



# STOP-IT

## **Deliverable 2.2 (M12)** **Annual technical and policy brief** **based on the results of each CoP**

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May, 2018



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 740610.

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## TITLE OF THE REPORT

D2.2: ANNUAL TECHNICAL AND POLICY BRIEF BASED ON THE RESULTS OF EACH COP

## SUMMARY

This deliverable is designed as a brief overview of activities carried out in the Communities of Practice (CoPs) within the STOP-IT project, together with summarizing the feedback of the participants and facilitators, and providing recommendations for future CoP activities. It is envisaged that this brief supports the Work Package 2 (WP2) team in delivering high-quality information and support to the CoPs and their members. In developing this brief, all feedback and evaluation forms provided by the CoPs facilitators over the first year of STOP-IT have been taken into consideration, as well as feedback from the facilitators of the workshops and work meetings. Six workshop reports and feedback from all four facilitators were used in developing this brief. The evaluation by both the participants and facilitators of the workshops was summarized and consolidated in order to avoid duplication of information. Recommendations for the WP2 team were formulated as a result of the feedback and recommendations provided by participants and facilitators.

## DELIVERABLE NUMBER

D2.2

## WORK PACKAGE

WP2

## LEAD BENEFICIARY

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## PLANNED DELIVERY DATE

31.05.2018

## ACTUAL DELIVERY DATE

31.05.2018

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## List of Acronyms and Abbreviations

AdB	Aigües de Barcelona
BWB	Berliner Wasserbetriebe
CO	Confidential
CoP	Community of Practice
CoU	Community of Users on Secure, Safe and Resilient Society
EC	European Commission
FL	Follower
FR	Front Runner
L-CoP	Local Community of Practise
PU	Public
QA	Quality Assurance
RIDB	Risk Identification Database
SAB	Security Advisory Board
TG	Thematic Groups
WP	Work Package



## Executive Summary

Deliverable 2.2 will be developed as four different briefs, one every 12 months, spanning the entire duration of STOP-IT. The current brief, the first in this series, builds on the workshop reports provided by the CoP facilitators after each workshop was carried out. This practice will continue until the end of the project. This brief was developed as a technical brief rather than a policy brief, as the local CoP workshops carried out to this point were only attended by stakeholders from organizations participating in STOP-IT. One project CoP activity was carried out with Front Runners and Follower utilities, while the trans-project CoP is in the early stages of development, integrating the STOP-IT project in research networks dedicated to cyber-security and infrastructure protection. As such, the current brief is looking to provide actionable advice to WP2 as well as CoP facilitators and managers based on the workshops that were held so far, in order to ensure the success of future workshops, which also will include external stakeholders. The authors envisage that the policy briefs related to the CoPs will be developed starting with the next version of deliverable 2.2, in order to provide input for the final deliverable of WP2, D2.3, which is due in M48 of the project.

After the six workshops carried out so far, the feedback from participants, CoP leaders, managers and facilitators, as well as from the beneficiaries of the information shared in the workshops (WP3) are in agreement that the objectives set have been realistic and have been achieved successfully during the workshops, or as follow up activities.

The suggestions, recommendations and feedback provided indicate a number of activities that are aimed at increasing the participation of external stakeholders, enhancing experience sharing between CoPs, providing a toolbox of moderation techniques, balancing the gender participation in workshops, and providing materials and information in advance of the workshops carried out.



## 1. Introduction

One of the goals of STOP-IT is to create and facilitate vibrant communities developed by the frontrunner utilities of the project and research organizations, in relation to cyber security in critical water infrastructure. The Communities of Practice (CoPs) developed throughout the project are designed to serve this purpose, and efforts are made from the beginning of STOP-IT to ensure they are operational during the project, as well as continuing to operate after the project ends in 2021. Within the STOP-IT project, a three-level CoP approach is designed, i.e. (i) local level (frontrunner water utility), (ii) project level (learning across locations and work packages) and (iii) trans-project level (transferability of knowledge and solutions to and from the project via interaction with other project/networks), see also D2.1.

