In2Action: Development and evaluation of a Policy Game Intervention to enhance evidence-use in HEPA policy making

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Contents

1. Introduction .......................................................................................................................................... 3
   1.1 REPOPA background and aims .................................................................................................. 3
   1.2 Work Package 2 - background and aims .................................................................................. 4
   1.3 Use of the KTA framework ....................................................................................................... 5
   1.4 Program Theory: Enhance cross-sector collaboration and evidence-informed policy making .... 6

2. The policy game intervention ............................................................................................................... 6
   2.1 Developing a policy game ............................................................................................................ 7
      2.1.1 Systems analysis in three countries .................................................................................... 7
      2.1.2 Designing generic game ........................................................................................................ 7
      2.1.3 Commonalities and differences: elements from the systems analyses for the generic game .... 7
      2.1.4 Adapting generic game to each country case ...................................................................... 8
   2.2 Game description: building blocks and participants ...................................................................... 8
   2.3 Pilots in three EU countries ........................................................................................................ 11
      2.3.1 Case: The Netherlands ....................................................................................................... 11
      2.3.2 Case: Denmark .................................................................................................................... 13
      2.3.3 Case: Romania ..................................................................................................................... 15

3. Evaluation of the intervention ............................................................................................................ 18
   3.1 Evaluation plan .......................................................................................................................... 18
   3.2 Methods used ............................................................................................................................ 18
      3.2.1 Observations ....................................................................................................................... 18
      3.2.2 Questionnaires .................................................................................................................... 18

4. Results ................................................................................................................................................. 19
   4.1 Observation results during the policy game ................................................................................. 20
      4.1.1 Specific context related aspects of the game ....................................................................... 20
      4.1.2 Leadership ........................................................................................................................ 21
      4.1.3 Communication and collaboration ...................................................................................... 22
      4.1.4 Facilitators and barriers related to collaboration and evidence-use in policy .................... 23
   4.2 Questionnaire results before and after the game– changes over time ..................................... 24
      4.2.1 Organizational networks ..................................................................................................... 24
1. Introduction

This is the final report from Work Package 2 (WP2) in the REsearch into POlicy to enhance Physical Activity (REPOPA) program of research funded by the European Commission (EC) FP7 program. The report is written by the three participating country teams from The Netherlands (NL), Denmark (DK) and Romania (RO) and aims to answer the research questions stated in the Description of Work (DoW) of REPOPA. It describes the development and evaluation of a game simulation intervention, a policy game in a real life setting. The policy game intervention focuses on the enhancement of organizational and process aspects related to use of evidence among stakeholders in cross-sector policy making in three EU countries.

The structure of the report is as follows. First the general background and aims are described followed by a description of the policy game intervention and its cases. Next the evaluation plan and methods (chapter 3) and main findings (chapter 4) follow. In chapter five the main findings are summarized across countries including discussion and conclusions with respect to the central questions. We finish with presenting some ideas and perspectives for future possibilities for the policy game intervention and achieved learnings in chapter six.

The report is a public document and serves as documentation to EC.

1.1 REPOPA background and aims

It is well known that integration of research evidence in policy making is important and that public health interventions should be based on the best available evidence, meaning that use of evidence can potentially enhance prioritization, planning and implementation of public health interventions (Brownson, Fielding, & Maylahn, 2009). Use of evidence is expected to facilitate implementation of the most appropriate and effective interventions in relation to cost-effectiveness and the interests of populations and each individual’s state of health.

The EU has put a focus on physical activity by funding research (Foster, 2000) and different resources are developed to stimulate policy making with focus on physical activity (Fourth Consolidated Draft, 2008). Additionally, scientific research has produced abundant knowledge and understanding on the link between physical activity and health, physical activity levels and trends, effective interventions to stimulate physical activity, and also on (national) policies in different EU countries. Thus, there is knowledge and know-how from both research and policy making on the relevance and importance of the increase of physical activity. However, integration of evidence in policy making is not straightforward and methods for this are needed (Brownson et al., 2009; Kohatsu, Robinson, & Torner, 2004; Nutley, 2007; Rychetnik & Wise, 2004).

The REPOPA program aims to integrate scientific research evidence and expert know-how with policy making processes to increase synergy and sustainability in promoting health and preventing disease among Europeans. The REPOPA Consortium brings together scientific researchers, experts, policy makers and stakeholders from different disciplines and countries. The Consortium consists of scientific excellence in health research, including physical activity, and links to real life experience in policy making and expertise in knowledge translation in six countries in Europe and in Canada.
1.2 Work Package 2 - background and aims

In WP2 the development of the game simulation and its impact on the use of knowledge in local Health Enhancing Physical Activity (HEPA) policy development are central. WP2 builds on the experiences from WP1 and the discovered role of evidence and stakeholders in health/HEPA policy-making (Aro et al., 2015; Hämäläinen, Villa, & Consortium, 2013). This information combined with a systems theory approach in knowledge translation (Participatory Policy analysis - PPA - in particular game simulation) and social science theories on organizational collaboration and change (Weiner, 2009) forms the basis for exploring how to promote - via enhancing of contact, communication and collaboration between stakeholders- efficient evidence utilization in policy processes. The lessons learned and experiences on the way of WP2 have been of use when developing indicators for WP4, the Delphi study. Elaboration on this part can found in chapter 6, Perspectives.

A meta-analysis examining approaches to improve adherence to preventive offers outline that organizational changes are most likely to improve behavioral change rather than education. In addition, organizations should choose interventions that are based on theory or a local assessment of needs and barriers. Thereby, involved collaboration and teamwork are essential (Stone et al., 2002). Furthermore, a systematic review (2012) of effectiveness of knowledge translation strategies points out that no single strategy is effective in all contexts. Hence, it is important to consider the characteristics of the knowledge being transferred, providers, participants and organizations when planning an effective strategy (LaRocca, Yost, et al. 2012).

A Canadian study comparing different settings of evidence-based practice implementation highlights the importance of leadership in knowledge exchange. Furthermore, the authors raised the importance of two-way-interconnections at all levels and necessary strategic visions (Stetler, Ritchie, et al. 2009).

Game simulation is a methodology for PPA, which is developed in the 1980s from the general systems analysis and takes into account above mentioned aspects. Game simulation is a way of PPA aimed to improve communication on formal models of systems by means of interactive simulation (Geurts & Joldersma, 2001). Game simulation is used to assist organizations in policy exploration, decision making and strategic change. The process combines the rigor of systems analysis and simulation techniques with creativity of scenario building and communicative power of role play and structures of group technique and sometimes computerization. Policy gaming is a type of game simulation which provides an appropriate tool for dealing with the increasing complexity of organizational environments and the problem of communication within complex organizations and networks. Policy gaming might be used as a strategy to solve a problem by: 1) framing the problem in a game, 2) finding answers through this game for the real problems, and 3) using the solutions of the problem in the real life context. The method has been used for over 25 years for systematic analysis of several strategic change projects, some of which also included processes between independent organizations (Geurts, Duke, & Vermeulen, 2007).
The overall aim of REPOPA WP2:

The overall aim of WP2 is to investigate if the policy game intervention - based on needs, context and systems analysis – could be used to improve communication and collaboration between stakeholders in a cross- and multi-sector health policy making process. The policy game aims to enhance the level of evidence-informed HEPA policy making in selected, real-life cases by studying and addressing cross-sector facilitators and barriers as well as organizational processes in evidence-informed HEPA policy making, which in turn may lead to a more efficient and successful policy.

The main objectives of WP 2 are to study organizational and process aspects in cross-sector HEPA policy making, more specifically:

- organizational networks;
- aspects of leadership between organizations;
- communication and organizational change processes;
- facilitators and barriers in evidence-informed policy making.

A policy game will be conducted in three real world policy cases relevant for physical activity promotion (existing or hypothetical) in three participating countries: The Netherlands (WP2 leader), Denmark and Romania.

1.3 Use of the KTA framework

Knowledge to action (KTA) has become a concept describing the process of putting research into public health practice and policy making (Graham et al., 2006; Straus & Holroyd-Leduc, 2008). The KTA model suggests what actions to take when translating research into action including: identify, review and select knowledge, adapt knowledge to local context, assess barriers of knowledge use, select and tailor interventions, monitor knowledge use, evaluate interventions (process and outcome) and sustain knowledge use in order to identify new knowledge gaps (Graham et al., 2006). In REPOPA the KTA framework forms the basis for developing indicators for evidence-informed decision making in policy processes.

In WP2 the KTA framework has been used in an operational manner, especially to structure the development process. Throughout the process in WP2 focus has been on communication, collaboration and the organizational network between stakeholders in cross-sector local HEPA policy making. Hence, this focus has been clear in the development of the generic game and the games adapted to local context (which will be described later). Therefore the first part of the KTA cycle has been of main inspiration. In particular, the phases of adapting knowledge to local context and assessing barriers to knowledge use.
1.4 Program Theory: Enhance cross-sector collaboration and evidence-informed policy making

For the policy game intervention in WP2 a more elaborate program theory (logical model) has been developed. The purpose of this logical model was to explicate the assumptions behind the intervention: How are the different steps in the policy game intervention expected to have an effect on (intermediate) outcomes, and how does this relate to the final expected outcomes of the intervention process. Furthermore, the RE-AIM framework (Glasgow, Klesges, et al. 2006; Glasgow, Vogt, & Boles, 1999) has been used as a guideline in the planning phase of how to develop an effective policy game intervention. For example who should be invited according to the systems analysis, how the intervention should be implemented and how the effectiveness and sustainability of the game could be measured.

The policy game intervention aims to help stakeholders in local HEPA policy making to overcome barriers for knowledge use. By participating in the game, they get the opportunity to communicate and collaborate with possible stakeholders/sources of knowledge relevant for the policy making process. In the policy game they can experience in a safe reality-based situation what it takes to collaborate, how to collect relevant knowledge and how to adapt it to the local context. This may stimulate cross-sector collaboration, stakeholder involvement (academia/knowledge providers, decision makers, professionals, citizens - with relevant sub groups); accountability (who is responsible, for whom and how is responsibility for policy implementation taken up); awareness of leadership aspects, collaboration in networks, interdependencies, trade-offs and negotiated interests and communication.

Based on the program theory of the policy game intervention, four expectations were formulated as to the impact of the policy game intervention.

The following general expectations were formulated:

- An increase in the knowledge about and awareness of the different stakeholders and sources of evidence available for use in the policy development process.
- An enhanced understanding of the advantages to use different sources of evidence and more communication and cross-sector collaboration among the main stakeholders.
- An increased intention to follow up on communication and cross-sector collaboration (attitudes change showing readiness for change in the organization).
- An increased intention to use (research) evidence from different stakeholders.

