IEA DSM TASK XXIV:

Closing the Loop - Behaviour Change in DSM: From theory to practice

Task Work Plan

Dr Sea Rotmann, Wellington, NZ and Dr Ruth Mourik Eindhoven, NL, May 2012

This task work plan was developed within Task XXIV of the IEA's
Demand Side Management Implementing Agreement http://www.ieadsm.org

International Energy Agency

Demand Side Management (DSM) Implementing Agreement

Task XXIV “Closing the loop - Behaviour Change in DSM: From theory to practice”

http://www.ieadsm.org

Synopsis

The IEA DSM ExCo and the Task XXIV Experts have tasked their Operating Agents to prepare a two year task workplan on Closing the loop - Behaviour Change in DSM: From theory to practice.

Draft workplans were presented for discussion to the ExCo and Task XXIV Experts at Workshop 1 in Austria and the Netherlands, April 10 and a webinar on April 12, 2012, as well as at the IEA DSM ExCo meeting and workshop in Trondheim in April 2012.

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IEA DSM Task XXIV “Closing the loop - Behaviour Change in DSM: From theory to practice”

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Financing partners of current task work plan

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Agentschap NL

Ministerie van Economische Zaken

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Switzerland

Swiss Federal Office of Energy

Federal Department of the Environment, Transport, Energy and Communications
www.bfe.admin.ch

New Zealand

National Energy Research Institute

www.neri.org.nz

Belgium (currently finalising)
Direction générale Energie
http://economie.fgov.be

Norway (currently finalising)

Enova www.enova.no

Austria (interested)

Finland (interested)

Sweden (interested)

UK (interested)

The Operating Agents wish to explicitly thank the IEA DSM ExCo members of the participating countries and their financing partners for their interest and support.

Contents

Background and Motivation

Towards the energy policy targets

Governments around the world struggle with achieving their targets (often set in legislation) to develop a more sustainable energy system. There is now a growing international realisation that technological development alone will be insufficient to meet those targets.

Energy efficiency and energy conservation have gained renewed interest due to climate convention commitments and the rising concerns about prices and security of supply of imported fuels. Energy efficiency and conservation are the cheapest, fastest and most feasible way to meet climate change mitigation targets, as well as many other environmental objectives. Concern for security of supply and 'peak oil' and other resource shortages have added to the urgency for energy conservation[1].

If one considers that, on average, European Member States households and other small-scale users consume about 26% of total energy used, the potential of these small-scale users to tackle the issues of climate change, security of supply and the energy-efficiency gap is high. However, a significant proportion of energy efficiency improvement potential is not realised in these small-scale user sectors[2]. This is often called the "energy efficiency gap", i.e. the difference between the actual energy efficiency and the higher level of efficiency that would still be cost-effective and relatively easy to implement.

A focus on better understanding what drives behaviour change could close this gap. It is estimated that energy-related behaviour change, facilitated and/or induced by Demand Side Management (DSM) programmes (e.g. feedback strategies that are improved to go beyond the traditional metering and billing) can trigger up to 20% electricity savings[3].

All in all, it is estimated that 'negajoules', i.e. energy saved compared with a 'no-policy scenario', have become the largest single energy source in Europe[4]. Recently, DSM programmes are increasingly acknowledging the untapped potential of changing the patterns of energy consumption by focusing on end-user energy demand reduction through behaviour changes. The potential of behaviour change (peak-load shifting) is, for example, one of the important elements of the business case for an economically viable roll-out of smart meters.[5]

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[1] Geller H. and S. Attali (2005). *The Experience with Energy Efficiency Policies and Programmes in IEA Countries: Learning from the Critics.* IEA Information Paper, Paris, France; European Commission (2005). *Doing more with less — Green Paper on energy efficiency*, Luxembourg: Office for Official Publications of the European Communities 2005— 45pp; *Directive 2006/32/EC*

[2] According to Skip Laitner of ACEEE (*pers comm*) up to 86% of energy used in the US is wasted (2010 US Energy Conversion Efficiency)

[3] eg. IDAE (2009). *Changing Energy Behaviour - Guidelines for Behavioural Change Programmes*, 99p; Dietz et al, 2009. *Household actions can provide a behavioral wedge to rapidly reduce US carbon emissions*. www.pnas.org/cgi/doi/10.1073/pnas.0908738106

[4] *Action Plan for Energy Efficiency* (2006) http://www.managenergy.net/resources/871

[5] Ahmad Faruqui, Dan Harris, Ryan Hledik (2010). Unlocking the €53 billion savings from smart meters in the EU: How increasing the adoption of dynamic tariffs could make or break the EU's smart grid investment. *Energy Policy* 38 (10): 6222-6231

The win-win of behaviour change

There are a many excellent reports that have recently recommended behaviour change methods as superior public policy tools[6]. However, it is also acknowledged that we are still, to date, failing to translate good theory into good practice[7]. Incorporating solid behaviour change understanding into policy-making and programme design will result in many co-benefits:

- ✓ Increased energy security
- ✓ Peak load management
- ✓ Reduced need for new generation
- ✓ Monetary savings
- ✓ Achieving climate change and emission reduction targets
- ✓ Improved health and comfort
- ✓ Social cohesion and altruism
- ✓ Bottom-up community engagement
- ✓ Role-modeling personal and corporate responsibility

Definitions

Detailed definitions for the various behaviour change disciplines, frameworks and models, as well as other technical terms, will be developed during this task with the participating experts. However, in this workplan we understand the following definitions:

Demand Side Management (DSM): DSM refers to all changes that originate from the demand (energy user) side. It can either include reducing the demand for energy (conservation) or shifting demand from peak periods to off-peak periods (load-management). The goal is to achieve large-scale energy efficiency improvements, usually (but not exclusively, we mainly focus on behaviour-driven efficiencies here) by deployment of improved technologies.

Behaviour Change: Behaviours are the externalisation of a complex combination of our emotions, morals, habits, social and normative factors. The majority of energy-consuming behaviours are based on habits and routine, eg switching off the lights (*curtailment behaviours*). Fewer are based on once-off behaviours, such as purchasing or installing energy efficient technology (*efficiency behaviours*). We distinguish between these two behaviour types, but will address both in this task.

Motivations for this new task

DSM aims to release the vast potential for cost-efficient energy efficiency that is locked in on the demand side of energy use (i.e. with the energy user). However releasing this potential proves very challenging. Several issues are crucial to harness this potential. This proposal aims to tackle issues in four areas:

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[6] eg UK Department for Transport Contract PPRO 04/06/33 (Nov 2009). *Individual Behaviour Change: Evidence in transport and public health;* OECD/IEA (2011). *Energy efficiency policy and carbon pricing: Barriers to Energy Efficiency*. 44p; UK House of Lords Science and Technology Select Committee (July 2011). *Behaviour Change Report*. 111pp

[7] The British Academy (March 2012). Nudging Citizens Towards Localism? Peter John with Liz Richardson, 80pp.

1. We need to understand that people do not usually make rational decisions

It is increasingly acknowledged that traditional way of targeting households and other smaller energy users as economically rational individuals (who respond to variables such as price or return of investment) is not effective. It results only in short-term changes. New theoretical approaches and fields (e.g. (social) psychology, behavioural economy, science and technology studies, and different innovation/diffusion theories) focus on DSM and behaviour change.