The **local** CoPs are organized around the four frontrunner utilities active in the STOP-IT project – Oslo VAV (Norway), Mekorot (Israel), Berliner Wasserbetriebe (Germany), and Aigües de Barcelona (Spain). Up to M12 of STOP-IT the guideline for the set-up and management of the CoPs was elaborated (finalised in M6), and two rounds of CoP workshops already took place for Oslo and Barcelona, and one round for Berlin and Mekorot. The workshops are geared towards communication, data collection for project activities, and experience sharing with internal and external stakeholders of the frontrunners. Monitoring how the CoPs are working towards these objectives is important in order to understand what works and what can be improved in organizing and carrying out the workshops, as well as understanding what potential follow-up activities should be encouraged. This monitoring activity is the object of the current brief, and is based on anonymous surveys taken at the end of the workshops by the participants. In addition, the facilitators have been asked to share their experiences in facilitating the workshops, feedback on the application of CoP guidelines, as well as recommendations to the WP2 team and the WPs that put forward the workshop requirements and materials.

For the **project** and **trans-project CoPs**, we are looking to identify productive interactions between the participants, and cross-pollination potential with other related projects. We learned in the first project year that the project and trans-project CoPs are evolving rather organically over a longer period of time, and as such, we envisage that the monitoring of these activities will yield more results as the project progresses. While this report contains information about activities carried out for the project and trans-project CoPs, it is still early to provide conclusive information about the effectiveness of these actions.



## 2. Local CoPs activities and feedback

The CoP guidelines developed in WP2 make clear the need to measure the success of the CoPs activities, especially related to the local activities carried out, as these are connected to the first line of users of results stemming from STOP-IT: the frontrunner and follower utilities, as well as connected local stakeholders. As part of the template provided to CoP managers and facilitators for reporting on each of the workshops, a specific section was designed to capture indicators related to outputs and outcomes of the workshops. These are envisaged to provide an overview of the direct indicators, such as number of participants and resulting follow-up actions, as well as to gauge the participants' satisfaction in relation to the activities of the CoP. Further work investigating the impact of these activities can be realistically performed during the last year of the project and beyond the project life span. In the following, a summary of the workshop goals, participants and their feedback, as well as feedback from the facilitators is provided.

### 2.1. Workshop goals

A set of objectives is established before every workshop is set up. These objectives have the role of guiding the general motivation and work flow within the CoP meeting. They are supposed to be established by the leader of the project activity for which the workshop is developed. For the first 2-3 workshops it was envisaged that the objectives are set up in such way that participants become comfortable with the idea of the CoPs, the STOP-IT project and its ambitions, as well as the format of the workshops and the roles of the facilitator and community manager. Also, for the first workshops it was agreed that these are carried out with internal stakeholders of the frontrunner's organizations primarily to pilot the concept of CoPs in STOP-IT and to become aware of the level of sensitive information that is shared within the activities. However, each workshop organizer was given the freedom to choose how open the workshop is to external organizations and to invite potential members of the CoPs, as needed.

For the *first workshop round* (Nov 2017), the objectives were set as follows:

- To introduce and update stakeholders with information about the STOP-IT project and personnel
- To refine the ambition, scopes and goals of the CoP
- To engage stakeholders in a collaborative approach to the project
- To collect and discuss stakeholders' ideas and needs regarding the STOP-IT project
- To provide requested input to task 3.1 (questionnaire)

For the *second workshop round* (Feb-Mar 2018), the objectives set, were slightly different for each local CoP. Apart from introducing CoP members to the STOP-IT project, or bringing them up to speed with the developments following the first workshop, the second workshop had the following explicit goal set as the main topic of the four local CoP workshops carried out in February-March 2018: input to the risk identification database (RIDB) for work carried out as part of WP3, task 3.2 – Risk Identification.



