



Phase I: Closing the Loop

Behaviour Change in DSM: from Theory to Practice

There is no behaviour change 'silver bullet', like there is no technological silver bullet that will ensure wholesale energy efficient practices. Designing and implementing the right programmes and policies that can be measured and evaluated to have achieved lasting behavioural and social norm change is difficult. We believe that this Task, and its extension, will help address these difficulties by developing guidelines, recommendations and examples of best (and good) practice and learnings from various cultures and contexts. We rely on a large, global network of sector-specific DSM experts – the 'Behaviour Changers' (researchers, implementers and policymakers) from participating and interested countries to engage in an interactive, online and face-to-face expert platform.

This Task (Phase I) had several Deliverables, including the expert network and platform for continued exchange of knowledge and successes, a large-scale analysis of the helicopter overview of various theories and models in their applied case studies, several reports, factsheets and guidelines on how to evaluate behavioural interventions and the participating country reports with specific to do's and not to do's, future research questions and re-iterated case studies following our best practice recommendations. Phase I of this Task is about to be finalised and Phase II (*How to help the Behaviour Changers*) is about to commence (March 2015).

Subtask 1 - *Helicopter view of models, theories, contexts, case studies and evaluation metrics of behavioural interventions*

This helicopter view included an in-depth definition exercise to clarify what terms such as 'DSM' and 'behaviour change' mean for this Task, seeing we work with so many different sectors and disciplines that use different jargon and have different understandings. In the 'Monster', our largest report to date, we have analysed over 40 case studies from around the world in the domains of building retrofits, transport, SMEs and smart meter/feedback. Our main

findings were that conventional approaches based on neoclassical economic models (providing information and financial incentives) often fail to achieve a strong, lasting impact as energy use is largely invisible, unimportant to peoples' daily lives and mostly habitual. There have been promising, yet more complex experiences with end-user and context-tailored approaches that move beyond the individual into more societal and practice changes. We will delve more deeply into how we can learn from, and build on these approaches with Behaviour Changers from different sectors, who have different needs and mandates, in Phase II of Task 24

We have also developed a Wiki (www.leadsmtask24wiki.info) which should be particularly useful to Behaviour Changers to be able to more quickly find the parts in the 'Monster' that are of specific interest to them. The Wiki and the 'Monster' will be living documents and we will continue to collect and add case studies in Phase II (to date, we have collected almost 60 case studies from 16 countries around the world).

Subtask 2 - *In depth analysis in areas of greatest need (building retrofits, transport, SMEs and smart meter/feedback)*

This Subtask analysed one case study per participating country in depth, in order to draw the most interesting learnings and recommendations for our Behaviour Changers. We have analysed SMEs in Norway (Finnfjord case), transport in Sweden (Stockholm Congestion Charge), building retrofits/smart meters in New Zealand (PowerCo Smart House) and the Netherlands (Powermatching City), smart meter/feedback in Austria (€CO2 Management and the Energy Hunt) and Italy (Energy@Home) and an overarching societal vision spanning all domains in Switzerland (2000 Watt Society).

Subtask 3 - *Evaluation Tool for Stakeholders*

This Subtask looked at the extremely difficult issue of how to best monitor and evaluate behavioural interventions to be able to show successful, ongoing behaviour changes (which may mean different things to different Behaviour Changers and the end user). We first undertook an extensive review of the methodologies used in the building retrofit and feedback literature (Karlin et al, 2015. *What do we know about what we know?*) that showed that there was indeed no standard methodology on how to collect data that shows how an intervention has actually changed behaviours. Then we developed an overview (Mourik et al, 2014. *Did you behave as we designed you to?*) how different disciplines (economics, psychology and sociology) evaluate behaviour, the main challenges on monitoring and evaluation and proposed a new way forward by using 'double-loop learning' instead of the commonly used single-loop (output-focused) learning methods. Finally, we developed specific guidelines and fact sheets for three main intervention tools in the building retrofit area (Energy Performance Certificates, Mass Marketing Campaigns and Subsidies and Loans) on how to apply single- vs double-loop learning in practice (Mourik et al, 2014. *From "I think I know" to "I understand what you did and why you did it"*). There is much more work to be done on evaluation, which will be continued in Subtasks 8 and 9 of Phase II.

Subtask 4 - *Country-specific recommendations, to do's and not to do's*

This Subtask provided each of our participating countries with a summary of all work undertaken in Phase I of Task 24, based on their specific country stories and contexts, stakeholder analyses and a re-iteration of each of the case studies collected for Subtasks 1 & 2 based on the learnings and recommendations of this Task. A list of to do's and not to do's for Behaviour Changers in each phase of

a behavioural intervention (design, implementation, evaluation, (re)-iteration and dissemination) was also provided.

Subtask 5 - *Expert Platform*

The Expert Platform is the 'heart' of Task 24 and we currently have 227 DSM and behaviour change experts from 21 countries on it. All films, presentations, events, reports and information pertaining to Task 24 is shared on this invite-only platform. We also successfully disseminated the Task in over 30 publications, 28 conferences and seminars and 15 expert workshops around the world.



Storytelling in DSM - *our special methodology of dissemination*

This Task is rather unique in several ways: it does not adhere to a disciplinary or sector view of energy, DSM and behaviour change; it is based on the concept of shared learning and open innovation and includes both national experts from financially participating countries and in-kind expertise from around the world; it focuses strongly on new media, social networking and 'matchmaking' Behaviour Changers and it has explored the use of narratives and storytelling in many different ways. We will continue to delve into how to successfully use storytelling to bridge silos and translate into different Behaviour Changers' jargon and how to evaluate its impact on disseminating behavioural interventions in Phase II.

Task Duration

July 2012 – March 2015.

Participating Countries

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|-------------------|-------------|
| Austria | Belgium |
| Italy | Netherlands |
| New Zealand | Norway |
| Sweden | Switzerland |
| UK (in kind only) | |

Task Publications

All official publications can be found on www.leadsm.org

Operating Agents

Dr Sea Rotmann,
Operating Agent, New Zealand
drsea@orcon.net.nz
Dr Ruth Mourik,
Co-Operating Agent, Netherlands
ruth.mourik@duneworks.nl