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Dissemination level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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1. PROJECT GOALS AND STRUCTURE

The problem - need for the project

Considerable amount of renewable energy in Europe represents DG. However, the distribution systems have been designed without considering interconnection of DG. One of the main barriers to the penetration of DG at the distribution network level is the complexity of the interconnection process of DG into the network. Each planned interconnection requires accurate modelling, simulation and analysis to tackle potential problems concerning stability, protection and voltage control in the network. The main cause of complexity is the present methods for managing distribution networks as well as the features of the different DG components themselves which are not designed to enable an easy interconnection. Also customers' expectations for extreme reliability and quality of power are increasing simultaneously with an increasing diversity of power generation methods. Therefore significant investments will be needed in the coming decades. It is now time to reconsider traditional network solutions in order to secure the efficiency, security and reliability of networks in the long run.

The solution developed in the project

This project develops, demonstrates and validates a new method for the active management of a distribution network and the enabling solutions to support it. The solutions operate as active components in managing the network to enable an easy interconnection of different DG units. The solutions cover the protection of the network, planning and information systems, and voltage and reactive power control.

The extraordinary feature of this project is to develop and demonstrate the active network management method and the enabling solutions simultaneously. Either one alone would not solve the problem described above. When interacting with each other according to the active network management method, the over all system operates better than it would by letting individual solutions interact randomly – which is the common practice today.

The overall goal of the project is to develop a new active network management (ANM) method for the electric distribution network including distributed generation (DG) and the enabling solutions to support it. The new management method enables simplified interconnection of distributed generation on existing electric distribution network. When the distribution network is managed according to ANM method the interactions of different active network components can be planned and controlled to benefit the operation and stability of the network.

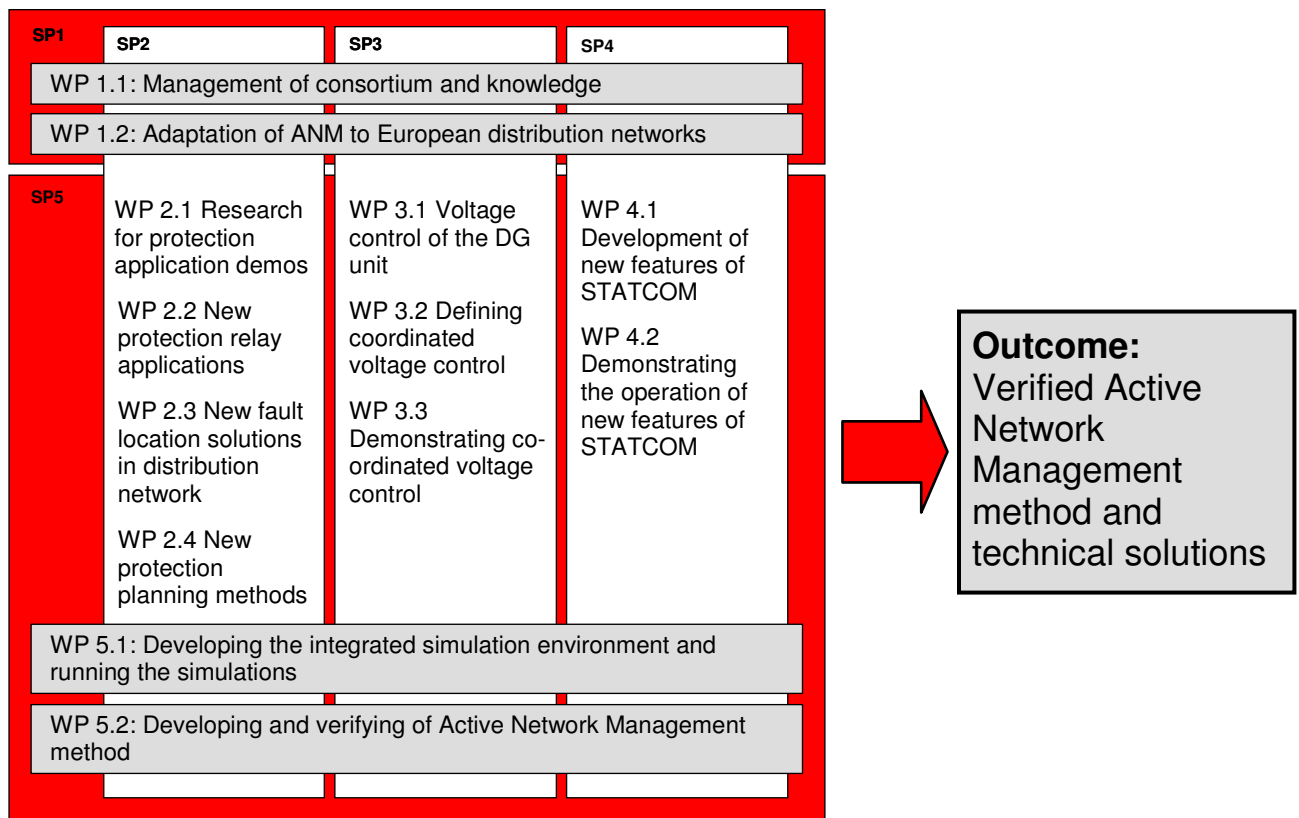
As the result ANM is increasing the security of distribution grids, improving the stability of the grid in fault situations and enhancing the optimal management of network. This adds value at European level by increasing the potential for renewable energy and by enabling more efficient management of distribution network assets for network owners.

