# Minutes of the HYCON Governing Board Meeting

# Siena, July 19, 2005

## 1 Representation of the nodes and approval of the agenda

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| **FIST:** | Joseph de Macedo |
| **CNRS:** | Françoise Lamnabhi-Lagarrigue |
| **ETHZ:** | Georgios Papafotiou (substitute) |
| **RUB:** | Jan Lunze |
| **UNIDO:** | Sebastian Engell (Chairman) |
| **UMD:** | Jörg Raisch (from 10.45) |
| **US:** | Eduardo Camacho |
| **SUPELEC:** | Hervé Gueguen |
| **INRIA:** | Giancarlo Ferrari Trecate |
| **UPAT:** | Badis Djeridane (substitute) |
| **UAQ:** | Fortunato Santucci, Maria Domenica Di Benedetto |
| **UNIPI:** | Lucia Pallottino (substitute) |
| **UNISI:** | Alberto Bemporad |
| **PARADES:** | Andrea Balluchi, Alberto Sangiovanni-Vincentelli |
| **UT:** | Jan Willem Polderman (substitute) |
| **TUD:** | Bart de Schutter (from at 11.40) |
| **KTH:** | Karl Henrik Johansson |
| **LTH:** | Rolf Johansson |
| **UCAM:** | Jan Maciejowski |
| **UCL:** | Iliyana Simeonova (substitute) |

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| **Absent:** | DLR, TUE, ULIN |

The quorum is met.

The meeting was declared open at 10.15.

The agenda of the meeting as proposed by the Chairman was accepted.

## 2 Approval of the minutes of the first Governing Board meeting

The minutes were approved unanimously as distributed before the meeting.

## 3. Progress report, results of the first review

- Francoise Lamnabhi-Lagarrigue reported on the reviewers' comments and the discussion at the last ExecCom meeting
- Sebastian Engell stresses the fact that for the Commission the relationship with industry and the transfer of the results has top priority; the evaluation of the network will strongly depend on the progress made in this area.
- The reviewers formulated some criticism related to WP 4c and 4d. The comments to WP 4c do not reflect the actual situation in this area that is very good; new

cooperation with industry was started following the workshop in May in Rome. Wrt. WP 4d, Karl Henrik Johansson reported that WP4d has reacted to the reviewers' comments and will change its title into "Networked Control" in order to clarify the specific contribution of HYCON in the field of communications. The mention of multimedia communications in the proposal was a suggestion by the Commission and turned out to be not appropriate.

- Regarding the integration of the work flow, it will have to be made more explicit that the results of the application areas will also trigger tool developments and provide testbeds for the tools that are available or currently under development. This had been tacitly understood as it is usual practice in control, but it seemed not clear to the reviewers.

- Alberto Sangiovanni-Vincentelli reported the work done on industrial bridging in WP6. Four different levels of involvement of the industrial partners were defined and a questionnaire has been distributed to the node leaders with the request of forwarding it to industrial contacts that each research group in HYCON may have. The node leaders were asked to pursue this without further delay. At the ExecCom meeting it was also discussed to organize the Industrial Advisory board according to the application areas such that subgroups with common interests can be formed. The WP4 structure seems to provide a natural framework for the IAB group definition. Each subgroup may "elect" one or two representatives for a HYCON IAB that could provide feedback on the overall directions and relevance of the network in addition to the inputs given to the application WPs. Education, in particular of PhD students and of technical staff, is also an important contribution to the dissemination of the results to industry.

- Regarding deliverables and milestones Francoise Lamnabhi-Lagarrigue points out that we were late with the deliverables at the review because of a misunderstanding of the deadlines, but this delay has been overcome. Sebastian Engell stressed that the deliverables have to be ready before September 15 and to be sent to the reviewers for the review on Oct. 5/6.

