

People Olympics for Healthy and Active Living a People Driven Social Innovation Initiative

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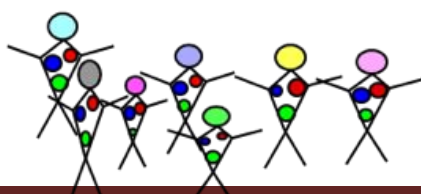
Abstract

The present document describes the People Olympics for Healthy and Active Living. It provides the Motivation and Concept of the People Olympics initiative; the expected benefits for the participating people and their cities; the model used to measure the “credits” accrued by the individuals and the competing teams; the governance of the initiative and indications on how to join the initiative.

1 Concept and Motivation

The recent financial crisis exposed a number of weaknesses in the European Societal Framework. Mass behavioural changes will be required in order to ensure the sustainability of consolidated life styles for Europeans. In particular a major societal challenge of our time in Europe is the aging society, as the European welfare system is under stress and older people's living is not as active and rewarding as it could be. There is a need to raise the consciousness of the people of their power to activate their collective creative intelligence and to drive systemic solutions for the aging society.

New innovation mechanisms, such as Living Labs and EIT (European Institute of Technology) ICT Labs, have been germinating all over Europe. The more than 300 Living Labs existing in Europe have organized communities of users for sensing, co-creating and experimenting IT based innovations, in socially relevant issues such as energy optimisation, health care and wellbeing. However, until now, the Labs and their users have acted in local ecosystems, under diverse and fragmented projects and dis-homogenous approaches, which have failed to mobilise the communities at large and has therefore hampered the impact potential.



“PEOPLE OLYMPICS FOR HEALTHY AND
ACTIVE LIVING”

People Olympics: 10.000s strong teams competing for their city wellbeing, fun and social transformation. © Roberto Santoro 2012

What is People Olympics?

The People Olympics is a game, based on competing cities. Each city has a team of 10.000 participants, which reflect that city demographics.¹ The members of the team track their physical activity through portable devices, which measure diverse physiological data. A system collects all data and updates the real time cumulative fitness activities at city level. It also compares it with the value of the other competing cities.

What is the motivation for People Olympics?

The People Olympics initiative aims to establish a People Driven Social Innovation Platform in the domain of Health, Aging and Wellbeing, in order

1. To increase the average value of the people's physical activity and
2. To raise the collective awareness and unleash the collective power of people co-creating new waves of Social Innovations.

This Platform supports the members to adopt a healthier, more active and co-creative behaviour and to contribute to a collective action.

People Olympics is the motivational mechanism per excellence and is dedicated to All young and old; male and female collaborating and competing through their daily physical, social and co-creation activities in their normal living scenarios. People Olympics promises to change the behaviour of people because it involves a collective action, which is an extraordinary motivating factor influencing people ability to change.

What is its contribution to social balance?

The Platform will develop strategies to favour the engagement of people with different health conditions, body shape, gender, cultural origins or abilities celebrating diversity among citizens.

On the other hand, through the involvement of sponsors, different activities to combat poverty and social exclusion in each city will be linked to People Olympics events

How are we going to do it?

The People Olympics games are supported by an ICT platform, suitable for:

- Facilitating the connection of users in order to perform activities and synchronise their behaviour to maximise the benefits of collective action;
- Collecting real time data from active users and the objects they carry in their real life environments, in order to build and make available individual and collective behavioural profiles in a dynamic way;
- Supporting the production of additional services (apps) for increasing users involvement and hence their engagement in changing and improving socially relevant behaviours.

¹ In such context the city has to be intended as reference and identification of the Team (the community) that could embrace individuals also at district, neighborhood or regional level.

How people interact with the system

The core of the People Olympics infrastructure is the People Olympics app (hereafter POPapp), conceived to involve:

- People for event creation, promotion (through sponsors), sharing and participation at city, country and global level for;
- Users for Services and new functions co-creation and prototyping;
- Participants for Measurement and evaluation of individual and collective performance (both for physical and social activities)

The POPapp is expected to represent the hub through which the participant interacts with People Olympics community at local, country and global level and to enhance user experience in such game and collective approach.