The work flows from basic planning to demonstrations and monitoring so that best knowledge of the partners is involved in each stage. The results from the demonstrations of solutions are combined together in SP5 into one integrated simulation environment in order to demonstrate and validate ANM method.

Sub projects

- SP1-Project management and dissemination
- SP2-Protection of distribution network including distributed generation
- SP3-Voltage control of distribution network including distributed generation
- SP4-Flexible STATCOM for distribution network
- SP5-Development of Active Network Management method

The seven participating partners are technology providers and international research institutes from Germany, Sweden and Finland. Three of them are SMEs. Two local distribution network owners and one industrial electricity user are providing test sites and infrastructures for demonstrations.



2. DISSEMINATION STRATEGY

To get the Active Network Management method to the market, there needs to be active dissemination in the research and development arenas, and also directly to the distribution network owners and operators.

The basic dissemination strategy is to proceed in two arenas:

- Public research results and findings of ANM are presented to European research and development networks for open evaluation and further refining. In this we try to raise awareness and interest towards the solutions developed in ADINE project.
- Enabling solutions are presented directly to the potential customers of attending companies as part of their marketing activities. In this we try to provide the distribution network owners direct and practical access to the enabling solutions.

To implement this basic strategy, we select a set of key messages and target groups for these messages. We analyse the most effective routes to serve these target groups and adjust the utilised media accordingly. Finally we select the set of activities to be accomplished during the project in the boundaries that our budget allows.

2.1. GOALS, TARGET GROUPS AND KEY MESSAGES

Goal of the dissemination is to get the key messages through in the selected target groups within the boundaries of project budget. The key messages in the first 18 month period of the project are aimed to create expectations towards the project results. Towards the end of the project the key messages will be tuned towards representing the actual achievements.

Following table shows the key messages for the first 18 months of the project, and the primary and secondary target groups for the key messages. Most of the dissemination activities are selected to reach the primary target groups. Some activities are also selected to bring the message to the secondary target groups.

