Arena – Innovative networks

A programme owned by Innovation Norway, the Research Council of Norway and the Industrial Development Corporation of Norway (SIVA), with Innovation Norway as the main operator

Programme description

Revised 25.03.04

Innovation Norway

1. Introduction

1.1 Introduction

Arena – Innovative Networks is a programme designed to promote increased innovation by engaging in cooperation and setting up networks between business participants, R&D participants and the authorities. The programme is directed at regional business communities where clusters of companies operate within one value chain, at the relevant knowledge suppliers, and where the potential exists for increasing cooperation and teamwork between these participants. The programme offers financial support and expertise for the implementation of development projects running over several years (main projects) and for the preparation of such projects.

The programme is a joint venture between Innovation Norway, the Research Council of Norway and the Industrial Development Corporation of Norway (SIVA). A steering committee is responsible for the strategic management of the programme. A programme manager and a secretariat at Innovation Norway are responsible for programme operations. Regional projects are based on regional development plans and the county municipalities are important partners.

1.2 Background – Brief history

During the autumn of the year 2000, the Research Council and the Norwegian Industrial Research and Development Fund (SND) set up a joint project entitled *Regional Innovation Pilots*, which was designed to help these agencies adopt a more integrated approach in order to develop regional business clusters and innovation systems. The initial framework for this endeavour was drawn up in connection with the planning of the Innovation Møre pilot project in 1999. During 2000 and the first half of 2001, preliminary studies were carried out in respect of a further five regional pilot projects. In August 2001, the SND's and the Research Council's Joint Venture Committee set up a steering committee which was tasked with continuing to develop and coordinate this work under the *Regional Innovation Pilots*. In 2002, SIVA joined as a formal partner.

In May 2002, the name *Regional Innovation Pilots* was changed to *Arena – Innovative Networks*, and it was given *programme* status.

2. Innovation in regional business communities – a specialist framework

Arena is based on a theoretical and empirical foundation which places emphasis on the following:

Value creation through innovation

Growth potential in industrialised economies is to an increasing extent determined by the ability to innovate. Innovation is a dynamic and interactive process which takes place both within a company and between a company and its environment. Research and development are prime movers which promote innovation, but innovation processes need to be understood as the results of cooperation between a company and other companies, customers, suppliers, knowledge suppliers and others. These are interactive processes, where learning does not result from the simple transfer of technology and expertise from one party to another, but where everyone involved acquires new insight from the process. A number of empirical

studies show that compared to less innovative companies, innovative companies have entered into more long-term collaborative relationships with external partners.

The importance of regional business communities
In a global economy, the development of competitive advantages will be increasingly determined by the specific resources and conditions available for supporting innovative processes in the regions concerned. Regional advantages are based on concentrations of specialist expertise, competitors, demanding customers, related industries and specialised service providers, etc. These are advantages which are largely dependent on having a relative concentration of business participants in a geographical area which are able to facilitate dialogue and cooperation. However, if these concentrations are to be able to collaborate, a regional culture and infrastructure to encourage collaboration must also be present.

System-based interaction between participants
Based on having regional concentrations of businesses and related R&D/resource players, there may be justification for developing more systematic cooperation between companies, and between companies, R&D players and the authorities. Such planned and systematic cooperation in respect of development processes can be characterised as a *regional innovation system*. This involves companies placing focus on systematic innovation activities, based on well developed cooperation with external, complementary resources. Innovation systems are also conditional on having established regional knowledge development and transfer institutions designed to assist regional businesses. In addition, one needs active public involvement in the form of active adaptation of the physical infrastructure, in the form of sector political measures, e.g. in the field of education, and agencies which function well.

In the light of the above, Arena will operate on the basis of the following ***key concepts:***

Innovation: Product and process development, innovation through technological change, R&D-based change, new utilisation of raw materials, new forms of organisation or interaction/teamwork and the opening up of new markets. Innovation involves development and commercialisation/implementation of the changes.

Network-based innovation: Innovation processes based on interactive and systematic cooperation between a company and external players.

Business communities: Concentrations of companies operating within one industry or value chain. These roughly correspond to the concept of *business clusters*.

Innovation systems: Organised cooperation between companies, and between companies and institutions in respect of knowledge development and transfer, as well as the authorities and the agencies involved.

Region *(in respect of business communities and innovation systems):* Functional demarcation of an area based on the extent of the business community concerned and the pattern of cooperation between the parties involved.

3. Arena's objectives and target groups

3.1 Main and secondary objectives

Main objective:
To increase value creation in regional business communities by strengthening the interaction between the business sector, knowledge providers and the authorities.

