and funding agencies. Other partners may be included as associate partners.

Roy continued to explain that TIARA has received full support by the CERN Council, which gives it high visibility and recognition, but also requires that we come up with a good proposal. The deadline is very challenging: the proposal must be submitted by 3-Dec-09!

There exists already the <u>TIARA website</u>, and we are strongly encouraged to use it to ensure efficient communication.

Roy presented the TIARA structure as it was approved by Council. The approved duration is 3 years. The TIARA structure consists of the Project Management (WP1, MGT), 5 "core" work packages with a more general scope (WP2: Governance, WP3: Infrastructures, WP4: R&D Programmes, WP5: Education and Training and WP6: Involving Industry) and possibly 4 more specific work packages (WP7: CLIC, WP8: v-factory, WP9: Super-B and WP10: Eurisol). He reminded us that the specific WP's (7-10) concern infrastructures. Concerning what could be included in one of the latter, he explained that a critical upgrade of (or the R&D for upgrading) a R&D infrastructure could be included in TIARA, but not the R&D projects that will be carried out using the infrastructure. For example, the design, the R&D, the modification or the construction of a large infrastructure for testing RF cavities could be included but not the R&D or the construction of the RF cavities themselves.

# Work packages

It is urgent (draft by the WP leaders due Monday 12-Oct-09) to define for each WP a work plan including:

- Objectives,
- Description of Work (1 to 2 pages),
- Deliverables (small number),
- Milestones,
- Schedule.

To get there fast, the approach must be pragmatic; it is difficult to carry a comprehensive buttom-up approach.

Action item: WP leaders should find their deputies, work out the work plan with the deputies and propose it to the participant partners' contacts. The deputy WP leaders of all WP must be known urgently.

As an indication of the time-frame, Roy indicated that the 3 years might be from mid-2010 to mid-2013.

Roy then gave common guidelines of how to count manpower for managerial work and cost of travel.

The question was discussed how industry could be included in TIARA. What Roy had foreseen was an "Industry Advisory Committee", but it is not clear who would be in that committee (too many industrial companies).

Action item: For the time being it is decided to remove this committee (it could be added even after the start of TIARA if needed). Instead we will explore further whether there is an appropriate European body that could represent industry and establish a liaison with it. WP on "collaboration with industry" should investigate this issue.

The <u>schedule</u> (see also below) for the preparation of the proposal is extremely tight. Next meetings (put in your agenda!): **14-Oct-09**, **2-Nov-09**, **16-Nov-09** and **23-Nov-2009** (reserved for backup, just in case).

Date	Deliverable	<b>Responsible persons</b>
25/9/2009	Finalization of the Proposal Editing Group	Coordinator
2/10/2009	Formation of Editing Group for each WP	WP PE
5/10/2009	Meeting of Proposal Editing Group (Coordinator+WP leaders)	Coordinator+WPPE
	Presentation of Draft Structure of the WP sections for the proposal	WP PE
12/10/2009	Initial version of the WP sections for the proposal, including detailed	WP PE
	description, task breakdown, list of deliverables and milestones, Gantt chart	
	Initial version of the general sections for the proposal	Coordinator
<b>14/10/2009</b>	Meeting of Proposal Editing Group (Coordinator+WP leaders)	Coordinator+WPPE
28/10/2009	Advanced WP documents, (description, task, deliverables, milestones, Gantt	WP PE
2/11/2009	Meeting of TIARA Contractors + Proposal Editing Group (Coordinator+WP	Contractors +
	leaders)	Coordinator+WPPE
<u>9/11/2009</u>	Final WP documents, including description, task breakdown, list of	WP PE
	deliverables and milestones, Gantt chart	
16/11/2009	Meeting of Proposal Editing Group (Coordinator+WP leaders)	Coordinator+WPPE
	Initial integration of the full TIARA proposal	Coordinator
23/11/2009	Reserved date for meeting of Proposal Editing Group (backup; will be	Coordinator+WPPE
	used in case of crisis)	
25/11/2009	Final integration of all section of the proposal ready	Coordinator
	Initial Electronic submission of TIARA-PP	Coordinator
2/12/2009	Final minor correction & Final Electronic submission of TIARA-PP	<b>Coordinat</b> or

