

**COMMON FORUM on
Contaminated land in Europe
13 & 14 April 2017
Vienna, AUSTRIA**

Meeting Report



29 August, 2017

Dominique Darmendrail & Dietmar Müller-Grabherr

The 2017 VIENNA meeting was attended by:

Ana Alzola Echazarra (Spain / Basque Country)
Christian Andersen (Denmark)
Paul Bardos (United Kingdom – EUGRIS)
Joan Bartoll Navas (Spain / Catalonia)
Andreas Baumgarten (Austria / AGES)
Andreas Bieber (Germany)
Antoine Billard (France)
Antonio Caballa de Roa (Spain)
Sophie Capus (Luxemburg)
Johan Ceenaeme (Belgium / Flanders)
Achim Constantin (Peru / RELASC)
Dominique Darmendrail (COMMON FORUM)
Margot de Cleen (the Netherlands)
Joerg Frauenstein (Germany)
Marie Jailler (Belgium / Wallonia)
Vlasta Janova (Slovakia)
Bjorn Johansson (Sweden)
Eduard Marquez i Bargallo (Spain / Catalonia)
Co Molenaar (The Netherlands)
Dietmar Müller-Grabher (Austria)
Moritz Ortmann (Austria / KPC)
Bavo Peeters (European Commission)
Rasa Radiene (Lithuania)
Jussi Reinikainen (Finland)
Grzegorz Siebelec (Poland)
Morten Sorensen (Denmark)
Thomas Strassburger (Germany)
Pol Tock (Luxemburg)
Eddy Van Dyck (Belgium / Flanders)
Regina Vilao (Portugal)
Martha Wepner – Banko (Austria)
Christiane Wermeille (Switzerland)

Note: Handouts of all presentations from this meeting are available for download at <http://www.commonforum.eu>

Session 0 – Welcome Address

The Spring 2017 meeting of Common Forum was opened by Johannes LABER (KPC) and Martin SCHAMANN (Environment Agency Austria).

It is a really great pleasure to welcome you in Vienna. Great pleasure, that's indeed not without a special reason: some of you may remember that I was part of COMMON FORUM at the time coordinating the FP4 project CLARINET project (1998-2001), linking research with governmental interests and representatives also from ministries and environment agencies. Therefore I feel happy today to be with CF again!

However, perspectives have changed significantly. Our organisation (EAA) and all of your institutions are scoping with the fact. EAA shifted fully towards customer orientation and for understanding itself as being a service provider. To secure our long term orientation 4 major environmental strategic processes lead our efforts, with the overall goal of

- supporting environment and society to transform towards decarbonisation and protecting natural capital, including soil and water as vital resources for our well-being.

Accordingly our nowadays understanding is, that sectoral approaches are not any longer of interest, but a comprehensive integration on environmental issues with social and economic aspects is crucial. Addressing lifestyle will be a trigger-point for changes.

Looking forward and considering our framing, things have also changed in a way getting more and more **unpredictable** moving towards a post-factual society. In electing a new president here in Austria citizens were on the divide between a straight right candidate and a former candidate of the green party. Presidential elections in France are ahead and media report high uncertainty on opinion polls. For sure we are facing the consequences of the BREXIT, however no one being able to predict and describe. There is a new government in America, doubting in climate change and not anymore in agreement with recent internationally approved documents.

By 2019 European citizens will be voting for the next European Parliament. At the time being no one knows where we will stand in 2 years and what role protection of environment will play. Anyway, we have to cope with the situation and strive for making the best of it.

I understand that this meeting here in Vienna and in particular the 1st day is dedicated to discuss the European policy framing for soil protection like it is – and how we could develop together. In line with this to discuss future and ambitions of COMMON FORUM until 2020 might get of particular importance. Therefore I would like to invite and encourage you and COMMON FORUM

- to consolidate common interests in terms of soil protection
- to keep on working towards a common European approach in soil policy
- to allow for thinking out-of-the-box – times hardly seek “business as usual”
- to make an effort in preparing 2020 as a possible turning point for contaminated land management.

All the best for the next 2 days

Martin Schamann
(EAA, Director of Operations)

NOTE: This Spring 2017 meeting was attended by:

- a) new representatives from:
 - Catalonia: Joan Bartoll and Eduard Márquez
 - Sweden: Bjorn Johansson
- b) Special invitees :
 - Andreas Baumgarten (AGES),
 - Moritz Ortmann (KPC)
 - Achim Constantin (ReLASC)

Session 1 – AUSTRIA – where we stay, what we need for the future – Dietmar Müller – Grabherr (Environment Agency Austria)

Dietmar introduced the Austria Policy objectives and legal framing, the key technical concepts, Risk assessment and management and finally the Financing and funding of remediation projects.

Conditioned by Austria's extremely diverse lithological structure, the sharp changes in relief and the varying climate, soils also change over very short distances. Being an alpine country 60 % of the landscape is to mountain regions and roughly only 1/3 of the country is permanently populated. By a nowadays population of 8.8 million people, wealth and lifestyle this meant a drastic increase of pressures on natural resources during the last 50 years.

At federal level there is no particular legislative document on soil protection. Contaminated site management since its beginning is driven by water legislation (enacted 1959). Furthermore the waste management act (issued 1990) addresses some aspects of contaminated soils. The Contaminated Sites Remediation Act (1989) introduced a waste taxation system to finance a national program on historically contaminated sites. By the waste levy a public budget for financing activities in remediation of 1.24 billion EURO was raised over 25 years (1990 – 2015). A revision for an integrated contaminated land management is under discussion since 2012, but still pending.

Such the estimate on future efforts show still a broad range in between 2.050 up to 5.000 seriously contaminated sites to be remediated and total costs, which without legal amendments may sum up to 10 – 12 billion EURO. Nevertheless since 2009 the agreed general target is, that all seriously contaminated sites shall either be controlled or under remediation until 2050.

In a European comparison the specific annual costs have been decreasing until 2016 to 6,5 €/inhabitant, whereas the average public investment stayed rather high and over the years also stable at approximately 75 %.

In terms of technologies it's factual that the national remediation market stays still rather resistive and acceptance on new and in particular on in-situ-technologies is low. During the last 20 years permeable barriers has been the only new technology well accepted. Since 2010 several demonstration projects on different thermal in-situ treatment techniques took place.