## Overview of workshop goals:

### Oslo VAV:

#### 1st workshop:

- To introduce and update stakeholders with information about the STOP-IT project and personnel
- To refine the ambition, scopes and goals of the CoP
- To engage stakeholders in a collaborative approach to the project
- To collect and discuss stakeholders' ideas and needs regarding the STOP-IT project
- To provide requested input to task 3.1 (questionnaire)

#### 2nd workshop:

- Risk identification: Identify and characterize risk events for the STOP-IT Risk Identification Database (RIDB), as input to Task 3.2.
- Further development of the Local CoP, involving the water utility of Bergen municipality.

### Aigües de Barcelona:

#### 1st workshop:

- To introduce and update stakeholders with information about the STOP-IT project and personnel
- To refine the ambition, scopes and goals of the CoP
- To engage stakeholders in a collaborative approach to the project
- To collect and discuss stakeholders' ideas and needs regarding the STOP-IT project
- To provide requested input to task 3.1 (questionnaire)

#### 2nd workshop:

- Update the partners on project progress
- Provide requested input to task 3.2 (RIDB)

### Berliner Wasserbetriebe:

- To introduce and update BWB and project partners with information about the STOP-IT project and personnel
- To define the organization, ambition, scopes and goals of the CoP
- To engage stakeholders in a collaborative approach to the project
- To collect and discuss stakeholders' ideas and needs regarding the STOP-IT project
- To provide requested input to task 3.2 (Risk Identification Database (RIDB))

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## Mekorot:

- To introduce and update stakeholders with information about the STOP-IT project and personnel
- To refine the ambition, scopes and goals of the CoP
- To engage stakeholders in a collaborative approach to the project
- To collect and discuss stakeholders' ideas and needs regarding the STOP-IT project
- To provide requested input to RIDB survey

So far, the feedback from participants, CoP leaders, managers and facilitators, as well as from the beneficiaries of the information shared in the workshops (WP3) shows that the objectives set have been realistic and have been achieved successfully during the workshops, or during follow up activities.

## **2.2. Participants' workshop evaluation and feedback**

The workshops set up as part of the CoP activities up to this point were focused on engaging internal stakeholders mostly (from frontrunners and research institutes), in order to collect information required by WP3, which lead to the development of CoP core groups. For the two CoP sessions carried out so far, eighty participants have attended in total – some of these are counted twice as they attended both sessions<sup>1</sup>. Feedback was generally positive with regards to the atmosphere, structure, openness, and collaborative opportunities, and less positive with regards to the lateness with which information about the workshop was provided, available time, and absence of external stakeholders. The following shows a summary of pros, cons and suggestions offered by workshop participants.

### Pros:

- Collaborative, open, positive, engaging and productive atmosphere
- Clear structure, contributions encouraged from everyone
- Open discussion and main objectives of the workshop were achieved
- Good opportunity to meet other project partners in order to exchange experiences, ideas and needs
- Networking with different departments within own organizations
- Using the fault trees<sup>2</sup> helped to animate and structure the discussions
- Much of the time was dedicated to plenary and group discussions

### Cons:

- Could have informed participants more/differently in advance
- Time was a bit short for discussion of complex issues (both WP3 questionnaire and local CoP); room for discussions within workshops sessions could have been longer

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<sup>1</sup> Aigues de Barcelona and Oslo VAV had both two workshops each, while BWB and Mekorot held one each, combining the first and second set of objectives

<sup>2</sup> Fault Trees, was one of the methods used to gather information for the Risk Identification Database (for WP3)



- Absence of external parties
- It has been more a working group meeting than a CoP meeting
- Filling the Excel table took time, but did not add much
- Explaining the fault tree approach took time (but was necessary)
- Communication of objectives before the meeting