The POPapp is expected also to:

- Have a high responsiveness of the interface (popping up events on the screen) as core part of the user app experience;
- Leverage modern mobile motion sensors and accelerometers in order to better keep track of physical activity and measure (with credit assignment) not only for traditional sport (run, swim, walk, jump etc.) but any other initiative involving collective participation, calories consumption, fun and social interaction.

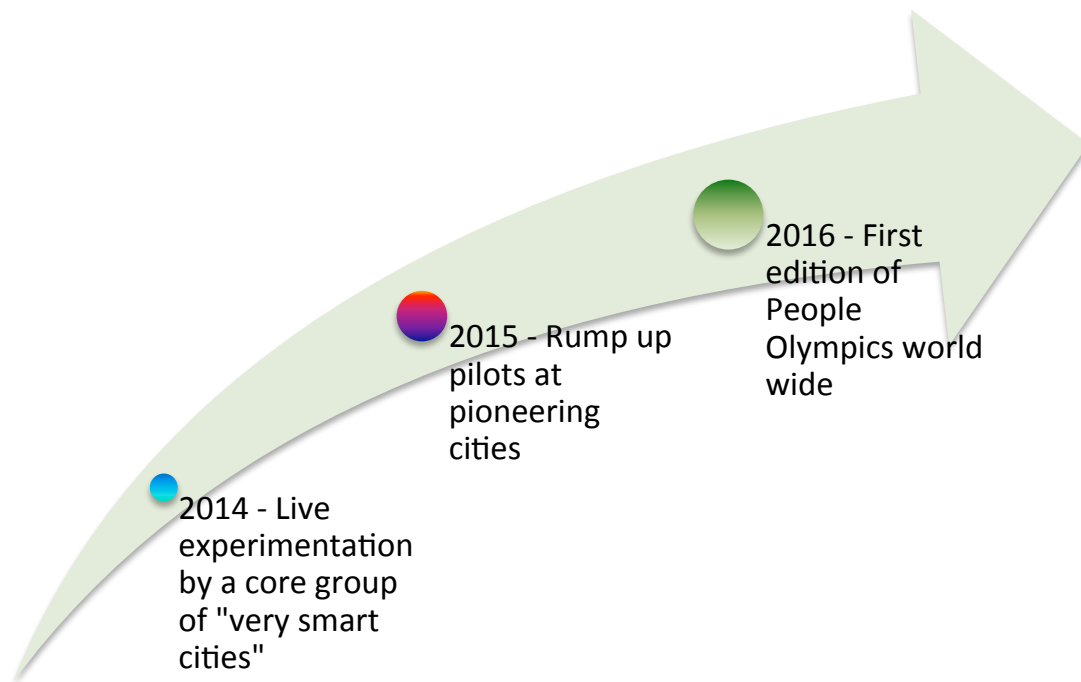
When are we going to do it?

The First Edition of the People Olympics games will take place in 2016, the same year of the Olympic Games in Rio de Janeiro. Each team is constituted by 10.000 people, reflecting the demographics of its City.

Live trials by a core group of “Very Smart Cities” will start in 2014 with the objective of validating the games rules and the supporting ICT infrastructure. Each trial will involve at least 100 people.

Rump up pilots will be conducted during 2015 by all the cities wishing to participate to the People Olympics games. Each pilot will involve at least 1.000 people

The “People Olympics for Healthy and Active Living” initiative will also form the basis for launching a major research and innovation project proposal in the HORIZON 2020 framework.