2. The policy game intervention

The policy game intervention is an innovative way of trying to intervene in the processes of policy making that stakeholders engage in real world policy making. This project focused on the development of a real life policy game for the local policy making context and evaluating its impact on aspects of the process of cross-sector policy making in relation to use of evidence in this process. To our best knowledge this has not been done (or documented on) before. In this chapter the development of this policy game intervention is described. Terminology as used in WP2 can be found in appendix 1: glossary.
2.1 Developing a policy game

When developing a policy game certain questions needed to be answered as it is structured in the first phases of the KTA cycle. For instance: which issue should be tackled, who are involved in this issue and should be participating in the game, how are participants related and what are their main roles, positions and driving forces, including barriers, in relation to the issue? By answering these questions the generic basis for the policy game was formed. In turn this generic base could be adapted to the specific cases, the local pilots in three EU countries, Netherlands, Denmark and Romania, see appendix 2 for the time line of WP2.

2.1.1 Systems analysis in three countries

To determine what the content of the game had to be, i.e. the main elements in the game and who should be participating, a systems analysis of the relevant policy network was executed in each country. Documents on the policy context and networks on local or regional level were studied and informative interviews with key-informants were held. This analysis resulted in a schematic overview of the stakeholder organizations involved in HEPA policy making (local, regional and national level). This schematic overview made clear which were main stakeholder organizations on different levels, what were their positions and roles, their main driving forces to be part of the network and their mutual relations in the process of HEPA policy making (at the local level). The systems analysis was the main preparatory part of the development of the policy game. Furthermore, the information from the systems analysis also provided baseline information on the network’s systems characteristics (organizational network, hierarchical relations, communication and collaboration, possibilities for use of evidence) of the case where the policy game was carried out.

2.1.2 Designing generic game

The information of the systems analysis of the organizational networks in the three countries formed the basis for the contents of the generic policy game. The common elements in the three systems analyses, namely how the HEPA policy making process on local/county level evolves; which stakeholders are involved in the organizational network; what drives them and how they are related; were discussed by the team members from the three countries. Based on the three systems analyses and the discussion by the country teams a generic game content and design of the policy game was developed.

2.1.3 Commonalities and differences: elements from the systems analyses for the generic game

A policy game is a context oriented intervention. Therefore it was important that the outline of the game and the cases had commonalities, for example the inclusion criteria. But when it comes to the adaptation to the specific context, the case and their needs became more important.

In advance to selection of the cases inclusion criteria were discussed within the WP2 team. The inclusion criteria across the three countries were: local/regional setting (preferably similar across countries); the willingness to participate (being motivated to participate in an innovative study/pilot); cross sectoral approach (preferably currently working towards cross- and multi-sector HEPA policy development); policy phase towards designing the implementation plan for the policy at hand.

It was most important that the cases were open minded towards a new experience and potential change, hence it was agreed that not all the other criteria needed to be met in all three countries.
However, all three cases met almost all the inclusion criteria, except for the inclusion criteria ‘phase’ where the Romanian case was in the phase before planning the implementation phase (see also ‘2.3 pilots in three EU countries’).

One of the main differences between the three countries regarding the policy development process was the difference in responsibility. In all three countries the responsibility and who’s in charge of the implementation differs. In the Netherlands and in Denmark the local authority is responsible for the health policy, regulated by law, but when it comes to the implementation plan, the Dutch authorities have mandated the Regional Sport Service with the responsibility for the implementation of this specific JOGG policy. In Denmark the local authorities themselves are in charge of directing the policy implementation. In Romania on the other hand, none of the stakeholders are in charge and can be held responsible for the implementation of the HEPA policy. As the aim of the policy game was to develop an implementation plan with concrete intervention ideas (intervention cards) to be handed in to the one responsible, a major adaptation in the Romanian game was necessary on this point (see also 2.3.3 Case: Romania).

All three cases had as main aim to work on cross- and multi-sector collaboration, to have stakeholders gain insight in the policy development process, each other’s roles and positions, and how they could benefit from collaboration. Each of the countries had also more specified needs, but these needs were all linked to the main aims mentioned.

2.1.4 Adapting generic game to each country case

The specific needs in each case were identified via interviews with country specific working groups to fine-tune the generic game for the local policy setting. The working groups consisted of researchers and key informants from the policy context where the game was going to be executed. The working group explored specific needs and barriers for cross-sector collaboration and exchange and use of different sources of evidence in HEPA policy making among the stakeholders in their local setting. This additional exploration of the local policy setting by the working group formed the basis for adaptations of the generic game to the country case. After adapting the generic game to the context of the specific country case, each country executed a pilot-test. The pilot-tests provided information for final adjustments for the final policy game before executing the game with the real life stakeholders from the policy case.

2.2 Game description: building blocks and participants

The generic game was named In2Action and was composed by six building blocks described below.

1) The script

The script of the game contained the general description and foundation of the game. It was decided to keep the game concept close to the real life characteristics of the local HEPA policy network (as shown in the systems analysis) such as roles, positions, driving forces of and relations between stakeholders.

The basic concept for the script of In2Action: A fictive municipality where different stakeholders were working on an implementation of a HEPA policy plan. The aim was to develop cross-sector interventions through collaboration between stakeholders and design an overall implementation plan that fits the aims of the HEPA policy. A game leader (see below under 6) facilitated the game and made sure the
script was followed. To develop integrated, cross-sector interventions the teams needed to get support from other teams in the game. In the end, the game leader would evaluate the result and decide together with the accountable stakeholder in the game whether the interventions proposed by the teams (which form the final implementation plan), met the objectives of the HEPA policy plan. This was part of the (final) evaluation of the game with the participants.

2) **The main roles**
Key stakeholders that were identified in the systems analysis were taken up in the game by role descriptions. These roles were supposed to be played by teams of 2-3 persons each, but since some people did not come, some roles were played by 1 person. Each role had specific objectives and aims, listed in a role description on paper. In these role descriptions also the game flow and the materials that could be used were pointed out. The words role and team are used interchangeable.

3) **Materials**
In the policy game there were two kinds of materials: materials to indicate achievements of teams and materials to support the game. In In2Action intervention cards were chosen to form indicators for achievements of the aim of the policy game, i.e. collaboration between stakeholders to develop an implementation plan with integrated, cross-sector interventions. These intervention cards needed to be filled in by each team and posted on a large poster. The intervention cards hold information on: description of the proposed action or intervention, which other team participated, how it was financed, which other team supported it and on what kind of evidence it was based. Next to the intervention cards the game included material that supported the script, the game flow and the roles. The game was, as previously mentioned, situated in a fictive municipality. Supportive materials were a newspaper, describing events in the municipality focusing on the subject of the game and the activities of stakeholders, a health policy, a map of the municipality and a report with socio-demographic figures of the municipality.

*All additional tools*  These included everything needed to solve problems in the flow of the game or tie up loose ends that still existed, e.g. made the different participants visible in the room by name tags, flags on tables and specific colored materials for teams, stamps for each team to show their support on the intervention cards, the setting of tables and decoration of the room, food and drinks – all what was needed in a practical sense for the game to be played.

4) **The rules**
Each game had specific rules. There were rules of the game and policy rules. The rules of the game should be followed and were determined before the game by the game leader(s) and game developers. The policy rules would come forward during the game and depended on the interaction participants had in real life and what was brought into the game by the participants. Both types of rules existed next to each other.
5) **The flow of the game**

The policy game consisted of two or more micro-cycles. In2Action had two micro cycles (MC) and was first introduced by the game leader, which took approximately one hour, see for the visualization of a MC appendix 3. Then a first cycle of one and a half hour started (including evaluation) and was built up as follows:

- Each team had 15 minutes to discuss their strategy within the team, the internal strategy phase;
- Next they got 30 minutes to execute their strategy – developing one or more interventions that fitted their organizations main objective and fitted the HEPA policy plan targets, therefore they needed to contact other stakeholders for collaboration, for support, for joint financing, for evidence and expertise;
- Next 15 minutes were spent to evaluate within a team how they did as a team;
- Then a plenary evaluation with the whole group of approximately 30 minutes, led by the game leader, followed. Central in this evaluation was what went well and what did not, why that happened and how that could be improved in the next round. After that there was a break and then the second micro cycle started again from the beginning: starting with an internal strategy phase for the team: what was learned from the first micro-cycle and what the team wants to do differently in the second micro cycle with the aim to get better achievements.

After MC2 a final debriefing session (approximately 60 minutes) ended the game session. In this final debriefing session the connection from the learning experiences in the game to the real life situation and experiences of participants was made.

Central issues in the debriefing session were: what were main learning experiences of participants, what barriers did they experience and how could they overcome these in the game, in looking for collaboration, and to what extent was evidence used in designing the interventions and why or why not, what experiences resembled their experiences in policy making in the real life, what were their take home messages from the game. Altogether the game In2Action took 5 to 6 hours for one case.

6) **The game leader and game participants**

The game leader would introduce the game; the script, the supportive materials, the aim of the game, its rules and the flow of the game. The game leader kept track of the game and knew all the ins and outs of the game. The game leader was also in charge of the entire process, leading and evaluating the different parts of the game, from beginning until the end.

Depending on the number of roles in the game, the number of participants could differ, preferably from 18 to 35 (at maximum) per game with optimally 2-3 persons per role. Each team consisted of people representing one or more stakeholder organizations or departments from stakeholders (if these stakeholders came from large organizations with separate departments, for instance a municipality with different departments). Participants could come from public and private institutions and from regional and local (or national organizations). From the systems analysis it followed which organizations represented the main stakeholders that should be participating in the policy game.
2.3 Pilots in three EU countries

Country teams from Denmark, Romania and the Netherlands each selected their own case for the policy game intervention to be carried out in: a municipality or region/county where local HEPA policy making took place. Each country selected a case that fitted best the selection criteria mentioned above. The selected cases are described below. The selection of the stakeholders and adaptations needed, have been discussed in close collaboration with the working group in each case.

2.3.1 Case: The Netherlands

The municipality of Roosendaal: The municipality of Roosendaal, further referred to as the ‘Dutch case’, was chosen as case in WP2 primarily because the case had a newly developed health policy and was working towards an implementation plan. Furthermore the case focused on the Dutch national umbrella policy “Youth on Healthy Weight” (JOGG) and the national health policy “Health close to the people”. The JOGG policy was part of the local health policy and would also be incorporated in the implementation plan and had youth and physical activity as main focus. The Dutch case represents an average municipality of medium size and met all inclusion criteria, mentioned in chapter 2.1.3.