More research is now being directed into understanding the actions of energy users who seem, at first sight, to be "economically irrational" when it comes to smart energy use. Key questions relate to:

- ✓ Understanding which categories of (energy) behaviours need to be addressed (curtailment vs efficiency) to maximise impact
- ✓ How these behaviours come about and why more sustainable behaviours are shunned by energy users
- ✓ How decisions come about and the roles that contexts, social norms, values and attitudes play in this (including individual and systemic barriers and drivers to behaviour change)
- ✓ What (policy) instruments could be effective and efficient to reduce or remove these barriers and increase drivers; and
- ✓ If these instruments are indeed effective.

2. The need to change energy use needs to be more widely accepted, and go beyond the individual energy user

Many attempts to change energy-related behaviour have been targeted at individuals as consumers of energy. Recent literature has suggested that more focus should be placed on the community level and the social aspects of energy-related behaviour[8]. This is because there are many limitations to individual behaviour change, including social dilemmas (eg freeriders), social conventions (eg peer pressure), the limitations of existing infrastructures and an overall feeling of helplessness when faced with the enormity of the climate challenge. These social contexts are very important and should not be ignored. Research and practice increasingly focus on the role of more participative community-based approaches to change energy use, which communicate the various co-benefits of energy efficient behaviour, using existing social networks. Yet the message that energy use needs to change is not being strongly taken up - by individuals or communities.

There is also greater understanding of the need to tackle the barriers in the broader environment such as laws and regulations, knowledge gaps, lack of economic incentives, missing skills, lack of influence, lack of technologies and good business models etc that hinder behaviour change to take place and to last.

3. There is little sharing of research results related to demand side reduction

This includes sharing of results amongst researchers, the various research disciplines, research institutions and between countries. There is thus little consensus-building on state of the art research perspectives on DSM and behavioural change outcomes.

In addition, best practice in research and in DSM implementation very often does not find its way to policymakers and other relevant stakeholders. If it does, it usually lacks robust and concrete

[8] Eva Heiskanen, Ruth Mourik, Ynke Feenstra, Justin Pariag (2009). BEYOND INDIVIDUAL BEHAVIOURAL CHANGE – WHY AND HOW? ECEEE summer study Panel 7.

evidence on the contribution of DSM and good research theory to successful outcomes. Unsuccessful research is often not shared to avoid embarrassment, even though these outcomes could significantly contribute to shared learning.

The result is that not enough funding and effort are put into designing successful behaviour change programmes and policy interventions that are based on solid research. In addition, not enough practical research is funded in this area due to a lack of uptake by policymakers and DSM implementers. This in turn leads to a lack of successful outcome measures.

4. Monitoring, understanding and learning about/adapting initiatives needs to be done in a more systematic manner

DSM projects demonstrate great diversity of goals, scope, participants, resources etc to meet the diversity of implementing environments. As a consequence, developing a generic evaluation and monitoring framework that is widely applicable, yet does justice to this diversity, is difficult.

There is a real and urgent need for more appropriate and effective monitoring, evaluation and learning of successful DSM implementation. The fact that there is not very much robust and concrete evidence on the contribution of DSM to a more sustainable energy system is not helpful when trying to garner support and demonstrate value to investors, policymakers and other relevant actors – especially when different actors are likely to be interested in different contributions and outcomes.

Currently, DSM policymakers and other relevant stakeholders fund and/or support DSM programmes on a rather ad-hoc basis because they lack these means of assessing their impact on contributing towards a more sustainable energy system. A review of state of the art research findings and current best practice could identify what roles and actions policymakers, investors and other relevant stakeholders might play to make behaviour change for DSM successful in tapping into the vast and cost-effective potential for energy efficiency and conservation.

To conclude, the current energy efficiency gap (or 'market failure' of energy efficiency) results from:

- ✓ a limited or over-simplistic understanding of energy end users acting as economically rational individuals;
- ✓ the insufficient sharing of results within the research community and across scientific and national borders;
- ✓ the limited transfer of best practice and good research to the policy domain and informing real-life interventions;
- ✓ the lack of monitoring and evaluation tools that are meaningful to a variety of stakeholders (e.g. policymakers and investors);
- ✓ a lack of clear recommendations and guidelines concerning the role and actions for different stakeholders, and the specific contexts they operate in; and
- ✓ limited information tailored specifically to countries' needs.

In the end, everyone loses out:

- ✓ behaviour change researchers who are chronically under-funded and whose findings do not inform real-life intervention design;

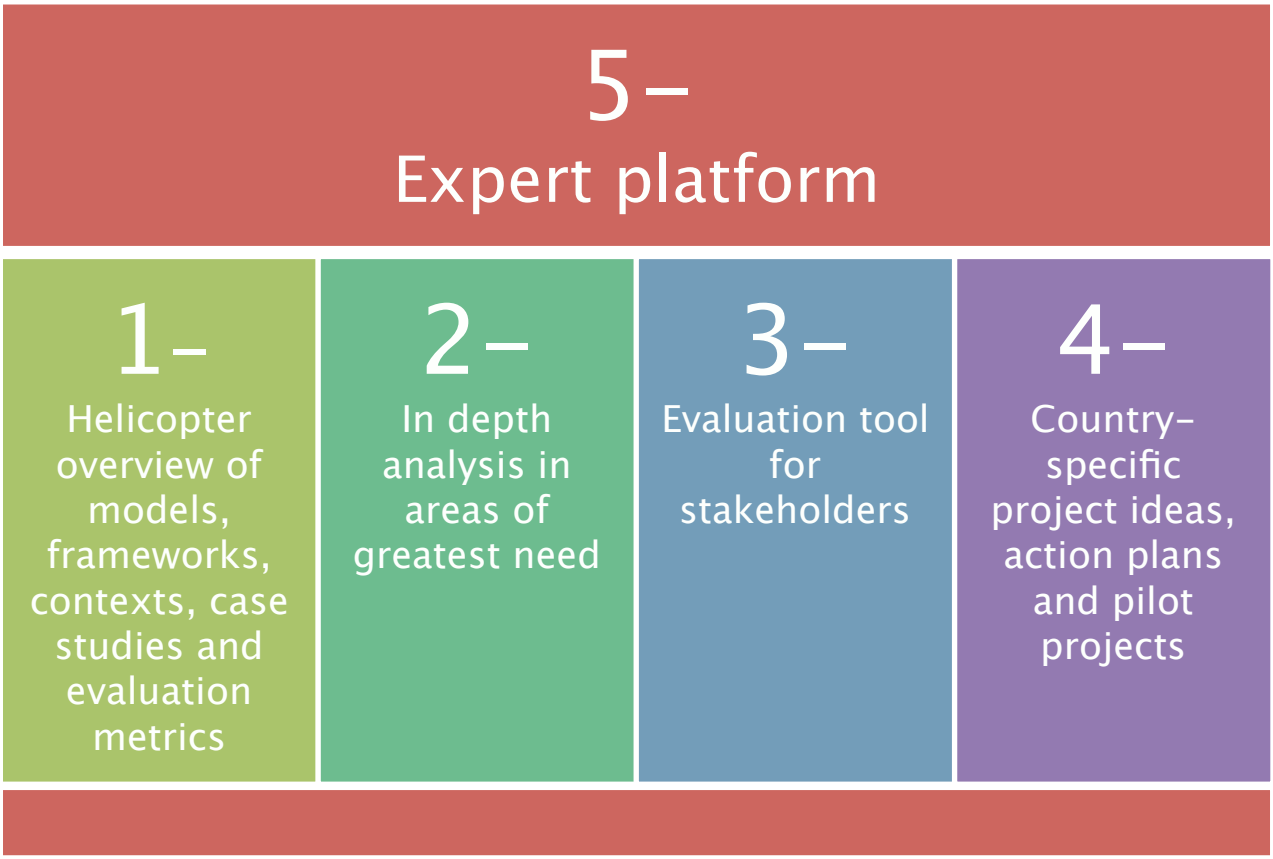
- ✓ policymakers and DSM implementers as they do not benefit from applying best practice research theory into practical applications;
- ✓ research funders as they lack clear evaluation of successful outcomes to fund practical behaviour change research efforts and thus continue relying on the 'easier', technological fixes to our energy problems; and
- ✓ the energy end users and society as a whole as wasteful behaviours are continued, thus not benefitting from the greater energy security, energy affordability and social and environmental outcomes that come with successful DSM projects.