Secondary objectives:
1. To strenghten the innovative abilities of companies.

2. To enable knowledge providers to become more active partners to the business community.

3. To assist the authorities and agencies involved to adopt a more active and coordinated approach in order to strengthen the innovative abilities of business communities.

4. To help to promote systematic learning about innovative processes and the development of business communities.

3.2 Target groups

1. Companies
Innovation-based value creation will be achieved through the companies involved, and consequently these companies are the most important target group for Arena. By companies we mean all commercial manufacturers/providers of goods and services within the value chain and related businesses. No size-related or other limitations have been placed on this target group, but in connection with projects based on alternative government funding, the relevant limitations relating to the respective means schemes will apply.

Arena is industry neutral, i.e. it has no limitations as regards those value chains which can be accepted.

2. Knowledge participants
These comprise R&D and educational facilities which are primarily or mainly based on public funding. (Commercial knowledge participants fall into the company group). Institutions which are designed to disseminate knowledge also fall into this group. Institutions located within the region concerned constitute the most important grouping in this target group. For many projects, knowledge institutions outside the region concerned will also serve as natural partners.

3. Government agencies and financial institutions
This group comprises all those authorities which are important in the context of framework conditions, business infrastructure and specific financial/subsidy schemes. Key players will be:

- County municipalities responsible for integrated regional development plans
- Municipal or inter-municipal development companies
- Central or local government sector authorities
- Regional government agencies
- Regional investors/seed capital funds, etc.

3.3 Principal reason for Arena's involvement

The fundamental reason for Arena's involvement is to enable the identification of barriers preventing the relevant groups from setting up a dialogue and cooperation in respect of innovation processes. It must be possible to reveal *system failure* and to ensure that public involvement and the use of grants will serve to break down barriers and/or strengthen development processes.

4. Strategies and means

4.1 Main programme strategy

Arena shall realise its objectives by:

1. Implementing and actively following up regional projects based on regional initiatives, broad partnership between regional development participants and targets and strategies adapted to suit those challenges and opportunities which are identified (regional "tailoring"). The *regional* projects may range from local communities/smaller regions within a county, to regions which cover several counties. The programme may also encompass national projects.

2. Recruiting projects with clear development characteristics, which can also contribute towards programme learning. The programme should encompass projects with different requirements and challenges in order to provide a broad empirical basis for learning.

3. Implementing development measures which are aimed at common challenges in respect of regional projects and specialist arenas for the exchange of experiences and learning between projects and for external specialist impetus.

4.2 Regional project strategies

Individual *regional* projects shall realise their objectives by:

1. Setting up meeting places, collaborative arenas and networks which can provide a basis for the development of trust-based relationships between participants and participant groupings.

2. Initiating and developing joint innovation projects and processes.

3. Developing and implementing measures to improve innovative abilities.

4. Developing and implementing education offers and R&D activities which are better adapted to business requirements, and to implement mobility measures between businesses and R&D.

5. Establishing the proactive and well-coordinated involvement of government agencies and the public authorities.

4.3 Types of work and enterprise areas

Regional projects shall be based on project managers adopting an active role in order to mobilise participants, facilitate development processes and develop relationships based on confidence between participants. The identified development barriers and potential shall serve as a basis for the type of involvement undertaken by the project managers. Such involvement must, in all situations, be based on development processes being powered by the *motivation and influence of business participants*.

Within this open, strategic framework, activities shall be structured under *projects*, i.e. measures shall have clear objectives and anticipated results, defined commencement and completion points, and be implemented with a basis in a defined project organisation.

The activities which are implemented shall be tailored in accordance with the relevant requirements. Some of the activities may employ familiar working models and means, while in other cases new approaches will need to be developed. It is impossible to present an exhaustive list of potential measures, but the following are examples of *main category* measures:

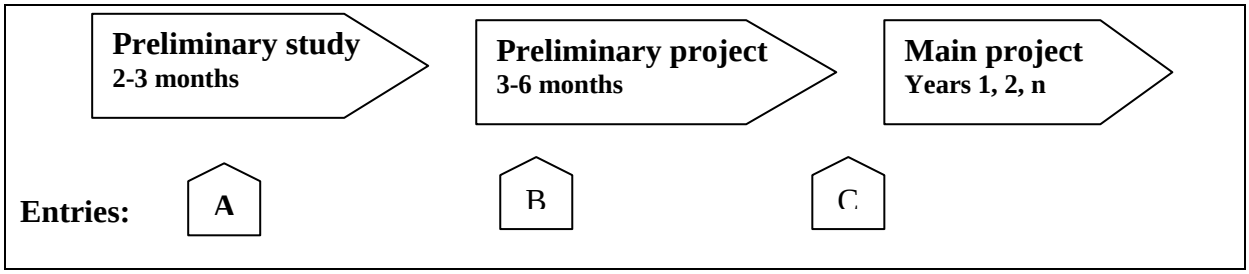
- *Resource measures:* Training offers for management or employees, preferably to be implemented in business networks.
- *Mobility measures:* Exchange of personnel between companies, between companies and knowledge institutions, corporate student projects, etc.
- *Infrastructure measures:* Development of offers from and access to knowledge institutions, service offers, seed corn funding, transport and communications, etc.
- *Meeting places and arenas:* Implementation of workshops and seminars, establishment of permanent meetings places, business associations, etc.
- *Facilitation of development processes:* Active involvement in the development of relations and collaborative measures between companies and between companies and knowledge institutions
- *Communications measures:* Development and implementation of measures for the joint marketing of business communities/projects, by using brands/logos, media measures, etc.
- *Analyses and mapping:* Implementation of studies in order to identify barriers, potential and scenarios, etc.
- *Initiation of innovation projects:* Help to develop company/R&D-based innovative projects.

Arena will develop a *project database* which will sum up implementation models and experience gained from relevant projects, for transferring such experience to others.

4.4 Model for the implementation of regional projects

The implementation of regional projects is based on a process model with specified phases and milestones in respect of decisions relating to continuation.

Arena's main task is to provide expertise and financial support for the implementation of development projects running over several years – *main projects*. The basis for the main projects is developed through preparatory processes in the form of *preliminary studies* where necessary, and *preliminary projects*.



Project concepts and proposals are included in the programme during the phase corresponding to the project's maturity:

Entry A is used for those cases where one is faced with an idea about or an initiative for a project, but where one has little basis for assessing whether or not the idea is sufficiently good

and/or realisable. Therefore a number of issues and assessments need to be systematised in a **preliminary study***:*

The purpose of having a *preliminary study* is to find out whether or not the basis for a project idea or initiative is good enough to justify using resources in order to define and develop a project organisation. If there are grounds for doing so, a preliminary study shall conclude with a proposal for a preliminary project. The main aspects contained in a preliminary study will be as follows:

- Brief description of the business community and any issues relating to future development
- Reasons for and possible organisation of a development project
- Assessment of the participation interests of the innovation participants
- (Any) proposals for a preliminary project

Preliminary studies will usually be completed within a period of 2-3 months.

Entry B applies when one is faced with a draft project which shows the development potential and the documented interest of the relevant participants in respect of project participation. Draft projects are developed into a **preliminary project*:***

The purpose of having a *preliminary project* is to define opportunities for realising identified potential and establishing frameworks for a main project, if there are grounds for doing so. Preliminary projects contain the following main aspects:

- Analysis/assessment with a view to defining barriers and development opportunities
- Development of ideas and enterprise areas with a view to realising a main project
- Development of relations between participants and integrating projects with the key participants
- (Any) proposals for a main project

Preliminary projects will usually be completed within a period of 3-6 months.

Entry C applies when a draft project exists which has matured in respect of aims, strategies, integration, participation and organisation.

Under a ***main project*** one shall realise those processes and projects which have been developed during the preliminary project or similar preparatory work, and continuously identify and realise new project opportunities relating to those targets and strategies which have been established. The basis for the implementation of a main project is a *main project plan*.

- Targets and strategies
- Project implementation plan
- Arrangements relating to result documentation and reporting
- Communications plan
- Organisation
- Budget and financial arrangements

Main projects may last for 3-5 years. Main project plans clarify milestones and decision-making points en route during the project period with a view to assessing whether or not progress and results are satisfactory.

During the final phase of a main project, a *continuation plan* shall be drawn up relating to the continuation of results, processes and relations in ordinary, self-managed organisations or structures.

4.5 Arena's relations with other innovation policy agencies

Arena's offer is based on close interaction with other regional and innovation policy agencies. Important relationships are as follows:

- *The county municipalities'* plans of action regarding regional development serve as an important basis for Arena's regional projects.
- *Innovation Norway's* risk loans, subsidy schemes and programmes shall be actively employed for realising the need for expertise and finance for innovation projects.
- *The Research Council's* programme relating to the mobilisation of collaboration between SMBs and R&D (MOBI) shall be actively employed. This applies in particular to Business-oriented College Endeavours.
- *The Research Council's* 2010 Value Creation Programme and associated development processes based on regional networks. There is a requirement for close cooperation in regions where both programmes are involved.
- *SIVA's* network of regional innovation units: knowledge parks, research parks, business parks and incubation centres, will serve as important partners in the regions concerned.