Action item: The milestones and schedule below is adopted as TIARA preparation objectives

# Individual work packages

## Work package 3, Infrastructures (Oliver Brüning):

Oliver proposed Lenny Rifkin and Swapan Chattopadhyay as deputies. He gave a list of areas in which R&D infrastructures of interest are to be identified: Superconducting RF, high field magnets, high power targets, medical accelerators, surface treatment, radiation hard electronics and materials, precise tooling and nano-technologies, alignment and survey, and novel acceleration concepts. A delivery would be the result of this survey. Another task could be to develop a common model for costing of these infrastructures.

## Work package 4, R&D Programmes (Franco Cervelli):

An initial task would be to survey the existing R&D programmes and of possible synergies. A next task would be to develop a method to allow the definition of priorities for future R&D.

Oliver remarks that for the definition of priorities, the interfaces to ECFA and the Council Strategy should be defined. Another remark concerns the need of coordination with international R&D programmes beyond Europe.

#### Work package 5, Education and Training (Phil Burrows):

Phil named 3 potential deputies: Daniel Brand of CERN, Marisa Marco of CIEMAT and Alex Muller of CNRS. He sees – agreeing with Roy's initial proposal – three main tasks: survey of existing accelerating courses, development of a "market" to identify the needs in training and a plan of action to promote accelerator R&D. Ideas that were mentioned: "Master classes", "student grant schemes", "European Summer School". In the discussion the successful teachers program existing for HEP was mentioned and its extension for accelerator R&D was proposed.

#### Work package 6, Involvement of Industry (Waldemar Singer):

Waldemar mentioned Lucio Rossi and Marcel Sobermann as potential deputies. First in his work plan came the implementation of tools for good communication. This will require basic understanding of the needs of industry in the field of accelerators and accelerator R&D. Task 2 seeks to establish a framework for joint R&D projects, where the handling of intellectual property rights was mentioned as potential issue to solve. Task 3 looks at ways to share infrastructures with industrial partners. Task 4 aims at establishing a road map which would allow improving long term vision of accelerator R&D, which in turn would allow industry to develop products with both long-term accelerator needs and potential markets in view. Task 5 finally aims at defining a model for associating industry to TIARA on the longer term.

## Work package 7, CLIC (Erk Jensen):

Erk thought to limit the scope of WP7 to the preparation of the Technical Design phase and the industrialisation phases of CLIC. His tasks were 1) the definition of infrastructures need for the Technical Design, 2) the identification of synergies with other areas, 3) the definition and implementation of specific training and 4) the CLIC specific needs to involve industry. However, as became clear much of these tasks should be merged into the general work packages 3 to 6. On the other hand, Roy made the proposal to maybe include a design study of the next major R&D facility for the 2-beam acceleration scheme after CTF3. Other ideas are discussed. A candidate for the deputy could be Franck Peauger (not confirmed).

## Work package 8, Neutrino Factory (Ken Long):

According to Ken's proposal, the concerned infrastructures are MICE at RAL and the development of a horn; the proposed partners are STFC and CERN. His primary concerns for the upgrade of infrastructures concern electrical engineering items: the necessary transformer power upgrade for MICE and a design study for an upgrade of the rapid rise time power supply for the horn.

#### **Other Work packages**

Work package 9, Super-B (Marica Biagini) and work package 10, Eurisol (Sébastien Bousson), were not presented.

Action item: Milestone for the WP for October 12th. Each WP should provide an Initial version of the WP sections for the proposal, including detailed description, task breakdown, list of deliverables and milestones, Gantt chart

Next meeting 14-Oct-09!

Minutes by Erk Jensen