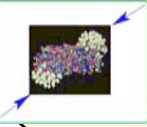


# Perspectives for future network activities

*J.-P. Koutchouk*  
*CERN*

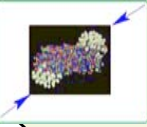


# 1- Framework

HHH, a network activity of CARE, will finish, like CARE on December 31<sup>th</sup> 2008, after having significantly stimulated discussions and thinking on accelerator upgrades.

It has been the initiative of ESGARD (European Steering Committee for accelerator R&D: CEA, CERN, CNRS, DESY, INFN, PSI, chaired by R. Aleksan/CEA) to launch after CARE a new venture, now called EuCARD and compete for EC funding.

This new project includes networks.

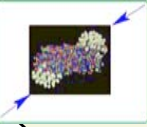


# 1- Framework (cont'd)

The CERN vision, after having the CERN Council define a European Strategy for the future of HEP, has been to invest more in such programs aimed at implementing in a concrete way collaborations to reach the goals that are now defined.

In practice, it has been agreed in ESGARD that CERN should be the Coordinator (leading lab in HEP) for the “next CARE” in an organization where all partners are on the same footing.

This policy is implemented in two EU projects: SLHC-PP and soon EuCARD. With a similar vision, EC requests EuCARD to contribute to establishing more lasting structures, beyond EU co-funded activities.

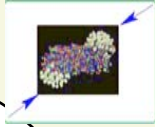


## 2 – Structure of EU Projects

The EU framework relevant to EuCARD requires three components:

1. **Networks** (NA),
2. **Trans-national access** to “unique” facilities (TA)
3. **Collaborative research activities** (JRA)

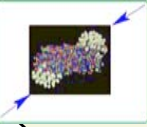
These components are considered of equal importance.



# 3 - Why EC funds networks?

*“To foster a culture of co-operation:*

- joint management and pooling of distributed resources;
- **strengthening of virtual research communities;**
- development of common standards, protocols and interoperability, **benchmarking;**
- provision of consultancy and training courses to new users;
- **foresight studies for new instrumentation, methods, concepts and/or technologies;**
- promotion of clustering and coordinated actions amongst related projects;
- **coordination with national or international related initiatives and support to the deployment of global approaches to science;**
- **dissemination of knowledge;**
- **.....”**



## 4 – EuCARD Networks

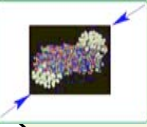
In a competition among some 130 projects, EuCARD arrived 2<sup>nd</sup> with 5 other proposals and was accepted for funding at a level of 10ME over 4 years.

EuCARD brings together 37 partners in Europe and has about 40 “Associates” all around the world.

It is presently in “negotiation” phase and due to start on April 1<sup>st</sup>.

*After the positive experience of CARE, it will include a network “AccNet”, i.e. Accelerator Sciences, with two branches:*

- *EuroLumi: it is a continuation of HHH focusing on the upgrade of accelerators,*
- *RFTech: dedicated to RF technologies (NC and SC)*



## 4 – New Networks (cont'd)

The network coordinators will be:

- W. Scandale/CERN until 10/2009,
- F. Zimmermann/CERN
- Alessandro Variola/LAL

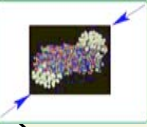
with task coordinators:

- Ezio Todesco/CERN
- Jean-Marie de Conto/U. Grenoble
- M. Grecki/DESY and Polish Institute
- W. Weingarten/CERN

The funding is modest but significant, dedicated to:

- meetings, workshops, link to US-LARP,...
- exchange of visitors, students and fellows, common studies
- ...

***Networks are open to ALL interested participants.***

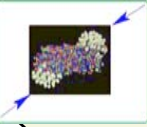


# 5 – Implementation

*It seems timely to reflect on the network implementation for EuCARD, with the experience of CARE-HHH:*

- *number of workshops, duration*
- *short meetings with video conferencing (a convincing tool would be needed)*
- *Time allocated for discussions*
- *Should the talks be documented with articles?*
- *Should there rather be a summary/conclusion by the organizers + chairmen delivered within weeks?*
- *encourage exchange of experts, collaborative studies with participants outside the “consortium”*
- *...*



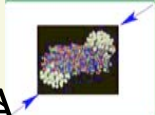


## 6 – Conclusion

HEP is at a crossroad. The two legs of accelerator technology (magnets for bending & focusing and RF cavities for acceleration) need significant progress and a reduction of their development time (now decades). The challenges are beyond what a single lab can do. An optimal use of public resources and a minimum ecological impact will be more and more important. New ideas are needed.

This is why it seems very valuable to “lose” a small fraction of one’s time listening and discussing accelerator R&D issues across specialties and beyond daily occupations, to favor the emergence of creative ideas.

This is what the networks can offer.



9:00	From CARE to EuCARD	0:15	R. Aleksan	CEA
9:15	Physics perspectives from EuCARD R&D	0:45	G. Weiglein	U. Durham
10:20	Presentation of the EuCARD programme	0:40	J.P. Koutchouk	CERN
11:00	The High Field Magnet R&D Program	0:30	G. de Rijk	CERN
11:30	The collimation R&D program	0:30	R. Assmann	CERN
12:00	The NC linac R&D program	0:30	E. Jensen	CERN
12:30	<b>EuCARD cocktail</b>	0:30		
14:00	European strategy for accelerator R&D	0:30	R. Aymar, DG	CERN
14:30	Dissemination, Communication	0:15	R. Romaniuk	PWR
14:45	SRF R&D program	0:30	D. Proch	DESY
15:15	ANAC R&D program	0:30	M. Biagini	INFN
16:05	NEU2012 network	0:15	V. Palladino	INFN
16:20	Accnet networks	0:15	F. Zimmermann	CERN
16:35	HighRadMat	0:10	I. Efthymiopoulos	CERN
16:45	MICE	0:10	A. Nichols (t.b.c.)	STFC-RAL
16:55	Conclusions by the EuCARD Coordinator	0:15		CERN