Initial motivation for participation: The Dutch case saw the policy game as a great opportunity to give the policy JOGG an impulse, to overcome currently experienced challenges, to collaborate and communicate with organizations within the municipality and to understand each other’s needs and values. For the Dutch case it was important to specifically focus on one of their more deprived neighborhoods.

The Dutch case’s policy: The policy focused on youth and aimed to implement the policy JOGG, with a specific focus on sport and physical activity in a safe environment. The municipality would like to see a close collaboration with public, private and community/civil organizations in the municipality to implement the program. The municipality, which was accountable, had assigned the responsibility for the implementation plan of JOGG to the regional organization Sport Service West-Brabant.

Main needs and barriers: The working group formed in the preparation phase identified specific needs and barriers with respect to collaboration and initiation of cross-sector interventions in the organizational network as experienced in this specific policy context. These were leading for the fine-tuning of the policy game to the specific policy context of the case. Main needs were: enhancing collaboration and give a boost to cross-sector collaboration in the implementation of the JOGG policy. Resemblance to the real world context was therefore important. Other needs were to elaborate the involvement of different organizations, to work in a more integrated way and to overcome barriers in reaching and involving organizations in this specific policy case JOGG, by understanding the needs and wishes of the other organizations and what could be gained when participating in the JOGG policy. Furthermore, they would like to speed up the process of collaboration by improving the understanding of this process better. A specific need of the Alderman accountable was to have a broader focus in the evaluation of the policy game than just HEPA policy. He saw the game as an opportunity for development in other health areas than physical activity, such as the transition of youth care that is now under the responsibility of municipalities in the Netherlands. Also for this area enhancement of cross-sector collaboration is a challenge. Further the Sport service and Public Health Service wished to gain
insight in new task divisions and budget allocations. Their wish was to learn more on their advisory role and how to work demand-oriented.

**Adaptations to the Dutch game:** One main adaptation for the Dutch case to the generic game was in the division of roles and the specifics of the local HEPA policy versus the more general health policy in the generic game. Stakeholders apparent in the Dutch systems analysis with similar relations to other stakeholders were combined in teams/roles. In the Dutch game 9 main roles could be defined. The second main adaptation was made to the health policy included as material in the game. Compared to the generic game which focused on general health policy, the policy in the Dutch game had a specific focus on the JOGG policy and needs of the Dutch case in this respect. In addition some of the supportive materials were adapted: extra grants in the policy game were added based on the national grants available in the Netherlands and the specific case. The conditions for receiving the grants were fictive though, mainly meant to stimulate collaboration between stakeholders.

**Participants to be invited:** The Dutch case focused on a specific community/neighborhood and was open for new stakeholders to take part in this specific policy development process. This resulted in the following participants in the game: The municipality, with the Board of Mayor and Aldermen and different sectors of policy officers, the Regional public health service, the Regional sport service, Education organizations, Care and Welfare organizations and the community. Private parties were approached as well but none of them was found prepared to participate in the game. The school in the neighborhood neither would like to participate, but another school and pre care organization in the municipality was interested in participating in the game.

**Participants in the game:** Hence, 9 roles were established for the invited game participants to play:

1. Board of Mayor and Aldermen represented by the Alderman Health, Welfare and Youth;
2. Center for Social Domain represented by one policy maker from Sector Public Health and one policy maker from Sector Sports;
3. Center for Strategic Planning represented by one policy maker from Sector Environment and Urban Planning and one policy advisor/researcher working for the municipality of Roosendaal;
4. The Health Service represented by one policy advisor and one health officer, both from the Public health service Roosendaal;
5. The Sports Service represented by two policy advisors/coordinators one specifically working on Youth on Healthy Weight and one on Sports in the region in general;
6. Broad schools represented by one director of a primary school, one director of a daycare institution and one coordinator Culture and Education;
7. Welfare and Care Organizations represented by one staff member of Centre for Youth and Family, one dietician and one physiotherapist;
8. The Private Parties represented by none of the invited companies;
9. Community council represented by one social worker sport, one chairman minority organization and one community manager.
A total of 18 persons, representatives of the public and civil society stakeholders of importance for the local HEPA policy development, participated in the Dutch policy game.

Additional roles Additional to the roles for the invited participants, two roles that were less directly involved in the local policy development process itself were covered by the game leaders: The National Science Academy and The City Council.

2.3.2 Case: Denmark

The municipality of Elsinore, further referred to as the ‘Danish case’, was chosen as case in WP2 primarily because they had a newly developed health policy, but needed a plan for the implementation of this policy. The health policy had a major focus on physical activity and also on the target group children and young adults. The municipality represented an average municipality of medium size, with a potential for change in the development of policies. The Danish case met all inclusion criteria as mentioned above (chapter 2.1.3).

Initial motivation for participation: The Danish case saw the policy game as an opportunity to kick-start the development of the implementation plan, and also bring into focus the necessity of a joint effort across municipality sectors in order to lift up the health challenges in the municipality. Another important incentive for the Danish case’s participation was the reorganization of the municipality sectors applied to the municipality during the system analysis phase/Danish game adaption phase, which especially affected the area of Health and Care. They wished that the Health and Care sector would become more visible in the new sector organization.

The Danish case’s policy: A health policy called “The Health policy 2013-16 – a common affair in Elsinore”. The specified target group was all citizens in the municipality with special attention to citizen with special needs and chronic diseases. The policy had a strong focus on physical activity promotion for all citizens including children and youth. The aim of the policy was to develop surroundings in the municipality that gave equal opportunities for healthy living for all citizens. One out of three focus areas were easy access for all citizens to outdoor surroundings that promote physical activity. The policy stated that the responsibility for the implementation of the policy is a common responsibility, which goes across-each of the sectors in the municipality. In the policy it was mentioned that: 1) an active leisure- and voluntary community as well as neighborhoods can contribute to promotion of active living, 2) the municipality sectors can make it easier for the citizens to access outdoor areas, safe and good cycling and walking lanes, and outdoor activities, which motivate to physical activity, and give clear and visible information to all citizens about offers and events. The policy did not mention concrete implementation initiatives, but stated that such initiatives would be announced yearly. Primarily the administrative level in the sector Health and Care (Team Health) was responsible for Health Promotion.

Main needs and barriers: Specific needs in the Danish case were to get ideas and plan how to develop an implementation plan for the health policy on the one hand and on the other hand to actually develop an implementation plan for the health policy. Furthermore, the need of the Danish case was to identify ideas for processes that can be used when policies and plans are developed in the municipality in future. More specific needs related to collaboration and knowledge exchange in the policy process on physical activity were: to strengthen and prioritize cross-sector communication and collaboration within health promotion as well as to strengthen knowledge exchange with stakeholders and to see what it takes to
fulfil this task. Furthermore, they wanted to identify procedures and develop guidelines for cross-sectorial core services and the Health and Care sector wished to become more visible, which was a need expressed as a result of the reorganization of the municipality sectors applied to the municipality during the system analysis phase/Danish game adaption phase.

Adaptations to the Danish game: One main adaptation for the Danish case to the generic game and the Dutch version of the game was linked to the fit of the stakeholders identified to participate in the Danish game and the described roles from the generic and Dutch game. The role descriptions from the generic and Dutch game were to a great extent reused in Denmark, but to do this some of the stakeholders identified in the Danish systems analysis were forced together into teams/roles with stakeholders that they not necessarily worked with on a daily basis, but who had similar goals or functions in the system. Also a few adaptations in the role descriptions were made as different stakeholders in the Danish system took up some of the relevant stakeholder’s functions identified from the Dutch system. Hence, adaptation was made to respect the system analysis made of the Danish case to make the roles recognizable for the game participants. At the end it resulted in roles in the game that represented more than one sector or different administrative levels or functions. In this way we aimed to stimulate communication and sharing of knowledge within a team as well. All together 9 roles were established to be played by the invited game participants. Finally, extra events and roles were described on paper and could be brought forward by the game leader if needed. These later events and roles were inspired by information retrieved as part of the systems analysis.

Participants to be invited: The Danish case wanted to represent the municipality in the game but also the representation of specific deprived community areas. Therefore the following organizations were invited and present in the game: The municipality, with the director and different sectors, several Municipality Services and representatives of the community, organizations ‘outside’ the municipality. Representatives of the political committees Health, Sport and Leisure, and Social Domain as well as a policy maker representing Communication, business, politics and Organization were approached but none of them were able to participate in the game. Furthermore, school leaders and a counselling partner for children and youth called SSPK (School, Social & Health, Culture and Leisure) were approached to participate, but none of these were able to participate.

Participants in the game: Hence, 9 roles were established for the invited game participants to play:

1. Board of directors and Politicians represented by the director;
2. Center for Social Domain represented by one policy maker from Sector for Health and Care and one policy maker from School and Daycare;
3. Center for Strategic Planning represented by one policy maker from Sector for Culture, Sport and Urban Development and one from Sector for Technique, Environment and Urban Planning;
4. The Health area represented by two policy makers from the Sector for Health and Care and one leader from the rehabilitation center in the municipality;
5. The Sports and Leisure area represented by two policy makers from Sector for Culture, Sport and Urban Development and the chairman from the Local Sports Council;
6. School and Daycare represented by two leaders from different daycare institutions and one educator from a third institution;
7. Social Affairs represented by one child care taker and one sports coordinator for vulnerable citizen;
8. Community council represented by one project leader representing citizen from a deprived housing areas in the municipality;
9. The Municipality Health Adviser represented by one person from Center for Prevention in Practice which is part of the interest group The Local Government Denmark.

A total of 18 persons, representatives of public and civil society stakeholders of importance for the local HEPA policy development participated in the Danish policy game.

Additional roles Similar as in the Dutch case, additionally to the roles established for the participants, two roles were established to be played by game leaders: The National Science Academy and The City Council.

2.3.3 Case: Romania

The municipality of Cluj-Napoca: The municipality of Cluj-Napoca, further referred to as the ‘Romanian case’, was chosen as the case in WP2, primarily because they were, at the time of the policy game development, working on the new municipality Strategic Development Plan for the period 2014-2020. The Romanian case was in the development phase of the Municipality Strategic Development Plan, with a potential for change in the development and implementation of policies and programs as well and thus had a good potential as a case in WP2. The Romanian case represents a highly populated municipality (INS, 2012), also having a high student population. The Romanian case meets all mandatory inclusion criteria established in the generic game, except the ‘phase of the policy development process’, which is one step back in comparison with the Dutch and Danish cases that were in the implementation of the strategic plans in the municipalities chosen as cases for WP2.

