



**SNOWMAN NETWORK**  
Knowledge for sustainable soils

# **SNOWMAN NETWORK**

## **2013**

# **ANNUAL REPORT**

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Final  
31-1-2014  
Hanny Verbakel, SNOWMAN secretariat  
Simon Moolenaar, chair SNOWMAN network

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## INTRODUCTION

The SNOWMAN network is a transnational group of research funding organisations and administrations in the field of sustainable management of Soil and Groundwater in Europe. The SNOWMAN projects aim at bridging the gap between knowledge demand and supply (Science-Policy-Practice Interface).

The SNOWMAN network is a self sustained network.

The aim of SNOWMAN network is to develop and share relevant knowledge for the sustainable use of soil and groundwater by:

- Executing our research programme by organizing calls for projects;
- Disseminating knowledge by sharing the knowledge developed in the SNOWMAN projects among the members and our broader networks;
- Involving end-users and stakeholders by giving them a role in our advisory group and in our project consortia with end-user participation.

More information on the past and present of the SNOWMAN network can be found in the [SNOWMAN portfolio](#)

This annual report gives an overview of the achievements of the SNOWMAN network during 2013, based on the activities that have been defined for 2013.

## NETWORK STEERING GROUP

The actions of the SNOWMAN network steering group (NSG) are based upon the strategic objectives of the SNOWMAN Management Paper (SNMP) and follow-up actions of 2012. The actions have been written down in the action plan of the NSG for 2013.

In 2013 the NSG existed of 5 research funding organisations (or administrations) mentioned in table 1. The NSG members were full members and they could therefore participate in making decisions on the NSG action plan objectives.

The SNOWMAN network secretariat was supported by the full members and hosted by SKB:

SNOWMAN Network Secretariat:

Hanny Verbakel, c/o SKB, P.O.Box 420, 2800 SK GOUDA, The Netherlands,

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Homepage: <http://www.snowmannetwork.com>.

**Table 1 The SNOWMAN Network Steering Group**

Public Waste Agency of Flanders( <b>OVAM</b> ), <b>Flanders Belgium</b> also representing: Departement Leefmilieu, Natuur en Energie <b>LNE</b> , <b>Flanders Belgium</b>	<i>Sofie Van den Bulck</i> , chair 2013 until April <i>Bert Van Goidsenhoven</i> representative for OVAM and LNE
Agence De l'Environnement et de la Maîtrise de l'Energie, <b>ADEME, France</b>	<i>Frédérique Cadière</i> , coordinator of call 2, 3 and 4
Ministère de l'Ecologie, du Développement Durable et de l'Energie, <b>MEDDE, France</b>	<i>Murièle Millot</i> , member of the task team research programme until September 2013, replaced by <i>Hélène Soubelet</i>  <i>Jurgis Sapijanskas</i> representative for MEDDE
Sustainable development of the subsurface, <b>SKB</b> , <b>The Netherlands</b>	<i>Simon Moolenaar</i> , task team leader New Developments and NSG chair (April 2013) <i>Ingrid van Reijssen</i> , task team leader Communication and Knowledge dissemination
Naturvardsverket <b>SEPA, Sweden</b>	<i>Kerstin Jansbo</i> , coordinator Advisory group

## Actions and results of the NSG in 2013

ACTION	RESULT	RESPONSIBILITY
Selection procedure call 4 projects according to the call 4 roadmap	☺ 3 call 4 project contracts are signed	Call 4 coordinator
Monitoring of call 2 and call 3 projects	☺ Midterm reports of IMAGH, PACMAN, IBRACS, SUSTAIN, ECOSOM, and SASSTRAT, final reports of Rejuvenate 2 and INSPECT have been delivered and approved by the respective Call Steering Committees.	Call 2 and 3 coordinator and the Call 2 and 3 Steering Committees
Options for participation of SNOWMAN in a new setting within the context of H2020, EIP's and ERAnet(+) will be explored.	☺ analysis for future investigations in context of Horizon 2020	Task team New developments
Communicate the new forms of membership as described in the revised management paper to potential partners	☺ the SNOWMAN contacts were informed through the newsletter and selected potential partners (e.g. SGI) were informed directly	Task Team Communication and Knowledge Dissemination
Organisation of a Knowledge exchange conference on SNOWMAN projects, including Kick-off Call 4 projects	☺ The practical organisation of the meeting has been set up on November 19 <sup>th</sup> and 20 <sup>th</sup> in Paris	Task Team Communication and Knowledge Dissemination, call 4 coordinator
Special session at AquaConsoil 2013, using the landscape as a framework	☺ April 16 <sup>th</sup> , 2013, Barcelona	Task Team Communication and Knowledge Dissemination
Webinar follow up on monitored Natural Attenuation	☹ postponed	Task Team Communication and Knowledge Dissemination
Further development of the SNOWMAN landscape by adding up information to the database which is linked to the SNOWMAN Research Program	☺ the SNOWMAN landscape version 0.2 can be consulted on the SNOWMAN website  ☹ Still necessary to fill in the landscape (mentioned in Knowledge exchange conference November 2013)	Task Team Communication and Knowledge Dissemination  Responsibility research coordinators
Translation of the advice of the Advisory group of the meeting of November 27, 2012 in the SNOWMAN	☺ the advisory group is informed about the follow-up of their advice	Coordinator Advisory group Kerstin Jansbo