People Olympics initiatives already in place

The People Olympics initiative Live Experimentation (2014 Early trial) phase has already started with selected pilot cities:

- Rome (Italy)
- Taipei (Taiwan)
- Saint Etienne (France)
- Bilbao (Spain)
- Montreal (Canada)
- Barcelona (Spain)
- Sofia (Bulgaria)
- Istanbul (Turkey)



Figure 1 - 2014 Trial - Pilot Cities

Trial events are created in these cities and a select group of 100 participants (reflecting the city demographics) is experimenting the concept and the first version of the system.² The users are also creating, sharing and participating in various events (involving people interaction, physical activity and WellBeing).

A vivid example on what will happen in 2014 People Olympics trial is given by the two events already organized and occurred.

²PeopleOlympics website / administration tool (www.peopleolympics.org) and the PoPApps app (Android version: <https://play.google.com/store/apps/details?id=popapp.engineeringinnovation.eu>; iOS version: <https://itunes.apple.com/it/app/popapps/id809933090?mt=8>).

Bilbao: first People Olympics event

One first example of the People Olympics events is the “Bilbao Bubble soccer day” held last 27 March 2014 in Bilbao.



The trial took place in the framework of an International Conference on Technology, Sports and Wellbeing held at the University of Deusto and organized by GAIA, the Association of Electronic and Information Technologies in the Basque Country, and Bilbao Ekintza, the municipal entity that drives the generation of social and economic wealth for Bilbao.

At Bilbao’s trial we counted with all the stakeholders: municipality, industry, young innovators, researchers and people in general:

Stakeholder	Number of people
Municipality	13
Industry	20
Young Innovators	15
Researchers	10
People in general	10

The trial consisted of a Bubble Soccer activity in which the participants of the event had the opportunity to verify people’s enthusiasm to be part of the initiative and demonstrate the fun of promoting physical activity with an innovative sport and the different ways we have to compete for our cities’ wellbeing, fun and social transformation while promoting collaboration with different sectors and enhancing the development and validation of new products, technologies and markets.

Video: www.peopleolympics.org/index.php/news/10-homequick/8-bilbao-bubble-soccer-video

Saint Etienne – People Olympics Trial

Another People Olympics trial event is organized in Saint Etienne during the week dedicated to the handicap (mental, physic, etc.). The goal is to mix all the population and to make them champions!

A big original “fun fair” is installed in the quarter. As a hunt, different activities are organized. For the citizen, it will be like a treasure hunt, he could go through the different activities, skipping some or experiment all, if he enjoy and if the doctor gave him the medical authorization.

So, throughout the day, the citizen could participate to these activities, and become a champion for a journey!

Organized sport activities for the participants are:

- a walk in the exhibition halls
- a tour of the buildings
- a basketball play
- an obstacle race.....

Additional co-creative workshops can be organized by participants.

Concluding: People Olympics initiative aims to organize a collective game (reminding the real Olympics game) where normal people (reflecting city demographics) are playing and competing on any kind of physical activity (and are interacting creating and participating in events in interactive and WellBeing driven way).

How was the idea of People Olympics conceived?

People Olympics is a disruptive approach, conceived by Roberto Santoro, President Emeritus of the European Network of Living Labs, and President of ESoCE Net (the European Society of Concurrent Engineering, non-profit association focusing on Collaborative Innovation), for societal change at large, with the objective of focusing collective intelligence to the Joint Intent of addressing today Societal Challenges.

This major initiative has been announced for the first time by Roberto Santoro himself at the BIOVISION Conference: the World Life Sciences Forum, held March 24-26, 2013 in Lyon, France. With over 3,000 participants, 200 high-level speakers and more than 30,000 Internet followers, BIOVISION is the most-attended multi-stakeholder meeting for all life sciences' players. When addressing the Plenary on "How to make better use of collective intelligence for Health?" Roberto Santoro said: "The real challenge in our societies is not only to have the excellence peak performance of few individuals, but also to have a raise on the average amount of physical activity that normal people do! Even a small increase will have a tremendous impact on the cost of healthcare and on the wellbeing of our aging societies, and will help solving chronic diseases better than most advancement in specialized care". See the People Olympic announcement video clip on YouTube <http://youtu.be/xsLmL3xFwac>

2 Benefits for the People and their Cities

What are the benefits of participating in People Olympics for a city and their citizens?