Initial motivation for participation: The most important reasons for participation, mentioned in the recruiting interviews, were getting to know other participating stakeholders and being more knowledgeable in regards to the activities of these stakeholders (and potential for collaboration in these activities). Some of the participants already collaborated with each other in different local projects and also with the REPOPA research team as respondents/interviewees. However, the main motivation for participation of the representatives of the Local Public Administration and County Council was fulfilling a job related task, as the recruiting of these participants was done top-down, the higher-up persons in these institutions delegating the responsibility for participation to these persons.

The Romanian case’s policy: In the Romanian case they work on the Municipality Strategic Development plan. Several working groups have been formed to develop specific parts of this plan. One of the working groups on physical activity is specifically at local level in Cluj-Napoca, the focus of this group being on the development of the local HEPA Strategy for 2014-2020, “Sport and Community”. The working group participating in this HEPA strategic development plan was primarily formed of local level stakeholders comprising with representatives of the private sector and the non-governmental sector. Some of the members of this rather informal local HEPA working group have been invited and accepted participation in the Romanian REPOPA policy game – In2Action.
Local level Sport and Physical Activity policies and actions are included in both the Cluj-Napoca Health Strategy which is based on the WHO Healthy Cities concepts (World Health Organization - Europe, 2009) and includes Active Life as one of the key points for future policies and actions, but also on the Sport and Physical Activity Strategy, “Sport and Community” which has the primary purpose of promoting the benefits of sports and physical activity at community level through the implementation of 14 operational programs addressing different age groups by different means: changes in policies – (e.g. opening school yards, improving infrastructure (e.g. 500 basketball courts), developing sport competitions (ClujManagementandPlanningGroup, 2014).

Main needs and barriers: Enhance own knowledge and understanding on the roles of other local stakeholders and increase collaboration based on common needs and goals were identified as the most important needs by the participating institutions. Also, to further structure and make more applicable the ideas comprised in the draft strategy proposed for consultation by the local public administration authorities has been identified as a need by the research team, considering the comments of the stakeholders approached for pre-game discussion.

At the moment of the game, the proposed local HEPA strategy comprised operational programs for specific sport and specific target populations, without having developed the overall goals and objectives of the strategy mentioned/developed. So basically, there was a need to make a step back and develop a more general overview of the local needs and then work further on the activities that could/should be developed for acquiring those needs.

Main barriers identified were scarce communication between stakeholders, scarce resources, stakeholders’ different goals, and lack of interest from the local public administration authorities and from the persons with decision making power: HEPA policy – low policy/politics.

Adaptations to the Romanian game: Roles described in the Dutch and Danish cases have been linked to those relevant in the Romanian local level administrative setting. However, given the more important role of the sport sector (rather than the health sector as in the NL and DK) in the Romanian national and local HEPA policy development, more sport related public, private and civil society stakeholders were identified and invited to participate in the game.

Also, there were differences in the national administrative structure between RO on the one hand and NL and DK on the other, respectively the centralized administrative system in RO, by compared with the regionalized systems in NL and DK influenced the local level dynamics in HEPA policy development. Stakeholders at local level have less structural autonomy and fewer resources to influence the HEPA policy development, which is mostly designed/developed at national level and implemented at local level. The local public administration would be the one public institution that would have more autonomy in this regards, but they appear to lack interest, expertise and resources for getting engaged in the process (of local HEPA policy development).

The previously presented adaptations (from the generic game) resulted into a more prominent role of the sport sector in the Romanian policy game, in terms of both number of teams and number of participants in the game. Also, the decreased levels of autonomy and decision making power of public stakeholders at local and county level (given the centralized system) had the effect of a more engaged private and civil society representatives. These adaptations were similar to the real life situation, where the public sector institutions only collaborate or endorse private and civil society representatives’
initiatives, the first ones not having themselves the necessary resources and/or expertise and/or regulatory framework to develop own policies and programs.

**Participants to be invited:** Participants in the RO policy game: The roles (i.e. institutions) identified (as having attributions and/or interest in local HEPA policy development) that participated in the RO policy game were: 1) The Local Public Administration representatives (the municipality); 2) County Council; 3) Public Education Sector; 4) Faculty of Physical Education and Sport; 5) Education civil society; 6) Private sport companies; 7) Public sport clubs; 8) Sport associations; 9) Students NGOs; 10) Private sport clubs. Representatives of County Youth and Sport Department and County Public Health Authority were also invited to participate and accepted participation, but did not participate in the end. For the purposes of trying to maintain a similar (to the other two games) game dynamic, these persons were replaced in their roles by one of the representatives of the public sport clubs, respectively by one of the potential observers, member the research team.

**Participants in the game:** Hence, 10 roles/teams were established for the invited game participants to play:

1. City Council represented by two civil servants;
2. County Council represented by one civil servant;
3. Public Education sector – represented by the executive director of the Children’s Palace, one specialty inspector from the County School inspectorate, two high-school teachers and an executive director of a local Education NGO;
4. University Sport – represented by the Dean of the Faculty of Physical Education and Sports and by a teaching assistant at the same institution;
5. County Public Health Authority – civil servant invited, accepted participation but did not show up – replaced with one medical doctor member of the research institute organizing the game;
6. Private sport companies – represented by the executive director of a sport equipment company and a middle-management person from a sport infrastructure company;
7. County Youth and Sport Authority – executive director invited, accepted participation but did not show up – replaced with one of the representatives (team manager) of the public sport clubs;
8. Private Sport associations: represented by two executive directors of two cycling sport associations;
9. Student NGOs: represented by a project leader from the Medical Students Association;
10. Private sport clubs: represented by a middle-management person from a rugby club and by a sportsman at a Paralympic sport club.

A total of 19 persons, representatives of public, private and civil society stakeholders engaged in local HEPA policy development participated in the RO policy game.

**Additional roles** Similar to the Dutch and Danish game, additional to the roles established for the participants, two more distinct roles were to be played by game leaders: the Institute for HEPA policy research (The National Science Academy in the NL and DK games) and The City Council.
3. Evaluation of the intervention

3.1 Evaluation plan

Because this project is of an exploratory nature the chosen evaluation design was a case study design with a mixed methods approach. The results of the process of executing a policy game intervention with participants from a real world policy setting and the impact of the policy game intervention on the game participants in the three cases have been measured using qualitative and quantitative methods.

Process evaluation: The evaluation of the process of executing the policy game intervention has been carried out by observations of the entire process during the policy game itself.

Effect evaluation: The impact the policy game intervention has had on the game participants has been measured by (digital) questionnaires on three consecutive moments before and after the policy games.

3.2 Methods used

3.2.1 Observations

Observations have been carried out during the game by (at least) four observers in each game. Each observer was responsible for 2 teams during the entire game session. Observers noted the actions of the teams structured by an observation protocol. In addition the observers made notes of the evaluation and debriefing sessions that followed the two micro cycles.

Main focus of the observation protocol was on communication (i.e. with which other team, level of intensity, conflicts), aspects of leadership (i.e. taking initiative to approach other teams, speaking to the group, bringing forward ones ideas), collaboration (teams working together) and of course general atmosphere. Observations were not focusing on the word by word content of the communication.

The observation data has been analyzed using qualitative software programs (depending on the countries availability those were Nvivo, AtlasTi and MaxQda). Each country team applied the same coding tree to code own country observation data. Consensus on the coding tree was reached by the entire WP2 team by exchanging, discussing and coding samples of the (ad hoc translated) observation data from each other’s cases. Within country teams consensus in final coding was reached when a sample of 20% of the observation data (in own language) was double coded by another researcher reaching an acceptable interrater agreement (Fleiss & Cohen, 1973).

3.2.2 Questionnaires

At three moments in time a digital questionnaire had to be filled in by the game participants.

- T = 0 – pre-measurement 1 week before the policy game
- T = 1 – post-measurement (short term) 1 to 2 weeks after the policy game
- T = 2 – post measurement (long term) 6-8 months after the policy game

The questionnaires were developed by the WP2 research team adapted to the different measuring points T (t=0, t=1 and t=2). Questions’ formulation was adapted to fit to the purpose of the different moments in time and questions were added on intention to change and changes in behavior, resulting in three (slightly) different questionnaires that focused on measuring the impact of the policy game on the
participants at the different moments in time. Several aspects related to leadership were measured, based on the instrument on leadership in organizational networks developed by Lasker et al. (Lasker, Weiss, & Miller, 2001), for instance fostering trust and inclusiveness, empowerment, communication vision, working towards a common language. Also several sources of evidence were taken into account, such as research evidence, professional expertise, experiences from other stakeholders, and target group knowledge.

T0 questionnaire: inventory of baseline situation before the game with respect to organizational network, communication and collaboration with other stakeholders, barriers and facilitators experienced in collaboration and use of knowledge within the actual network, aspects of leadership experienced in actual organizational network, attitudes towards collaboration and use of evidence in policy making.

T1 questionnaire: inventory of how participants experienced the game, what they learned in the game, whether the game had an impact on intentions to collaborate, an impact on increased insight in the organizational network, the potential benefit from other stakeholders, an impact on increased insight in aspects of leadership and an impact on attitudes towards use of evidence in policy making.

T2 questionnaire: inventory of how experiences in the policy game had impacted the participants’ everyday life policy making, changes in attitudes, intentions and behavior with respect to organizational network, collaboration, aspects of leadership, use of evidence in policy making and barriers and facilitators.

4. Results

This chapter presents main findings of the policy game intervention on the four central topics which the policy game intervention was aimed to impact on:

- organizational networks;
- aspects of leadership;
- communication and collaboration;
- barriers and facilitators with respect to collaboration and use of evidence in policy-making.

In paragraph 4.1 the findings on the processes occurring during the policy games are described by the observation data. In paragraph 4.2 the findings on the effects of the policy games are described by the data held from the questionnaires among participants before and after the game.

The organizational network aspect was investigated when building the systems analysis and is used as input for the game participants, as described in the previous chapters. Organizational network was not part of the observations, but in the questionnaires there was specifically asked for aspects on organizational network. Therefore only in the questionnaire results organizational network is taken up.
4.1 Observation results during the policy game

Observation data focused on processes during the game with respect to the topics leadership, communication and collaboration and barriers and facilitators. Findings on these topics are described with a focus on changes occurring during the policy game intervention.