Key message	Primary target group	Secondary target group
1) <u>ANM-Method</u> ADINE-project is developing Active Network Management method for network operators to simultaneously increase the reliability of their network and minimise the investments in new network capacity. ANM-method is a new term that ADINE-project is launching to the market.	Distribution network owners in Finland, Sweden, Germany, Spain, Portugal, UK. Project partners in other DGTREN grid issues projects	Distribution network owners in other EU-countries Research groups in EU-countries working with similar issues

	<p>EU Technology Platform for the Electricity Networks of the Future</p> <p>Finnish Center of Expertise program / Energy Technology Cluster</p>	Publics in EU countries
<p>2) <u>New Protection Solutions</u> ADINE-project is developing new protection and fault location solutions for easy interconnection of distributed electricity generation into distribution network.</p>	<p>Distribution network owners in Finland, Sweden, Germany, Spain, Portugal, UK.</p>	<p>Distribution network owners in other EU-countries</p> <p>Publics in EU countries</p>
<p>3) <u>New Voltage Control Solutions</u> ADINE-project is developing new decentralised and centralised voltage controls to improve voltage regulation of distribution networks including distributed electricity generation.</p>	<p>Distribution network owners in Finland, Sweden, Germany, Spain, Portugal, UK.</p>	<p>Distribution network owners in other EU-countries</p> <p>Publics in EU countries</p>
<p>4) <u>New Generation Statcom</u> ADINE-project is developing a second-generation separate compensator for improving the recovery of the network during line fault and for improving the control of the voltage level.</p>	<p>Distribution network owners in Finland, Sweden, Germany, Spain, Portugal, UK.</p>	<p>Distribution network owners in other EU-countries</p> <p>Publics in EU countries</p>
<p>5) <u>More competitiveness and reliability</u> When the results of the project become new state of the art in the market it will reinforce the competitiveness of European electricity distributors through more effective asset management and more reliable delivery of electricity.</p>	<p>EU Technology Platform for the Electricity Networks of the Future</p>	Publics in EU countries

2.2. SOURCES AND MEDIA

We should find the best route and media to serve the key messages easily and “naturally” for each target group. Information from Adine should strike through several media to primary target groups. Following table shows the intended routes and media at the first stage.

Primary target group	Route for information	Selected media
Distribution network owners in Finland	Electronic newsletters ST-pooli – annual seminar Energiateollisuus Ry (Association of Finnish Electricity Industry - Member of Eurelectric) Sähkö ja Tele, Energia (magazines) ABB and NC marketing activities	Project mailing list Project presentation Project mailing list Articles R&D highlights in presentations
Tekes	Tekes seminars about grid issues	Project presentations
Distribution network owners in Sweden	Electronic newsletters Elnätsdagarna organized by Svensk Energi (the next one is 26-27 Nov. 2008) Svensk Energi, EnergiDirekt ERA, Elbranschen Compower marketing activities	Project mailing list Articles Articles R&D highlights in presentations
Distribution network owners in Germany	Electronic newsletters German main event for DSOs Cired conference 2008 etz Elektrotechnik und Automation ABB and NC marketing activities	

Distribution network owners in Spain	<p>WP1.2 workshops.</p> <p>Futured (www.future.es)</p> <p>Electronic newsletters</p>	<p>Product presentations.</p> <p>Project presentations.</p> <p>Market study</p> <p>Project mailing list</p>
Distribution network owners in Portugal	<p>WP1.2 workshops.</p> <p>Electronic newsletters</p>	<p>Product presentations.</p> <p>Project presentations.</p> <p>Market study</p> <p>Project mailing list</p>
Distribution network owners in UK	<p>WP1.2 workshops</p> <p>Distribution code work group</p> <p>Electronic newsletters</p>	<p>Product presentations.</p> <p>Project presentations.</p> <p>Market study</p> <p>Project mailing list</p>
<p>Other selected DGTREN and RTD grid issues projects</p> <p>DINEMO</p> <p>SUPWIND</p> <p>WINDGRID</p> <p>ANEMOS.PLUS</p> <p>CRISTAL</p> <p>EWIS</p> <p>GROW-DERS</p> <p>INTEGRAL</p> <p>IS-POWER</p> <p>VSYNC</p> <p>SUSPLAN</p> <p>REALISEGRID</p> <p>TRADEWIND</p>	<p>Grid projects meetings</p> <p>Electronic newsletters</p> <p>Conferences and seminars</p>	<p>Project presentations.</p> <p>Project posters.</p> <p>Public intermediate reports.</p> <p>Project mailing list.</p> <p>Link-lists at web pages.</p>
<p>EU Technology Platform for the Electricity Networks of the Future</p> <ul style="list-style-type: none"> • Secreteriat 	<p>Conferences and seminars</p> <p>Electronic newsletters</p>	<p>Public intermediate reports.</p> <p>Project mailing list.</p>