networks objectives and procedures		
To survey the relevance of social and economical sciences for SNOWMAN	<p>☺ Call 4 has specifically addressed these issues;</p> <p>☹ further follow up will mainly be based on results/meetings resulting from the Call 4 projects</p>	Task team New developments and Call 4 Steering Committee

## TASK TEAMS

The SNOWMAN network activities and responsibilities are divided among the task teams. Each task team has their own action plan. All task teams have members from the organisations of the full members.

The SNOWMAN task teams for 2013 are:

- The task team *New developments (incl. the former task team Research Program)*– task team leader Simon Moolenaar
- The task team *Knowledge dissemination and communication* – task team leader Ingrid van Reijssen
- The task team *Advisory group* – task team leader Kerstin Jansbo
- *Call coordinator* for call 2, 3 and 4 Frédérique Cadière
- All task teams and the chair are assisted by the SNOWMAN secretariat and call secretariat Hanny Verbakel.

## Task team New developments

The task team 'New Developments' is a permanent task team of the SNOWMAN network. The activities of the task team are divided into the following tasks:

- To survey the relevance of social and economical sciences for SNOWMAN - short term
- To biannually update the SNOWMAN network research program - mid term
- To establish European research programming - long term

Members of the task team New Developments for 2013:

- Chair: Simon Moolenaar (SKB)
- Members:
  - France: Armelle de Bohan (ADEME)
  - Belgium: Esther Goidts (DGARNE), Joost Salomez (LNE)
  - The Netherlands: Simon Moolenaar (SKB)
  - Supported by the SNOWMAN secretariat: Hanny Verbakel (SKB)

Actions and results

For the **short term** activity *the survey on the relevance of social and economical sciences: this activity has* mainly resulted in the preparation of the Call 4 text. Follow up activities will mainly be based on the results and meetings in the context of the call 4 projects.

For the **mid term activity** *to biannually update the SNOWMAN Network Research Program (SNRP):* steps have been taken to update the integration of social and economic sciences through the call 4 actions resulting in the 4th SNOWMAN network research call. Further updating of the SNRP has been "on hold" during the Future Investigation. A lot of input has been gathered for several potential research programmes, but priorities and scope still have to be defined depending on how the network will proceed and who will be on board as a member/funder.

For the **long term** activity *to establish European research programming:*

As a result of the Future investigation this long term activity has become more prominent and has, in fact, been part of the short and mid term activities instead of the activities that were originally planned for the short term (*survey on the relevance of social and economical sciences*) and the mid term (*to biannually update the SNOWMAN Network Research Programme*).

## The future of the SNOWMAN Network in the context of Horizon 2020

SNOWMAN wants to build strong transnational and subnational collaboration on sustainable soil management in Europe in order to get soil issues higher on the national and EC agenda's as a cross cutting theme to address the (H2020) grand societal challenges.

The SNOWMAN Future Investigation started in April, 2013 and aims to:

- investigate the viability and perspectives of the SNOWMAN network as a self sustained network on sustainable management of soil and groundwater and to attract new partners;
- carry out a quick scan of themes related to the soil-water-system with the (potential) funders of the SNOWMAN network and within the context of H2020 and the European Research Era;
- investigate the perspectives to integrate the self-sustained SNOWMAN network in the H2020 themes and challenges, e.g. by designing a new ERA-NET;
- investigate other ways of funding and transnational cooperation in new or existing programs.

In order to focus on new European activities in view of H2020 the SNOWMAN network decided to assign Simon Moolenaar to carry out this investigation.

There will be a Horizon 2020 Call in 2013 (open until April 2014) for a Coordinating and support action (CSA): "coordinating and supporting research and innovation for the management of natural resources".