## 4 European Institute of Hybrid Systems (EIHS)

### 4.1 Mission of the Institute

Sebastian Engell summarizes the discussion on EIHS mission during the ExecCom meeting yesterday. The three main aspects on the mission of the EIHS as stated in deliverable D1.1.1 are research, education and dissemination. However, if the EIHS should develop into a permanent structure that can be sustained after the end of the funding of HYCON, additional funding must be sought actively. The best chances for such funding are from sources that support technology transfer. Therefore the additional tasks
- Outreach to industry
- Attracting co-funding for technology transfer and/or support of scientific excellence from local/national/European sources
were added to the description in D1.1.1 during the meeting of the ExecCom. In order to be successful, the institute needs a manager who is scientifically active in hybrid systems but acts not only as a researcher but also in an entrepreneurial fashion. As PostDocs usually are very much in a transient stage of their career, the leader of the node that hosts the Institute will have to play a very active role in securing the future of the EIHS. The fact that we have a good financial base for the first three years through HYCON already so the EIHS does not start from scratch can and should be used in the negotiations with local or regional sponsors.

The Governing Board agreed on this extension of the mission of the EIHS and, as a consequence, of the selection criteria.

## 4.2 Legal structure

Alberto Bemporad reviewed the possible structures (EEIG, such as Parades, Association Model, and Company Model) of the EIHS as reported in deliverable D1.2.1. Examples of possible statues and bylaws under these different structures are collected in the preliminary version of deliverable D1.4.1. Among these models, the Association Model is the "lightest" one that can most easily be set up. A problem however is that in associations, in most countries the members share the financial risk what will most likely not be acceptable for universities. An alternative is to form the association by personal memberships.

The Chairman proposes to select the Association Model as the preferred option and to ask the WP1 members for a further investigation and clarification of the possible structures, in particular of the legal situation (other options than under Belgian law?) and of the liability of the members.

The proposition is accepted by formal vote with two abstentions and no votes against.

Deliverable D1.4.1 will be refined following this decision. This will lead to an inevitable delay.

## 4.3 Location of the EIHS

There are 5 applications from nodes that want to host the EIHS: Siena, L'Aquila, Pisa, Paris, and Patras. The applications were presented by the five nodes. Questions were asked in particular regarding the possibility of obtaining funds from local, regional or national institutions and ease of transport to and from the locations.

It was agreed that the criterion of rooms for educational activities such as the summer school is of minor importance, because such activities can be organized in different locations without much effort. In contrast, the research activity and the management, including attracting additional funding, should not be separated but performed in one place.

Since the mission of the EIHS has been modified during the discussions in Siena, it is not appropriate to decide on the location at this point. The applicants should provide additional information on the following issues:
- Perspectives/ goals statement
- Opportunities for local/ regional co-funding (provide LoIs if possible)
- Financial support by the university for visiting scientists
- Academic environment
    - Size of the group(s) hosting the institute
    - Income from 3rd sources, esp. industrially (co)-funded projects
    - Labs, application projects
    - Interaction with other groups/people (names, www)
- Technology-oriented companies/institutes in the area
- Commitment of the node leader to entrepreneurial activities, eventually naming the proposed lead-scientist
- Running cost per year:
    - Overheads

– Facilities
– Basic personnel (1/2 secretary, computer support)
• Necessary investments.

Sebastian Engell proposes that a smaller group of persons should propose the location to the Governing Board possibly after further discussions of some issues with the proposers. The deadline for the information from the nodes was set to Sept. 30, 2005. The Governing board nominates Sebastian Engell, Jan Maciejowski and Eduardo Camacho for the selection committee. The final decision will be taken by the Governing Board in the next meeting in December.

## 5 Financial status and planning for the period M13-30

The current financial status is not entirely clear, as only the cost statements for months 1-6 are available. It seems that not all of the available money will be used during the first year, partly due to the late arrival of the EU contribution at the nodes. Ideas from the work packages for the tasks and deliverables in the next period were presented at the ExecCom meeting. The WP leaders will decide on a proposal for the work program at an ExecCom meeting in Paris on Sept. 16. This will then be discussed with the Commission on the second day of the review on Oct. 6.