To summarise major future challenges are:

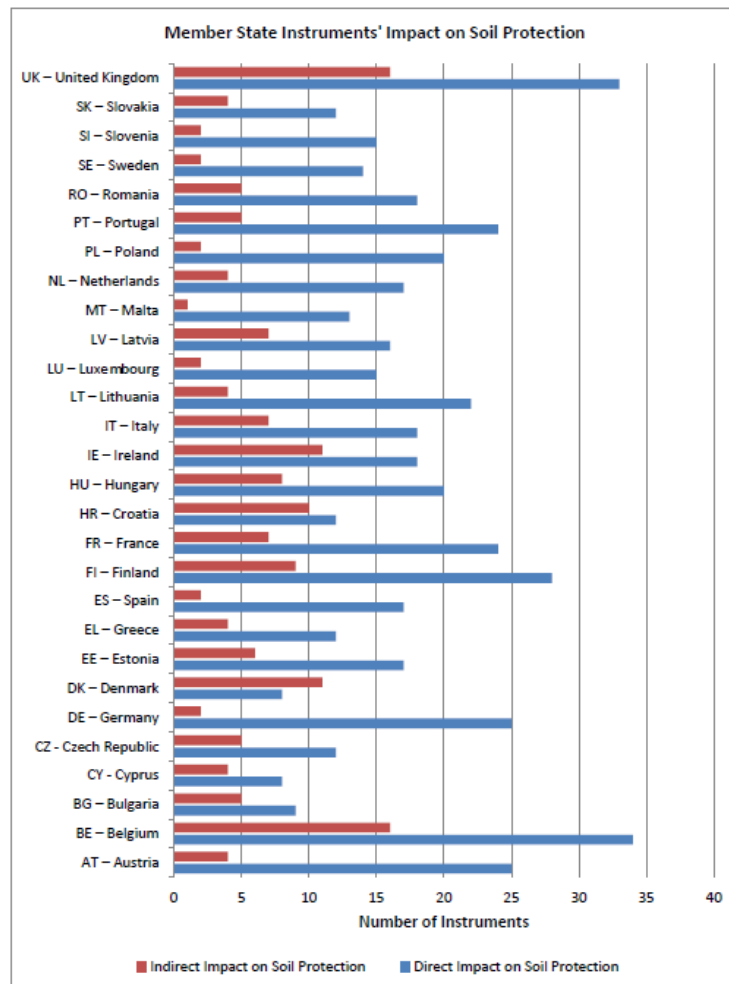
- getting political agreement for a major revision of the existing legal framework;
- financing historical burdens – amounts necessary might range from 5 – 20 billion EURO;
- improved common understanding of involved stakeholders with regard to the ambitions of the “prevent & limit”-principle and the concept and implementation of “sustainability”;
- Improving eco-efficiency („factor 4“) by more effective and accelerated investigation concepts and tailor-made solutions for remediation

Session 2 – European Soil Agenda

2A - Conclusions of the inventory report regarding contamination – Bavo Peeters (European Commission)

Bavo Peeters, who joined the European Commission recently, presented the outcomes of the soil policy inventory and the progress of assessment of EU and national policies. The Soil Wiki developed by Ecologic inventories 641 instruments in the EU Member States (including the transposition of EU legislation).

Soil Organic Matter and Biodiversity Loss are threats most covered by the existing legislations and policies, most probably as they are also impacted by the other threats.



The instruments were assessed around six priorities clusters:

- Overarching strategic EU policies and funds
- CAP and complementary measures
- Diffuse pollution and water management
- Industrial and point source soil contamination
- Nature, land use planning and soil sealing
- Climate change & energy

On the Industrial and point source soil contamination, the study highlighted the fact that:

- There are no common Rules for identification, assessment and remediation of CS, no common targets or priorities, no common approach for historic contamination and orphan sites.
- Current funding is mostly driven by redevelopment-

- The lack of clear targets and priorities on EU level may lead to a deprioritization of soil protection.

The European Commission has awarded a contract to a consortium led by Deltares to support the implementation of the Soil Thematic Strategy with the writing of reports and policy briefs, the updating of the wiki and the website, and the organisation of workshops.

2B – World Café – How to move forward on the European Soil Thematic Strategy?

In September 2014 the DG's of the MS discussed how to proceed now the Draft Soil Directive was withdrawn in May 2014 and the 7th EAP, agreed upon in January 2014, states that "the Union and its MS should reflect as soon as possible on how soil quality issues could be addressed using a targeted and proportionate risk-based approach within a binding legal framework. Targets should also be set for sustainable land use and soil". The DG's came to the conclusion that a lot of legislative instruments already existed and wondered if a binding instrument had added value. Therefore it was decided to make an inventory of existing policy and legislation and identify gaps.

The WIKI is the result of the inventory of the EU and MS legislation on soil and soil related policies. The WIKI shows a big range in the development of soil policy, legislation, tools, organization (financing included), knowledge development and implementation. A distinction can be made in "front runners, peloton and laggards". Also cultural aspects are visible: liability and consensus driven policies can be distinguished. Taken these differences into account; what are ways to team up and create the best for all?

The EU Soil Thematic Strategy distinguishes 4 pillars: awareness raising, research, integration, and legislation. Several threats have been identified: contamination, loss of organic matter, compaction, soil sealing, desertification, erosion and salinization. The focus in the Strategy and the MS's policy has been on contamination and on soil sealing. Therefore, it was proposed to organize the CF discussion along the lines of the 4 pillars of the Soil Thematic Strategy.

The outputs of the 4 world cafés are presented in Appendix 1.

Session 3 – European and International cooperation

3A - TAIEF mission/workshop: Malaysia

Three Common Forum members (Andreas Bieber - Germany, Co Molenaar - The Netherlands, Eddy Van Dyck - Flanders-Belgium) participated, with Mark Kibblewhite (United Kingdom), to an Environmental Technical Assistance and Information Exchange Facility (TAIEF) mission in Malaysia, in December 2016. This TAIEF scheme offers short-term peer-to-peer assistance to support environmental policy development and implementation.

The Malaysia's Department of Environment (DoE), Ministry of Natural Resources and Environment (NRE), requested this TAIEF expert mission to contrast EU and Malaysian contaminated land policies, and review draft legislation and three published guidelines for contaminated land management in Malaysia. During 4 days, the Malaysian legislation and guidelines based on a study on the Criteria and Standards for Managing and Restoring Contaminated Land were reviewed by the EU delegation.

The main outputs of this mission are the followings:

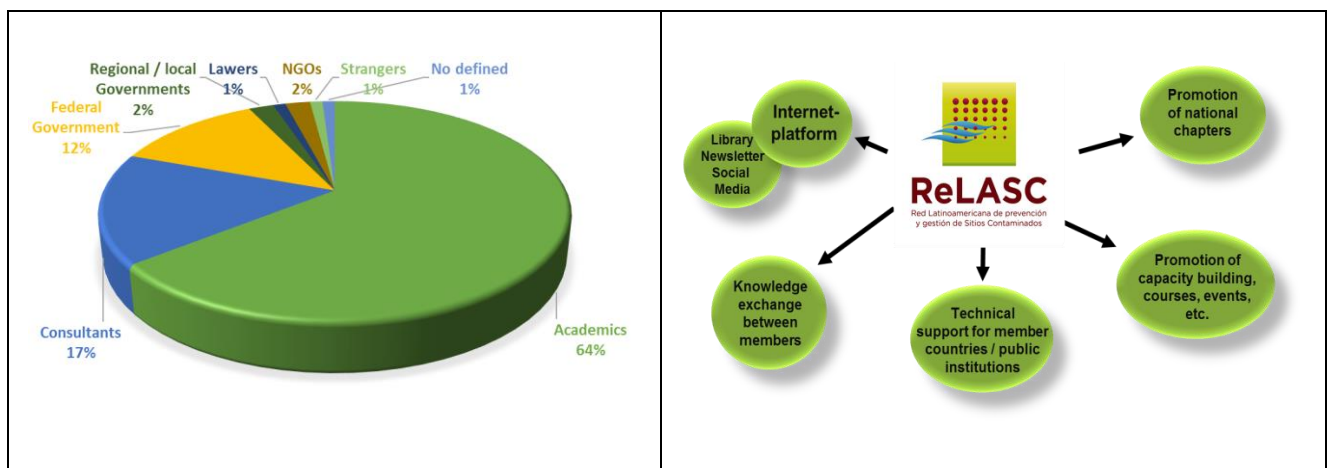
- the available documents are consistent with internationally accepted good practices;
- the draft legislation is a good starting point;
- the most critical point is a well constructed action plan for implementation, with adequate funding and resources;
- Special recommendations were addressed about:
 - Stakeholder engagement: to ensure that the intent and details of implementation are agreed
 - Institutional capacity development so that compliance and schedules can be ensured (i.e. prioritising sites to start, task distribution between public and private sector, ...)
 - Clarification on procedures, national priorities and timelines, or enforcement schedules, ...