This CSA (H2020 SC5-10-B) offers the SNOWMAN Network a very good opportunity to continue the network as it aims at:

- ➔ Structuring research on Soil, Land Use and Land Management in Europe;
- ➔ Design a SRA for activities on soil, land use and land management to be implemented through future calls;
- ➔ Synergies and collaboration between national research programmes;
- ➔ Improved evidence based policy making for agriculture, environment, climate, spatial planning, energy, drinking water, resource efficiency and Rio+20 "land degradation neutral world".

The Call text further mentions communication and dissemination activities for an improved Science-Policy-Interface, cross disciplinary interaction, integrated systemic approach specially between socio-economic and environmental sciences.

This CSA could definitely build upon and profit from experiences and collaboration developed in the SNOWMAN Network because connecting soil, (soil) science and (the H2020) societal challenges requires the SNOWMAN features to:

- position soil science as connecting key-stone;
- promote multi-, inter-, and transdisciplinary research;
- promote participation of relevant stakeholders: scientists, knowledge community, governmental agencies, policy makers, businesses, industry, entrepreneurs, consultants, NGO's, citizens;
- carry out projects as experiments involving stakeholders as end-users and including business interest;
- play the role as knowledge brokers for participatory joint learning and practical application and knowledge dissemination;
- not only focus on Science-Policy Interfacing but on Science-Policy-Practice (SPP) interfacing

SNOWMAN is the soil network encompassing all soil-related themes: we can take a broad and balanced approach and start from our core group, extend to new partners and expand our strategic collaboration within such CSA.



The SNOWMAN strategy and time path based on the H2020 Call for a CSA are:

2014 (beginning of the year):

get more parties involved and committed through starting a CSA (H2020 Call SC5-10-B)

1. viable network and broadening towards umbrella/platform function for (new) members and partners from public & private sectors

→ “growing”

2. to present ourselves as THE SOIL NETWORK and get attention from EC/H2020 by drawing a joint proposal for the CSA

→ “showing”

2014 (end of the year): decision on acceptance or rejection of our proposal for the CSA-SRA

2015:

If CSA proposal will be accepted: agenda-setting within H2020

3. drawing the European Strategic Research Agenda on Soil (SRA on SOIL as result from the Call for a CSA in SC5-10-B)
4. decisions on new organization/format, new partners/funders, new themes/scope, joint calls, new ERA-NET?, etc

If CSA proposal will be rejected:

5. remaining a self sustained (expanded) network?
6. decisions on new organization/format, new partners/funders, new themes/scope, new calls, etc

→ “knowing” (where to go and how to go about it...)

2016:

SNOWMAN partners plus new funders/partners in new organization (self sustained network, ERA-NET or some other form)

7. to organise calls, knowledge dissemination, scoping meetings etc

→ “get going”

According to this strategy the year 2014 will be an “intermediate” but very strategic and determining year:

- No new calls
- No new research program for the Network itself
- Business as usual: running the current projects and knowledge dissemination activities
- No final decision on the future of the Network before the end of 2014 or even 2015
- Cooperation with new partners to answer the H2020 Call for a CSA/SRA on soil and land management

In any case, the SNOWMAN Network is likely to benefit from participating in or coordinating the SC5-10-B CSA:

- It will boost the partner search, EU-wide visibility and networking opportunities
- It will help to become a key player in the drafting of a EU-wide SRA on soil and land management

Based on this, new partnerships will develop and it may later (2014/2015) be decided to:

- Remain self sustained, but with new scope and partners;
- Become a H2020 ERA-NET with all or some of the current SNOWMAN partners involved (depending on scope and budgets), based on the SRA and aiming at future calls;
- Start some other international collaboration, depending on partners/funders and scope derived from the SRA.

## **Participation in Conferences and meetings Research team**

### PLATFORM

*Bioeconomy ERA-NETs in action and interaction*

2nd Annual Workshop,

18- 19 April 2013

Workshop held in Paris, France

18th April attended by Armelle de Bohan (ADEME) and 19th April attended by Simon Moolenaar (SKB)

*Fostering Innovation and Strengthening Synergies within the EU*

The European Institute of Innovation and Technology (EIT)

29 and 30 April 2013

Trinity College, Dublin, Ireland

Attended by Simon Moolenaar (SKB)

*The economics of soil in the urban and peri-urban context*

Stakeholder workshop

21 October 2013

DG Environment (room B), Avenue Beaulieu 5, Brussels, Belgium

Attended by Frank Agterberg (SKB) and OVAM

*FACCE-JPI anniversary*

22 October in Paris

Attended by Armelle de Bohan (ADEME) via internet/webinar & by Jurgis Sapijanskas (MEDDE)?

*Global Soil Week 2013*

Second Global Soil Week 2013 – Losing Ground?