4.1.1 Specific context related aspects of the game

Game leaders
In all three countries the game leaders had a similar role. The game leader that facilitated the first game (the Dutch game) was an expert in designing and facilitating policy games. He also was responsible for guiding the design of the generic game. The game leaders in Denmark and Romania attended the previous held game and were supervised and guided in their game leader role by the Dutch game expert.

The game leader introduced the game, presenting the significance of the game, as well as the steps that would be employed and rules that would be applied. Next the game leader facilitated the game process and the dialogue in the plenum evaluation sessions, touching on the proposed WP2 objectives but also encouraging the whole group on elaborating on some of the ideas/concerns brought up by of the group members and worked towards bridging the policy game activity with the real life context and learning experiences.

The Netherlands
The sphere in the group between participants was positive and good and remained good during the whole game. The energy level within the game would fluctuate, decreasing for a short period when a new phase of the game was introduced, but as soon as the participants had adjusted to the new phase the energy level would rise again.

Denmark
The sphere in the Danish game was generally positive (focused, industrious, laughter) with elements/periods of a more negative sphere (frustration), when the teams met barriers/challenges in the interaction with each other. The energy level was high until far in the second half of the game, but during final evaluation and debriefing of the game, the energy level dropped significantly for all participants.

Romania
In Romania the sphere in the game evolved throughout the game development. At arrival, the sphere was very positive and relaxed. This positive sphere was maintained in the first part of the game, but after the break, when some participants left and participants became more fatigued, the energy level significantly decreased.
4.1.2 Leadership

The central question answered in this paragraph is: Do we see from our observations that the policy game intervention affects leadership issues among the game participants? If yes, what kind of processes do the observations show? In the observations the focus was on different aspects of leadership, both formal and informal (Lasker, Weiss, & Miller, 2001).

**Netherlands: summary of main findings**

Different aspects of leadership came forward during the policy game. The most dominant one was “taking initiative to contact or collaboration” with other teams. In both micro cycles of the game, all teams (some more, some less) took initiative to contact other teams in search for collaboration and to discuss their ideas with each other.

It became clear that some teams had expectations from the formal leadership, but this formal leadership role was not taken in the way it was expected. In the discussion in the first evaluation it became apparent that to the opinion of the participants two types of leadership roles would be relevant in the policy making process; a role representing those accountable/responsible for the policy development process and a project management role.

As a result of the evaluation in MC2 a change occurred half way during MC2. Two leaders stood up to initiate a different way of working. Trying to find consensus and sharing own visions were new aspects especially coming up in this second MC.

In the final evaluation, participants agreed that both formal and informal leadership aspects (such as commitment/ownership, and taking the lead on the development of a plan, giving direction, inspiring and empowering others) were important aspects of leadership when working in collaboration (multi- and cross-sector) to be able to proceed in a constructive way in policy development.

**Denmark: summary of main findings**

Observations of the interactions during the game showed that the most dominant leadership aspects between game participant teams were “taking initiative to make contact or collaborate” and “communicating own vision and give clarity”.

In both cycles of the game, all teams (some more, some less) took initiative to contact other teams in search for interaction and collaboration. Furthermore, both the formal leadership role, taking responsibility for initiation of a shared process, as the more informal leadership role, taking the responsibility of the management role, were taken in the first cycle.

Also in the Danish game, one team showed clearly informal leadership skills, using this in the interaction with other teams and being dominant in the discussion to get ideas through.

In addition, some changes could be seen over MCs. For example, the way one of the participants shared knowledge and interacted with others in the group. The observed change was seen from sharing own vision towards inspiring and facilitating. A change was also observed in the formal leadership.

**Romania: summary of main findings**

During the game, a number of informal leaders were identified in different teams. These persons had expressed personal opinions in regards to the real life current processes (in local HEPA policy development) as well as personal needs and systemic needs they considered most pressing. The influence of these leaders became visible in their actions, as well as in their absence. The leave of these
two leaders seemed to decrease the overall engagement in the game of the rest of the group and contributed to a gap in expressing ideas in the second part of the game. Another observation in the Romanian game showed that the more formal/institutional driven leaders on paper according to the systems analysis were not acting like leaders in the game at all. Nevertheless, all of the other participating teams approached these leaders.

4.1.3 Communication and collaboration

The central question answered in this paragraph is: Do we see from our observations that the policy game intervention affects communication and collaboration within the organizational network? If yes, what kind of processes do the observations show?

Netherlands: summary of main findings

In the game all teams were very active in getting in contact with other teams, in efforts to start joint projects or gain support for their initiative. It showed not to be easy to have a coordinated discussion. Half way during MC1 almost all teams formed one big group and discussed a joint project. In MC2 a plenary session was initiated to present project ideas by each team, which changed the communication pattern. Even though extensive communication between teams had taken place in the main part of the game, teams still focused on the parts their own team was most interested in and in their own organizations goals.

Denmark: summary of main findings

Observations showed that as the game evolved changes in the communication and collaboration between teams occurred e.g.: intensity, topics discussed, collaborations agreed upon. Overall team communication processes became more intense during the game. The task in the game stimulated action on the one hand, but did to a lesser extent lead to coordinated and well thought out processes and actions. Delegation of tasks by the formal leader influenced the communication and collaboration process in the rest of the game as teams had to adapt to their new role and the other teams needed to realize and accept that the coordination role between teams was changed. In MC2 communication behavior changed for some teams from a selling role to a more listening, contributing or facilitating role, whereas other teams changed behavior from a relatively passive role to be more outreaching. As a result, in MC2 the number of contacts increased significantly. Furthermore, it was observed that more collaboration support and agreements were established in MC2 compared to MC1.

Romania: summary of main findings

Overview of the observations reveals that communication and collaboration strategies of the participants in the Romanian policy game were driven by the exhaustiveness principle: most of the participants tried to present their strategy to as many of the other participants as possible. They did not necessarily take into account common goals or strategies for developing partnerships. On the other hand, some other teams were waiting to be approached with ideas. There were no changes in the strategies for communication and collaboration between MC1 and MC2, the learning experience from MC1 being that more effective communication (and less personal conversation) could have resulted in achieving the goal: getting a chance to present own strategy to all
of the other participants (and potentially proposing an intervention). Thus, MC2 came as an opportunity to continue the strategy from MC1 and wrap-up things in terms of finalizing proposed interventions and put these on the policy making agenda.

4.1.4 Facilitators and barriers related to collaboration and evidence-use in policy
The central question answered in this paragraph is: Do we see from our observations that the policy game intervention affects barriers and facilitators in relation to communication, collaboration and use of evidence in HEPA policy making.

Netherlands: summary of main findings
Barriers related to communication and collaboration were for example about the responsibility, who was in charge and who could be hold responsible for the process. Furthermore a barrier was seen in how the communication process should evolve, when to talk to whom and also how to come from ideas to concrete plans keeping in mind the HEPA policy objectives and the own organization goals and keeping in control by maintaining expectation from the management.
Enthusiasm is a main facilitator that stimulated other stakeholders; new ideas were generated from an enthusiastic communication process between stakeholders. Next to that because of mutual communication between stakeholders organization’s aims would become more clarified and understandable for each other to get on the same page.
A main barrier that participants came across regarding research knowledge was that what is theoretical important, is seldom feasible in practice. The problem needs to be analyzed very well to know how the theory can be applied in practice. In general, not much research evidence was used in the game.

Denmark: summary of main findings
Barriers for communication or collaboration observed in the game were differences in strategies for contact and collaboration and lack of coordination including lack of knowledge about other running projects. And with respect to collaboration a need for internal communication hindered active collaboration.
Facilitators for communication observed or discussed in the game were personal relations, insight to the roles and visions of other teams, early and mutual involvement in each other’s projects and development of projects that fit with goals in others projects, as well as mutual financial support to each other’s projects.
In the game, not much evidence from research was used. The cost for use of evidence was identified as a barrier for use of research knowledge, but on the other hand also as a facilitator for contact to other teams to get input on evidence (which was free of charge).

Romania: summary of main findings
Having a chance to contact other stakeholders (such as in the policy game) with common goals and activities speaking a common language facilitated the communication and collaboration processes.
Having different goals and activities, differences in institutional arrangements formed barriers for starting communication and collaboration. The lack of a structural basis for developing cross-sectoral collaborations or lack of interest for collaboration on behalf of decision makers appeared to hinder contact for collaboration.
Not much evidence was asked for during the game. Facilitators mentioned by participants for using research evidence were easy-to-use: language used adapted to the educational background of the policymakers; relevant and timely for the policy and for using other types of evidence: structural (institutional) arrangements facilitating communication/collaboration between stakeholders. Barriers that came up for the use of research evidence were lack of funding resulting in lack of national and local relevant research evidence and for other types of evidence: lack of interest in collaboration and using the expertise of stakeholders from other sectors and/or domains.

4.2 Questionnaire results before and after the game—changes over time

Response rates of the questionnaires decreased over time (table 1). After the game at least 75% of the participants in the game filled in the questionnaire and after 6 months almost a 70% response rate was reached, see table 1.

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4.2.1 Organizational networks

The central question answered in this paragraph is: Do we see from our findings that the policy game intervention affects aspects of the organizational network participants are involved in? If yes, what kind of impact do the findings show?

The Netherlands

Organizations to be involved in the policy development process

Before the game a small group of the participants mentioned not all the organizations were involved in the policy process. After the game half of the participants indicated not all organizations were involved and the number of participants who thought not all relevant stakeholders were involved increased over time. At all moments in time education, care and welfare organizations, private parties and the community should be involved. At the long term measurement participants also added the involvement of political parties and other sectors then health and sports. The majority of the participants in the game thought at all moments in time that their organization should be involved in the development of the local HEPA policy plan. Six months after the game all participants indicated that they were involved to some extent in the development of the local HEPA policy plan.

Insight into benefits of the organizational network

Before the game the majority of the participants’ assessed their organizational network as beneficial in realizing their organizational goals primarily due to the expertise, network and knowledge about needs and values for target groups in the organizational network. After six month the majority of the participants mentioned that their organization could contribute in elaborating the network and with
expertise and facilities.

*Understanding of the policy development process*

The majority of the game participants indicated directly after the game that they have enhanced their understanding of the policy development process, of the roles of the different organizations, how their own organization could contribute and how to collaborate, after the policy game. This same finding was observed after six months. Six months after the game almost half of the game participants indicated they have been positively influenced in their engagement in the HEPA policy through the participation in the game.