Such missions are also interesting and a good experience for the experts themselves, and that, as for this mission, the Common Forum secretariat could be a contact point for such missions (TAIEF and others) for listing up the available experts from governmental organisations.

A Malaysian delegation visits Belgium, Germany and the Netherlands in the upcoming weeks to continue the experiences exchange, in particular on EU best practices and technologies for soil contamination remediation.

3B - ReLASC – the contaminated land network in Latin America

ReLASC is a Latin American network which promotes the prevention and remediation of contaminated soil and groundwater through the interchange of experiences and know-how between Latin American countries (website: www.relasc.org). Managed by public institutions (8 Ministries of Environment from Latin-America, current presidency by Peru), it has now more than 1700 members from different communities.



After several years of existence, its main challenges can be summarized as:

- ✓ Identification and development of common goals for cooperation between Latin-American countries for contaminated land management issues to strengthen the network (problems: national regulations – when existing , no transnational perspective or policy on contaminated sites);

- ✓ In this perspective, the future work will target i) the development of technical guidelines, position papers and capacity building in Peru, ii) Technical support between ReLASC-countries, regarding case studies, legislation, technical issues, etc. and iii) the organization of the 1st International ReLASC-NICOLE Seminar related to “Management of Hydrocarbon Contaminated Sites”, May 31th to June 2nd, 2017 in Lima – Peru, with support by the COMMON FORUM.
- ✓ Financial sustainability of the Network for the mid- long term (short term financing by German Cooperation through different programs), as the current Members (LA countries) don't bear the operational costs of ReLASC;
 - ✓ Nevertheless, discussion for affiliating new member countries are in progress with Cuba and Bolivia.
- ✓ Role of problem owners, industry and service providers within the network.

A delegation of RELASC is intending to participate at the 2017 ICCL Meeting, planned in October 2017 in Denmark.

3C - COST-Action IS1408 – Industrially Contaminated Sites and Health Network (ICSHNet)

This [Cost action](#) (networking instrument for researchers, engineers and scholars to cooperate and coordinate nationally funded research activities) has been initiated by the Italian National Institute of Health, in cooperation with 27 countries. During the current funding period (29 April 2015 – 28 April 2019), the action is aiming at establishing and consolidating a European network of experts and institutions, to develop a common framework for research and response on environmental health issues related to industrially contaminated sites. Its core part is related to a methodology of risk evaluation for associated pathways, health related exposure scenarios and risk management for the remediation of contaminated sites.

It was recommended to the COST project management to link with Common Forum in order to implement existing knowledge and bridge the gap to the decision makers on national levels and among competent environmental authorities. Joerg offered, to be the connection piece among two sides.

The expected outputs are:

- guidelines, evidence-based reviews, compilation of case studies on:
 - strategies for studying environment and health in contaminated sites, focusing on methodology; and
 - strategies for risk management and communication;
 - expert consensus on methodology for exposure assessment;
- expert consensus on methodology for health assessments that allows:
 - the separate analysis of population subgroups (in particular, children), and
 - consideration of social gradients, confounding and interactions with socioeconomic factors and social health determinants;
- plans of a system, criteria, requirements to collect and compile data and produce comparative analyses of the health impact of different sources of contamination within and among different European countries, allowing for the inclusion of socioeconomic factors.

As several members of the Common Forum (BE/Flanders, CH, DE, FI, IT) have been approached by the related national contact points of the COST Action, most of the discussions were dedicated to: i)

the possibility of future cooperation between the two networks, and ii) the practicalities of the expected new tools.

3D - booklet on land as a resource (CF-WG SaR & NICOLE)

The NICOLE network proposed a joint publication (booklet) to show cases of Soil and Land as a resource (booklet). This cooperation with different stakeholder communities (public and private owners) would be the occasion to promote sustainable remediation and re-circularity of sites.

The CF members discussed:

- its position vs. the JRC publication, the national documents (i.e. UK produced by CL:AIRE)
- the procedure for a joint edition, should the CF logo be on the booklet
- the conditions to produce cases of interest.

The CF members are invited to think if they know examples to share. (Meanwhile Ana Alzola sent two showcases of the Basque region.) Reactions are welcomed till the 1st of July 2017.

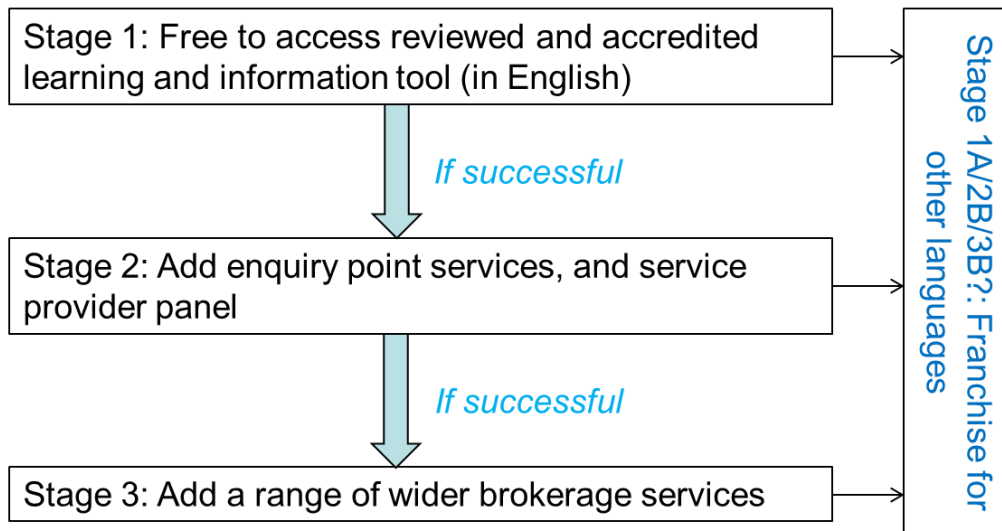
Paul Bardos proposes to place a link on the Eugris site.

3E - EUGRIS and future perspectives

EUGRIS, established 2005 following a FP5 funded project, had been upgraded and supported by r3 since 2005 and via linkage to a range of EU and other projects (Germany & Hungary). Its current audience (>25,000 visits per week for an average 5 minutes, 4,300 registered users of which 3,000 opted in to alert service) shows the interest on such tool, but its content, links and the user interface all need updating to meet modern needs and expectations. The best option to make this robust in the long term is that the web site needs to become economically self-sustaining. This will mean some structural and content changes, including a much sharper focus on contaminated land and brownfields. However, the aim is still to provide meaningful information free at the point of use.