Presentation by Simon Moolenaar: Making connections on October 30th.

27-31 October 2013

*SCANDIC Hotel, Gabriele-Tergit-Promenade 19, 10963 Berlin, Deutschland*

Attended by Simon Moolenaar (SKB). Also attended by Advisory group members Luca Montanarella, Dominique Darmendrail, Jean Louis Morel and Claire Chenu.

## Task Team Knowledge dissemination and communication

The task team Knowledge dissemination and communication is a permanent task team. The activities were divided into the following tasks:

- Communication of SNOWMAN network activities
- Knowledge dissemination of SNOWMAN network project results
- Knowledge dissemination of existing knowledge

Members of the task team during 2013:

Chair: Ingrid van Reijssen (SKB)

- Members:
  - Belgium: Sofie Van den Bulck (OVAM) until March 2013
  - France: H el ene Roussel (ADEME), until September 2013
  - Sweden: Yvonne Ohlsson (SGI) until October 2013
  - The Netherlands: Ingrid van Reijssen (SKB)
  - Secretariat: Hanny Verbakel

Actions and results:

### **Communication of SNOWMAN network activities**

- By means of the *SNOWMAN newsletter* the network was informed on the results of the Fourth SNOWMAN network call, the future investigation of the SNOWMAN network and the final results the network achieved during 2013.

### *Communicate SNOWMAN project results*

- On 19th and 20th November the results of the finalized call 2 projects INSPECT and MCA were presented, as well as the midterm results of the call 3 projects IBRACS, ImaHg, PACMAN, ECOSOM, SUSTAIN and SASSTRAT. On November 20th the Kick-off meeting presented the new call 4 projects BALANCE4P, RAISOILCOMP and URBAN SOIL. Communication of these results and of REJUVENATE 2 project are on the SNOWMAN website.
- ImaHg webinar with hotspots in Sweden, France, The Netherlands, Belgium and England on "Enhanced knowledge in mercury fate and transport for Improved Management of Hg soil contamination" as final workshop of the project on November 29th

### *Other topics for network communication*

- Throughout the year SNOWMAN activities have been spread by LinkedIn e.g. results of the Fourth SNOWMAN network call and future SNOWMAN network plans During the past year the LinkedIn group has been frequently visited and the group now counts 262 members.
- Presentation of the SNOWMAN landscape on the AquaConsoil meeting in Barcelona in April 16<sup>th</sup>.

### *SNOWMAN meetings*

- On June 17th the SNOWMAN network steering group gathered in Utrecht The Netherlands.
- The November meeting was in Paris on November 18th, NSG meeting in the morning and a combined NSG/Advisory group meeting in the afternoon, discussing the SNOWMAN future.

#### *Other meetings*

- During the AquaConsoil meeting in Barcelona in April Ingrid van Reijssen (SKB and chair of the Task team Knowledge dissemination and communication) presented the SNOWMAN landscape together with Johan Ceenaeme of OVAM to an audience of about 50 people.
- Other meetings attended to promote the SNOWMAN network and focus on future investigation for the network are mentioned under the task team new developments.

#### *Website*

- On a regular basis the SNOWMAN website is updated with information on the agenda, the newsletters, the SNOWMAN landscape and projects.
- Changes within the Network Steering group, the list with peer reviewers and the updating of the call 4 factsheets have been done.
- The website contains two video's in which the Network Steering group members and some Advisory group members give their idea's on the network.
- Links to the SNOWMAN team site, the SNOWMAN landscape and the SNOWMAN LinkedIn group can be found on the website.

#### *Team site*

- The SNOWMAN team site gives access to all SNOWMAN documents like agenda's, minutes, reports, etc. For the teleconferences made by the network members documents are shared on the team site.
- During the review period of the Call 4 projects peer reviewers had access to the team site to review the project proposals, the clarifications of proposals and final budget sheets.
- The ImaHg project has access to part of the team site which is used for sharing documents in the project team.

#### *Newsletter*

The SNOWMAN newsletter was published three times in 2013. In January, June and December.

In January Sofie Van den Bulck said farewell to the network after being a member from the start. Furthermore attention was drawn to the new call and the ongoing projects. A small overview of 2012 was given.

In June the main focus was on the future investigation of the SNOWMAN network introduced by the new chair Simon Moolenaar. Also the outcome of the fourth call was one of the issues.

#### *Posters, banners, presentations, flyers, portfolio etc*

Presentations have been held by research coordinators during presentations of their project results.