A critical factor in all this, including the DSM work, is to draw as wide a research scope as is manageable. If the wider dependencies are not taken into consideration, the options and recommendations will be flawed and are unlikely to gain lasting traction.

Following from these challenges, this new task of the IEA DSM Implementing Agreement is aimed at developing a framework that clearly links behaviour change research theory with successful policy implementation and outcome evaluation.

The work needs to be manageable, in light of the resources and time available, and to be able to focus quickly and clearly enough on the most important topics of particular interest to participating countries. The research scope will allow a wide scope and a helicopter overview at the beginning of the task (helicopter overview Subtask 1) and a more focused and country-tailored approach in subsequent subtasks.

See Figure 1 below for an overview of our subtasks:



Objectives of Task XXIV

The main objective of this project is to create a global expert network and design a framework to allow policymakers, funders of DSM programmes, researchers and DSM implementers to:

I. Create and enable an international expert network interacting with countries' expert networks
II. Provide a helicopter overview of behaviour change models, frameworks, disciplines, contexts, monitoring and evaluation metrics
III. Provide detailed assessments of successful applications focussing on participating/sponsoring countries' needs (smart meters, SMEs, transport, built environment (in particular, refurbishment and/or renovations))
IV. Create an internationally validated monitoring and evaluation template
V. Break down silos and enable mutual learning on how to turn good theory into best practice

Expected Outcomes

The benefits for the participating countries and for the DSM agreement will encompass:

- ✓ Participation in the IEA DSM Behaviour Change Expert Platform and communication with a large variety of international and national stakeholders
- ✓ Maintaining an ongoing platform of shared learning, best practice examples and know-how
- ✓ A database of global knowledge and examples of behaviour change programmes, models and outcomes
- ✓ Mutual feedback, coaching and experience exchange for country- and context-specific issues
- ✓ Reducing the silos in research disciplines and fostering inter- and intradisciplinary sharing and end user involvement
- ✓ Better ability to get funding and collaborations involving behaviour change programmes and interventions
- ✓ Ability to monitor, evaluate and prove ongoing success of behaviour change outcomes leading to energy and CO_2 savings, health and social benefits, financial savings and community engagement
- ✓ Contribute to an IEA DSM competence centre.

Structure of the Subtasks

Schedule of Activities

Phase / Duration of the action (in months)	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24
Subtask 0: Management of the task												
0.1 Set-up an advisory board												
Workshop to finalise task definition in Austria/NL plus VC, 6-monthly ExCo meetings. Annual Advisory Board (AB) meetings		WS AT/ NL	Ex Co		AB	Ex Co			Ex Co		AB	ExCo
Subtask 1: Helicopter overview of models, frameworks, contexts, case studies and evaluation metrics												
1.0 Development of template to analyse models, frameworks, disciplines and evaluation metrics												
1.1 Inventory of available models, frameworks and disciplines and analysis of applicability of models in differing contexts												
1.2 Deliverable on definitions of models and frameworks and their contextual applicability												
1.3 Build-up and continuous updating of database (wiki style)												
Workshops in BEL (August 2012) and UK (October 2012)				WS BEL	WS UK							
Subtask 2: In depth analysis of topics of particular interest to participating countries												
2.1 Detailed characterisation of targeted cases and development of case study template												
2.2 Collection and analysis of case studies for different selected sectors, themes and countries with inventory of key context factors and success stories and learnings. Insert in database developed under ST1.3												
2.3: Development of deliverable on context factors influencing DSM activities in topics of particular interest to participating countries												
Workshops and webinars in BEL and UK (same as in ST1)				WS BEL	WS UK	Web						
Subtask 3: Evaluation Tool												
3.1: Identifying relevant indicators/metrics/tools for monitoring and evaluation of DSM project and programmes												
3.2 Assessing context sensitivity of indicators/metrics/tools, dependent on stakeholder needs												
3.3: Developing and testing monitoring and evaluation tool												
Workshops New Zealand, Norway, Switzerland								WS NZ	VC	WS NO	VC	WS CH
Subtask 4: Country-specific project ideas, research priorities, to do/not to do lists and ideas for pilot projects												
4.1 Development of stakeholder-tailored to do's and not to do's for successful context (country) sensitive implementation, monitoring and evaluation of DSM projects on selected topics and target groups (i.e. smart metering, SMEs and transport)												
4.2 Development of country specific research priorities, project ideas and pilot plans - to be put in practice if task extension is approved												
4.3 Dissemination of the to do's and not to do's												
Workshops Switzerland, Norway, New Zealand and others if other countries become participants						Web		WS NZ		WS NO	VC	WS CH
Subtask 5: Social media expert platform												
5.1 Overall coordination of the project												
5.2 Design of a Stakeholder Engagement Plan												
5.3 Design of the online platform and specification of its individual components in consultation with experts												
5.4 Utilisation of ongoing expert platform												
Workshop to finalise task definition in Austria/NL plus VC, ExCo meeting sign-off in Norway April 18, 2012. Ongoing online interaction		WS Aut/ NL	Web	Web	Web	Web	Web	Web	Web	Web	Web	Web

Note: VC = video conferencing or webinars; Web = web-based engagement; WS= expert workshops; ExCo = DSM Executive Committee meetings (6 monthly); AB= Advisory Board meetings. Also note that not all countries mentioned have already signed Notice of participation letters.

