FP6-001917

EURON

European Robotics Network

Network of Excellence
Information Society Technologies

DR.12.3
EUROP Collaboration Agreement

Due date of deliverable: 30/8/2005
Actual submission date: 25/7/2005

Start date of project: May 1st, 2004
Duration: 48 months

Organisation name of lead contractor for this deliverable:
IPA

Revision: V1
Dissemination Level: PU
1. Introduction and overview

Robotic systems will be one of the major drivers for creating new markets in the 21st century. Their development will transform every day life as well as industrial processes in an order of magnitude which can be compared to the impact of internet technologies at the end of the 20th c. Furthermore, Robotics will have a decisive role in addressing the new challenges becoming evident in Security and Space.

While robotics has already revolutionized productivity and quality in automotive and electronic industries, it is now at a decision point where its scope is dramatically expanding to conquer a whole range of new markets. These new markets are driven both by social aspirations and economic benefits impacting a wide range of peoples’ lives.

A consolidated European R&D strategy in robotics is a requisite for preparing a new generation of robots that would closely collaborate with workers and move out of the factory to conquer a new wave of novel service, security and space application markets.

As industrial, service and security/space robotics increasingly share the same research challenges and agendas, EUROP, the European Technology Platform in Robotics, would aim to maintain Europe’s leadership in industrial robotics and expand it into the burgeoning service and security markets. It would also aim to ensure increased public and personal security levels as well as new levels of quality of life by providing technologies required to enable society to address challenges in terms of ageing and well-being.

More specifically, the key elements of the mission of EUROP are to:

- **Drive forward the robotic vision by developing a Strategic Agenda and accompanying technology roadmaps, as well as ensuring their implementation**;
- **Unite all the main industrial and academic robotics stakeholders and public authorities around this common vision**;
- **Align the fragmented R&D efforts at Community, intergovernmental, national, regional levels in the European research Area along the common Strategic Agenda**;
- **Benchmark and link with relevant initiatives outside the EU**;
- **Set up and implement a communication activity to ascertain the key role of robotics in modern economies and society**
- **Develop and promote an educational programme that will establish robotics as a major interdisciplinary topic of training**.
- **Steer the development of new legal structures that might be needed to ensure the effectiveness of EUROP as a public-private partnership**.
- **Launch an activity to enhance the innovation environment, producing a policy for benchmarks, standards and for open source, providing advice on structural, educational and regulatory matters and stimulating new ventures and markets**.
- **Link with relevant initiatives outside the EU**.
- **Build on European strengths in research communities related to Robotics as well as on results from the existing network EURON**.
- **Promote mechanisms for collaboration between industry and academia in order to favour the transfer of R&D results**.
- **Stimulate the civilian development of dual use technologies by exploiting synergies between the civilian and defence sectors**.
The guiding principle of EUROP is that the initiative is open and can be joined at any time by any new organisation involved in robotic activities in Europe as a research, developer or user organisation of robotic technologies. The rules for joining the EUROP platform are stipulated below.

The governance structure of EUROP is intended to ensure the realisation of its mission and objectives. It consists of:

- A **Steering Board**, to define and update the Strategic Agenda and oversee its implementation. This board includes decision makers from leading stakeholders from the private sector and academia, as well as representatives from the Mirror Group of Public Authorities.
- An **Executive Board**, as a smaller executive and operational representation of the Steering Board.
- A **Mirror Group**, ensuring the participation of Public Authorities at national, regional and European levels in their function as policy makers, regulators and funding bodies. The aim of the Mirror Group is to develop synergies between national and European programmes and policies, pool resources to support the implementation of the Strategic Agenda and to promote a fertile innovation environment and a state-of-the-art research infrastructure for Robotics in Europe.
- A **Group of Public Institutions**, to provide decision making support based on scientific analysis and ensuring the participation of the scientific community (public research institutes and universities) excelling in Robotics research. This includes members of EURON, the European Network of Excellence in Robotics (EURON - www.euron.org).
- An **End-Users Forum**, including representatives from industrial sectors that are major users of robotics technologies (aerospace, automotive, food, but also security applications), in order to state expectations, requirements, and validation principles.
- **Working Groups** for specific predefined tasks, either permanent or on an ad-hoc temporary basis.
- An **Office** that provides permanent secretarial, operational and public relations support for EUROP.
- An annual event, the **EUROP annual gathering**, to provide the means for all stakeholders of the platform and beyond to interact and discuss progress achieved in the different working areas.

The governance structure is illustrated below, working groups are defined as example of the possible working structure.