The messages will be served to secondary target groups by attaching the project posters and presentations to seminars and conferences. Articles will also be served to professional magazines in Finland, Sweden and Germany.

Quantitative objectives for dissemination through seminars and conferences are:

- 1 presentation / year in Finnish and Swedish or in common Nordic conference
- 2 presentations during the project in German conference
- 3 presentations during the project in other European conferences

List of identified conference opportunities

DPSP International Conference on Developments in Power System Protection
17-20 March 2008, Glasgow, UK
<http://conferences.theiet.org/dpsp/>

CIREC Seminar 2008: SmartGrids for Distribution
23-24 June 2008, Frankfurt, Germany
<http://conferences.theiet.org/ciredsmartgrids/index.htm>

Distributed Generation Systems Conference
8-10 September 2008, Blyth, Northumberland, UK
<http://conferences.theiet.org/disgen/index.htm>

NORDAC Nordic Conference on Electricity System Management and Development
8-9 September 2008, Bergen, Norway
www.nordac.net

IEEE International conference on Sustainable Energy Technologies
24-27 Nov 2008, Singapore
Deadline for Paper Submission 1 May 2008
<http://icset2008.org/call-for-papers/>

2008 Power Quality And Supply Reliability Conference
27-29 Aug 2008, Pärnu, Estonia
<http://deepzone2.ttu.ee/eta/pq2008>

MedPower 2008
6th Mediterranean Conference and Exhibition on Power Generation, Transmission and Distribution, Thessaloniki, Greece
<http://medpower08.com>

Power system conference and exposition
5 - 18 Mar. 2009, Seattle, Washington, USA
<http://www.pscexpo.com/2009/>

European Wind Energy Conference & Exhibition
16 – 19 March 2009, Marseille, France
<http://www.ewec2009.info/>

POWERENG International Conference on Power Engineering, Energy and Electrical Drives
18-20 March, Lisbon, Portugal
<http://www.uninova.pt/powereng2009/>

CIREC International Electricity Conference & Exhibition
8-11 June 2009, Prague, Czech Republic
<http://www.cired.org.uk/>
Proposed round table discussion about Active distribution network

IEEE PowerTech
28 June - 2 July 2009, Bucharest, Romania
October 6th, 2008 Deadline for extended abstracts submission
<http://ewh.ieee.org/conf/powertech/2009/>

IEEE PES General Meeting
26 - 30 Jul. 2009, Calgary, Alberta, Canada

Transmission & Distribution Conference & Exposition: Asia and Pacific (T&D Asia)
26 Oct - 30 Oct 2009, Seoul, Korea

IEEE/PES Transmission & Distribution Conference & Exposition (T&D)
20 Apr - 22 Apr 2010, New Orleans, LA, USA
<http://www.ieeet-d.org/>

Third international Conference on Integration of Renewable Energy Sources and Distributed Energy Resources
should be 2008 arranged by EU-DEEP project
<http://www.eudeep.com/>

Annual Conference for Protective Relay Engineers every year, Texas, USA
<http://engineering.tamu.edu/prorelay/>

Nordic wind power conference
2009 or 2010

PowerGrid Europe (together with Power-Gen Europe)
3-5 June 2008, Milan, Italy (arranged every year)
<http://pgrid08.evenst.pennnet.com>

Transmission & Distribution Europe
11-13 March 2008, Amsterdam, The Netherlands (arranged every year)
<http://www.td-europe.eu/>

13th European Conference on Power Electronics and Applications 2009, Barcelona, Spain
8-10 Sept 2009

<http://www.epe2009.com>

2.3. ACCESS AND AVAILABILITY

All dissemination material will be stored in the project web-page in accessible format. Users can download the material when appropriate for them. The web-page address will be included in all dissemination materials and presentations. We also try to get Adine-links to other DGTREN “grid issues” projects pages.