Subtask 0: Task Management

Subtask number	0
Start date or starting event:	Month 1
End date of subtask	Month 24
Subtask title	**Project coordination, ExCo feedback and reporting**
Activity Type	Management and administration

Objectives

- Overall project coordination and management, including contact relationship management
- Attendance of ExCo meetings, conferences and reporting to IEA DSM ExCo
- Set-up Task Advisory Board (AB) of stakeholders (ExCo, IEA, intermediaries from research, industry, government, community sectors)

Description of work and activities

Subtask 0: Management of the task												
0.1 Set-up an advisory board (AB)												
Workshop to finalise task definition in Austria/NL plus VC, 6-monthly ExCo meetings. Annual Advisory Board (AB) meetings		WS AT/ NL	Ex Co		AB	Ex Co			Ex Co		AB	ExCo

This subtask will focus on overall project management, attending ExCo meetings and report-back to the IEA DSM ExCo members, organising financial and other administrative issues and publicising the task. It will also involve a series of kick-off workshops and webinars to finalise the task definition and expert input/output (held April 10 and 12, 2012). Outputs include: Overall project organisation and management (OAs); Task Status reports (OAs with inputs of NEs, AB); Annual reports (OAs); End of Term report, if applicable (OAs with inputs from NEs, AB); Participation in IEA DSM ExCo meetings (OAs); Final report and task management report (OAs with inputs of NEs, AB); Task flyers – at the start and at the conclusion of the project (OAs); Communication with related IEA tasks and other projects (OAs).

Task Sharing

Subtasks	**SEA**	**DW**	**BE**	**NL**	**CH**	**NO**	**NZ**	**AB**
0	1 month	0.5 month	2 days	2 days	2 days	2 days	2 days	2 days
Workshops NL and AT ExCo, AB meetings	15 days	15 days	1 day	1 day	1 day	1 day	1 day	1 day
total	**1.5 months**	**1 month**	**3 days**	**3 days**	**3 days**	**3 days**	**3 days**	**3 days**

The Operating Agents (OAs) will ensure project progress according to the timetable, deliverables, milestones and expected results and the professional, result-oriented implementation of the project in close collaboration with the national experts (NEs). The OAs are also responsible for all reporting to the DSM ExCo. The Advisory Board (AB) will provide strategic overview and governance.

Task Management and Distribution of Responsibilities [9]

The Operating Agents (OAs) are responsible for the overall performance, time schedule, information transfer, reporting etc of Task XXIV following the Procedural Guidelines for the IEA DSM Programme.

[9] Note that the responsibilities described here apply to other subtasks as well

The responsibilities of the OAs include:

a) Taking care of the overall management of the task, including co-ordination, liaison between the subtasks, flow of information between the participants and communication with the Executive Committee;

b) Providing a task status report to each ExCo meeting, the Final Report and the Task Management Report;

c) Distributing the results of the work;

d) Chairing the task meetings and setting the agenda. Assistance at each meeting will be provided by the participant from the country hosting the meeting;

e) In her role as Subtask leader, the Operating Agent is responsible for the quality and the management of the work to be performed under the Subtask; including the preparing, editing, and organising of Subtask deliverables, providing status reports on the progress made and convening and leading Subtask meetings as required;

f) Performing additional services and actions as may be decided by the ExCo if provided with appropriate resources;

g) Maintaining contacts with work related to this Task going on in other Implementing Agreements or in other international organisations; organising other meetings as presented in the work plan.

Task XXIV Operating Agents[10]

Dr Sea Rotmann (SEA, NZ) and Dr Ruth Mourik (DuneWorks, NL) are the two co-Operating Agents of Task XXIV, with Dr Sea Rotmann undertaking primary duties such as invoicing.

Each National Expert (NE):

a) Will provide the subtask leaders with detailed reports on the results of the work carried out and all relevant information and data;

b) Will give the best possible contribution to the content and reviewing of the draft reports of the Task and the subtasks;

c) May organise one expert meeting and/or stakeholder workshop in his/her home country over the course of the task;

d) Will contribute to the Task XXIV expert platform and provide case studies and country-specific input;

e) Supports the OAs in disseminating the results of the work.

The participating countries will assign national experts (NEs) to Task XXIV on their notice of participation.

Task XXIV National Experts[11]

Netherlands: Dr Ruth Mourik
Switzerland: Dr Vicente Carabias-Hütter
Belgium: Dr Ioana-Georgiana Ciuciu and Dr Frédéric Klopfert (final sign-off pending)
New Zealand: Dr Janet Stephenson
Norway: pending on tender

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[10] As signed off at May 20, 2012 ExCo meeting in Norway.

[11] As assigned by June 2012 by the participating countries (additional countries and experts may follow)

The Advisory Board:

Will provide OAs with overarching strategic and governance advice and feedback (at least once a year in a face-to-face or online meeting set up by the OAs).

Deliverables

D0: Advisory committee of stakeholders from ExCo, IEA, research, commercial, community, policy and end user sectors providing strategic guidance.

Other deliverables:

- Four half-yearly task status reports (first one completed)
- Three annual reports (first one completed)
- One End of term report (if applicable)
- One Final report (compilation of subtask deliverables)
- Task management report
- IEA DSM Spotlight articles (first one completed, second in preparation)
- Two Task flyers (first one completed)

Subtask 1: Helicopter overview

Subtask number	1
Start date or starting event:	Month 1
End date of subtask	Month 12 (Database will continue until end of Task)
Subtask title	**Helicopter overview of models, frameworks, contexts, case studies and evaluation metrics**
Activity Type	Scientific and empirical inventory

Background to this Subtask

[Note: It is still critical to draw as wide a research scope as is manageable and to involve as many experts and country case studies as possible in this Subtask. However, feedback from the kick-off workshops and webinar made it clear that the draft Subtasks were too ambitious in light of the resources and time available. They also did not focus quickly and clearly enough on the topics of particular interest to participating countries. Thus, draft Subtasks 1 & 3 were combined into this new Subtask 1. The new Subtask 2 focuses on very specific needs and issues relevant to the participating/sponsoring countries.]

Achieving a lasting reduction of energy consumption is a huge challenge for policymakers and DSM practitioners. An estimated 30% of energy demand is locked in the so-called ‘behavioural wedge’. This ‘wedge’ includes people’s energy-using habits, as well as their purchasing decisions of energy (in)efficient technologies. Both of these behaviours will be focused on in this Subtask.

A fundamental challenge is how to understand energy behaviour change processes. There are diverse social scientific models of understanding behaviour, but to date there has been little interaction and exchange between the various models and disciplines. As a first step in the

challenge of moving towards an interdisciplinary model of better understanding behaviour change, we will present an inventory of what the diverse (sub)disciplines have to offer both theoretically and empirically. A structured draft overview of the diverse models of understanding of behavioural change (in relation to Energy DSM) is provided below. The Subtask will develop this overview with input from the national and contributing experts. In addition, short (140 characters to be 'tweetable') definitions of each model/framework/discipline will be developed and underpinned by a range of empirical (case) studies that use or operate in these models/frameworks/disciplines. Pros and cons of each approach will be discussed.

Overview of disciplines offering models of understanding behaviour change[12]

Disciplinary angle:	**Who might contribute to this?**
Economics:	
– Classical economic theory (rational choice)	
– Behavioural economics	Hans Nilsson
– Evolutionary economics	
– Industrial ecology (?)	
Psychology:	
– Cognitive psychology	
– Social psychology	
– Organisational psychology	
– Neuropsychology	
Sociology:	
– Practice theory	Elizabeth Shove
– Sociology of consumption (wageningen)	Spaargaren, Van Vliet
Anthropology	Ruth Mourik
Political science:	
– Reflexive and deliberative governance (Hajer; Voss etc)	
– New institutionalism – institutional capacity building for common pool resource management (Ellinor Ostrom; Healey)	
– Critical policy analysis (policy practices)	
– Policy frameworks for DSM	
– The politics of smart metering	
Communication theory, storytelling	Nick Potter
Social marketing inducing behavioural change	
Agent based modelling	
Law	
Interdisciplinary approaches:	
Multilevel strategic niche management	DW/Tue; SPRU
STS studies	Henrik Karlstrøm
• Scripting	
• design by intent	
Innovation studies (social innovation)	DW/Tue; SPRU
– Spatial/urban planning	

[12] Note this is not a completed or exclusive collection

The inventory is done at the level of conceptual/theoretical frameworks that provide explanations of how behavioural changes come about[13]. When assessing the models' (potential) contribution to understanding energy DSM and behavioural change, we will also attempt to address the following underlying key issues and challenges.