2. **New EUROP membership**
EUROP is an open initiative and can be joined at any time by any new organisation involved in robotic activities in Europe as a research, developer or user organisation of robotic technologies.
New candidate members to join, they need to submit a letter to the Executive Board (see below), motivating their interest in joining the activities of the platform and stating that they accept these terms of reference and Rules of Procedure, as well as that they agree to the vision outlined in “EUROP”, the 2005 report presenting the strategic vision of the platform.

3. **Steering Board (SB)**

**Mission**
The mission of the Steering Board is to drive the definition and updating of the Strategic Agenda, to oversee its implementation and to ensure the smooth and efficient running of the EUROP Platform.

**Membership**
In the beginning, the Steering Board will be composed of:
- **Voting Members**: representatives from all the industrial participants and from a group of Public Institutions (up to 20% of total voting members);
- **Non-voting Members**: 2 representatives of the Mirror Group and 2 representatives of the End-User Group.

If the Steering Board grows too large (i.e., above 40 voting Members), the members of the Steering Board shall agree the rules for revising the membership. The new membership will be drawn from a range of relevant stakeholders with the absolute majority of the members, at any time, being from Industry. Stakeholders should reach consensus to facilitate a balanced composition of the Steering Board with regard to the three main industrial sectors (industrial automation, service, security/space robotics), small and large industries, nationalities, etc., in accordance with the interests of developing the competitiveness of the dynamic, knowledge-based European economy. Achieving a balanced voting representativity of the three sectors will be the objective of the platform, whenever it starts reaching stability in terms of participating industrial entities.

As individuals, members will normally be of sufficient international standing and key actors in the robotic systems or related application areas, and be involved in a wide range of activities relevant to the EUROP Platform. In representing their specific organisation, they will take into account the wider interest of the robotics sector. Members should be able to provide substantial advice and be in a position to influence stakeholders in planning RTD programmes, fostering partnerships and leveraging resources.

Members of the Steering Board or their delegates agree to commit sufficient time to take an active part in its work and, in particular, to make every effort to attend the plenary meetings of the Steering Board.

**Initial composition of the Steering Board**
The initial composition of the Steering Board is as follows:

- Industry (all entities that have signed up EUROP)
- Public Institutions
- Invited mirror group members (2)
- Invited End-Users representatives (2)

Individuals from the industrial organisations that signed the “EUROP” report will occupy the industry seats.

Up to 20% of the total number of votes of the Steering Board will be occupied by representatives from the group of Public Institutions. These representatives will form the Academia Advisory Group. The group of Public Institutions will select from its members the representatives of the Academia Advisory Group on the basis of the following criteria:

- Geographical representativity and balance of nationalities,
- Representative panel of R&D domains (i.e., sectorial and technological balance)
• Recognised excellence of academia representatives and standing of the individual proposed.
• Relevance of the advisory group for attaining the objectives of EUROP.

Termination of membership
Members may leave the Steering Board on a voluntary basis or because they fail to fulfil their obligations (see next section).

Changes in membership
Members of the Steering Board may terminate their membership at any time, by informing the Chairperson in writing. Wherever possible, sufficient notice should be given to allow a suitable replacement to be found, in principle from the same organisations. Such successors would have to be individuals of high standing, in line with the aforementioned selection criteria for members of the Steering Board.

If members of the Steering Board demonstrate a lack of commitment, they may be asked to resign their membership. In particular, if a member persistently fails to attend plenary meetings or if his/her organisation fails to pay its due share for the Office operations (see section 8), the Steering Board will discuss whether this member needs to be replaced. The Steering Board will decide whether to appoint replacement for such member from the same organisation or from a different organisation.

On the basis of a justified proposal, the Steering Board may decide to reduce or increase the number of its members, either on a temporary or permanent basis. In particular, should the initial membership grow beyond 40 voting members, there may be a strong operational need to limit their number to 40. In such cases, when appointing its members, the Steering Board will have to respect the membership rules, as these were defined above.

Should the number of voting members in the Steering Board be limited, a procedure will need to be established that guarantees fair and equal participation opportunities in the Steering Board of all interested EUROP industrial members for a fixed period of time.

Meetings
Plenary sessions of the Steering Board will normally be held at least twice per year. Additional meetings involving part of the membership may be convened according to specific topic requirements.

The Office shall be responsible for the organisation of meetings, the execution of the Steering Board’s calendar and the preparation of the minutes of the meetings. For this purpose, the Office Director will participate in the meetings as a non-voting member.

Meetings of the Steering Board shall not take place if more than 50% of its members are unable to attend.

