

Silicon Sensor Alliance

Aarne Oja

Manchester

23 Feb 2010

Agenda

Opening and background (Aarne Oja)

Presentation of new partners

Fabian Jachmann, Marc Schillgalies, Silicon Sensor International

Thomas Fritzsch, FhG IZM

Joint demonstrator activity

VTT-SINTEF planning: Juha Kalliopuska

Planning by other partners?

Discussion

COST proposal wrap-up and further actions

Next actions

AOB

Participants

Thor-Erik Hansen	SINTEF	NO
Wlodek Kaplan	Acreo	SWE
Juha Kalliopuska	VTT	FI
Mathieu Morelle	Canberra	BE
Aarne Oja	VTT	FI
Atte Haapalinna	Okmetic	FI
Maurizio Boscardin	FBK	IT
Thomas Fritzsch	FhG IZM	DE
Petr Sicho	Acad. Sciences, Praha	CZ
Cinzia Da Via	U. Manchester	GB
Fabian Jachmann	Silicon Sensor International AG	DE
Marc Schillgalies	Silicon Sensor International AG	DE
Manuel Lozano	CNM	ES
Ralf Röder	CiS	DE
Pavel Freundlich	OnSemi	CZ
Jan Andersson	Acreo	SWE
Zack Sharon	SemeFAB	GB

Previous meetings

18 June at CERN

<http://indico.cern.ch/conferenceDisplay.py?confId=59396>

15-16 September at CERN

<http://indico.cern.ch/conferenceDisplay.py?confId=67311>

25-26 November at CERN

<http://indico.cern.ch/conferenceDisplay.py?confId=74945>

Objectives for the Silicon Sensor Alliance

- To clarify the CERN needs for the LHC upgrade (ATLAS, CMS, ...)
 - To clarify the CERN procurement procedure

- To evaluate the prospects of a European vendor network to bid for the LHC detector upgrade
 - From the partners perspective
 - From the CERN perspective

- To set up joint R&D projects and a Network

R&D instruments

- **Network for the Detector Ecosystem (COST)**
- *Project Outline (PO) submitted in 25Sept09 – passed for the 2nd run*
- *Coordinator Prof. Christer Frödh, Mittel Universität Sweden*
- *Full proposal submitted in Jan09*
- *Decision on 17Feb 2010: not selected*

- **Initial Training Network (ITN) Application**
- *Coordinator Prof. Tuure Tuuva, Univ. of Lappeenranta, Finland*
- *Submitted in 22Dec09*
- *Evaluation coming in a month or so?*

R&D instruments (2)

- FP7 infrastructure proposal for future radiation detectors (AIDA)
- *Application submitted in Dec09*
- *No actual detector manufacturing included in the project*
- *Decisions coming in March or so. Any news?*

- *Are there any funding opportunities in the FP7 calls for 2011?*

- *Industry driven EUREKA-Euripides project?*

Joint Demonstrator Activity

- Demonstrate the ability of a European manufacturer network to produce radiation detectors
 - High volumes in a given time
 - Proven track record
 - Proven performance of the detectors
 - Reliability of the production
 - Redundancy of critical instruments and processing steps
 - Access to high quality wafer material

- A joint demonstrator needed to be competitive in forthcoming CERN market surveys
- Opportunity for European vendors: a significant increase the market share

Agenda

Opening and background (Aarne Oja)

Presentation of new partners

Fabian Jachmann, Marc Schillgalies, Silicon Sensor International

Thomas Fritzsch, FhG IZM

Joint demonstrator activity

VTT-SINTEF planning: Juha Kalliopuska

Planning by other partners?

Discussion

COST proposal wrap-up and further actions

Next actions

AOB

Evaluation of the COST proposal

- **Our proposal was not selected for further assessment.**
- **The comments on B and D indicate criteria where we got low score. As a result I have some comments and proposals for the continued work.**
- **Please note the Strengths of the proposal.**

- **A. CRITICAL CRITERIA**
 - B. SCIENCE**
 - B3 Following a well trodden approach.

 - C. IMPACT**
 - D. STRUCTURE AND ORGANISATION**
 - D2 Confusion between milestones and deliverables.
 - D3 The monitoring aspect is missing.

 - E. CONTRIBUTION TO WIDER COST GOALS**
 - F. OVERALL RECOMMENDATION**
 - F.1 Strength of proposal
 - F.2 Weakness of proposal
 - F.3 New experts proposed by the EEP for potential nomination

COST (2)

- Strengths
 - very timely proposal
 - compared to other technologies detectors have lagged behind (except for space applications) and need further development
 - scientific institutes involved high level

- Weaknesses
 - See B3, D2, D3
 - Some conflicts with COST guidelines e.g. MC composition
 - Much of the description not quantitative enough, more specific outcomes
 - what is meant by quantum imaging?
 - Concerned about the orientation of the proposal, towards development of marketable products
 - Proposed participants perhaps capable of networking without COST
- **The most interesting statement in the report is “Proposed participants perhaps capable of networking without COST “ since it could indicate that the panel thinks that the money should be used for groups that need it better. Still I get the impression, from the strengths, that they think that this work should be done.**
- **Since the funding available from COST is essentially travel money I think we should continue to do what we planned to do in the COST action anyway. Key activities would then be:**
- **Continued work to establish the manufacturer network**
- **Formation of informal Working Groups to address the issues of the technology roadmap**
- **Formation of a Steering Group to arrange networking activities, to make strategy documents to influence the funding agencies and to facilitate the formation of strategic projects among the members of the network to implement the technology roadmap**
- **(We would anyway have needed to find money to do the work even if we got the COST Action.)**

COST (3)

- I believe that we need some kind of network similar to the Technology Platforms to promote this technology to the funding agencies. Since the meeting in Manchester is fairly short I propose a one or two day meeting in May to work on these issues. We should then invite the key players on the different technologies included in the COST proposal. We could also try to make some kind of event in connection with IWORID in Cambridge in July.
- I will not be able to join the meeting in Manchester since I have been asked to represent the detector community at a Workshop for planning of the new synchrotron (MAXIV) in Lund on the same day. Still I think that it is important to continue the efforts to make a network for research and manufacturing of radiation detectors and I am willing to continue my efforts to make that happen. Looking forward to the results from Manchester.
- Best Regards
- Christer

Thank you for your attention!





**VTT creates business from
technology**

Could not participate to this meeting

Vaclac Vrba	Acad. Sciences, Praha	CZ
Christian Vieider	Acreo	SWE
Christer Fröjdh	MiUn	SWE
Pierluigi Bellutti	FBK	IT
Claudio Piemonte	FBK	IT
Francesco della Porta	FBK	IT