A SNOWMAN presentation was held during the meetings:

- at AquaConsoil on April 16th, Barcelona by Ingrid van Reijssen en Johan Ceenaeme
- at the Global Soil Week on October 30th in Berlin by Simon Moolenaar

*SNOWMAN cooperation in the making of:*

- DSP vision on H2020 CSA topic SC5\_10\_B "Structuring research on soil, land-use and Land management in Europe

#### *Portfolio*

For the Global Soil Week October in Berlin a portfolio was made on the SNOWMAN network to attract new SNOWMAN members.

*Inventory and budget* on a new name for the SNOWMAN Network in relation to the future investigation.

**Future actions**

For 2014 a workshop together with the NICOLE network has been planned.

**Knowledge dissemination of SNOWMAN network project results**

During the November meeting a presentation was given of the final results of the call 2 projects INSPECT, REJUVENATE 2 and MCA. The final reports of INSPECT and REJUVENATE 2 have already been delivered.

Midterm results and reports of the Call 3 projects IBRACS, PACMAN, ECOSOM and SUSTAIN are presented. IMAHg is finalized as well as the Dutch part of SASSTRAT which results are presented in Paris.

The final reports will be published on the SNOWMAN website.

On September 10th a teleconference between the project members of ECOSOM – Guenola Peres and Agathe Revalliers and SUSTAIN Mirjam Pulleman was held together with the task team leader Knowledge dissemination Ingrid van Reijssen. Dissemination results over 2012 were discussed and follow up actions for 2013 and 2014.

During the Knowledge dissemination days in November 2013 the results of the final projects of Call 2, the midterm results of Call 3 were presented. (see SNOWMAN calls)

**Knowledge dissemination of existing knowledge****SNOWMAN landscape**

For existing knowledge the SNOWMAN landscape presented during the Kick off meeting in November 2011 has been filled with more projects e.g. project results of the French national GESSOL program.

During the November meeting the updated mind map of the SNOWMAN landscape was presented. Filling the landscape is still necessary and has been reminded to participants of the knowledge exchange conference in November 2013.

## Task team Advisory Group

The Advisory group advises the SNOWMAN network on a regular basis.

The task team members are:

- Kerstin Jansbo, coordinator
- Hanny Verbakel, secretariat

The Advisory group members for 2013-2015 are:

Jon Greaves	UK, chair
Armelle de Bohan	ADEME, France
Ton Breure	RIVM, The Netherlands, chair Dutch Soil Partnership
Claire Chenu	INRA, France
Dominique Darmendrail	BRGM, France and representative for Common Forum
Victor Dries	OVAM, Belgium
Wouter Gevaerts	Arcadis, Belgium and representative for NICOLE
Luca Montanarella	European commission, JRC, Italy
Jean-Louis Morel	Université de Lorraine, France
Jean-Luc Peyron	ECOFOR, France

In February the Advisory group members received the revised SNOWMAN management paper, the vision paper, the annual report 2012 and the task team action plans.

During Spring the SNOWMAN Advisory group members gave their input for the future investigation of the SNOWMAN network by filling in a questionnaire.

These actions and the discussions during the NSG/AG meeting on November 18<sup>th</sup> in Paris led to the unanimous recommendations by the Advisory group members present to become actively involved and to take the lead in the H2020 Call SC5-10B (CSA/SRA).

## SNOWMAN NETWORK CALL

The call coordinator Frédérique Cadière (ADEME, France) together with the SNOWMAN call secretariat Hanny Verbakel are responsible for the coordination and support of the 4<sup>th</sup> call. The total budget available for the fourth call by (potential) funders was 1.800.000,-- euro. The call secretariat, supporting the call coordinator and the peer reviewers, is paid by the (potential) funders during the selection period. After selection the remaining amount is divided by the funders to pay the secretariat. Main task is supporting the project boards on the monitoring of the projects, supporting the funders, call coordinator and the organization of the Kick off meeting.

The fourth SNOWMAN network call closed on December 15<sup>th</sup> 2012 resulted in the application of 8 project proposals. In January the eligibility check was done by the SNOWMAN call 4 secretariat. The fit to call and fundability check and by the (proposed) funders didn't show any problems. Very soon the selection of the peer reviewers started. During the teleconference held on January 22<sup>nd</sup> and 29<sup>th</sup> a final list of peer reviewers was made together with the finalization of the Peer review Guide.

In February the peer reviewers were invited for peer reviewing the project proposals during the Moderation meeting in Paris. They received access to the SNOWMAN team site to enable them to pick up all documents on the proposals.

Chair to the Moderation meeting at the ADEME office in Paris was Christophe Schwartz, on March 15<sup>th</sup>. After discussions and focus on strong and weak project points a selection was made, which resulted in a first ranking from scientific point of view. Two project proposals were rejected, 5 needed clarifications and 2 were recommended for funding.