**Denmark: summary of main findings**

*Organizations to be involved in the policy development process*

Before the game a small group of the participants mentioned not all the organizations were involved in the policy process, and a greater part of the game participants were unable to assess whether or not all relevant stakeholders were involved in the development of the local HEPA policy plan. After the game a greater part of the participants were able to indicate that not all organizations were involved. Participants in the game thought at all moments in time that their organization should be involved in the development of the local HEPA policy plan. And six months after the game the majority of participants indicated that they were involved (some more, some less) in the development of the local HEPA policy plan.

*Insight into benefits of organizational network*

Before the game the majority of game participant found that their organizational network is useful or very useful primarily due to the organizational networks knowledge about the target groups, their expertise and network. After six month the majority of the participants mentioned that their organization could contribute to the development of the local HEPA policy implementation plan with their network and with expertise and other resources (e.g. facilities).

*Understanding of the policy development process*

A greater part of the game participants indicate in the questionnaires given straight after the game that they via the policy game have enhanced their understanding of the local HEPA policy process, how their organization can contribute to/be engaged in the development process, which roles other stakeholders/organizations play, with whom they can collaborate in the process and how they can collaborate. The same finding was observed after 6 month. After six months it was further observed that half of the game participants' felt that their commitment to the development of local HEPA policy plan had been (slightly) positively affected by participation in In2Action, whereas no change was observed for the other half.
Romania: summary of main findings

Organizations to be involved in the policy development process
Over time the number of respondents increased indicating that not all relevant stakeholders were involved in the local HEPA policy development. The organizations that were proposed to get involved in the HEPA policy development process ranged from mass-media to economic agents, local public institutions and private and civil society representatives. Immediately after participation, most of the organizations proposed were from the civil society sector. At 6 months evaluation, universities, local authorities and business sector was proposed to be involved in HEPA policy development processes. In regards to the role of their own organization in local HEPA policy development, before participation in the game most participants appreciated that their organization should to some extend have a role in these processes. Immediately after participation still most of them answered in a similar way. At 6 months evaluation, all participants still agreed that their organization should be involved to some extend in the local HEPA policy development processes.

Insight into the benefits of the organizational network
Before the game participants appreciated main reasons for collaborating with other stakeholders from their organizational network in the development of local HEPA policies was the involvement in the different sports events. In terms of benefits of being in their organizational network for achieving own organization goals, all respondents to the questionnaire before the game appreciated this aspect as important to some extent. In terms of own institution potential resources put into the organizational network, at 6 months evaluation, respondents appreciated that offering contacts, and offering human resources, infrastructure and other facilities are the most important resources they can offer to their organizational network.

Understanding the policy development process
Participants indicated in the questionnaires given straight after the game that the policy game enhanced their understanding of the local HEPA policy process, how their organization can contribute to/be engaged in the development process, which roles other stakeholders/organizations play, with whom they can collaborate in the process and how they can collaborate. At 6 months, the most important insights identified consecutive to the participation in the policy game were increased understanding on the local HEPA policy development processes, increased understanding on the roles of their own institution and of other institutions (could) play in the local HEPA policy development processes. At 6 months follow-up, respondents mentioned increased insights in the local HEPA policy development processes and the involvement of their own organization. Participation in the policy game had a small positive influence on their involvement in these processes.

4.2.2 Leadership aspects
The focus was on different aspects of leadership, both formal and informal, measuring the effectiveness of leadership in their organizational network of HEPA policy development (Lasker et al., 2001). Before the game (T0) the current effectiveness of the different aspects of leadership in the participants’ organizational network in each of the following areas was asked (scores from 1 very good, to 5 very
bad). Shortly after the game (T1) the increased insight in leadership aspects was measured and at the long term (T2) the perceived changes in leadership aspects were asked.

**Netherlands**

Before the game the participants rated the effectiveness of the different aspects of leadership of their organizational network slightly above average for each of the aspects. Speaking the same language and resolving conflict among partners in the networks scored lowest, motivating others in the network scored highest.

As a result of the game participants’ insight in leadership aspects had increased to some extent, especially insight in the aspects combining the perspectives of partners and involving other people and organizations in the network were enhanced.

After six months, participants experienced in general minor positive changes, mostly in motivating others in the network and involving other people and organizations in the network.

**Denmark**

Before the game most participants scored the effectiveness of the different leadership areas to be average or less. Resolving conflicts among partners in the network and combining the perspectives in the network scored lowest. Motivating others in the network got the best rating.

As a result of the game the game participants increased their insight to the leadership of the network around the HEPA policy. Especially insight in the aspects responsibility, motivation, common language, respect, and creativity were enhanced.

However, only a few experienced a positive change in leadership behavior, whereas the general impression was no change in leadership behavior in the organizational network after six months.

**Romania**

Before the game, most participants rated the effectiveness of the different aspects of leadership in their organizational network as being either good or fair. Most effective leadership aspects were promoting respect and trust in the network, creating an environment where different opinions can be expressed, resolving conflicts between partners and empowering people involved in the organization network.

As a result of their participation in the game, immediately after the game participants reported average or high increased insight in all different aspects of leadership in their organizational network.

The most increased insight in leadership aspects in their organizational network were working towards a common language) combining perspectives, fostering trust and inclusiveness and communicating the networks vision.

At 6 months evaluation, the participants appreciated that medium to high positive changes occurred in the behavior of the partners in their organizational network in regards to the leadership aspects characterizing the network, especially common language, communicating the networks, fostering trust and inclusiveness, creating an open environment and stimulating creativity.
4.2.3 Communication and collaboration

The central question answered in this paragraph is: Do we see from our findings that the policy game intervention affects communication and collaboration within the organizational network? If yes, what kind of impact do the findings show?

Netherlands

Attitude towards collaboration
Collaboration is indicated as important by the majority of the participants before the start of the game. Shortly after the game, a small minority had changed their attitude towards collaboration with other stakeholders. Participants who experienced a change stated they got new insights and became more conscious. A few game participants indicated that their attitude towards the usefulness of collaboration had changed as a result of the policy game.

Intention to start collaboration
As a result of the game, the motivation of the majority of the participants to start with collaborations was enhanced. More than half of the participants had the intention to start collaboration with a variety of other stakeholders. Six month after the game a minority of the participants indicated to have the intention to contact new stakeholders in the future.

Change in collaboration
At the long term the collaboration between organizations got a boost after the policy game according to most of the participants. Furthermore half of the participants actually did contact new stakeholders during the six months after the policy game or at least did an attempt to. Contacted stakeholders were dieticians, schools and the municipality. The most frequent mentioned reason for not contacting new stakeholders was the fact that collaborations were already settled.

Denmark

Attitude towards collaboration
Before the game the majority of game participants found collaboration between different sectors and stakeholders during the development process of the local HEPA policy important. Follow-up measurements showed that the fraction who found collaboration between different sectors and stakeholders important during the development process of the local HEPA policy/implementation plan for the health policy tended to increase slightly towards a positive change across measurement periods. At short term, and most of the game participants indicated that their attitude towards the usefulness of collaboration had not changed as a result of the policy game.

Intention to collaborate
Straight after the game the majority of game participants indicated that the policy game increased their desire and intention to starting collaboration with other stakeholders. Health, sport and school were for example mentioned as potential stakeholders to contact. The motivation was a wish for knowledge
transfer and more quality in their work. After six months less than half intended to contact new stakeholders.

**Change in collaboration**

Almost no participants had contacted new stakeholders one week after the game. In the six month period after the game some (less than half) participants had taken contact to new stakeholders and a few had tried. Half of the participants indicated that collaboration between organizations / partners relevant for the development of the local HEPA policy plan got a boost after In2Action. In other words, according to all who saw themselves as involved in the process, the collaboration was given a boost by the game.

**Romania**

**Attitude towards collaboration**

Before the game most of the participants rated cross-sectoral collaboration as very important in the development of HEPA policies at local level. The most important reasons for collaboration were financial and other types of support, organizing sport events together, and facilitating access to sport infrastructure and the nature of the job. Directly after the game cross-sectoral collaboration in local HEPA policy development has been rated as important by almost all participants and after six months all participants did. Directly after the game more than half of the respondents declared that participation in the game did not changed their opinion in regards to the benefits of collaboration in the development of local HEPA policies. Six months after the game the majority indicated that there had been a positive change to some extent in their attitude towards cross-sectoral collaboration.

**Intention to collaborate**

Directly after the game majority of the participants considered that the participation influenced in a positive manner their attitudes towards collaboration, in terms of the level of knowledge and understanding of the roles of other stakeholders and the opportunities for collaboration. This number of participants also had the intention to start collaboration in the next 6 months following the participation in the policy game. After six months a slight majority had the intention to contact new stakeholders in the following 6 months. Most important motivation mentioned for starting new collaborations were resources and expertise and research evidence.

**Change in collaboration**

Most respondents declared that the participation in the policy game had influenced them up to some extent in developing new collaborations. Immediately after the participation in the game, more than half of the respondents succeeded in contacting other stakeholders with the aim of developing collaboration in local HEPA policy development, whereas some tried to contact other stakeholders but did not succeeded. At 6 months evaluation, a minority of the respondents succeeded in contacting other stakeholders. In regards to the boost in collaboration between organizations in the local HEPA policy development process after the policy game, at six months evaluation most of the respondents mentioned that participation in the game increased collaboration up to a minor extent.
4.2.4 Facilitators and barriers related to collaboration and evidence-use in policy

Central question addressed in this paragraph is: Do we see from our findings that the policy game intervention affects barriers and facilitators in relation to communication, collaboration and use of evidence in HEPA policy making?

The Netherlands

Importance of knowledge use

Already before the game several sources of evidence seemed important to the majority of the game participants, with sources from research and involved parties mentioned by the majority of the participants as very important. Also directly after the game and after six months the majority of the game participants indicated all sources as important.

Attitude towards knowledge use

Directly after the game a few participants indicated a change in attitude towards the use of knowledge in regards to local HEPA policy development. Reasons for the changed attitude directly after the game were the involvement in the policy development and extension of contacts and new perspectives. Six months after the game the majority of the game participants experienced a minor positive change.

Barriers

Before the game lack of time was the most frequent observed barrier for contact and collaboration. At six months most participants mentioned not applicable when asking for barriers in contacting and collaborating with stakeholders. The most frequently experienced barriers in the use of different sources of knowledge are lack of time and lack of economic resources at six months.

Denmark

Importance of use of knowledge

Already before the game several sources of evidence seemed important to the majority of the game participants. The most important sources of evidence were knowledge about target groups and research. The fraction of game participants, that found the different sources of knowledge important, increased over time. The greatest change was observed for knowledge from experts.

