
INTERNATIONAL ENERGY AGENCY
IMPLEMENTING AGREEMENT ON TECHNOLOGIES
AND PROGRAMMES FOR DEMAND SIDE MANAGEMENT

Task XV: Network-Driven DSM

Task Status Report

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IEA DSM PROGRAMME
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INTRODUCTION

At its meeting in April 2004, the IEA DSM Executive Committee approved the initiation of Task XV: “Network-Driven DSM” and nominated David Crossley as the Operating Agent. At its meeting in October 2004, the IEA DSM Executive Committee declared Task XV to be ‘in force’ from 18 October 2004 and to be completed by 30 April 2006. At this meeting, the Executive Committee also approved a modification of the Objectives and Work Plan for Task XV to include the use of DSM measures to provide both relief of electricity network constraints and network operational services.

SUMMARY OF TASK OBJECTIVES AND SUBTASKS

Objectives

The objectives of Task XV, as approved at the October 2004 Executive Committee meeting, are as follows:

- to identify a wide range of DSM measures which can be used to relieve electricity network constraints and/or provide network operational services;
- to further develop the identified network-driven DSM measures so that they will be successful in cost-effectively achieving network-related objectives;
- to investigate how existing network planning processes can be modified to incorporate the development and operation of DSM measures over the medium and long term;
- to develop ‘best practice’ principles, procedures and methodologies for the evaluation and acquisition of network-driven DSM resources;
- to communicate and disseminate information about network-driven DSM to relevant audiences.

Subtasks

The Work Plan for the Network-Driven DSM Task comprises five Subtasks.

Subtask 1: Worldwide Survey of Network-Driven DSM Projects

Subtask Objective

To identify a wide range of DSM measures which can be used to relieve electricity network constraints and/or provide network operational services.

Subtask Deliverable

A report listing and summarising network-driven DSM projects implemented around the world.

Subtask 2: Assessment and Development of Network-Driven DSM Measures

Subtask Objective

To further develop the identified network-driven DSM measures so that they will be successful in cost effectively achieving network-related objectives.

Subtask Deliverable

A report listing and summarising successful network-driven DSM measures and the specific network problems they address.

Subtask 3: Incorporation of DSM Measures into Network Planning

Subtask Objective

To investigate how existing network planning processes can be modified to incorporate the development and operation of DSM measures over the medium and long term.

Subtask Deliverable

A report on ways in which network planning processes can be modified to incorporate DSM measures as alternatives to network augmentation.

Subtask 4: Evaluation and Acquisition of Network-Driven DSM Resources

Subtask Objective

To develop 'best practice' principles, procedures and methodologies for the evaluation and acquisition of network-driven DSM resources.

Subtask Deliverable

A report on 'best practice' principles, procedures and methodologies for the evaluation and acquisition of network-driven DSM resources.

Subtask 5: Communication of Information About Network-Driven DSM

Subtask Objective

To communicate and disseminate information about network-driven DSM to relevant audiences, including representatives of electricity network businesses, government agencies and electricity end-users.

Subtask Deliverables

- A Task Newsletter.
- Information databases about network-driven DSM projects and measures.
- Regional workshops about network-driven DSM held in Europe, North America and Asia Pacific.

MAJOR ACCOMPLISHMENTS SINCE APRIL 2005

Following are the major accomplishments in Task XV over the last six months.

- Further development of the Task XV website as a sub-site on the IEADSM website. The Task XV website includes both a public site and an Experts secure site which is the main working location for Task XV.
- Further development of the on-line data collection form for the survey of network DSM projects which comprises Activities 1-1 and 1-2 of Subtask 1. The data collection form is linked to a database located on the Task XV website.
- Completion of the survey of network DSM projects. The Country Experts completed the collection of information about network-driven DSM projects implemented in their respective countries. The Operating Agent completed collection of information about network DSM projects implemented in other countries and also collected information about additional projects in some participating countries and reviewed and expanded the material collected by the Country Experts. At the time of writing, detailed case studies have been prepared for 43 network-driven DSM projects. This will form the "raw data" for the remainder of the analysis in Task XV.

- Completion of the first draft of a report listing and summarising network-driven DSM projects implemented around the world. This report includes all the 43 case studies and draws some conclusions about the DSM measures used in the case study projects. By the time of the ExCo meeting, this report will be circulated to the Country Experts and relevant ExCo members for comment. This report is the major deliverable for Subtask 1 and its completion will conclude the subtask.
- Publication of one issue of the Task XV newsletter. The newsletter provides information about progress with Task XV to the Country Experts and relevant IEA DSM Programme ExCo members.