#### Suggestions:

- Ensure that all participants have necessary background information, and/or make time for more detailed introduction to the workshop, make available detailed agenda in advance
- More precise announcement of topics discussed (e.g. to send presentations or questions as draft version before the meeting) so that stakeholders have the opportunity to prepare workshop discussions
- Put extra thought into the balance between eliciting information requested from other WPs and the format, needs & ambitions of the local CoP
- Select a specific topic in advance and organize the meeting with required people (both internal and external)
- Have more thematic meetings and provide more time for experience sharing between the utilities
- In general: Illustrations of the STOP-IT Project or the specific issue the workshop is focusing at should be provided (this would enhance the general understanding of the STOP-IT project or the subjects to be discussed)
- Avoidance of (too long) lectures in order to get the discussion started / to keep it alive

### 2.3. Local CoP facilitators feedback

As the local CoP development is performed in coordination with the research institutes active in the project and in collaboration with the frontrunners, it was important to gauge the perception that the facilitators have on the workshops performed so far through the CoPs. As such, the local CoP facilitators were asked to respond to the following questions, related to the set-up, management of the local CoPs, as well as the support offered from WP2:

1. How would you describe the facilitator experience overall? What have you gained/learned from this activity?
2. Are there/have there been follow up actions decided with CoP members so far?
3. Have the guidelines elaborated by WP2 through D2.1 provided you with the tools and knowledge you felt were required to facilitate the workshops?
4. What are your recommendations for:
  - a. The WP2 team – elaborators of the CoP methodology in STOP-IT?
  - b. The other WPs representatives that develop the workshop subject, materials and ideas?
5. What are your suggestions for improvement overall?

Primarily, all facilitators noted that so far the CoP approach has been a positive experience with direct learning outcomes for them, as well as for the participants. The first two workshops were designed (aside for setting up the CoP) mostly for frontrunners to provide inputs for the



work carried out in WP3, specifically in tasks 3.1 and 3.2., and as such, there has been less room for developing social learning and characteristics associated with the CoP approach. However, there is an overall beneficial sentiment that the facilitators are building their own role within the STOP-IT CoPs through their approach to the application of the concept, their role as the project tasks “translator” to actions, and through ensuring that attention is given to the goals, values and social learning between stakeholders. Follow up actions, including additional meetings and telephone-conferences are being organized by the communities.

Facilitators reported that the guidelines prepared in WP2 for the design, set-up and management of the CoPs have been beneficial in forming a theoretical basis before the CoPs began operation. In practice, the CoP meetings took their own direction and are starting to form their own identity, an aspect considered while developing the guidelines: the CoPs were given flexibility in choosing the methods that they use in the meetings, such as the order with which they approach the subjects, adapt to local culture and work conditions, the frontrunners primary interests, etc. Not all questionnaires, templates and recommendations were used as prescribed, which indicates that the facilitators are using their own best knowledge to lead the workshops. While this is in principle a good development for the CoPs so far, attention should be given to how much the workshops are straying from the overall direction of the project and, if needed, support should be provided from WP2 to correct any undesired deviations.

One particular point of attention raised by the facilitators, also seen in the participants’ feedback, is that guidelines, suggestions, materials, and requests from work package leaders should be made available to both the facilitators and the CoP members more in advance compared to how this has been done so far. As noted by the facilitators, the local CoPs are now established but the immediate future of these CoPs is in the hands of the WPs that provide them with content. The suggestion is to clearly mark the future workshops on a 6-12 months basis, so that a calendar of events can be established. This will enhance the capabilities for the CoPs to collaborate (between locations, as well as between local-project-trans-project). Another suggestion is to have CoP members provide information in advance of the workshops, and then summarize, compare and discuss during the workshop, rather than asking for the information to be shared as part of the discussions. This feedback around proper communication and information sharing relates to the “what’s in it for us?” question to which the CoP members should have a clear answer formulated for themselves.