Therefore, the question for r3 is whether:

- To continue with the site at a low level (almost “hobby”) interest so its value and usefulness might slowly fade, or
- To take a leap of faith and develop a sustainable future for an upgraded and revitalised portal, which will require a new business model.



The Stage 1 conditions (i.e. Consolidate content to contaminated land and brownfields, divest other content, Update information categories, Convert and update the “encyclopaedia” to a free to access learning resource, Seek external collaborations validations, etc.) were discussed by the CF Members.

Several meeting participants expressed interest in the further development of EUGRIS. Paul will follow up these discussions bilaterally and keep the Common Forum updated.

Session 4 – COMMON FORUM 2030 – where do YOU see/wish the network to be?

Given the need and interest in discussing how to move forward on the European Soil Thematic Strategy (see Session 2B World Café & Appendix 1) Session 4 was cancelled.

By a short note and providing briefly the presentation (available by the meeting documentation <http://www.commonforum.eu/meetings.asp>) Dietmar informed as an intro on his expectations to discuss on:

- developing new lines of action until 2020 (e.g. a new CLM concept: 4th generation, CLM 4.0)
- trends, needs and objectives in Contaminated Sites Management at the timeframe of UN Sustainable Development Goals, SDG’s (2030)

It was agreed to postpone this discussion for the 1st year of the next secretariat phase.

Session 5 – Common Forum Activities & next secretariat

5A- draft secretariat report

In August 2005 a semi-permanent secretariat has been formally established on a project basis for three years. The main goal of this “end of project” report, sent prior to the Vienna meeting to all secretariat funders, is to report back on the activities conducted under the contract period (September 2014 up to August 2017) and to support the decision about continuation of the secretariat.

After a brief presentation of the main activities (organisation and reporting of CF meetings, assistance to ICCL meetings, speaker on behalf of CF, information exchanges, networking activities, and on-going support to CF members, contribution to national meetings, European and International events), Dominique Darmendrail made recommendations for the future:

- **For the Common Forum:**
 - Maintain a balance in the different topics addressed during CF meetings by addressing legal and regulatory issues, technical themes, financial aspects of contaminated land management and case studies in addition to EU and national policies
 - Continue to support the on demand questionnaires, in order to provide specific and dedicated needs of CF members
 - Develop contacts with policy makers in new EU member states and continue contacts with EC and EU research projects
 - Discuss targeted initiatives for developing a mid- to long-term vision of the network
 - Continue optimisation of the communication tools.

- For the ICCL:
 - Continue in the same way the organisation of ICCL meetings with, If possible, alternative solutions for the organisation of the Open workshop (e.g. co-organisation with an already established event – conference);
 - Consider the expansion of the ICCL activities (communication about the results of the meetings, follow-up action plan, and contact with new representatives and countries) in terms of extra costs for the CF secretariat budget in the upcoming period.
 - Considering the actual global framing European countries could aim to export knowledge and experiences on soil and groundwater management, strengthen international exchanges.

Secretariat funders are requested to review and comment the draft secretariat report by end of June 2017.

5B- Common Forum secretariat and budget

As a prerequisite for planning secretariat in terms of a project Dietmar Müller-Grabherr will approach CF members and in particular secretariat funders so far. Contacts will be made until September 2017.

Referring to the application of EAA as presented at the Oslo-meeting (October 2016) a discounted day rate has been agreed. However compared to the actual secretariat phase it needs to be recognized that a cost increase by 6 % will be accounted during the next secretariat.

A first outline on the budget, contributions and planned use of monetary resources shall be made available and discussed at the meeting in Copenhagen.

5C- Revised contracts

The actual contracts need to undergo an internal juridical check at Environment Agency Austria (EAA). Following this process secretariat funders will get forwarded a revised draft contract.

EAA asks CF partners for support to finalise contract procedures timely until an intended deadline by end October 2017.

5D - WG “Soil as a resource” – tasks and responsibilities

The Working group “Soil as a Resource”

- is established under the umbrella of CF
- chaired and facilitated by the NL (convenors: Co Molenaar & Margot de Cleen)
- is open to CF-members, further MS representatives as well as EC and NICOLE representatives
- holds regular meetings back to back with CF-meetings, and
- similar to CF, needs support by hosts/hosting countries (meeting facilities, on-site support, equipment; coffee/tea).

The convenors (NL) of WG SaR are responsible for setting the agenda, preparing meetings, reporting and establishing any other documents.

CF-secretariat supports to distribute documents and is responsible for maintaining documents and reporting on the CF-website.

The WG is seen as the platform for European policy makers to exchange policy, experience and knowledge in soil issues in line with the EU Soil Policy development. As the Common Forum, it should be the place of informal discussions, for finding consensus, drawing up Joint position papers and developing new policy instruments for solving the main societal challenges (Food security, sustainable agriculture and forestry, efficient energy, climate action, resource efficiency ...).

Discussions mainly focused on:

- The possible limitations for inviting other representatives for an half day;
- The intention to draw up “position papers”. Those are not meant as papers summarising a formally and official position of CF, WG SaR or its members, but should:
 - provide for describing concepts and ideas resulting from discussions of WG SaR, and
 - like “white papers” be ready to be used for communication purposes and joint narratives”;
- The process to find solutions in this area which is quite broad.

The next meeting will be in Spring 2018.

5E- Future events:

- Milano (Italy) - 7 – 9 June 2017 – NICOLE Workshop « Value Land management and marketing as an asset »
- Lyon (France) – 26 - 30 June 2017 – AQUACONSOIL 2017
- Ferrara (Italy) – 20 – 22 September 2017 - REMTECH 2017
- Copenhagen (Denmark) - 3 – 6 October 2017 –CF meeting / ICCL Meeting / Joint conference with NICOLE

During the Common Forum meeting in Copenhagen, the following topics should be at the agenda:

- Monitoring of peat soils – G. Siebelec
- CF in 2030 – D. Mueller – Grabherr
- Study on Risk Assessment methodology
- Outcomes of the 4th Expert Group

The secretariat is looking for volunteers for hosting the upcoming meetings. Representatives from Wallonia, Luxemburg, Portugal and Spain / Catalonia will explore their possibilities.

Session 6 – Countries Session

6A- Site closure and the duty to return back to the initial state (IED ; Art. 22 par. 3) - approval procedure of the German guideline – Joerg FRAUENSTEIN

Within the context of the implementation of the Industrial Emissions Directive, Germany has finalized a guidance document on obligations to return the initial state. A first draft was accepted in March 2016 by Working Group on Soil Protection Issues of the German Federal States and the Federal Government (Bund/Länder-Arbeitsgemeinschaft Bodenschutz - LABO) in order to initiate an intense stakeholder participation process among industries, related business associations, Federal States and the Federal Government.

A national workshop was also organized for collecting feedbacks. Following this consultation, the draft guidance was amended and improved, again approved by LABO, followed by the working Group on Water Issues of the German Federal States and the Federal Government (Bund/Länder-Arbeitsgemeinschaft Wasser, LAWA and the Working Group on Emission reduction of the German Federal States and the Federal Government (LAI). Finally the document was on the agenda of the conference of Environmental ministers of the federal states. They authorized the official publication and recommended an implementation into a general national guideline on IED issues.

So the document has been formally approved by LABO in March 2017 and is under translation in English (planned for June 2017).