WORK PLAN FOR THE PERIOD OCTOBER 2005 TO MARCH 2006

Timetable

The current timetable for the five subtasks which comprise Task XV is shown in Table 1 on the next page.

At present, the work completed so far in Task XV is about five months behind schedule. The reason for this is the additional elapsed time required to develop case studies of network-related DSM projects in Subtask 1. Both the Country Experts and the Operating Agent has some difficulty in identifying suitable projects for study. Once the projects were identified, it then took considerable time to collect enough detailed information about the implementation of each project. However, the additional time was well spent because we now have 43 detailed case studies of network-related DSM projects that will form the “raw data” for the remainder of the analysis in Task XV.

Because of the time spent on Subtask 1, it is expected that Task XV will require additional time to complete the remaining subtasks. This additional time is shown in the proposed revised timetable in Table 2 below. Consequently, the ExCo will be asked to approve a six month extension for Task XV.

While more elapsed time than expected was taken to complete Subtask 1, the actual paid labour time by the Operating Agent is within budget (see Table 3 below). Therefore there will be no additional cost if the ExCo approves a six month extension for Task XV.

Work Plan

If the ExCo approves a six month extension for Task XV, the following work will be carried out over the next six months:

- complete Subtask 1 by incorporating comments from Country Experts and finalising the report;
- undertake an analysis of the information contained in the database to determine the factors which lead to particular network-driven DSM measures being successful in cost-effectively achieving network-related objectives (Activities 2-1 and 2-2 of Subtask 2);
- carry out further development of the network-driven DSM measures to improve their effectiveness in achieving network-related objectives (Activity 2-3 of Subtask 2);
- complete Subtask 2 by preparing a report listing and summarising successful network-driven DSM measures and the specific network problems they address;
- carry out a survey of the network planning processes implemented in the countries participating in Task XV (Activities 3-1 and 3-2 of Subtask 3);
- commence developing options for modifying network planning processes to incorporate DSM measures as alternatives to network augmentation (Activity 3-3 of Subtask 3);
- provide information about the progress of Task XV to the country Experts and relevant IEA DSM Programme Executive Committee members through a regular newsletter (Activity 5-1 of Subtask 5);
- update databases containing relevant information about network-driven DSM projects and measures, and network planning processes, and make these available to the country Experts through the secure web site (Activity 5-2 of Subtask 5).

EXPERTS MEETINGS

The second Experts meeting for Task XV was held in Sophia Antipolis, France on 12 and 13 April 2005.

The third Experts meeting is scheduled to be held in Madrid, Spain on 17 and 18 October 2005.

FINANCIAL REPORT

Receipts

The first annual financial contribution to Task XV has been received from all of the four participants.

An invoice has been sent to one participant for the second annual financial contribution and this payment has been received.

Invoices for the second annual financial contribution will be sent to the remaining three participants shortly.

Expenditure

Table 3 on the next page details the expenditure incurred in Task XV from the commencement of the Task to 17 September 2005.

Labour is charged in euros and converted to Australian dollars at the exchange rate applicable on the date of invoice payment. Other expenses are charged in the original currency in which

the expense was incurred and converted to Australian dollars at the exchange rate applicable on the date of invoice payment.

To produce this statement, the Australian dollar amounts were converted back to euros at the exchange rates applicable on 17 September 2005. Consequently there are some minor discrepancies compared with the original currency amounts. These discrepancies are caused by movements in exchange rates since the invoices were paid.

Table 3. Task XV Expenditure		
Expense Item	AUD	EUR
Labour	140,241.27	88,021.20
Contractors	0	0
Travel	17,236.86	10,818.50
Bank charges	35.15	22.06
Total	157,513.28	98,861.76

The expenditure to date of EUR 98,861.76 is **43%** of the EUR 228,200 budget for Task XV.

ISSUES TO BE CONSIDERED BY THE EXECUTIVE COMMITTEE

No Cost Six Month Extension

The ExCo is requested to approve a no cost six month extension for Task XV, with the work to be carried out according to the revised timetable proposed in Table 2 above. If this extension is approved, Task XV will be completed by 30 September 2006.

The reason for the requested extension is the additional elapsed time required to develop case studies of network-related DSM projects in Subtask 1.

While more elapsed time than expected was taken to complete Subtask 1, the actual paid labour time by the Operating Agent is within budget (see Table 3 below). Therefore there will be no additional cost if the ExCo approves a six month extension for Task XV.