Representation and quorum
The personal commitment of members is paramount and their substitution in meetings is possible (but not encouraged). Steering Board individuals or their delegates must be mandated by their CEO (resp. Laboratory Manager) to commit their Company (resp. Laboratory) in writings, meeting and decision making.

Admission of third parties
The Steering Board may invite other participants to its meetings, as appropriate, e.g. in cases where specialist expertise is required to deal with specific issues. Such invitees shall not enjoy membership rights and may be requested by the Executive Board to withdraw from the meeting if a vote is called for.

Decision making
The Executive Board shall make every reasonable effort to facilitate consensus among Steering Board members. Decisions shall strengthen the platform position. In the event the Steering Board remains divided on an issue, the Executive Board may exceptionally request members to
vote. Decisions will then be the subject of a simple majority vote, with the Executive Board holding the casting vote in cases where the Steering Board is evenly divided. The outcome of the vote shall be recorded of the meeting. If necessary, the Steering Board’s opinion may be obtained by a written procedure. Valid decisions can only be taken if at least half of the voting attendants are from industry. To allow adequate preparation of decisions, decision points and accompanying documents will be distributed at least two weeks in advance.

4. Executive Board (EB)

In the interest of dynamic and efficient management and internal communication, an Executive Board shall be set up. It will consist of the platform Chair and Three domain Chairs from the Steering Board (voting members), and an Office Director (non-voting members). Initially, the executive committee has domain chairs related to:

- Manufacturing Robotics,
- Service Robotics,
- Space and Security Robotics.

The EB will particularly be responsible for:

- The internal co-ordination and overall day-to-day management of the platform operations and the preparation of the meetings and decisions of the Steering Board.
- Co-ordination with the mirror group, member states programs, the European Commission, the European Space Agency, the European Defence Agency and other public funding organisations supporting R&D in robotics.

The Chairs of the Working Groups will be invited to attend the EB meetings as needed, depending on the agenda. The EB will, at its discretion, convene such meetings as needed to progress initiatives and co-ordinate platform operations, and shall maintain a record of these meetings.

- For EB meetings, at most 2 representatives can attend per company.
- For decision making, the same principles will apply as in the Steering Board.
- Steering board rules apply for representation and termination.

It is agreed that an election procedure should apply to elect chairs of the Executive Board. The initial mandate is fixed for a period of 2 years. A Member of the EB can be re-elected.

The election procedure, duration of the mandate of the EB Members, and likely rotational procedures that guarantee smooth operation during transitional periods are still under discussion and will be agreed in the next meetings of the Steering Board in 2005.

5. Working Groups

For specific predefined tasks, the Steering Board shall establish permanent or ad-hoc temporary Working Groups (WGs), as it deems necessary. The mandate of such Working Groups shall be decided by the Steering Board, as well as their chairmanship, structure and reporting mechanisms. The composition of a Working Group will be established under the responsibility of its Chairperson, who will report back to the Steering Board and seek their advice where appropriate. For this purpose it is recommended (but not strictly required) to select the chairpersons of the Working Groups from the membership of the Steering Board. Any EUROP member can join the works of any WG.

Whereas the creation of the Working Groups is the responsibility of the Steering Board, the co-ordination of their operations and the follow-up and consistency of their activities and scope are assisted by the office.

An example of Working Groups that EUROP could launch in the coming years includes:
• **WG Support** (optional): consisting of aides ("sherpas") to the members of the Steering Board, it prepares decisions and supports activities of the Steering and Executive Boards as needed;

• **WG Strategic Agenda**: charged by the Steering Board with developing the Strategic Agenda and accompanying technology roadmaps; sub-groups may be created to further structure the work, e.g. to develop roadmaps in particular technology areas;

• **WG Funding Strategy**: assessing options for funding instruments, mechanisms and structures;

• **WG Research Infrastructure**: addressing issues pertaining to the research infrastructure, including Centres of excellence/Competence; [The description of this WG is not very clear]

• **WG Innovation Environment**: addressing various non-technical aspects of innovation, such as Intellectual Property, standardisation, mechanisms for strengthening academia – industry liaison and technology transfer, industrialisation, SME involvement, financing of robotics innovation (venture capital funds, etc), etc.

Stimulated by the need to drive forward the Strategic Research Agenda, a number of Technical Working Groups (TWG) could also be initiated as part of EUROP, to address research issues that are cross domain and pre-competitive-oriented.

Representative examples of such TWGs are the following:

• **TWG on Basic Component Technology** (BCT), to address innovative and low-cost technologies including sensing and actuation technologies, basic communication and mobility.