2.4. MONITORING THE SUCCESS

Successful dissemination affects the market. The limited budget of ADINE sets tight boundaries to the dissemination quantity, so we set the reference point for measuring the success as follows:

“If at the end of the project ADINE and its’ serious attempt to demonstrate a new way to manage distribution networks is recognised as a new possibility in research institutes and in most DSOs in target countries, the dissemination has been successful.”

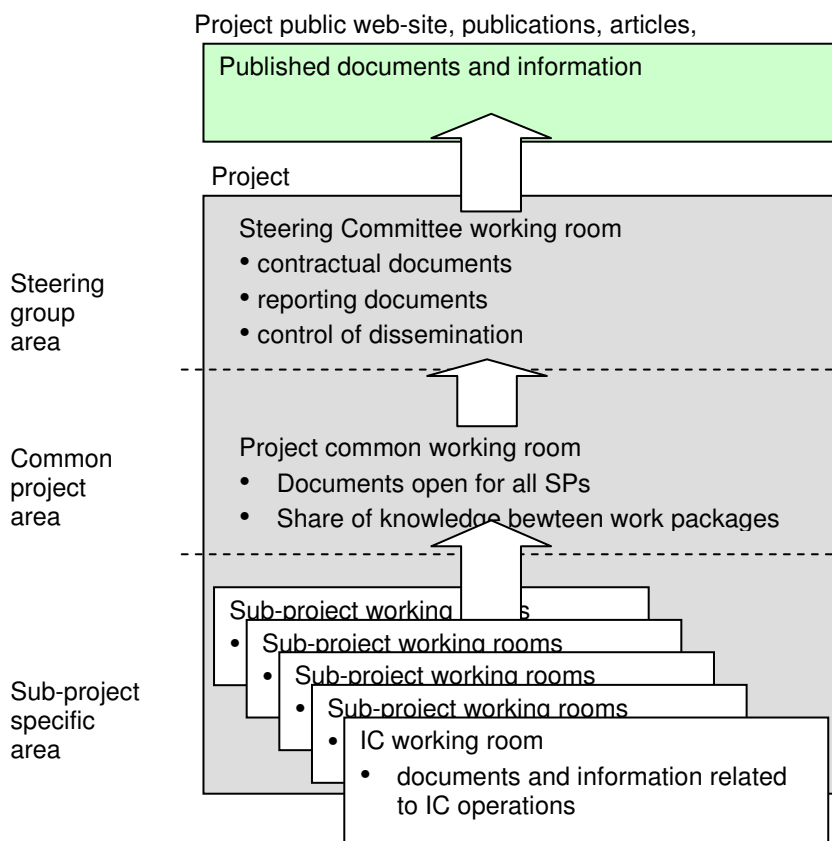
The success towards this reference point can be evaluated only in a qualitative way. The success will anyhow follow with the following success factors, which will be monitored along the project:

1. Quantity of dissemination
 - number of activities
 - public deliveries, presentations, posters and articles
 - presentations and posters in seminars
 - workshops
 - mailing list activities
 - number of message recipients
 - mailing list participants
 - mailing list participants through public web-page gateway
 - participants in seminars and workshops
2. Focus of dissemination
 - number of organisations and persons reached at Primary Target Groups
 - number of organisations and persons reached at Secondary Target Groups
3. Quality of dissemination
 - success rate of abstracts
 - feedback from presentations and corresponding papers where possible
 - feedback from WP1.2 workshops (evaluation from participants)
 - success rate of articles

3. MANAGEMENT OF DISSEMINATION

WP 1.1 includes also necessary activities to ensure successful management of knowledge and to coordinate the dissemination of the results according to dissemination plan. Steering committee is in charge of decisions regarding dissemination opportunities during the project. The management of dissemination actions includes creating, updating and communicating the detailed dissemination plan, creating and updating the project web-site and coordinating the published content in all formats. Hermia is leading this work package and all other project partners are participating in dissemination activities.