On March 22<sup>nd</sup> the first Recommendation meeting was held in Brussels by the call steering committee, existing of (potential) funders starting with an agreement on the rejected projects by the peer reviewers. For the other project the discussion of the proposals followed by ranking: a. with peer review scores, b. with bonus points and c. with national priority points. The discussion resulted in a final selection of the proposals. Four proposals were rejected, 3 were recommended for funding but needed clarifications and one proposal was on the reserve list. Clarifications were asked and received and these were again sent to the peer reviewers.

Final decisions on the proposals were made during the final recommendation teleconference on May 23<sup>rd</sup>. The remaining project proposals BALANCE4P, RAISOILCOMP and URBAN SOIL were selected. Due to a limited budget for the Dutch funder SKB only the first two projects could be funded immediately. After negotiations DGARNE was able to fund the Dutch part of URBAN SOIL to enable the start of the funding commitment by the funders. Letters to the coordinators of the rejected and fundable projects were sent, but due to the budget negotiations the project coordinator of URBAN SOIL received the funding confirmation letter a little later. National contract signed was finished by the beginning of November and the projects started on October 1<sup>st</sup>.

With the choice of the projects almost all potential funders were able to fund the projects. Unfortunately for ADEME no projects were fundable.

The funders for the 4<sup>th</sup> SNOWMAN network call are:  
BALANCE4P: FORMAS, Sweden – OVAM, Belgium, Flanders and SKB, The Netherlands  
RAI SOILCOMP: FORMAS, Sweden – LNE, Belgium Flanders and SKB, The Netherlands  
URBAN SOIL: MEDDE, France and DGARNE, Belgium Wallonia, budget also for the Dutch part of the project.



The three projects selected have a total budget of 856.716,-- euro.

#### **BALANCE4P**

*Balancing decisions for urban brownfield regeneration – people, planet, profit and processes*

**Topic:** Soil contamination

Project running from 1-10-2013 – 15-08-2015

**Parties involved:**

Lead organization: Chalmers University of Technology, Sweden,

research coordinator: Jenny Normann

Research partner organisations:

Deltares, The Netherlands – Delft University of Technology, The Netherlands, VITO, Belgium

and participating case: Municipality of The Hague, The Netherlands.

#### **RAI SOILCOMP**

*Raising Awareness on the Impact of subSOIL COMPaction'*

**Topic:**

Agricultural and forest soils

Project running from 1-10-2013 – 31-12-2014

**Lead organisation:** Alterra, The Netherlands

research coordinator: Mirjam Hack ten Broeke

Research partner organisations:

Ghent University, Belgium, Flanders, Swedish University of Agricultural Sciences, Sweden,

Inagro Onderzoek & Advies in Land- en tuinbouw, Belgium, Flanders, CLM centre for

Agriculture and Environment, The Netherlands and Wageningen University, Department of

Environmental Sciences, The Netherlands

#### **URBAN SOIL**

*Relationship between City-Dwellers and soils: How to use urban and Peri-urban soils to face the urban challenge?*

**Topics:**

Soil Contamination

Agriculture and forest soils

Project running from 1-10-2013 – 30-09-2016

**Lead organisation:** Centre national de la recherche scientifique, France

research coordinator: Louiza Boukharaeva

Research partner organisations:

Soil and Water Systems Department Gembloux Agro – Bio Technical University of Liege,

Belgium, Wallonia and National Institute for Public Health and the Environment the

Netherlands

The Kick off meeting of the 3 projects was held at Les Salons du Relais in Paris on November 20th, 2013. The research coordinators presented the projects with special emphasis on the knowledge dissemination part of the projects.

During discussions, the added value of these 3 projects was stressed as a first step to a “community of practice” combining transdisciplinary teams on soil sciences and socio-economics. And as backgrounds are different in each field, the recommendation was made to give more time to these projects dedicated to know each other and learn how to work together.

The consortium agreements of both RAI SOILCOMP and BALANCE4P have been finalized in 2013. For URBAN SOIL we expect finalization beginning 2014.

For the Call 4 funders see Appendix 2.