### 3. Project CoP activities and feedback

Project CoPs are designed to exchange experiences on the applicable outcomes of STOP-IT with project partners by promoting a multi-stakeholder approach to water system protection (see also D2.1). Up to M12, Project CoPs have been launched on different levels:

- i. on Task- and Work Package (WP) level, within the Scientific Technical Committee (STC), the Project Advisory Board (PAB) and
- ii. as a Water Utility group of STOP-IT operators in order to connect frontrunners and followers

CoPs on project level (i) will not be considered in this report as this CoPs consist mainly of project working groups and meetings and interactions will be described in corresponding WP deliverables and technical reports (in M18, M36, M48) accordingly.

In order to connect frontrunners and followers beyond project activities and tasks and to enhance exchange of knowledge and experiences, it was decided to provide a CoP for FR and FL water utilities: the Water Utility Group. A first meeting took place within the expanded local CoP workshop at Berliner Wasserbetriebe (Workshop on IT-Security on 12.-13.03.2018). At the meeting three (out of four) frontrunner utilities and three (out of four) follower utilities were attending.

The objective of this first water utility meeting was to bring together FR, FL, research institutions and technology providers in order to

- Provide a framework for knowledge exchange between utilities
- Achieve a common understanding of upcoming tasks and tools developed
- Exchange experiences and ideas
- Discuss and define needs and expectations

The most positive and negative aspects of the workshop and suggestions for improvement were:

Pros:

- Collaborative and productive atmosphere
- Very engaged participants
- Meeting the other team members, exchanging ideas and discussions on several topics, receiving feedback from group members
- Presentation and explanation of BWB site and test lab and network (good opportunity for knowledge exchange)

Cons:

- Room for discussions within workshop sessions could have been longer
- Only a little number of technology providers was attending the workshop, this would have enhanced the discussion and the exchange with water utilities (FR & FL)

Suggestions for improvement of future workshops/meetings:

- More precise announcements of topics discussed (e.g. to send presentations or questions as draft version well before the meeting) so that stakeholders have the opportunity to prepare workshop discussions

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- Have the project managers inquiries and questions for the group in advance

The overall feedback on the first water utility meeting was very positive and the participating (and also other) partners from water utilities were indicating interest on further meetings within the water utility group. Currently, it is planned to provide a water utility session within the annual project meeting. Depending on the feedback and response within this meeting, a decision on the future frequency of the water utility group meetings will be made.



## 4. Trans-project CoP activities and feedback

With regards to the trans-project CoPs, the activity is driven by STOP-IT's coordinator, Rita Ugarelli. Collaborations have been established with relevant communities: the ICT4Water cluster ([www.ict4water.eu/](http://www.ict4water.eu/)), the "Community of Users on Secure, Safe and Resilient Societies" (CoU) ([www.securityresearch-cou.eu/about](http://www.securityresearch-cou.eu/about)), the FP7 project SCOUT ([www.scout-project.eu/](http://www.scout-project.eu/)) and the Net4Society ([www.net4society.eu](http://www.net4society.eu)).

The ICT4water cluster aims at safe, sufficient, valued and "smart" water for EU citizens by stimulating the development of innovative water management products and services, based on Information and Communication technologies and enabling greater cooperation among researchers, industry, water regulators, operators and users across the EU. The cluster comprises 20 ongoing H2020 projects, including STOP-IT and 13 concluded projects.

The collaborative activities established are:

- Contribution to the ICT4water newsletter by STOP-IT WP9
- Participation to the ICT4Water cluster events (as the EIP Water conference in Porto, September 2017 and the combined events of ICT4Water cluster and the WssTP working group on ICT and Water )
- STOP-IT will be presented by Rita Ugarelli (SINTEF) within an ICT4Water dedicated session at the coming 13th International Conference on Hydroinformatics (HIC 2018). ([www.hic2018.org/](http://www.hic2018.org/)) in June 2018

The "Community of Users on Secure, Safe and Resilient Societies" (CoU) has been launched in January 2014 and has since developed to become an efficient platform of exchanges among different actors of different branches of security and crisis management. The CoU has developed a thematic programme for 2018, among which a dedicated theme focuses on water safety and security (Theme 2).