• **TWG on Robotic Systems Engineering** (RSE), including *standardisation and certification* issues, benchmarking, dependability analysis, modular robotic design, systems of robotic systems and robotic architecture design.

• **TWG on Cognition, Autonomy and Human Factors** (CAFH), necessary for improving human interaction, addressing social and society challenges, achieving more autonomous behaviours and designing efficient systems of robots.

• **TWG on Miniaturised Robotics** (MR), mainly based on recent advances in Micro-Electro Mechanical Systems, which allow new design principles in terms of mobility (bio-inspired design), sensing (smart skins) and smart materials.

The Chairs of the Working Groups and the Technical Working Groups are chosen on a voluntary basis. Steering Board rules apply for termination and representation.

### 6. Office

An office will be created to facilitate and assist the EUROP Platform and its activities. It will be the responsibility of the Office to:

• Provide organisational, secretarial and operational support to the Steering Board, Executive Board, Working Groups and EUROP Annual gathering as required: organising meetings; preparing agendas and minutes; receiving, publishing and distributing documents;

• Act as an information and communication centre for EUROP, including the launch and maintenance of a dedicated website;

• Develop and implement a public relations strategy;

• Provide IT support to EUROP, allowing the platform and its bodies to make efficient use of electronic communication, information exchange and document handling;

• Handle financial matters pertaining to the operations of the EUROP platform. The above activities of the Office will ramp up gradually, commensurate to the activities of the EUROP platform.

### 7. Mirror Group of Public Authorities
The terms of Reference and Rules of Procedure for the Mirror Group of Public Authorities will be determined by the Public Authorities concerned.

The mirror group actions will have to be co-ordinated with the EB ones.

8. **EUROP Annual Gathering**

An Annual Gathering (AG) will provide the means to interact with all stakeholders in the platform and beyond, to ensure shared ownership and a common vision. Organised in the format of plenary meetings and parallel sessions, with plenty of opportunities for networking, it will allow EUROP members to exchange information and results. Virtual events and internet-based collaborative activities could be used to supplement the regular physical events.

9. **General issues**

**Amendments to the Terms of Reference and Rules of Procedure**

These Terms of Reference and Rules of Procedure may be amended at any time on the request of a least 5 members of the Steering Board.

If at some point in time (e.g. after the launch of the EU 7th Framework Programme) some EUROP policies or activities were to be implemented through a joint technology initiative (JTI) as defined under Article 171 of the EU Treaty or a joint RTD programme, for example undertaken by several Member States with participation by the Community under Article 169 of the EU Treaty, a dedicated legal structure will probably be required for the management of the joint undertaking or RTD programme. If for these or other reasons a legal structure becomes required, the current governance structure, Terms of Reference and Rules of Procedure may need to be revised.

**Transparency**

The Steering Board shall have a high regard for the transparency of its activities and the need for including and informing all relevant stakeholders of the operations of the EUROP platform.

The platform shall make every effort to consult all relevant stakeholders on documents under preparation that have a general interest (e.g. the Strategic Agenda).

Relevant documents such as the Strategic Agenda and roadmaps shall be made available to the public via the internet.

**Intellectual Property Rights (IPR)**

- For individual RTD projects on robotic systems under public programmes at Community, intergovernmental, national or regional levels, the IPR provisions of the respective public programmes and RTD projects will apply.
- To foster the exchange of information within the European Research Area, more favourable access rights may be granted between different RTD projects on robotic systems under the various public programmes at Community, intergovernmental, national or regional levels, but only with the agreement of all partners involved in the project consortia concerned, for example under the conditions described in Article IX of the ITEA frame Agreement.

[Note: More detailed rules on the management of IP rights and on public dissemination will be discussed in the next meetings of the Steering Board].

**Remuneration**

The functions exercised by the members of the EUROP bodies, including the platform Chair, the three domain Chairs and the Scientific Counsellor will not be subject to remuneration. Only the functions exercised by the Office Staff will be remunerated as such (through a nominal fee).
Rules will be agreed for differentiating EUROP fees among large and small (or even very small) companies.

Specific Support Actions may be requested to support the platform functioning.

**Cost and funding**

- The annual budget for operating the Office and the platform is decided by the industrial members of the Steering Board. They will equally share the approved costs on an annual basis, taking into account any in-kind contributions made to the office.
- Travel & subsistence costs related to the participation of EUROP Members to its activities are to be bared by each of the participants (except otherwise indicated).
- At least part of the incidental costs of major EUROP events (e.g. the Annual Gathering) will be charged to participants.

25 July 2005