THE PEOPLE OLYMPICS FOR HEALTHY and ACTIVE LIVING offers to the participating cities the opportunity of being part of a social innovation initiative for boosting their citizen's participation and wellbeing, which also promises to generate new jobs and economic activities.

Social Innovations are innovations that are not only good for society but also enhance society capacity to act. Social innovations take place across boundaries between the public sector, the private sector, the third sector and the household. (European Commission DG Enterprise Social Innovation Competition)

It is widely recognized that regular physical exercise is beneficial to the health and wellbeing of people. However, People Olympics Games offer citizens not only this physical benefit but the possibility of making their city more liveable and enjoyable:

- People will be using more and better the wellbeing facilities and infrastructure already existing on their territory.
- People will be engaged in the creative development for improving their city wellbeing facilities and infrastructures (more cycling lanes, more jogging green areas, new routes for cultural sites, etc.).
- People and the City will be engaged in generating micro and macro events, synchronous and asynchronous, in collaboration and competition with the other cities (excursions to the best sites around the city, discovery of city facilities and attractions...)

What would be the role of the City Administration in People Olympics?

The City Administration per se is not expected to take an active role in the organization and conduction of the People Olympic Games. Its role would be a support and promotional role. In particular, it is expected to facilitate the safe execution of the People Olympic team events, taking place in the City.

3 “Rules of the Game” and the Social Innovation Behavioural Model

The People Olympics rules of the game consist in accruing credits for the competing team. Credits are gained by performing physical activities, participating to social events, and by co-creating new services and motivational mechanisms for the community. The credits are combined to evaluate an overall “Healthy Index” for the competing team and their city. The Healthy index is continuously updated and reported in the People Olympic world map so as to inspire further collaboration and competition throughout the duration of the games. Prizes and awards are given not only for the highest overall “Healthy Index” but for all kind of partial achievements, like most original or most popular collective event.

The scores achieved by each city can win prizes not only from calories consumption but also through participation in events, and other co-creation activities. These initiatives, regularly organized at local level and sometimes coordinated globally, will enable participants to enjoy and to win competitions all year round... this way everyone has a chance to win playing the People Olympics!



What model will be used to evaluate physical and other activities in People Olympics?

The People Olympic for Healthy and Active Living initiative adopts the Social Innovation Model (refSantoro2013) in order to evaluate the accrued “KBS credits” throughout the games. The Social Innovation Model describes activity/behaviours which have a Knowledge (what do I need to know about the specific domain), Social (how do I connect with other users for information exchange) and Business (how can I participate in creating new processes and tools to support improved behaviours) relevance.

In the context of the Healthy and Active behaviour uptake, for instance, the KSB model will be adapted and extended to the three dimensions, as depicted in the following picture:

- Knowledge (awareness of Healthy Living practices and benefits and co-creativity of new Healthy living motivational mechanisms and associated ICT services, such as apps);
- Social (Social Capital accrued by the interaction, collaboration and competition of the local communities members, augmented by joint cross border initiatives at intercommunity level);
- Business (the benefits accrued through physical activities, at both individual and collective level which are of a well-being nature, but also of economic and social value in relation to collective competition prizes and reward).

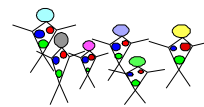


Knowledge
Increase awareness of healthy lifestyle
Learning to Innovate (Co-Creation)



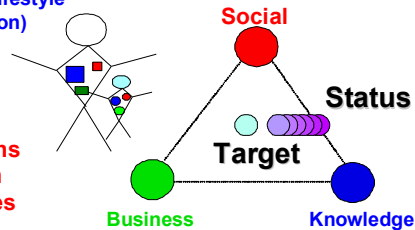
Social
Interacting with
Healthy Living fans
and Innovators in
other communities

Business / benefits
benefits accrued through physical activities
Getting Reward for User co-created services



Social Innovation Model based on people KSB Experience

The KBS chromo-framework
© R.Santoro A. Bifulco PRO-VE 2005



The Social Innovation Behavioural Model: Implementation of KBS elements in the active and healthy living domain.