Nevertheless, there are some remaining issues which will need to be further discussed. The most important are the followings:

- Further development of the Substance assessment evaluation required
- Pragmatic and practical solutions for "historical" sites with remaining contaminations
- The level of expenditures for the preparation of technical measures (back to baseline conditions) for being acceptable
- transfer of site specific information

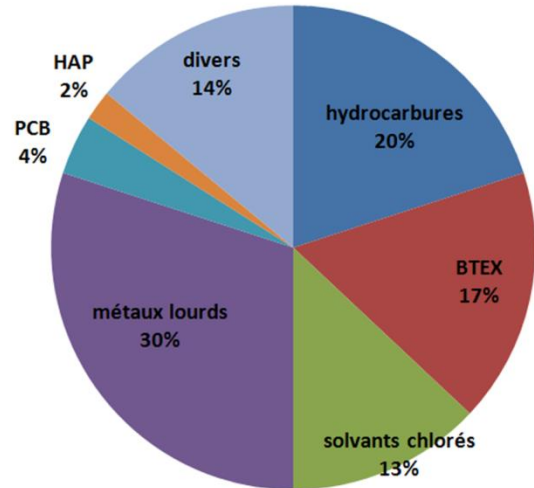
During the process the need occurred to revise the existing guideline for the Baseline report, starting with the next month.

6B - Contaminated sites with POP: need of remediation and remediation goals within the implementation of the Stockholm convention – Christiane WERMEILLE

Christiane Wermeille questioned the Common Forum members about their vision of the need of remediation and remediation goals within the implementation of the Stockholm Convention.

4% of the 38,000 contaminated sites located in Switzerland are polluted by PCBs, and included some of the most famous CS (la Pila Landfill).

The current Swiss legislation is not adapted to the situations where slightly soluble pollutants contaminate the sediments and fishes in a river but are not measurable in the water:
The legislation and regulations cover the remediation of pollutions of groundwater and surface water originating from the site and detected above thresholds values in these media.

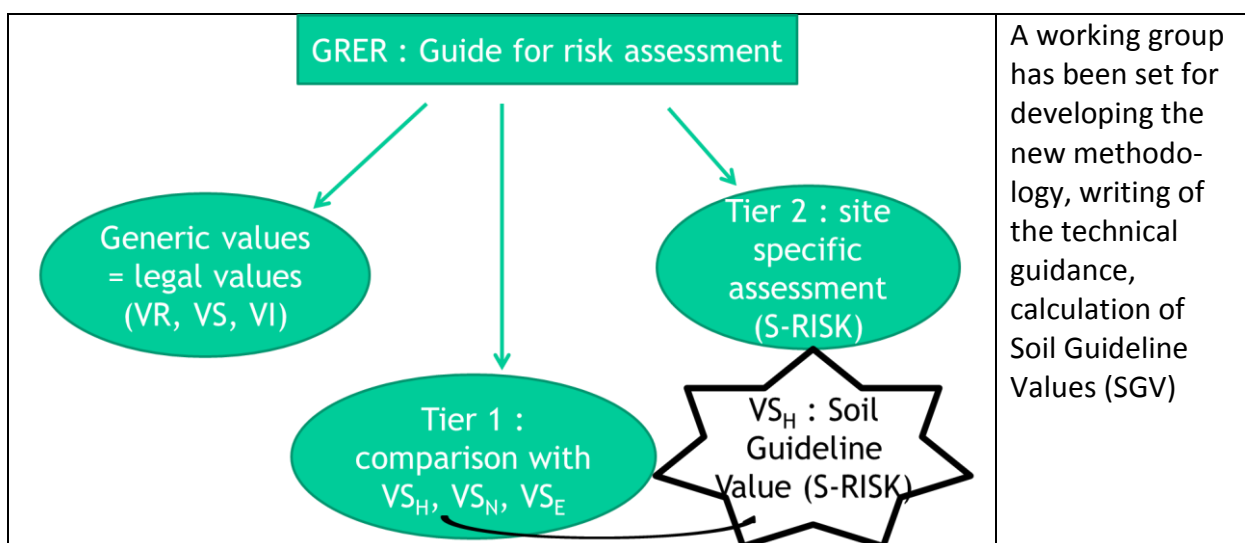


Considering the provisions of the Stockholm convention, it could be a way to tackle those cases. Therefore any experiences of remediation within the Stockholm Convention would be appreciated.

None of the Vienna attendees reported back on such use of the Stockholm convention. The situation is covered by specific POP programmes (AT, NL), by excavated soils legislation (FI) or under usual risk based framework (SK).

6C - Harmonization of human health risk assessment in Belgium (S-RISK) – Questions about risk management – Marie JAILLER

In Belgium, the regions are competent for soil protection. Since 2016 – 2017, the three regions have adopted the same model for assessing risks for Human Health. This model, S-RISK, is used in Wallonia the tiers 1 (comparison with legal values) and 2 (site specific risk assessment).



A working group has been set for developing the new methodology, writing of the technical guidance, calculation of Soil Guideline Values (SGV)

The model has been specifically improved on the followings:

- New vapour intrusion model (based on the NL VOLASOIL model)
- calculation of exposure intake by age groups
- specific soil texture from soil data in Wallonia
- updating of soil ingestion rate
- updating of the most relevant toxicity data.

Nevertheless some challenges remain:

- what to do when the geochemical background values are high, above the new SGVs?
- The new toxicity data set by EFSA and ANSES for lead or arsenic
- How to consider the risk additivity for their possible interactions between all the substances in the human body (i.e. for arsenic, cadmium, lead, benzene, toluene, benzo(a)pyrene, trichloroethene, or naphthalene).

Wallonia is planning to send to all Common Forum members a questionnaire for collecting information and arguments on:

- Comparison SGV to natural background level in soil
- Comparison SGV to diffuse background level in soil
- Risk additivity (mixture) : good agreement between SGV (VS_H) and detailed risk assessment
- Residential land-use including vegetable garden
- Link between environment and health : epidemiological survey, human biological monitoring
- Recommendations to owners of private garden where soil concentration > SGV for residential land-use
- A specific land-use : a building with commercial activities at the ground-floor and residential use at the other floors

SHORT NOTICES FROM OTHER COUNTRIES

- **Austria**

The Austrian Environment Ministry keeps its ambition for a major legislative revision towards an integrated contaminated land management. Discussions are ongoing since 2012, strong stakeholder interests in particular with regard to monetary aspects, liability and groundwater protection caused several prolongations. Nowadays it is envisaged to finalise drafts on legislative documents until summer 2017.

- **Belgium / Flanders**

The Flemish Soil Decree was recently under review for integrating new provisions on mixed pollution. That is pollution where more than one person has the duty to remediate. The guidance for the execution of descriptive soil investigations and investigations after remediation have been modified, more attention is given to residual soil contamination with advices for any future land use. The Public Waste Agency of Flanders (OVAM) also prepares new amendments on the Soil Decree, the intention is 1/ to create a general inventory duty for each owner of land where a risk activity was carried out and 2/ to raise the responsibilities of the accredited soil experts. The soil experts will be audited and their investigations will be less checked.

- **Denmark**

The estimation of the total number of contaminated sites is currently under update. The related costs (risk assessment, remediation and clean-up, monitoring) will also be reviewed.