One of the key challenges facing energy DSM initiatives (and policy in general) is finding the right ways to monitor and evaluate the initiative and its impacts. Definitions of success can refer to effectiveness in terms of reaching the set goals in a cost-and resource-efficient way. They can refer to 'outputs' (eg number of houses insulated under a government insulation subsidy scheme) or 'outcomes' (eg overall health improvements of occupants from insulated homes). Although this can work well for particular initiatives and programmes, it may fall short in the following ways:

- It does not allow for evaluating 'learning' while in fact social learning (potentially leading to a change in 'social norm') might be a crucial criterion to account for the occurrence of behavioural change
- It does not consider that DSM initiatives may change along the course of time to adapt to changing circumstances ('double loop learning').

In addition to these issues, more generally we are confronted with the following:

- Usually no budget is available to continue evaluation beyond the duration of a DSM intitiative – ongoing evaluation (18 months to 3 years) is imperative to be able to see if long-lasting behavioural change has taken place
- Attributing 'success' to the particular DSM initiative can be problematic because other (changing) circumstances may have affected the outcome as well. It is the interaction of the DSM initiative with the particular context variables that produces a particular outcome.

This Subtask will also develop an inventory of available evaluation metrics and underpinning case studies and examples. As part of this work, we will create an inventory of specific contexts that can influence behaviour change and DSM initiatives (again, with case studies and examples, where applicable).

Objectives

- To identify the range of behavioural models, frameworks and disciplines that have relevant insight into human behaviour and energy demand side management in a variety of end-use sectors.
- To create a template for analysis of behaviour change models and disciplines that assess both habitual and purchasing behaviours.
- To understand the benefits and limitations of applying different models/approaches/ frameworks to different contexts (target group, targeted behaviour, country, scale, technology, timing etc).
- To identify which models could be combined to address specific issues. See below for a draft table that will be built on to organise this inventory.
- To select relevant models that can inform DSM initiatives that are focusing on particular topics of interest: e.g. smart metering, SMEs, renovation programmes and transport (and

[13] Different models rely on different assumptions regarding what sort of knowledge, methods of data collection and interpretation are considered valid. We will not discuss this in-depth for each model but of course need to take it into account when discussing the ways in which insights from different models can be combined.

any additional issue, topic, sector that participating countries identify as relevant.) Note: this will feed into Subtask 2.

- To identify the various available evaluation metrics and their usefulness for different stakeholders (e.g. policymakers, funders, end-users). Note: this will feed into Subtask 3.

Template for assessing and describing different models of understanding behaviour change

1. Key questions:
For which questions is this model of understanding suitable?
For which questions is this model of understanding unsuitable?
Complementarities with other models of understanding?
2. What does this model say about:
– Energy (DSM/consumption)
– Key units of analysis
– The (role of the) individual – The (role of) social context
– Actors and institutions
– What behaviour is assessed (purchasing or habitual)
– Behavioural change processes – Social change
– Relevant conditions/factors affecting behaviour change
– Potential of (policy) interventions to encourage behavioural change
– Monitoring and evaluation
3. What are the strengths of this model? (e.g. in terms of providing explanation, insight, a novel perspective; in terms of providing ideas for intervention; being action oriented or not; grounded in theory; grounded in empirical work)
4. What are the weaknesses of this model? (e.g. in terms of providing explanation, insight, a novel perspective; in terms of providing ideas for intervention; being action oriented or not; grounded in theory; grounded in empirical work)
5. What specific examples and case studies underpin this model?
6. Additional comments (e.g. on how this model can be made practicable for practitioners and policymakers; if this model addresses other topics than energy, how does it still bear relevance to energy DSM)

Description of Work and activities

Subtask 1: Helicopter overview of models, frameworks, contexts, case studies and evaluation metrics													
1.0 Development of template to analyse models, frameworks, disciplines and evaluation metrics													
1.1 Inventory of available models, frameworks and disciplines and analysis of applicability of models in differing contexts													
1.2 Deliverable on definitions of models and frameworks and their contextual applicability													
1.3 Build-up and continuous updating of database (wiki style)													
Workshops in BEL (August 2012) and UK (October 2012)				WS BEL	WS UK								

ST 1.0: The Operating Agents (OAs) and the National Experts (NEs) will collectively design the research template, with input from other participating experts

ST 1.1: All NEs, the OAs and selected research experts from a variety of disciplinary, sectoral and national backgrounds will contribute models of understanding behaviour change and DSM that were researched and/or used in their countries, and discuss their pros and cons and learnings; complementary and conflicting issues between the models, frameworks and approaches; and their

contextual sensitivities. The OAs will prepare a positioning paper with Swiss, Belgian, Dutch, New-Zealand and UK experts to discuss and finalise at the BEL and UK workshops in August and October 2012.
ST 1.2: 'Tweetable' definitions (i.e. no more than 140 characters) of all models, frameworks and disciplines, produced by different participating experts, including the national experts.
ST 1.3: Designed by the OAs and added to by all participating experts.

Task Sharing and expected person months/days per national expert [14]

Subtasks	SEA	DW	BE	NL	CH	NO	NZ	SP*	UK*	others
1.1	1 month	0.5 month	1 day	1 day	1 day	1 day	1 day	1 day	1 day	1 day
1.2	1 month	0.5 month	1 day	1 day	1 day	1 day	1 day	1 day	1 day	1 day
1.3	1 month	0.5 month	1 day	1 day	1 day	1 day	1 day	1 day	1 day	1 day
1.4	1 month	0.5 month								
Workshops BE and UK	3 days	3 days	3 days	3 days	3 days	3 days	3 days	3 days	3 days	3 days
total	**4 months + 3 days**	**2 months + 3 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**

Deliverables

This Subtask 1 will produce two deliverables:

- D1: Database and/or Wiki of all experts, collected case studies, best practice, models, frameworks, definitions, contexts, evaluation metrics, references etc.
- D2: A 'report' of which the final format is yet to be finalised with the experts. Most likely it will be highly interactive, easy to access and comprised of easily understandable formats such as infographics, podcasts, webinars, Pecha Kucha slideshows, youtube videos, TED talks etc.

Subtask 2: In-depth analysis

Subtask number	2
Start date or starting event:	Month 1
End date of Subtask	Month 12
Subtask title	**In-depth analysis of topics of particular interest to participating countries**
Activity Type	Scientific and empirical inventory

Background

The idea of Subtasks 1 and 2 is to:

a)Make a big-picture, helicopter overview inventory of the 'landscape' and the various puzzle pieces that make up the very complex world of 'behaviour change in DSM'; and

[14] Depending on the number of participants per country this figure may be 3 days, 6 days (2 participants), 9 days (3 participants, etc). The figures shown here only account for National Expert time.
* Spain and the UK have already promised expert input in-kind, despite not having signed on to become financially participating countries yet

b)Create an in-depth analysis of specific themes, sectors, and target group-specific issues that have been identified as relevant and in need of deeper understanding by the participating countries. This will be achieved by means of specific selected case studies.