The collaborative activities established are:

- The 8th of March 2018 Rita Ugarelli (SINTEF) participated to the "Science to Science" round-table on Theme 2, to present the project on behalf of the STOP-IT consortium
- The CoU will create an expert team on cyber security and Rita Ugarelli expressed on behalf of the consortium the availability to join. The expert team will also interact with NATO on selected topics.
- The 7th of June 2018 Rita Ugarelli (SINTEF) will attend the 11th CoU Theme 12 "Urban CIP", led by DG HOME with European Reference Network for Critical Infrastructure Protection (ERNICIP). The event will focus on urban critical infrastructures:
  - FP7 and H2020 Projects (see list below) for the "science to science" panel.
  - Involvement of policy DGs and MS in the "policy to policy" panel.



- Bringing scientists, policy-makers and industry/SMEs together around crisis management at city level and CIP in the "policy to research & innovation" panel with involvement of stakeholders.
- Involvement of practitioners in the "Interactions with practitioners" panel.
- Projects of relevance to the theme: SMR, RESOLUTE, IMPACT, CARISMAND, CUIDAR, SMART-RESILIENCE, DARWIN, ATENA, DEFEND, STOP-IT, SAURON, GAMMA, SUCCESS

The SCOUT project is based on the use of multiple innovative and low impact technologies for the protection of space control ground stations and the satellite links against physical and cyber-attacks. STOP-IT was presented at the final workshop of SCOUT by Juan Caubet (EURECAT) the 15th of March 2018 within the AFCEA conference "Protection of critical infrastructures: the SCOUT workshop" devoted to the thematic topic of Protection of Critical Infrastructure. No short term follow up items are foreseen in relation to the SCOUT project, but according to Juan Caubet there is high potential for collaboration with the other projects presented at the workshop.

STOP-IT has been invited to events organised by ERNCIP (<https://erncip-project.jrc.ec.europa.eu/>) and to contribute to their activities. ERNCIP (European Reference Network for Critical Infrastructure Protection) is an EC platform which is formed by different Thematic Groups (TG). Aigües de Barcelona (AdB), Front Runner of STOP-IT, is involved in one of those TG (Chemical and Biological Risks to drinking water). Possibly AdB could support the project by building a bridge between ERNCIP and STOP-IT.

Overall and considering we are only in M12 of the project, the trans-project activities already achieved making STOP-IT visible in the most relevant networks/communities at EU level related to safety, security and CIP. Besides making STOP-IT visible, a direct outcome of the active participation is the opportunity to link with ended and ongoing FP7/H2020 projects on CIP, with high potential for a dedicated trans-project CoP workshop, which could be included into the agenda for the PSB meeting in 2019 or 2020.





## 5. Critical review of CoP workshops

Summarizing the feedback and indicators provided by both the CoP participants and facilitators creates a basis for improvement of the future operation and knowledge gathering/sharing within the CoPs. The following subchapters are primarily directed towards local CoPs. However, we believe parts of this critical analysis are also useful for and should be considered in organizing future project CoPs. For trans-project CoPs there are currently no particular recommendations for improvement, as most activities are developing on longer time frames and in connection to other projects and initiatives.

### 5.1. Lessons learned

The CoP guidelines were designed to support the CoP facilitators and managers in the setting up, starting and managing the activities carried out in the workshops. These guidelines were not set up as hard prescriptions, and each CoP had flexibility in how to carry out the initial activities. In the guidelines it was suggested that the first CoP workshop should start with an introduction to the CoP concept, leading the participants through the different aspects that the activities will cover. In practice, for some of the CoPs it was found that introducing and discussing the different CoP aspects gradually, in relation to the specific tasks required, was more efficient than discussing the concept of CoP and its operation itself.