Attitude towards knowledge use

The majority of game participants indicated straight after the game that they as results of participation in the game changed their attitude to the use of knowledge in the development of local HEPA policy plan. Example of arguments for the cause of change were: "Research / knowledge can target our efforts to a higher degree" and "(I) have become more (red: focused/no te) on others' knowledge and experience." The same result was identified after six months.

Barriers

Before the game the most frequent barriers for contact and collaboration identified in the questionnaire were lack of time and lack of personal contacts. Lack of time was also emphasized as the most frequent barrier for collaboration six months after the game, but at this point in time lack of interest from other part was also identified. At six month lack of time was also identified as the most dominant barrier for use of knowledge.
Romania

Importance of use of knowledge
In what regards the importance of the use of different sources of knowledge in local HEPA policy development, before participation in the game most respondents rated knowledge from involved stakeholders, knowledge from research and knowledge from experts as very important. Immediately after game, knowledge from research and knowledge from experts remained the most rated very important sources of knowledge. At 6 months evaluation the results remained approximately the same as measured directly after the game.

Attitude towards knowledge use
Immediately after the game, respondents stated that the participation in the game changed their attitudes towards to use of knowledge in local HEPA policy development, more specifically, it helped them understand the benefits of collaboration, and the methods they could use for starting collaborations. At 6 months follow-up, almost half of the respondents mentioned that participation in the policy game had changed their attitudes positive towards the use of evidence in HEPA policy development.

Barriers
Before the game the most important barriers for collaboration mentioned by the participants were lack of interest among the contacted stakeholders followed by lack of time and different interests from other stakeholders. Short term outcomes: Identified barriers in starting communication were lack of opportunities to get to know other stakeholders and lack of time to approach for collaboration stakeholders already known. Also, the perceived lack of interest from the other stakeholders represented a barrier identified in starting communication for collaboration purposes. Facilitators for evidence use were identified the increased knowledge into the roles of other stakeholders and the enhanced understanding on the benefits of collaboration. At 6 months evaluation lack of time was mentioned as the most important barrier in starting new contacts for collaboration purposes. Also lack of economic resources and lack of access or difficult access to relevant data were identified as main barriers for evidence use in local HEPA policy development.

4.2.5 Learning experiences and link to reality

The Netherlands
One week after the game the majority of the participants indicated that they had enlarged their insight into the roles and positions of the other stakeholders and into collaboration processes in local HEPA policy and a third of the participants acknowledged that the game to a high degree resulted in knowledge and experience useful for their future daily work. After six months half of the participants indicated that the game had influenced their work in a positive direction, especially the way collaboration processes evolve and when to connect with other parties.

Denmark
The majority of participants stressed “importance of collaboration” as the main learning experience and acknowledged that the game to a high degree resulted in knowledge/experience useful for their future
daily work. And after six month half the participants indicated that the game have Influenced their work in a positive direction. It had changed their mindset towards more focus on collaboration and interdisciplinary working.

**Romania**

According to the immediately after game responses, the participants in the game mentioned that the most important learning experiences acquired consecutive to the participation in the game were related to defining and presenting objectives, communicating with other institutions, developing a work plan and negotiating it, using others’ expertise, and having all of the abovementioned aspects run in an atypical, new working environment (i.e. the policy game setting). Also, the most of the respondents mentioned that the acquired knowledge and experience will be very useful for them in their work. At 6 months evaluation, the majority of the respondents appreciated that the experience accumulated through their participation in the game influence positively their professional activities up to a minor extent. The most relevant answers in this regard were: having a new perspective on collaboration for strategic development, sharing experiences and visions and interact with different sectors.

### 5. Discussion and Conclusion

The project showed that it is indeed feasible to develop a generic policy game intervention that can be applied in a similar way in different EU countries, in a real world policy context with real world stakeholders. The aim of this policy game being to enhance communication and collaboration which in turn would influence the uptake and integration of evidence in the HEPA policy development process.

The knowledge to action framework (Straus & Holroyd-Leduc, 2008) has been used in an operational manner to structure the process. It was used to guide collection of information on specific needs and barriers, details on the organizational network and the local policy context. Together with the knowledge derived from WP1 on factors related to use of evidence in HEPA policy making (Hämäläinen et al., 2013) and the successfully conducted systems analysis in all three countries which gave country and context specific information, a fine-tuned version of the policy game for each pilot country (NL, DK and RO) was developed.

However, the development process of the policy game also showed some limitations. Comparisons of the systems analyses from the three countries showed clearly that the organizational network in the HEPA policy cases in Denmark and The Netherlands were quite similar, whereas that in Romania differed substantially. Main difference being that in the Romanian case there was no county level autonomy or accountability for the HEPA policy development, as was the case in DK and NL, but on national level. This formed a challenge for the design of the generic concept of the policy game. In addition, in Romania it was hard to find stakeholders involved, especially those in decision making positions to be transparent on providing information on needs and barriers and also to participate in the policy game. It was therefore decided to base the generic design for the concept of the game on the similarities of the systems analyses of the three countries, with a focus on DK and NL. The final consequence of this being stronger adaptations for Romania were required.
In the policy game, participants had the opportunity to experience in a safe environment a reality-based situation, collaborating with multiple stakeholders across sectors. They also experienced what it takes to collect relevant knowledge and how to apply and adapt it to the local context, all by learning by experience. The focus of the game was primarily on gaining more insight, enhancing understanding, changing attitudes and intentions towards more collaboration, and in the end on strengthening and increasing actual cross-sector collaboration and evidence use. By experiencing this in the game main barriers in cross-sector and multi-sector collaboration and use of evidence in this process may be overcome also in the real world. By participating in the game participants had the opportunity to communicate and collaborate with real world stakeholders that were possible sources of useful knowledge, relevant for the policy making process in real life. All participants played their specific role as in the real world context, i.e. setting the political agenda, providing evidence from research, providing expert and experience based knowledge, facilitating implementation.

This brings us to the overall aim of WP2 which focused on whether the policy game had an impact on integration of evidence and actual policy making. The assumption being that the policy game affected aspects of the organizational network, the networks’ leadership, collaboration and facilitators and barriers in evidence-informed policy making among the participants, who were real world actors in the policy process.

**Impact on organizational network**

The organizational network as it functioned in the real world within the policy context of each country became visible through the three systems analyses. The (formal) roles, positions and relations between stakeholders involved were visualized in detail. Participants invited to the game were selected based on the systems analysis. In all three countries most important real world stakeholders (from the local policy case) were invited in the game. A specific limitation in Romania was that the main decision making stakeholders in the policy context were absent, which was felt as a serious flaw in the game operationalization among participants in the game.

In all three countries questionnaire findings showed that the game experience immediately impacted on the insights game participants had in the organizational network for HEPA policy making and its stakeholders in the local context. They became more aware of relevant stakeholders both as involved in the game and in the real-life local policy process. In addition most participants also became more conscious of the extent to which their own organization could and should contribute to the local HEPA policy process.

On the longer term findings from the questionnaires showed that in all three countries the commitment to and understanding of game participants of the local HEPA policy plan had been positively influenced by the policy game. In all three country cases participants had an enhanced understanding of the policy development process, roles of different organizations and sectors and their relevance, contribution of own organization and how to collaborate at the long term. In addition also their involvement and (intention to) collaborate in the real world policy development process increased on the longer term.

**Impact on leadership aspects**

The game provided participants with increased insights in leadership processes within their local organizational network when engaged in HEPA policy development. Both observation findings and questionnaire findings illustrated this. A common experience from the participants during the game was
that the absence of clear directions and (formal or informal) leadership hindered the progress of cross- and multi sector collaboration in the game.

There was some enhanced insight in aspects of leadership in each of the three countries directly after the game. Participants had experienced the importance of several aspects of leadership in an organizational network such as creating a common language, showing vision and inspiring and involving others to their plans and ideas. In addition in Romania also the importance of promoting respect, trust and inclusion in the organizational network emerged from the game experience.

The impact with respect to behavior changes perceived in leadership aspects within the actual organizational network on the long term were positive but limited in the Netherlands, nearly absent in Denmark, but positive in Romania. In Romania in the real world network working towards a common language, promoting trust in the network, communicating vision and an environment open to different opinions were increased. Perhaps the fact that the network did not have had many opportunities to meet and contact each other before the game in Romania, gave the game participants an impression of substantial changes in leadership behavior compared to the situation before the game.
Communication and collaboration
The policy game stimulated communication between teams in general as expected. Intensity of communication between and within teams varied during the course of the game. As the game evolved the game participants adapted their communicative behavior. Communication patterns became more purposeful and more targeted.
The experiences from the policy game process showed that fruitful cross-sector and multi-sector policy making requires coordination and direction, as aspects of leadership. Random contacts and communication, which participants started with, were acknowledged by participants to be very time consuming and not very efficient to be productive in the game. Coordinated actions provided better progress towards cross- and multi-sector policy development.

At least half of the participants in each of the countries indicated a boost in collaboration with relevant stakeholders six months after the policy game. Knowing that the attitude towards collaboration was already positive among most game participants from the beginning, the policy game seemed to have had an additional positive influence on intentions to and actual collaboration. Collaboration was perceived as the main learning experience and participants acknowledged that the game to a high degree resulted in increase in knowledge/experience useful for their future daily work. But it was also emphasized that before actual collaboration can take place there needs to be a process of communication to share ideas and perspectives. The policy game provided an opportunity to practice this in a safe environment that resembled the real world context in an optimal way.

Barriers and facilitators for the use of evidence in HEPA policy development
Several barriers in use of evidence among game participants emerged during the game. Most stakeholders in local level policy making appeared not very familiar with use of evidence in policy making. They found it hard to distinguish and choose between different sources of evidence. They were used to work with what they ‘had or knew’ - their own knowledge. Other barriers that came up across all three country cases were how to apply theoretical or research based knowledge into (local) practice and how to deal with weighing the importance of knowledge to other criteria (political, financial, availability, practicality) relevant for the policy development.
From questionnaires it became apparent that attitudes towards use of evidence in policy development (slightly) positively changed over time. In the long term most participants had a more positive attitude specifically to use of knowledge from expertise, but also towards evidence from research and knowledge from other stakeholders involved. Lack of time and lack of resources in general were main barriers for the use of knowledge that came up in all country cases. This also relates directly to collaboration. In the policy game, it became apparent that intensive communication with many stakeholders consumed a lot of time in itself anyhow. Furthermore, when sectors were very distant to each other this was hindering the start of the communication process. Facilitators for collaboration that came up from the policy game process across countries were for instance when communication resulted in sharing of new ideas, in sharing enthusiasm and giving clarification, and in sharing of knowledge between stakeholders.
Some strengths
The main strengths of the policy game intervention lie in the fact that the game was based on the real world policy making context and actually involved its real world stakeholders from the organizational network. And that it was based on a detailed analysis of the local policy context, the organizational network, the main stakeholders, the main needs and barriers experienced in the policy development. Participants in both DK and NL brought up in the final debriefing of the policy game that the game itself could be seen as a facilitator for (the start) of a collaborative project such as developing a cross- and multi-sector implementation of a policy plan.