To enable systematic and controllable information flows all project documentation and e-mail messaging are managed in intranet application, where each SP has own internal material folder and e-mail tool for operative work. The Implementation Committee and Steering Committee also have own similar working rooms in the intranet. Access to each working room is restricted to corresponding members only. All participants have access to project common working room, where all common material are stored. All published material is released in project’s public www-pages. The structure of project’s internet pages is described in Figure below.



4. PLANNED DISSEMINATION ACTIVITIES FOR FIRST REPORTING PERIOD

The consortium will spread awareness and information about the project in the project internet site and project interest-group mailing list. The consortium will also publish documents in internet. There will be public presentations about intermediate reports and materials about developed solutions and related technical or marketing- type materials. There will also be scientific publications in scientific seminars and ADINE project will exchange information with other projects.

Information flow from outside world to project will be catalysed by arranging introduction sessions relating other corresponding projects in conjunction with SC meetings. In intranet there is also a tool to share valuable links and hints with other project members.

WP1.2 includes dissemination activities that aim to spread knowledge about ANM method to other stakeholders not involved in the project. The work consists of specialist workshops in target countries. In workshops adaptation of ANM method to local markets is discussed with participants from industry and research institutes. The practical arrangements of the workshops will be subcontracted organisation with local presence in the target countries.

Activities for first reporting period 1.10.2007 – 31.3.2009

1. Project internet site

- launched in December 2007
- address is www.adine.fi
- contains general information about project, material folder for published materials and gateway to project e-mail-list.
- Link-list to partner web-pages will be included
- Link-list for other grid-issues project web pages will be included
- Possible other tools that are available, but not used yet are:
 - discussion tool
 - bulleting board
 - questionnaire
- There is also possibility to create sub-pages for sub-projects or partners when needed

2. Project interest-group mailing list

- This e-mail tool is already created and in use
- Coordinator controls the use of this list and is responsible of including/removing persons
- The list will be used for sending delivery notes about published documents of ADINE project (all public deliverables will be included)
- Anyone interested about the project can join the list from the public project web-page

3. Published papers in internet

- public intermediate reports will summarise proceeding and achievements in six month periods. The first ones will be published and disseminated as follows
 - March 31, 2008
 - September 30, 2008
 - March 31, 2009
- public papers in scientific seminars
- general and specific presentations of the project

4. Presentations and posters

This list includes one main conference presentation in Finland, Sweden and Germany + 1-2 other European conferences. UK, Spain and Portugal will be taken care by WP1.2.

Finland, Sweden and other Nordic countries

ST-pooli – annual seminar, Finland
fall 2008, place and location not yet known

NORDAC Nordic Conference on Electricity System Management and Development
8-9 September 2008, Bergen, Norway

www.nordac.net

Presentation by TUT / Abstract already sent.

Germany

CIREC Seminar 2008: SmartGrids for Distribution
23-24 June 2008, Frankfurt, Germany

<http://conferences.theiet.org/ciredsmartgrids/index.htm>

Presentation by TUT / Abstract already sent.

Other Europe

CIREC International Electricity Conference & Exhibition
8-11 June 2009, Prague, Czech Republic

<http://www.cired.org.uk/>

Proposed round table discussion about Active distribution network.

5. Information exchange with other projects

- Coordinator and SP5 leader participate in FP6 grid issues projects seminar in Brussels and establish a dialog with other projects (5.-6. March, 2008). Dissemination routes to each project will be established

6. Dissemination of the results in the network-owner work-shops arranged in WP1.2

- According to WP1.2 plan, first set of workshops will take place between may and September 2008