- **Finland**

The proposition to move to a more sustainable approach is on the way, with:

- a) A new national strategy, including recommendations on the development of targeted policy measures
- b) New regulations and guidelines on risk assessment, sustainable remediation and reuse of excavated soils
- c) A new national investigation and remediation programme and financial scheme for the remediation of orphan sites
- d) The implementation of innovative demonstration projects.

- **France**

The new version of the national guidance documents is now available on line – in French only

(<http://www.ecologique-solidaire.gouv.fr/sites-et-sols-pollues>).

- **Germany**

The Federal Soil protection Act is currently under review, with proposal of changes of some trigger values.

- **Lithuania**

The current discussions are related to the remediation of orphan sites and the revision of guidance values according different land use categories.

- **Luxemburg**

The proposal national contaminated sites policy is still at the Ministry consultation levels, with comments by some other ministries (i.e. certificate for building on contaminated sites). Discussions are ongoing on:

- a) The promotion of more sustainable remediation solutions while still operating on the sites
- b) The realization of the first Ecological Risk Assessment on sites.

Any recommendation about expertise on pollution by aircraft fuels on fractured bedrock will be appreciated.

- **The Netherlands**

The draft Environmental and Planning Act will consider: i) outlooks and vision documents on all authority levels, ii) pilots at provincial and municipality levels iii) Decision Support Systems for measuring the impacts of redevelopment, iv) the elaboration of sub-surface plans in some cities (including groundwater reservation, heating storage, etc.), and v) the development of an infrastructure for knowledge transfer to be tested at province levels.

The Covenant on soil and subsoil (see Utrecht meeting report) is under implementation: the draft Environment and Planning Act is an incentive for local authorities to broaden the scope of sustainable soil use and management. For 50% of the contaminated sites with unacceptable groundwater migration risks (estimated to 1.300 sites), actions are in execution with the aims of remediation and residual contamination manageable by aftercare measures. The long-term financial issues are under discussion.

For Groundwater remediation in urban areas, the remediation will be combined with (re)development, using the area approach (cf. Utrecht meeting report).

A consortium Tauw/CE/RIVM is currently developing a cost benefit analysis instrument based on 4 soil archetypes and with different levels of ambition, for supporting the decision making by local authorities.

NL is partner in the EU project Cocoon (together with OVAM). It focusses on EU vision for landfill management.

The City of Dordrecht works on a vision and norms for PFAS driven by problems caused by the DUPONT site.

- **Portugal**

The proposal for national legislation on contamination prevention and soil remediation needs to be approved by the New Ministry council, after the validation by the national committee (approach and orphan sites remediation funding).

- **Spain / Federal level**

The Ministry is currently working with the regional authorities for reclassifying activities and be more efficient in the future. The content should be detailed by the end of June 2017.

- **Spain / Catalonia**

Catalonia has recently amended the waste law. Regarding soils, one of the new provisions is the compulsory presentation of a soil quality study for building permits in sites where potential soil contaminating activities where developed in the past.

Recently it has been finished a study about environmental effects of shooting ranges both in use and abandoned sites. Besides lead and antimony, concentration of polycyclic aromatic hydrocarbons (PAH) have resulted over reference values.

- **Spain / Basque Country**

The Basque Country is working on 2 new documents:

- Contaminated sites plan has been finished
- First draft strategy for soil protection

In 2015 the law on Contaminated Sites was updated, now the decree is being developed. Guideline on risk assessment and work on reducing excavated soil is underway.

- **Slovakia**

200 Million Euros have been allocated to the investigation, remediation and monitoring of 30 major contaminated sites. The public procurement procedures have been launched for 20 of them.

- **Sweden**

The latest developments in Sweden are related to:

- a) A new funding scheme for residential areas
- b) The promotion of remedial solutions alternative to dig & dump
- c) New guidance values for materials – currently under process for evaluating the SE guideline value for lead (for this autumn)

Session 7 - Highlights, initiatives and updates in CLM

- **Minamata Convention – State of Play**

As previously discussed, the Minamata convention on mercury was adopted in October 2013. The European Commission submitted a legislative proposal aiming to align the EU legislation with the Convention. After the report of the European Parliament's Committee for Environment, Public Health and Food Safety (ENVI - 13 October 2016), the Commission, Council and Parliament reached agreement in interinstitutional trilogue negotiations on 14 December 2016.

The agreement, endorsed by Coreper on 16 December 2016 and by the ENVI Committee on 12 January 2017, was submitted for a first-reading vote in the March II plenary, with the following provisions:

1. The Commission shall organise an exchange of information with the Member States regarding the measures taken at national level to identify and assess sites contaminated by mercury and mercury compounds and to address the significant risks such contamination may pose to human health and the environment.
2. By 1 January 2021, the Commission shall make the information gathered pursuant to paragraph 1, including an inventory of sites contaminated by mercury and mercury compounds, publicly available on the internet.

- **RemTech Europe 2017 – markets and technologies**

Jussi Reinikainen, Member of the Scientific Committee, introduced the Event Agenda:

- Wednesday, September 20 : Welcome by RemTech Expo, Get-together
- Thursday, September 21: The conference by itself
- Friday, September 22: Workshop on sustainable remediation (half a day)

During the conference, the following topics shall be addressed:

1. Management of diffuse pollution, National and Regional approaches
2. National best practices (guidelines, legislation, operational practices, etc.)
3. Innovative technologies in site characterization
4. Innovative technologies in site remediation
5. Emerging pollutants, unconventional pollutants and mixtures of pollutants
6. Military and mining sites
7. Brownfields redevelopment, economic aspects included
8. Re-use of excavated soils and re-use of land treated soil case studies
9. Sustainable remediation approaches and case studies

- **Update ISO/TC 190 and CEN/TC 345**

With regard to international standardization the following aspects are of importance:

- Generally it needs to be recognized that ISO-TC 190, its SC's (Sub-Committees) are the responsible bodies for planning work items and organising working groups. CEN-TC 345 is the European "mirror-group" responsible for administrative issues in adopting ISO-standards as EN-standards. Up to now any standard stemming from ISO-TC 190, which was suggested for adoption, has been accepted. Interest and participation to the so-called parallel voting procedure are generally low and driven by a few countries and respective national standardization bodies.
- ISO-TC 190 SC3 (Sub-Committee 3: chemical methods) has been closed down. Work items have been transferred to a new technical committee at CEN, which is CEN-TC 444

“Environmental Characterisation”. This new CEN-TC will cover analytical methods for solid matrices like soil, waste, composts and sludges.

- As it was intended to amend EN ISO 11074 “Soil quality – Vocabulary” annually, it is noted, that up to now no revision took place.
- Furthermore upcoming/under revision (lead AFNOR):
 - rev. (EN) ISO/CD 15175: “Soil quality - Characterization of soil related to groundwater protection”
 - rev. (EN) ISO 15800: “Soil quality - Characterization of soil with respect to human exposure”
- With regard to sampling the actual drafts reference new ISO-standards (“ISO-series 18400”). Austria is skeptical that by approving revisions on ISO 15175 and ISO 15800 also the “ISO-18400”-series will receive European approval indirect but implicit.
- not a CEN subject, but may be of interest:
 - DIS/ISO 18504: “Soil quality – Guidance on sustainable remediation” has been accepted, FDIS-stage will be skipped and therefore publication is expected by 2017 (title amended to ISO 18504 “Soil quality – Sustainable Remediation”)

CF members are invited to control and check at national level, whether EN standards stemming from ISO-TC 190 may influence contaminated land management issues in practice. Given any questions or interest Dietmar Müller-Grabherr stays ready to provide information and support.