5. Documentation and reporting results and effects

The programme has established an integrated system for project selection, documentation, evaluation and reporting:

- *Selection* of projects is based on one set of *criteria* for the respective assessment of proposals relating to preliminary projects and proposals relating to main projects, cf. item 4.4.

- Individual *main project plans* draw up targets relating to those activities, results and effects for which realisation is sought. These specific targets for each project form the basis for the documentation, assessment and reporting of project developments.

- A separate *self-assessment tool* has also been developed for assessing how main projects develop in respect of a few key dimensions which are common to all projects.

- All projects submit an *annual report* which contains standard information about activities and results. These reports also form the basis of the programme's annual reports.

- An ongoing *evaluation* has been implemented (middle of 2003) which is designed to help programme managers analyse and assess targets and strategies, implementation plans, result indications, etc., with a view to assisting programme managers in their work on continuing to develop and improve the programme.

- A number of the regional projects have implemented their own systems for ongoing and/or result evaluation.

6. Organisation

6.1 Integration and ownership of the programme

Arena's overall targets and guidelines are laid down by the three funding institutions. The programme reports to each of these institutions. The owners have appointed a *programme executive* in Innovation Norway who is responsible for ongoing follow-up on behalf of the owners.

6.2 Programme management

The owners have appointed a steering committee which has been given responsibility for programme development and coordination, including the implementation of new regional projects and joint development projects. Project funding are decided, executed and followed up by the main programme operator, Innovation Norway

The steering committee consists of members from the county municipality, Innovation Norway, the Research Council of Norway, SIVA, the R&D sector and industry.

Operational responsibility for the development and implementation of Arena, including the secretariat function of the steering committee, is undertaken by a *programme manager* and a *programme secretariat* at Innovation Norway.

6.3 Organisation of regional projects

Regional projects which are implemented in response to decisions made by the steering committee are organised with the following functions:

- *Contractual partner,* i.e. the institution which is responsible for Arena's grants and associated conditions.
- *Steering committee,* under the leadership of a *project manager*, who is responsible for all strategic project decisions.
- *Project manager,* who has daily, operational responsibility for project implementation.

7. Funding

7.1 Funding of Arena

The programme is funded by:

- The Norwegian Ministry of Local Government and Regional Development (KRD)'s national programme scheme
- The Norwegian Ministry of Trade and Industry (NHD)'s nationwide innovation scheme
- The Research Council, through funds from NHD

7.2 Programme grant allocation

The programmes fund is allocated for the following main purposes:

- Basic funding of regional preliminary projects and main projects
- Joint development projects, learning measures and special communications measures
- Programme management

7.3 Funding principles for regional projects

Arena offers *basic funding* for preliminary and main projects. This mainly includes funding for:

- Project management
- Travel and meeting activities

- Communications
- Purchase of consultancy services
- Other small projects

Arena's basic funding shall be supplemented with other funding for the implementation of activities, in the form of:
- Similar basic funding from other sources for the implementation of main projects
- Private and public funding for specific spin-off projects resulting from basic activities.

Total funding shall be shown in the main project plan.

8. Knowledge base and learning

Arena is characterised by an open framework and considerable emphasis being placed on the development of new approaches and forms of work. This requires a systematic documentation and the sharing of experience. The programme represents an innovation policy commitment to the development of business communities and innovation systems which are also implemented in a number of other countries. This means that relevant international experiences should be systematically utilized in the development of the programme and the regional projects. Arena places emphasis on obtaining and systematically passing on theoretical and experience-based insight about the development of clusters and innovative systems.

One of Arena's objectives is to actively use experience gained from the programme to develop policy concerning innovation processes and systems.

Some important elements relating to knowledge development and transfer under the programme are as follows :
- *Project Manager Forum:* A meeting place for the managers of Arena projects for the purpose of exchanging information and expert input. Held 4 times per year.

- *Project web:* Extranet for in-house communications and information at Arena, including a project database.

- *Annual Arena conference*: An annual conference shall be held for project participants and other interested parties at Arena, along with related activities. The first experience conference is being held in 2004.

- *External professional conferences:* Programme managers and project managers are encouraged to actively attend national and international network conferences.

- *Annual study trips:* The steering committee will undertake a study trip each year to relevant foreign communities.

- *In-house reports:* The programme may draw up its own, small reports in order to cover the requirement for updating and synthesising knowledge relating to relevant issues.

- *Research Council's analysis activities:* Arena shall make active use of any relevant analyses carried out under the auspices of the Research Council's programmes.