## SNOWMAN network projects

Finalized call 2 projects in 2013:

### **INSPECT**

*Integration of spatially explicit risks of contaminants in spatial planning and land management*

Research coordinator: **Renaud Scheifler**

### **REJUVENATE 2**

*Crop based systems for sustainable risk based land management for economically marginal degraded areas, phase ii: demonstration projects and evaluation decision support tool*

Research coordinator: **Yvonne Andersson-Skold**

### **MCA project**

*Multi-criteria analysis (MCA) of remediation alternatives to assess their overall impact and cost/benefit, with focus on soil function (ecosystem services and goods) and sustainability'*

Research coordinator: **Magnus Bergknut**

Ongoing projects call 3:

### **IBRACS**

*Integrating Bioavailability in Risk Assessment of Contaminated Soils: opportunities and feasibilities*

Research coordinator: **Dan Berggren Kleja**

### **IMAHG**

*Enhanced knowledge in mercury fate and transport for improved management of hg soil contamination*

Research coordinator: **Valérie Guerin**

### **PACMAN**

*Assessment and management of polar pacis in contaminated soils and remedial processes*

Research coordinator: **Staffan Lundstedt**

**During the Knowledge dissemination days in November 2013 the final conclusions on the above projects presented on November 19<sup>th</sup> were:**

Decision support tools (MCA and INSPECT)

- Dissemination: how to communicate about a tool that is still in development? When should focus move from new developments (adding new species, criteria) to experiments on a wider scale with the tool as it is?
- How could the SNOWMAN community help experiment with the models and put them into practice on a larger scale?
- In the end, is the most important feature of decision support tools the process itself?

INSPECT

- Importance of space (spatial distribution of contaminants) for risk assessment: it provides new management opportunities at least for cattle

MCA

- MCA creates a new unit (other than €) where apple and oranges can be compared
- But leaves the issue of weights open: how can social, economic and cultural dimensions be weighed? Should they be weighted?
- Focus Groups in soil science: to what extent can they help solve the issue of local acceptance in the management of contaminated land?

IBRACS

- Development of a new method to assess bioavailability
- Issue of standards: Compatibility of the accumulated data conforming to past and current regulation with novel, more precise methods? To what extent should innovative methods be restricted to top tier remediation?
- *Way forward for IBRACS: Proposition of a new standard?*

PACMAN

- Polar PACs: unregulated, widespread, highly mobile contaminants that can be created during the degradation of regulated contaminants (PAHs)
- Additivity of toxicity?
- Does including new contaminants change the overall conclusions of risk assessments? What would be the "minimum contaminant set" that should be investigated?

IMaHg

- Dissemination: Final workshop: on-line conference connecting national hotspots

Ongoing projects call 3:

### **ECOSOM**

*Soil organic matter as a key factor in the provision of soil ecosystem services*

Research coordinator: **Sabine Houot**

### **SUSTAIN**

*Soil functional biodiversity and ecosystem services, a transdisciplinary approach*

**Guénola Pérès** support to Daniel Cluzeau, Research coordinator:

### **SAS STRAT**

*Sustainable agriculture and soil: comparative study of strategies for managing the integrated quality of agricultural soils in different regions of Europe / Belgium, France, The Netherlands*

Research coordinator: **Stéphane Baudé**

**During the Knowledge dissemination meeting on November 20th following highlights and thoughts were concluded:**

### **ECOSOM**

- Organic Waste Products as a solution to tackle SOM reduction and subsequent threat impact on ecosystem services?
  - Positive effect on biological populations, nutrient availability, physical properties, potential substitution for mineral fertilizers
  - Potential trade offs (GHG, NH<sub>3</sub>, organic pollutants)
    - For pathogens composting is recommended
  - Results depend on the OWP source

### **SUSTAIN**

- Integrative project: Environmental, economical and sociological effects of reduced tillage systems
- The effects on yield and earthworms strongly depend on the other agricultural practices (*conventional/ organic*) and the tillage reduction technique (*Moulboard ploughing, superficial till...*).

### **ECOSOM and SUSTAIN**

- How to better integrate data and results to grasp the causal chain from soil properties, functions to ecosystem services:
  - Conceptual model?
  - Multivariate analysis, Path analysis?
  - LCA?
- How to aggregate results for communication purposes?
  - Predictive tool, multivariate graph, LCA?
  - parallels yesterday's discussion on MCA, weighing and the multiple dimensions of sustainability

### **SAS-STRAT**

- 3 case studies that display strong differences in the determinants of change:
  - Territorial, market, professional-technical starting points;
  - Soil is a consequence never the primary cause per se
- soil quality thus needs to be linked with another issue (water, market valorization...) to be taken into account
- Socio-technical tools (e.g. VSA) can effectively contribute to the dynamics of change