- **Message from Ana Paya Perez, JRC**

For the revision of the “progress in the management of contaminated sites in Europe” indicator, the JRC received replies from 18 MS and 4 associated countries and is still waiting response from 10 MS of which 4 have promised to send the replies (ES, IT, LU, PT). As June 2017, 24 countries have replied to the questionnaire (now JRC has received the replies of PT and LU). Relevant improvements have been achieved as a result of the efforts made to define a Land and Soil Indicator (LSI003) by the ad hoc Working Group on Contaminated Sites and Brownfields under EIONET NRCs Soil, and the Site Status for those sites where polluting activities took place. Commission JRC is expecting the replies from 3 countries in order to complete the analysis of the questionnaire.

JRC organized an EU - CHINA soil workshop on policy, science and technology the 27 & 28 February 2017 for building-up a partnership with experts from EU Member States interested in setting collaborations with China. CF members from Italy and UK participated tot his workshop.

The Monography “European achievements in soil remediation and brownfield redevelopment” of EIONET NRC Soil is in preparation, with an expected publication by July 2017.

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Next CF meetings:

2017

- Autumn 2017 – Copenhagen (DK), back to back with the ICCL Meeting - First week of October 2017

2018

- Spring 2018 – not settled yet (intended to be defined until October 2018)
- Autumn 2018 – not settled yet (as Austria will hold the EU-presidency a further meeting in Vienna or another Austrian town might get possible)

The secretariat is looking for volunteers for hosting the upcoming meetings. Representatives from Wallonia, Luxemburg, Portugal and Spain / Catalonia will explore their possibilities.

Tasks List

Action	Responsible	Deadline
Establishing new contracts	Dietmar Müller-Grabherr	30.10.2017
2018 CF-meetings – contacting possible hosts	Dietmar Müller-Grabherr	30.12.2017

APPENDIX 1 – OUTPUTS OF THE EUROPEAN SOIL AGENDA WORLD CAFES

Roundtable discussions on Awareness raising

The groups discussed the following questions!

1. Is there still a need to raise more awareness about sustainable soil use and land management?
2. If Q1 is yes, what kind of subjects can be identified? (services of the soil, value, functions, degradation, multiple land use..etc)
3. Do you agree that there is a gap in awareness about the added value about the soil-sediment-water system?
4. Is there a need for more exchange of information on the different soil issues?

Awareness for what? For whom? Is it possible to raise awareness or do you need an event/catastrophe?

Threats, ambitions can shift in time.

You need to know the target group and goals

There is a gap between communication and concrete facts

You can react or be pro-active dependent on the situation

You need to specify your awareness tools

Legislation as form of awareness raising

In Germany awareness is part of national legislation: a report for the parliament on what has been achieved in the last 4 years. All soil threats and functions are mentioned. The awareness is policy driven.

In Flanders also awareness is part of national legislation. A direct link is made with landownership. By change of ownership a soil certificate is obliged.

Wallonia also has a soil certificate.

Awareness raising caused by catastrophe

In Catalonia a catastrophe, water pollution caused by soil pollution, caused political attention and a wish to act. Although desertification in Spain also is a severe problem, awareness of desertification has not yet lead to a specific (policy) approach.

Getting ambitions on the agenda

Legislation and catastrophes can lead to political urgency and get soil and soil threats or services on the agenda.

In the Netherlands stakeholders play an important role in getting soil and services on the political agenda. CEOs of companies, authorities and NGOs act as soil ambassador.

Find themes of political interest which need soil and its services to get soil and soil threats on the political agenda: for example show the relation with food security, health, climate or energy. Make a connection with societal challenges.

Contamination is rather well covered.

Lately awareness has increased by global agreements: International Year of Soils, Sustainable Development Goals.

What messages can help to get ambitions on the agenda?

Connect with societal challenges; they are part of mutual agreements.

Give a positive message: show the value and show the benefits of soils and soil services for society

Go local: show what soil and services mean for cities, local communities and their societal tasks: circular economy, recycle the city, climate resilient cities.

Show the positive effects of soil quality and reuse of land (this could also be done for other themes).

Show the connection with themes which are already valued.

What instruments are available to raise awareness?

Stimulate by funding good examples and thus accelerate the process

Show the costs of non-sustainable soil use

Show the loss of benefits by not using the soil services

Invest in education (already at primary school level as they do in Austria)

What are essential starting points?

Use clear and simple examples to communicate

Look at the system as a whole. A lot of money is available for water. The investment in water quality f.e. can be optimized by taking soil into account.

Agricultural land but also forests and nature reserves serve much more goals than the private food or wood production, they contribute to common goods as biodiversity, carbon sequestration, climate adaptation, water retention and so on. The price of these goods should be incorporated in the price of agricultural and other "open" land.

Get information to people as soon as possible: start at the primary school

Show the link between soil and land use on every level in every project concerning spatial and land planning

Start with a broader vision/ambition

Bottlenecks

Value of soil functions: blessing or pest? Can we make criteria to show the value of the soil functions for society? Examples of concepts exist, but they have not been published (yet).

A lot of tools are available: political support is needed.

Because global problems are at the core it is hard to reach civilians.

There is knowledge needed to understand the role of the system. This makes it hard to come to an optimal solution and explain this.

Contractors and service provider are not yet/always aware of the importance to look at the system as a whole: the approach is still sectorial.

Legislation is sometimes contradictive

There is a discrepancy between short term private benefits and long term common interests.

What can CF contribute?

Show for different target groups goals and experiences

Make an inventory of awareness tools used in our countries

Help to draw up simple examples to communicate with different stakeholder groups based on the system as a whole.

Identify (European) stakeholders who can get soil services on the political agenda

Show the importance of criteria that show the value of soil functions for society

Do joint research (via the INSPIRATION research agenda)

Roundtable discussions on Research

The Common Forum supported the H2020 call for the development of a strategic research agenda on soil, land use and land management. The joining MS now each have their own knowledge agendas. The joint knowledge requirements of the MS will be part of the EU research agenda. At the end of 2017 the INSPIRATION project has delivered a research agenda.

1. How can we organize and influence the new H2020 calls and other EU research investment programs? Do you see other possibilities for joint research?
2. Is there a need to improve the science-policy interface? How can this be achieved?
3. Do you think more attention for data collection on soil services and functioning is needed knowing that data are essential for sustainable use and management of soils? Do you think monitoring and evaluation data should be gathered and shared on EU level?
4. Can Common Forum be a vehicle for improving joint research and data collection, for example on emerging contaminants? How should this be put into practise?

OUTCOMES:

Considering the difficulties to reach a political consensus, **research is a good path for an EU and international cooperation** on soil and land management, if multi- and inter-disciplinary, and coordinated between the different funding instruments (complementing each other for avoiding overlaps, redundancy and reduce the current landscape fragmentation).

The **Science – Policy interface** should be improved. It could be done by more end-users oriented RDI programmes, integrating global thinking, social sciences (i.e. on solutions acceptance).