A lively discussion evolved on the issue of the revision of the work plan and the funding of the nodes. The planning of the work and the expenditures in a NoE proceeds on a moving horizon, every year a plan for the next 18 months is developed that has to be approved by the Commission. The principle of moving horizon budget planning allows for adjustments in months 13-18 based on the results of the first year. However, the money that has already been distributed to the nodes (75% of 330 person months for months 1-18) will be left untouched, if the nodes claim this money and the WP leader agree that an equivalent contribution has been made. If the effort within months 1-18 is considerably lower than planned, some of the funds may be rolled on to months 19-30. Disputes between a node and the WP leader will be resolved by the Governing Board.

In the planning for months 13-30, the WP leaders should ask which partner wants to contribute how much effort to the milestones and deliverables that are proposed to the Commission and base the proposed budget distribution on the responses.

## 6 Modifications of the consortium

• Stefan Kowalewski (Aachen) asked the Governing board to agree that RWTH Aachen becomes an independent node of HYCON. At present, Aachen is funded through Dortmund which creates considerable administrative problems. The budget for months 1-18 will be split between Dortmund and Aachen, so no re-planning of cost is needed. Aachen contributes mostly to WPs 4c and 6. The proposal was accepted unanimously.
• The same situation is encountered between Valladolid and Sevilla. The GovBoard agreed to establish Valladolid as a separate note and to divide the budget between the two nodes.
• Oded Maler (Verimag, Grenoble) applied to become a node of HYCON. After the chairman asked him to indicate the WPs to which Verimag plans to contribute, WPs 4a and 4c were selected. There was no information available from the leader of WP 4a since Oded Maler contacted him but did not propose any specific contributions Verimag would like to make. For 4c, Alberto Sangiovanni-Vincentelli stated that the

contribution from Verimag is more on the theoretical side and that there is no direct involvement in current projects within this area beyond the work carried out in the CC European Project. On the other hand, Verimag certainly strengthens HYCON as the proposed participants are some of the finest researchers in the area of embedded control and software. Tool development could also be an important area of co-operation. However, as no direct contribution to the tasks defined for HYCON in the tool development space was visible at this point, it was decided to offer Verimag the status of an associated node and to invite them to meetings. If more co-operations emerge especially in the non-research tasks, the status may be changed to that of a regular node.

## 7 Financial report

Audit period: 15 September 2004 to 14 September 2005

Signed form C and the Audit document should arrive at Fist at the latest the 15 October 2005.

Excel financial table (annex 2 table 3) should arrive at Fist before 15 October by email.

Also complete electronic form C (from www.cordis.lu/fp6, ``find a document'').

Deliverables D.7.3.1 and D.7.3.2 are documents that will guide through the financial aspects of the projects.

## 8 Projects under the HYCON Umbrella

Francoise Lamnabhi-Lagarrigue should be informed on all applications to the EU (IP, STREP, Marie Curie) and for national funding on hybrid systems by the partners.

## 9 ARTEMIS

Alberto Sangiovanni-Vincentelli reported on the ARTEMIS technology platform. Currently, it looks like ARTEMIS will receive funding under the technology platform scheme, most likely by "topping up" national contributions to projects from European funds. A formal membership or representation of HYCON in the ARTEMIS Steering Committee was considered infeasible at this time because membership is closed at this time and involves mostly companies (only three University Institutions are at this time represented). Alberto S-V who is a member of the High Level Group as well as of the Steering Committee representing PARADES will try to increase the visibility of HYCON within ARTEMIS.

## 10 Dissemination

A tutorial session at CDC/ECC 2005 has been proposed and accepted. The papers in this session will appear in a cumulated paper in the EJC.

The exchange of PhD students should be increased.

The next summer school will be held in 2007 because then a sufficient number of new graduate students is expected. The location is open.

In 2006, a HYCON Conference to improve the internal exchange between the nodes and the WPs and to improve the visibility of HYCON should be organized. The best time seems to be in the autumn. Volunteers to host the conference are sought.

A joint CTS and HYCON workshop has been organized by Francoise Lamnabhi-Lagarrigue on 10-12 July 2006 in Paris. Lectures and pedagogical talks from HYCON members are being planned.

## 11 Next meeting

The next Governing Board meeting will be held in conjunction with the CDC/ECC, possibly on Friday December 16. An ExecCom meeting will be also organized at the CDC/ECC.