In addition, we will explicitly focus on the usability of the inventoried models of understanding and evaluation metrics that were analysed and inventorised in ST 1. The review of case study material that we propose will identify relevant outcomes and conclusions to show how these models contribute to an enhanced understanding of energy DSM and behaviour change and what best practices exist on specific selected themes, sectors and targets.

We will also critically look for ways to improve empirical inquiry and evaluation of energy DSM practices, with a special focus on what definition of success is relevant for what stakeholder (which will feed into ST 3).

Topics of particular interest that have already been identified by participating countries are the following:

- Difference for DSM when dealing with habitual versus purchasing behaviours;
- Smart metering in relation to energy DSM;
- SMEs and energy behaviour change and DSM;
- Addressing the effectiveness of DSM connected to building renovation programmes;
- Legal frameworks needed for the uptake of smart metering;
- Effectiveness of DSM and behaviour change in relation to smart meters;
- DSM in transport through behaviour changes (i.e. mobility patterns, fuel efficient driving, fuel switching and broader systemic changes);
- Evaluation metrics for DSM in combination with smart metering;
- Monitoring and evaluating metrics over the long term and how to attribute success to the particular interventions;
- Inventories of policies and programmes world wide;
- Inventory of research agenda on DSM and behaviour change.

Objectives

- Develop a template for analysing selected case studies with special focus on stakeholder-dependent definitions of successful outcomes of behaviour change interventions
- Collect 3-5 exemplary DSM cases per participating countries (linked to the above identified selected topics)
- Make a country- and sector-specific inventory of all contextual factors influencing the effectiveness of the selected DSM programme topics
- Identify key approaches to solving, circumventing or using contextual issues on the local, regional and national level and share learnings and best practice
- Insert the collected case studies to the database and/or wiki developed under ST1

Description of work and activities

Subtask 2: In depth analysis of topics of particular interest to participating countries												
2.1 Detailed characterisation of targeted cases and development of case study template												
2.2 Collection and analysis of case studies for different selected sectors, themes and countries with inventory of key context factors and success stories and learnings. Insert in database developed under ST1.3												
2.3: Development of deliverable on context factors influencing DSM activities in topics of particular interest to participating countries												
Workshops and webinars in BEL and UK (same as in ST1)				WS BEL	WS UK	Web						

This Subtask will have a combined empirical and scientific approach to developing a country-specific overview of topics of particular interest to participating countries that need further research and deeper understanding. It will then continue with an analysis of the context and process factors that influence the successfulness of the DSM programmes deployed in specific topics, sectors or targeting specific end user groups.

The in-depth understanding will be realised by means of case study examples (including post evaluation of case studies) highlighting these factors, and successful (and less successful) approaches to work around, or with these factors.

ST2.1: The Operating Agents (OAs) and National Experts (NEs) will work together to develop a country-specific inventory of topics of particular interest to participating countries. On the basis of these topics, the characterisation of targeted cases to be analysed will be developed. Many of these issues will be discussed during the BE and UK workshops in mid 2012. A generic inventory of programmes and contextual factors will be prepared by the OAs and selected experts and then sent to all experts before relevant workshops in BE and UK in 2012. The experts who are presenting their case studies will be asked to consider their country's specificities of these factors before the workshop.
ST 2.2: OAs and NEs will undertake the analysis of 3-5 case studies per country.
ST 2.3: To be developed by the OAs and commented upon by the NEs.

Task Sharing and expected person months/days per partner

Subtasks	**SEA**	**DW**	**BE**	**NL**	**CH**	**NO**	**NZ**	**SP***	**UK***	**others**
2.1	1 month	0.5 month	2 days	2 days	2 days	2 days	2 days	2 days	2 days	2 days
2.2	2 month	1 month	2 days	2 days	2 days	2 days	2 days	2 days	2 days	2 days
2.3	2 month	1 month	2 days	2 days	2 days	2 days	2 days	2 days	2 days	2 days
Workshops BE and UK	*Already counted under ST1*									
total	**5 months**	**2.5 months**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**

Deliverables

- D3: Surveys and post-evaluation of detailed case studies topics of particular interest to participating countries. The exact format for this deliverable will be decided upon with the participating countries to ensure the best possible format for different types of stakeholders. The case studies will be fed into the database/Wiki to be developed in the first Subtask.

Subtask 3: Evaluation Tool

Subtask number	3
Start date or starting event:	Month 9
End date of subtask	Month 24 with draft deliverables due in month 22 for last workshop
Subtask title	**Evaluation Tool for stakeholders**
Activity Type	Scientific and empirical analysis

Objectives

- To develop a practical, context-specific monitoring and evaluation tool for DSM projects and programmes, with the specific aim to meet various stakeholder needs for outcome evaluation. This tool will be developed to match with the monitoring and evaluation analysis of the topics of particular interest to participating countries (Subtask 2).

Description of work and activities

Subtask 3: Evaluation Tool for stakeholders												
3.1: Identifying relevant indicators/metrics/tools for monitoring and evaluation of DSM project and programmes												
3.2 Assessing context sensitivity of indicators/metrics/tools, dependent on stakeholder needs												
3.3: Developing and testing monitoring and evaluation tool												
Workshops New Zealand, Norway, Switzerland								WS NZ	VC	WS NO	VC	WS CH

This Subtask will focus on the development of indicators, metrics and ways to monitor and evaluate long-term, identifiable and/or measurable behaviour change outcomes of DSM programmes. These indicators etc will be context sensitive and contingent on the sector/goals/ target groups of behaviour change programmes. Case studies of successful measurements and monitoring of ongoing behaviour change outcomes will be included.

ST 3.1: will be a co-creation process between the Operating Agents (OAs) and the National Experts (NEs) and other invited experts.
ST 3.2: will be undertaken mainly by the OAs with feedback from the NEs.
ST 3.3: will be the main task of the OAs with feedback from users of the tool (stakeholders). Specific workshops with intended users will be developed.

Task sharing and expected person months/days per partner

Subtasks	**SEA**	**DW**	**BE**	**NL**	**CH**	**NO**	**NZ**	**SP***	**UK***	**others**
3.1	1 month	0.5 month	1 day	1 day	1 day	1 day	1 day	1 day	1 day	1 day
3.2	2 months	1 month	1 day	1 day	1 day	1 day	1 day	1 day	1 day	1 day
3.3	2 months	1 month	1 day	1 day	1 day	1 day	1 day	1 day	1 day	1 day
Workshops NZ, NO, CH	3 days (1 per WS)	3 days	3 days	3 days	3 days	3 days	3 days	3 days	3 days	3 days
total	**5 months + 3 days**	**2.5 months + 3 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**	**6 days**

Deliverables

D4: Tool to evaluate 'successful outcomes' of DSM programmes for a variety of stakeholders (political, policy, community, industry, end user).