Water is considered as a “Public Good”. It’s not the case for Soil (“private ownership”). Why? Some soil functions should be considered as such. This could be the subject of research projects, as a couple of other remaining scientific gaps (i.e. cocktail effects, emerging contaminants, quantification of each soil and land ecosystem service, value of land vs. paying for soil services, indicators development methodologies, connecting and calibrating earth observations / remote sensing to local observations, upscaling and downscaling information and models).

What is necessary for taking decision, for policy setting, for deriving indicators of relevance should also be explored, in particular data reliability, aggregation of data (new methodologies, artificial intelligence, ...) and of indicators, use of data (at different scales).

Some solutions:

- Identify facilitators / translators for science policy interface
- Develop case studies on good and bad experiences.

Data Collection for developing research and innovation is essential, but can be difficult in some cases (i.e. collecting soil samples on private owned land). The main recommendations are:

- Focus on data collection, reliability and representativeness, for feeding correctly the models and decision support systems developed in the recent years
- Maintain / develop funding of national infrastructures / observatories on the long term for networking at EU and international levels – connect to the European programme ESFRI
- Give access to existing infrastructures / databases – vs. use of the templates developed under the INSPIRE Directive and provisions of AARHUS Convention.
- Access to samples from “good experimental sites / areas” for lab studies.
- Provide methodologies / policy briefs on how to use the existing data in an appropriate way?

Common Forum should play a role in this field. How?

- Elaborating and publishing CF position papers / technical documents will serve to feed the national discussions (via connections between CF members and RDI national contact points) and EU developments (dissemination to EC DGs).
- Developing a note for CF members on H2020 and other RDI funding instruments / mechanisms for understanding and acting at the most appropriate levels.
- Consider match-making exercises between funding programmes / organisations and identified RDI needs (as the one ongoing under the H2020 INSPIRATION project) for influencing the national funders for more attention on Soil and Land RDI programmes at national, European and International levels.

Roundtable discussions on Integration

“Community policies on, inter alia, agriculture, regional development, transport and research have a significant impact on soil. Soil protection will need to be further integrated in other policy areas, if the goals of this strategy are to be met”. Soil services are the base under the UN sustainable development goals/ the EU societal challenges climate change, resource efficiency, food production and safety etc.?

1. Do you agree that soil is a cross-cutting theme and that there is a need for further integration?

Reactions:

All of us agree that soil is a crosscutting theme and that there is a need for further integration. Although there is already a lot of other soil related EU policy/legislation, but without specific targets and without a real integration and sometimes contrary e.g. between different directives (for example heavy metals in sewage sludge in agriculture and heavy metal balances in waste legislation).The soil relation is then more indirect and not visible. Especially in the CAP there is a need for more integration of soil threats, like decrease in organic matter and erosion.

Real integration is "hard", because of the need for different people with different knowledge (environment, spatial planning)/skills. Often restrictions/competences of organizations and conservative working structures are due for a sectoral approach. To make integration to a success we have to speak the same language and to make data available and digestible for others so that they are able to use it. Make the value of soil transparent! There will be still a need for sectoral instruments/legislation. The restriction for integrating soil in other EU policies it's needed that soil is a common good instead of private owned.

2. Is soil protection in your country sufficiently integrated in other policies? Can you give some examples? What was the role of EU policy?

Reactions:

In general the CF members are working in the field of contaminated land. An complete overview how soil is integrated in their other national policy and legislation is difficult to oversee. On the other hand Luxembourg has only one integrated law and no sectoral soil law. Most of the members state that there is need for more integration of soil with climate change, both adaptation and mitigation.

3. In your country do you think soil services are part of other policies such as climate adaptation, agriculture, spatial planning?

Reactions:

Most evident the soil services are used in agriculture for food production, although the value of land for food production is relatively low compared to other uses. So the pressure in land use changing from agricultural land for urbanization remains high.

In most countries the awareness is raising about the positive contribution of the soil-sediment-water system to societal challenges e.g. climate change, carbon sequestration, drinking water etc. The best way to use soil services in a sustainable way is to value them in “hard” euro’s. Therefore a reliable, transparent instrument should be developed. Although it’s noticed that some aspects, like perception of people, are difficult to value. Because soil is a limited resource the connection with a circular economy should be made better. Italia has developed a special tax for land use change.

4. The Common Forum can facilitate integration by joint knowledge and instrument development, exchange of policies and experiences, etc. Should this be intensified? Is this a role for the Working Group Soils as a resource?

Reactions:

CF will be a platform for exchanging information, knowledge and experiences. The role of the CF could be to address questions on soil as a resource, give opinions about the sustainable use of ecosystem services and improvement of the relationship with the spatial planning. The role of the CF could also be showing the costs of failure of not integrating or using the soil services in a sustainable way.

Implementing of the SRA on soil, land use and land management (INSPIRATION) could be a theme.

Roundtable discussions on Legislation

The Common Forum supported EC during the preparatory phase of the former draft on a Soil Framework Directive (2006; withdrawn 2014). However considering the 7th Environment Action Plan (January, 2014) and the recently published “Soil inventory report” (‘Updated Inventory and Assessment of Soil Protection Policy Instruments in EU Member States’; Ecologic Institute, Berlin, 08 February 2017) it is anticipated that further discussion on common European soil legislation will take place in future. To discover and exchange on current perspectives of MS representatives a set of 4 questions was prepared and discussed:

- Does your country need separate EU legislation on soil to tackle soil threats and develop sustainable use and management of soil services? Is extension of existing EU legislation and policies to be preferred?
- Should legislation focus on soil threats, soil services or both?
- Is there a need to have a level-playing field or is it possible to have different measures for different groups of MS, like “front runners, peloton and laggards”?
- Should the Common Forum make an updated outline for an EU Framework directive or a proposal for EU instruments?

Reactions:

- Representatives of several countries confirmed an interest for a common European soil legislation. The “Pros” felt harmonisation necessary and emphasised that any legislative act at EU-level should strictly provide for a framework and general goals, encouraging flexible solutions at MS-level. The “Cons” would in difference prefer to develop common tools. Generally MS representatives pointed out that (heavy) administrative procedures need to be avoided as otherwise any possible benefit will get weighed out by such back-draws.
- There is a positive perception to address the concept of (ecosystem) services, which could offer opportunities for integrating various environmental policies. However there are doubts, that
 - a good common understanding of the concept is already established and,
 - the applicability of the concept in legal terms, as major limitations in translating the concept of “services” into rules providing the necessary normative character are expected.

- In turn it is felt, that (soil) threats are much easier to monitor and measure. Instead of setting the focus to negative aspects, likely losses and damages, the way forward could be to watch out for positive effects and proofing benefits. Addressing (soil) functions could be key and a better denominator for setting a possible legislative focus.
- Some voices expressed sympathy for aiming to “level the playing field”. However the general perception or question is, whether this triggers for “minimum denominators” in between MS.
- Updating the CF outline for an alternative SDF or proposals for EU instruments seems, at the time being, hardly advisable. It would be more helpful to support the development of new views.
- This could be a common interest at the mid-term (e.g. end 2018). In preparing it would be recommended to start by
 - analysing the backgrounds of failure during the period from 2004 – 2014 and
 - performing an independent gap analysis,
- and finally discuss results of both actions.
- Following this path, it might be feasible to establish good starting point for further initiatives.

Possible follow-up actions to the World Café and its 4 round tables shall be discussed at the next CF-meeting in Copenhagen (3 October 2018).