In the guidelines the importance of the roles of facilitators of the CoPs were clearly recognized: “The CoP facilitator is designated from the related research institute and supports the CoP manager. The facilitator should be an ‘independent expert’, who is given the authority to lead, to impose clear rules and roles, and who can generate an environment of trust.” In practice, this aspect was proven, as the facilitator has the important role to keep frontrunner utilities engaged, to collect their needs for corresponding tasks and project activities and vice versa.

As the CoPs take shape through the development of workshops and connected activities, social learning takes place between the members of the CoP. So far, there was less need (and time available) for development of social learning and characteristics associated with the CoP format. However, as the CoPs develop as part of the STOP-IT project, including external stakeholders (i.e. not only members of the organizations represented in STOP-IT), social learning will most likely take shape through the stakeholder interactions with the project.

Sets of questionnaires, materials, and templates are provided to the CoP facilitators and managers, as well references to the CoP guidelines, prior to the workshops being organized. To this point, the facilitators reported that it would have been excessive to use all questionnaires, templates and recommendations exactly as provided; instead, the facilitators had the freedom to tailor the approach and use only materials that were needed in the workshops.





The CoP activities in the first project year were focused on (1) setting up the CoPs and (2) providing information required for WP3 of STOP-IT – namely, the identification of risks for the frontrunner utilities systems. Up to now, FRs were mostly asked to provide information, but it is envisaged that as the CoPs advance and coalesce by attracting more members, STOP-IT will also need to focus on showing the benefits in terms of "what is in it for us" to the members.

The distinction between Local and Project CoPs is blurry in practice; however, this is not perceived as a problem. Instead, while allowing for flexibility for the organic development of project CoPs, efforts are made to be inclusive in the approach, especially for the STOP-IT utilities. The utilities experience sharing, as experienced in the Berlin local CoP workshop, where all the FRs were represented, is starting to coalesce into a project CoP.

## 5.2. Recommendations for future workshops

The following list of recommendations builds on the consolidation of participation indicators, feedback from members of the CoP, as well as feedback from facilitators. The recommendations provide actionable information mostly dedicated to the WP2 team, while facilitators and managers should be informed about the actions taken by the WP2 team on the basis of the following recommendations.

1. Efforts should be made to balance the gender representation in the workshops;
2. The CoP guidelines may be more appropriate for formal meeting formats. They should be considered and applied for the annual meeting, when a dedicated session for utilities is programmed as a project CoP.
3. Material and information should be provided earlier by WPs or task leaders responsible for the workshop (i.e. info material, graphics, suggested moderation techniques etc.); graphics are already prepared to clarify the STOP-IT project and approach to participants;
4. CoP events/meetings should ideally be set for the upcoming 6-12 months in advance in a calendar of activities;
5. Ensure that attention is given to the goals, values and social learning between stakeholders;
6. Ensure and enhance experience sharing between the local CoPs, as well as with project and trans-project CoPs;
7. Involving more/external stakeholders is relevant for experience sharing, user requirements, technology development, testing experiences, and the building of contact networks;
8. Focus on experience sharing in the coming project year and, to the extent possible, expand beyond the local situation and connect FRs;
9. Try keeping the meetings lively by avoiding long lectures and by avoiding the filling of Excel files / questionnaires during meetings; these activities should be carried out before or after the actual meeting, while the meeting should be reserved for discussing results and summaries of these activities;
10. Try placing more emphasis on what the input/feedback will be used for to show what the next steps will be (envisaged characteristics of RIDB, capabilities of the solutions, etc.),



provide some visions, knowledge that will be inspiring and show the participants 'what's in this for me';

11. Explore the provision of a toolbox of moderation techniques (in case there is no suggestion from the WPs or task leaders who are responsible for workshops content). This could be for instance a short presentation showing 3-5 useful moderation techniques, such as world café, visioning etc., which could support the discussions;

12. Implement a more illustrative overview of outcomes and storyline, identifying the stage of the project in relation to project activities, what results are envisaged to be obtained through the information requested, what are the future steps to be taken.



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 740610.

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