Subtask 4: Country-specific recommendations

Subtask number	4
Start date or starting event:	Month 8
End date of subtask	Month 24 with draft deliverables due in month 22 for last workshop
Subtask title	**Country-specific to do's and not to do's, research priorities and pilot programmes or action plans**
Activity Type	Empirical analysis

Objectives

- Development of country specific:
  - to do's and not to do's for the particular topics of interest identified in ST 2.1
  - research priorities in participating countries
  - pilot project ideas/action plans for participating countries (to be put into practice if task extension is approved)
- Disseminating these guidelines, potentially training stakeholders in using them.

Description of work and activities

Subtask 4: Country-specific project ideas, research priorities, to do/not to do lists and ideas for pilot projects													
4.1 Development of stakeholder-tailored to do's and not to do's for successful context (country) sensitive implementation, monitoring and evaluation of DSM projects on selected topics and target groups (i.e. smart metering, SMEs and transport)													
4.2 Development of country specific research priorities, project ideas and pilot plans - to be put in practice if task extension is approved													
4.3 Dissemination of the to do's and not to do's													
Workshops Switzerland, Norway, New Zealand and others if other countries become participants						Web		WS NZ		WS NO	VC	WS CH	

This Subtask will be the culmination of all collected and analysed data in Subtasks 1-3.
It will highlight what makes a good example 'good', when, where, why and how in the participating countries and on the topics of particular interest to these countries.

ST 4.1: Country-specific to do's and not to do's for different stakeholders when developing a new DSM programme in the participating countries will be developed by OAs and NEs.
ST 4.2: OAs, with input from NEs, will develop research priorities, plans for relevant and necessary pilot/action research projects for the respective countries. Special focus will be placed on the frameworks/approaches that are best suited to different questions/outcomes that are sought (based on ST 2.1). In addition, we will highlight how to monitor and evaluate successful outcomes from a DSM project/programme (outcome of ST 3).
ST 4.3: The dissemination of these do's and don'ts will be the main task of the OAs.

Task sharing and expected person months/days per partner

Subtasks	**SEA**	**DW**	**BE**	**NL**	**CH**	**NO**	**NZ**
4.1	1 month	0.5 month	3 days	3 days	3 days	3 days	3 days
4.2	2 months	1 month	5 days	5 days	5 days	5 days	5 days
4.3	2 months	1 month	1 day	1 day	1 day	1 day	1 day
Workshops NZ, NO, CH (other participating countries?)	10 days	10 days	2 days	2 days	2 days	2 days	2 days
total	**5 months + 10 days**	**2.5 months + 10 days**	**11 days**	**11 days**	**11 days**	**11 days**	**11 days**

Deliverables

D 5: To do's and not to do's, priority research areas and ideas for pilots and/or action research projects for participating countries and stakeholders.

Subtask 5: Expert Platform

Subtask number	5
Start date or starting event:	Month 1
End date of subtask	Month 24
Subtask title	**Social Media Expert Platform**
Activity Type	Networking, dissemination

Background

Behaviour change is a very social human issue. One of the main drivers/barriers for behaviour change are prevailing social norms. These social norms are strongly affected by our social networks. Social media has become a prevailing, global tool to engage with our social networks. Hence, this task will utilise the idea of social networks (and social media as a tool to engage them) to disseminate, engage, collaborate and share learnings with the experts and stakeholders from participating or contributing countries.

Objectives

- Design, development and run social media expert platform

Description of work and activities

Subtask 5: Social media expert platform												
5.1 Overall coordination of the project												
5.2 Design of a Stakeholder Engagement Plan												
5.3 Design of the online platform and specification of its individual components in consultation with experts												
5.4 Utilisation of ongoing expert platform												
Workshop to finalise task definition in Austria/NL plus VC, ExCo meeting sign-off in Norway April 18, 2012. Ongoing online interaction		WS Aut/ NL			Web			Web			Web	

ST 5.1: The NZ OA will create a social media expert platform for a large number of experts from different sectors (research, policy, implementation, plus different end use sectors). This platform will explicitly aim to create a learning culture and social network among its experts.
ST 5.2: The OAs will develop a stakeholder engagement plan to outline how various stakeholders are hoped to be engaged using the expert platform.
ST 5.3: Design and beta testing of the platform by New Zealand OA and volunteering stakeholders.
ST 5.4: Ongoing utilisation of platform. This will only be successful if all experts engage and utilise the platform for sharing information, learnings etc. The platform is meant to introduce experts from various countries, disciplines and stakeholder groups to one another and to foster collaboration outside this Task.

Task sharing and expected person months/days per partner

Subtasks	SEA	DW	BE	NL	CH	NO	NZ	SP*	UK*	AB
5.1	0.5 months									
5.2	3 days	3 days								
5.3	1 month									
5.4	1 month	0.5 month	10 days	10 days	10 days	10 days	10 days	10 days	10 days	5 days
Workshop NL/AT/web	*Already included in ST 0. Beta testing volunteers not counted towards NE time (< 1d).*									
total	**2.5 months + 3 days**	**0.5 months + 3 days**	**10 days**	**10 days**	**10 days**	**10 days**	**10 days**	**10 days**	**10 days**	**5 days**

Deliverables

D 6: Social media expert platform and meeting place for (invited) DSM and behaviour change experts and implementers. This platform will include a wide range of social media tools to foster greatest ability to interact, share and discuss. Experts can upload blogs, videos, photos, documents, slides and their biographies. They can chat, start groups and discussion fora, invite other experts and tweet or facebook from the site. It is meant to provide a 'matchmaking' service to enable trans-national, inter-disciplinary teams of experts and end users to collaborate and bid for funding. This platform may in future be hosted on the DSM-IA Task XXIV website. It's current web address is www.ieadsmtask24.ning.com

Task XXIV Task sharing overview

In addition to the cost sharing to the OA budget, each country will be required to:

Provide expert time of approximately 1.5 person-months a year (42 days per national expert). This includes:

- ✓ Undertaking part of the research and/or writing work for selected parts of Subtasks 1 to 5
- ✓ Attending up to six meetings/workshops of the Task and preparing for them
- ✓ Hosting a meeting/workshop during the lifetime of the Task
- ✓ Carrying out the national dissemination activities, plus
- ✓ Actively engaging in the expert platform.

Participation may partly involve funding already allocated to a national activity, which falls substantially within the scope of work to be performed under this Task.

Task XXIV Deliverables overview

Subtask	Deliverable	Deliverable name	Type of deliverable	Month of completion
0	D0	Advisory committee	Network	8
1	D1	Database/wiki listing collected models, cases	database	12 but ongoing
1	D2	Final 'report' on work in ST1	Interactive format	12
2	D3	Surveys and post-evaluation of detailed case studies topics of particular interest to participating countries	Report/interactive	12
3	D4	Tool to evaluate 'successful outcomes' of DSM programmes	Interactive	16
4	D5	To do's and not to do's, priority research areas and ideas for pilots and projects for participating countries and stakeholders	Briefs and other formats	24
5	D6	Social platform and meeting place for DSM and behaviour change experts and implementers	Online social media platform	ongoing

Additional subtasks for possible extension after 24 months (turning theory into practice):

Subtask 6: Pilot DSM/action research projects in participating countries to test and further refine guidelines on how to best design and implement pilots for each of the specific contexts, cultures, sectors and energy end uses
Subtask 7: Evaluate outcome success of pilots for at least 18 months to 3 years to prove ongoing, habitual change has taken place
Subtask 8: Roadmap for research and programme investors on how to prioritise what type of DSM projects/programmes, when, where and how to fund best-practice to achieve greatest long-term outcomes that build on prior work in the sector/country.