## LIST OF APPENDICES

**Annex 1**      [SNOWMAN portfolio](#)

**Annex 2**      **Table call 4 funders**

**Annex 3**      **List of documents and meetings produced by:**

The Network Steering Group

Task team New Developments

Task team Knowledge dissemination and communication

Advisory group

Fourth SNOWMAN network coordinated call

## Appendix 2

### Table Call 4 funders

Public Waste Agency of Flanders( <b>OVAM</b> ), <b>Flanders Belgium</b>	<i>Bert Van Goidsenhoven</i> representative for OVAM
Departement Leefmilieu, Natuur en Energie <b>LNE</b> , <b>Flanders Belgium</b>	<i>Joost Salomez</i> representative for LNE
Direction Générale Opérationnelle de l’Agriculture, des Ressources Naturelles et de l’Environnement <b>DGARNE, Belgium, Wallonia</b> ,	<i>Esther Goidts and Arnaud Warin</i> representatives for DGARNE
Ministère de l’Ecologie, du Développement Durable et de l’Energie, <b>MEDDE, France</b>	<i>Hélène Soubelet and</i> <i>Jurgis Sapijanskas</i> representatives for MEDDE
Sustainable development of the subsurface, <b>SKB</b> , <b>The Netherlands</b>	<i>Simon Moolenaar</i> representative for SKB
<b>FORMAS, Sweden</b>	<i>Elisabet Göransson</i> representative for FORMAS

## Appendix 3 List of products produced by the network

Produced by the Network Steering Group:

### **SNOWMAN network steering group**

Produced by the NSG:

- Action plan 2013
- Letter of commitment Network Steering Group
- Minutes of meetings

- teleconferences:

January 14<sup>th</sup>

February 11<sup>th</sup>

April 9<sup>th</sup>

May 7<sup>th</sup>

September 10<sup>th</sup>

October 8<sup>th</sup>

November 5<sup>th</sup>

December 17<sup>th</sup>

Face to face meetings:

June 17<sup>th</sup>, Utrecht, The Netherlands – discussion future investigation

November 18<sup>th</sup> – final discussion on future SNOWMAN network (morning) and together with the Advisory group in the afternoon

### **Task team New developments**

Produced by the task team:

- Action plan 2013
- Special assignment on the future investigation by Simon Moolenaar
- Questionnaire sent to NSG, Advisory group and stakeholders
- Presentation during the special session of the Global Soil Week in Berlin

### **Task team Knowledge dissemination and communication**

Produced by the task team:

- Action plan 2013
- SNOWMAN ambassadors at conferences and meetings
- Newsletter January – SNOWMAN network results 2012
- Presentation Landscape at AquaConsoil April 16<sup>th</sup>, Barcelona
- Newsletter June – presenting SNOWMAN future investigation
- Knowledge dissemination teleconference ECOSOM and SUSTAIN on September 10<sup>th</sup> 2013.
- *Inventory and budget* on a new name for the SNOWMAN network in relation to the future investigation
- SNOWMAN portfolio – new funders
- Webinar IMagH on November 29<sup>th</sup>
- Newsletter December – results SNOWMAN Knowledge dissemination meeting Paris, November 18-19
- Minutes of teleconferences

– teleconferences  
January 22<sup>nd</sup> – preparation Newsletter  
February 19<sup>th</sup>  
March 19<sup>th</sup>  
April 9<sup>th</sup>  
May 21<sup>st</sup>  
November 12<sup>th</sup>  
December 3<sup>rd</sup> and 17<sup>th</sup>

### **Advisory group**

Produced by the task team:

- Action plan 2013
- Input for Future investigation by questionnaire
- Advice during PLATFORM meeting, JRC meeting, Global Soil Week
- Cooperation Dominique Darmendrail for 2-pager
- Advice on Future SNOWMAN network during the Advisory group meeting of November 18<sup>th</sup> in Paris

### **SNOWMAN Fourth Coordinated Call**

Produced for the Fourth Coordinated Call

- Peer review guide
- Funding confirmation call 4
- Factsheets call 4 projects
- Minutes of teleconferences
- Minutes of meetings
- Monitoring rules
- Questionnaire Call 4 applicants

Teleconferences:

January 22<sup>nd</sup> and 29<sup>th</sup> – peer review selection and preparation Moderation meeting  
May 23<sup>rd</sup> – final recommendation  
September 10<sup>th</sup> – preparation Knowledge dissemination meeting November, Paris  
October 10<sup>th</sup> – finalizing preparation

Meetings:

March 15<sup>th</sup> – Moderation meeting Paris  
March 26<sup>th</sup> – Recommendation meeting, Brussels  
November 18<sup>th</sup>, 19<sup>th</sup> – Knowledge dissemination meeting Paris  
final meeting Call 2 projects, midterm meeting call 3 projects and Kick-off call 4 projects