Some limitations
Representativeness of this exploratory study is limited since first of all there were only three pilots that were held. Next, not all stakeholders invited were present in the three pilots. Private parties were lacking in two out of three countries. In Romania in general the decision making stakeholders were absent. It is assumed that when these stakeholders can be involved (in future application of the policy game) this will further enhance its impact because the game participants are the actual players in the ‘real world’ policy making. Per country case there were some stakeholders missing or ‘fairly new or unknown’ in the organizational network. This very likely has influenced the process of the policy game intervention, however it resembles the real world situation also.
Another limitation might be that personal representation within the roles/teams of the policy game is of great influence. Leadership behavior for instance also is related to personality. So the process that occurred during the game which influences participants’ experiences is partly dependent on the other participants. That might limit generalizability of findings. On the other hand this too resembles the real world context.
A final limitation may be that one can question whether participants of the game act as in real life and whether the barriers encountered mirror actual real world barriers. That can be questioned. On the other hand literature on policy game interventions showed that when stakeholders are involved in a game that resembles their actual real world context they easily forget that it is a play and act as in real life.

Conclusion
Firstly, it can be concluded from the results of this project that it is feasible to develop and execute a comparable policy game intervention focused on improving cross- and multi-sector health promotion/HEPA policy making in three local cases in EU countries.

Secondly, it can also be concluded that the policy game intervention contributed to improved insights into the main process dynamics that are important in stakeholder collaboration in the real world context. The process dynamics the policy game focused on are assumed central preconditions for integrating research and other evidence into the actual policy developing process. Among game participants more awareness of (lack of) leadership in their organizational network was seen due to the policy game. The game resulted in increased insights on the importance of coordination and giving direction for making progress in cross- and multi-sector collaboration and in this way creating opportunities for integration of different sources of evidence into the policy process. Most game participants perceived the game as creating enthusiasm, inspiring others and sharing ideas, and
improving the understanding of the policy making process and increasing insights in each other's roles and positions. On the long term the main impact of the game on participants' behavior was that about half of them actually had increased their collaboration and their organizational network in relation to the policy development. Also their attitude and opinion towards the benefits of collaboration with other stakeholders and sectors had positively changed. As had their attitude towards use of both research evidence and expertise knowledge.

Furthermore, it can be concluded that even though attitudes toward evidence use in these cases slightly positively changed the actual use of evidence is not ensured. Other aspects such as available resources, time and money, still were mentioned as main barriers for evidence use in the real world context. However, also speaking a common language and having an open environment with respect and trust for all actors involved, is acknowledged by participants as a necessary condition to enhance integration of evidence into policy making and appeared important for stimulating contact and collaboration. The policy game therefore is considered a useful first step in stimulating integration of different sources of evidence in real world policy making. Both participants as researchers have learned from the policy game process. Among main limitations for instance was the fact that the policy system in Romania is not sufficiently similar to apply the policy game to its full use. The execution of the policy game therefore was more hypothetical for participants in Romania. Nevertheless they still appreciated the impact of meeting and discussing HEPA local policy with main stakeholders.

Overall this project and its results showed that a generic game, based on system analyses within three different EU countries, can be built and this specific game can be used as an initiator in enhancing the process of cross- and multi sector evidence-informed (HEPA) policy in (different) EU countries. By increasing insights in and attitudes towards collaboration with other stakeholders also across other sectors, the benefits the expertise and various sources of evidence can provide, become clearer to all stakeholders involved. This enhances the process of integration of (research and other) evidence and the policy making process.
6. Perspectives

Our work in WP2 within the REPOPA project has shown a positive potential of a policy game as an instrument for enhancing cross- and multi-sector collaboration and in that way also as an instrument for increasing use and integration of evidence in local policy making. Hence, the method seems to be useful when increased insight in functioning of organizational networks as well as collaboration and knowledge sharing or transfer is wanted. This paragraph presents some ideas and perspectives with respect to usefulness, now or in the near future, of the policy game intervention and how the experiences of the policy game can be used in the REPOPA framework.

Within REPOPA the policy game intervention addressed some of the main factors known from literature and also emerging from the policy analysis in WP1, that play a role in the integration of evidence and policy development, namely improving communication and collaboration between various stakeholders from different sectors involved in the policy process.

Based on the experiences with the pilots in the three countries, the WP2 team gave input to the further development of the REPOPA indicators forming the basis for the Delphi questionnaire in WP4. WP2 emphasized measurable indicators focused on cross sector experience, collaboration and knowledge sharing with relevant stakeholders and networking as these were identified as highly relevant for evidence based policy making from the WP2 achievements.

Next to that WP2 findings also shed more light on the importance of leadership in cross- and multi-sector policy making and integration of evidence in this process. Both formal and informal leadership aspects showed to be of strong influence in the actual process of enhancing collaboration and use of evidence among multiple stakeholders. Stakeholders may be very well prepared to collaborate and use each other’s expertise and available evidence. However, if no one steers them in the right direction, or gives clear vision as to how and why (what this collaboration should achieve and under what conditions) the communication and collaboration seems not very productive in delivering integrated actions.

Taking up or elaborating on aspects of (formal and informal) leadership in the REPOPA indicator framework is therefore recommended. This also relates to the fact that in the actual process of cross- and multi-sector policy making, group dynamics play an important role. Where various organizations are supposed to work together in an intensive way, organizational networks dynamics are relevant to pay attention to. Without clear purposes and goals for organizations as to what to achieve, how and why, they will tend to work towards their primary/own goals instead of to more distant or vague ‘network goals’. Developing a cross-sector public health policy therefore needs very clear purpose and direction for all stakeholders to become committed and involved.

Dissemination

In WP6 dissemination of results and products from REPOPA is stimulated. For instance by bringing the intervention under the attention of public health institutes, presenting it at relevant websites or platforms. In Denmark the policy game intervention is considered as a potential useful tool to use in multi-component intervention studies in local societies where increased insight in organizational networks as well as collaboration and knowledge sharing is wanted to achieve improvements in public health. Furthermore, the policy game method has been described and tested on Danish policy makers.
and health professionals which has given rise to considerations of the methods possibilities outside the local policy making arena.  

Also in Denmark the national platform being established as a result of the REPOPA project include both a web-based solution and an interest group being established under an existing national public health network. It is now considered how the usefulness of the method can be disseminated to the interest group and further disseminated to the network of the interest group.

In the Netherlands a follow up of this project is initiated in close collaboration with the National Institute of Public Health (RIVM). The National Institute works on facilitating and optimizing uptake of evidence in the policy making process on both national and local level. Policy games are now piloted as a means to support the integration of research and other evidence in policy making, for both more strategic as more practical policy making. This approach seems a fruitful way to further develop the national version of the policy game with a national institute as a tool to be applied for enhancing collaboration and stimulating evidence use in policy development.

In Romania the policy game intervention hopefully can be applied as an instrument to stimulate the process of creating more discussion and open communication between new stakeholders that enter the policy development process. In that way contributing to more trust and respect among partners involved and working towards a more integrated public health policy.

We assume that the lack of follow-up (i.e. consecutive meetings) may have limited the uptake of learnings and positive experiences acquired in the game into their daily work. Most of the participants reported changes in insights, perceptions and intentions, but showed only limited behavior changes in their daily work—although some changes were shown. Hence, further studies of such interventions including consecutive meetings and follow up might be a promising next step to support change stakeholders’ behaviors and thereby increase actual cross- and multi sector collaboration toward HEPA and PH policy making. This might be a promising approach to follow up on with future (developmental intervention) research. The aspect of bringing together stakeholders from the actual policy context to meet, make contact and work on integrated policy implementation plans, adding to that more extensive digital and internet support as well as follow up meetings in the real life context. Disseminating the intervention as a potential useful instrument within countries participating in REPOPA and the larger EU, on international and national conferences, on relevant websites and in scientific publications will support further acquaintance with the method and may stimulate further use.
References


# Appendix 1 - Glossary

## Driving forces

Key internal and external factors that influence the decisions and policies within an organization network makes to stay competitive. Internal forces are for example knowledge and competence of management and workforce and external forces are for example economy, demographic changes, competition, technology, social trends, local and national politics and environmental issues that shape the future of an organizational network.

## Barriers

Factors limiting either contact, collaboration or the use of evidence.

## Communication

Communication is an instrument to be in contact with a stakeholder.

## Collaboration

When two or more persons/organizations work together to achieve their common objectives. Collaboration is an intensive way of connecting (it needs regular high quality communication, but can be ad hoc/project based).

## Contact

A way to connect with a stakeholder about a certain topic. This can be incidental to more regular contact. There can be contact for human resources, experience, expertise, financial benefits.

## Evidence-informed policy making

Evidence-informed policy-making is an approach to policy decisions that aims to ensure that decision making is well-informed by research evidence, experiential evidence and knowledge from stakeholders and target groups.

## Facilitators

Factors stimulating either contact, collaboration or the use of evidence.

## Knowledge

Information from different sources, such as research, different stakeholders, and also information about a target group.

## Leadership

Guiding or directing a group via a formal or informal role in an organizational network. It can be provided by any stakeholder in the network and can be about for example taking responsibility, motivating others, empowering others, sharing a vision, fostering respect or combining perspectives.

## Organizational network

A group of stakeholders working in different organizations/institutions that together form a network and where they feel they are all belonging to this specific network. They regularly and structurally collaborate (not ad hoc or incidental), and exchange knowledge and learn from each other.

## Policy development

Making decisions on the proposal and/or realization of a program, project or activity with a strategic aim, and being responsible for these decisions.

## Systems analysis

Mapping the system by looking at the stakeholders involved, their relations, driving forces and hierarchy.
### Appendix 2 - Time line WP2 process

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Appendix 3 - Micro cycle – a game round

A game round

Determine team strategy

External group evaluation

Internal team evaluation

Execute team strategy