Task XXIV Budget[15]

4 - 5 countries	6 - 7 countries	8 - 9 countries	10+ countries
€40,000 per country (2 project coordinators, travel, platform development, overheads) **Total budget €160,000**	**€40,000 per country** (2 project coordinators, travel, platform development, overheads) **Total budget €240,000**	**€40,000 per country** (2 project coordinators, travel, platform development, overheads) **Total budget €320,000**	**€40,000per country** (2 project coordinators, travel, platform development, overheads) **Total budget €400,000**
Level of detail in deliverables: · Social expert platform · Helicopter overview · High-level evaluation and monitoring overview · In-depth analysis of country specific context of 4-5 countries · Action plans and specific recommendations for 4-5 countries	Level of detail in deliverables: · Social expert platform · Helicopter overview · High-level evaluation and monitoring overview · In-depth analysis of country specific context of 6-7 countries · In-depth case studies and to do's/not to do's for 3 sectors · Action plans and specific recommendations for 6-7 countries	Level of detail in deliverables: · Social expert platform · Helicopter overview · More detailed evaluation and monitoring overview and tools · In-depth analysis of country specific context of 8-9 countries · In-depth case studies and to do's/not to do's for 5 sectors · Action plans and specific recommendations for 8-9 countries	Maximum level of context-specific detail: · Social expert platform · Helicopter overview · More detailed evaluation and monitoring overview and tools · In-depth analysis of country specific context of 10+ countries · In-depth case studies and to do's/not to do's for 7 sectors · Action plans and specific recommendations for 10+ countries
20 months duration	**24 months duration**	**30 months duration**	**36 months duration**

We hope to ultimately attract at least 8 countries (and/or sponsors), as this task benefits from the maximum number of experts (in addition to the national experts) we can engage to draw on their knowledge and learnings. Not all of them may be part of participating countries, thus in-kind contributions of experts and countries to specific sub-tasks will be welcome. The IEA DSM ExCo is currently developing guidelines on what constitutes the various participants (see draft definitions):

Sponsors would consist of regular sponsors such as RAP, and would have the same rights, duties and obligations as members, but cannot hold the position as Chair or Vice Chair. Need to be approved by Executive Committee members and the CERT.

Task Sponsors would have no vote in the Executive Committee. They would pay the common fund and have an equal task share. Need to be approved by the Executive Committee and the CERT.

National Task Participant: The country is a DSM IA member, and the national Executive Committee member "allows" participation of a "third" national party (for example: Universities or company that replaces regular "agency" for specific task). The participant pays an equal budget share, and the Operating Agent can put that contribution as an in kind contribution in to the Task budget if all participants agree. The Participant has a regular vote in task content matters, and all Executive Committee tasks and rights remain with the regular Executive Committee member or Alternate.

Contributor: A contributor is a non-member country party accepted by Task participants (1&2). The contributor pays for additional work (can be partly in kind), may have their logo on reports and other hardcopy material. Access to data needs to be decided by the participants in a work plan. The Contributor has no rights on Intellectual Property, has no voting rights on Task or IA matters and is contracted to the Task.

Supporter: A supporter attends workshops, seminars etc. at their own cost and contributes to the development of materials, methods etc. A supporter is invited to contribute on the discretion of the Operating Agent, and has no rights at all.

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[15] Note that the current workplan outline and timelines is planned for 6-7 countries participating

Risk Register

The early identification and management of potential risks is one essential element of our Project Management system. As such, the possible risks to the successful completion of this project have been assessed and mitigation approaches identified as shown below.

Risk	Likelihood of Occurrence	Impact	Risk Category	Risk Mitigation Measure(s)	Risk Category, post Mitigation
Lack of full range of requisite expertise, with which to deliver the required services	Low	High	Medium	Composition and make-up of Task Experts; Access to wider range of specialists and support staff within all the Project Participants; Knowledge of and access to range of key stakeholders, within the wider industry.	Low
Inability of Operating Agent and Task Experts to work together	Low	High	Medium	Prior working relationships and interactions; Regular reporting to the Executive Committee of any issues arising.	Low
Sudden unavailability or withdrawal of Task Experts	Medium	High	High	Participants aware of level of commitment required, and decision to participate in project indicates that sufficient resources will be made available.	Medium, in short term, reducing to low, in the medium term.
Sudden unavailability of Operating Agents, other key staff member(s)	Low	Medium	Medium	Ability of Duneworks to re-allocate staff from wider complementary skill pools	Medium, in very short term. Low, in short to medium term.
Inability to access requisite information on consumer behaviours and context-specific case studies	Medium	High	High	Composition and make-up of Project Participants to be developed such as to give a full and balanced coverage of consumer behaviours, policies and programmes aimed at behaviour change. All Participants will be asked to provide National Data for the project.	Low
Project delivery timescale over-runs	Low	High	Medium	Formal Project Management procedures; Regular reporting to the IEA DSM ExCo. Clearly identified Operating Agent and escalation procedures.	Low
Cost over-runs, particularly on expert platform and data repository (if IEA DSM website proves insufficient)	High	High	High	Formalised Project Management and review procedures; Project to be performed on fixed price total contract basis; Operating Agents to find additional financing for software applications, if needed.	Low

Preliminary Task Work

The Operating Agents for this Task have undertaken significant preliminary work (approximately 6 months for NZ OA, 3 months for NL OA) to bring the proposal to final sign-off at the ExCo meeting in Norway, April 2012. This included:

- Exploring interest for new Task with dozens of stakeholders and potential experts before developing proposal
- Initital proposal development and presentation at ExCo meeting in Jeju Island, Korea (Nov 2011)
- Draft task definition plan completed and widely disseminated, including presentation of Task to several DSOs, retailers and technology developers to secure commercial participation
- Publicised Task widely via flyer, IEA DSM Spotlight, mailing lists, twitter, facebook, linkedin, Behaviour Change & Energy News, SCORAI newsletter, websites
- Secured UKERC meeting place funding for October Oxford workshop on Subtask 2
- Held kick-off workshops in Austria, NL and webinar with remaining experts including US, UK, Sweden
- Significant effort went into securing the necessary country participation, 5 countries finalised (CH, NL, NZ, NO, BE) and another 5 expressing strong interest (SE, FI, AUT, UK, US). 5 countries who are not part of the IEA DSM implementing agreement are considering some form of sponsorship or expert participation (ES, RAP, DEN, GER, AUS).
- Securing expert interest for participation, with over 150 experts expressing interest. Experts from non-participating or sponsoring countries will get access only to Subtasks 1 & 3 (Helicopter view and Evaluation Tool) and country-specific needs and recommendations will be developed only for participating/sponsoring countries
- Contact relationship management system purchased and set up to collate all email traffic with participating experts
- ISGAN participated in our workshop and IEA has expressed interest in publicising the Task outputs. Working on collaboration with other Tasks, e.g. Task XXIII.