The Social Innovation model includes an activity profile for individuals (with the main objective of helping individuals to improve their activity profile and to adopt improved behaviours) and an activity profile for the community as a whole, in which all the individuals contribute to a collective profile and, hence, contribute to societal behavioural change at large.

The data collected by the IT platform will be used to build an innovative Profile, at both individual and collective (i.e. community) level. The innovative approach consists of the possibility that individuals can assess and evaluate their contributions to the collective profile of their local community, which is competing at worldwide level with similar communities. Overall, the Social Innovation Model delivers reliable and interoperable KBS measurements (the Key Behavioural Indicators), in order to make possible the comparison of data coming from diverse personal profiles and community profiles.

Collective KBIs can be therefore compared in a community competition, where Cities can compete one against the other in order to prove which of them is the most effective in tackling that specific societal issues: who is more active and healthy?.



Figure 1: Individuals contribute to community/city positioning and to compete against other communities/cities

People can be active in their community by contributing to the overall knowledge accumulated (acting as a guru), and/or by producing/experimenting benefits (acting as a champion, being directly involved in performing activities) and/or by attracting and motivating people to join in (acting as a charismatic and trend-setter person). The combination of the individual behaviour along the different axis determines the city/community profile and its positioning with respect to the other ones. Prizes and rewards will be given throughout the People Olympic competition.

4 Governance and Sustainability

International not for profit Association for People Driven Social Innovation

The overall governance of the initiative will be ensured by an International not for profit Association for People Driven Social Innovation being established (PO International Association). The mission of the Association is to promote People Driven Social Innovation for addressing Health and Wellbeing Societal Challenges in an aging Society.

Main responsibility of the Association is

1. to set and manage the “Rules of the Game”
2. to establish and administer the membership acceptance criteria
3. to evaluate and accept new candidate members, which meet the criteria
4. to provide communication and networking services to its members.

The financial sustainability of the Association is based on membership fees.

International Organizing Committee

The initial development of this initiative is ensured by an International Organizing Committee, constituted within the not for profit association ESoCE Net. The Committee will move under the dedicated People Olympics Association once established. The International Organizing Committee is composed by one representative from each of the Founding Members and by selected representatives (1 to 3) from the following stakeholder types:

1. People Olympic community, Living labs and their cities (participating to the People Olympic games, facilitating people activity and enjoyment)
2. Education and Research (all the tracking data of people physical activity will be made available to medical and social research)
3. Business (fitness gadgets, ICT infrastructure and services)

The mission of the International Organizing Committee is to develop all the required organizational and technical elements to the actual foundation of the People Olympics Association and its ecosystem. In particular:

1. to draft the Association bylaws and governance of the People Olympic initiative.
2. to define the preliminary “Rules of the Game”.
3. to define the People Olympic Kit to be offered to the candidate members: including organizational, communication, and technical guidelines to support the 10.000 team engagement and activities.
4. to validate the People Olympics Social Innovation Platform through live trials, with at least 100 participants during 2014.

The financial sustainability of the International Organizing Committee is based on the membership fees as founding members and voluntary contributions.

People Olympics service company

The actual development of the People Olympic ICT system and of the People Olympic Kit has been carried out by Engineering Innovation srl, a service company which makes available its product-services to the International not for profit Association for People Driven Social Innovation (ESoCE Net ad interim), under a general frame contract agreement.

Engineering Innovation is also in charge of managing the sponsors program.

Overall Sustainability

The overall sustainability of the People Olympics for Healthy and Active Living initiative is based on membership fees, voluntary contributions and on the acquisition of Private and Public sponsorship.

Sponsor Program

A sponsor program is available at Global and Local level. Sponsors are visible in the POP App and on the website. Agreements are made for general advertisement and for discount coupons offered to the People Olympics participants.

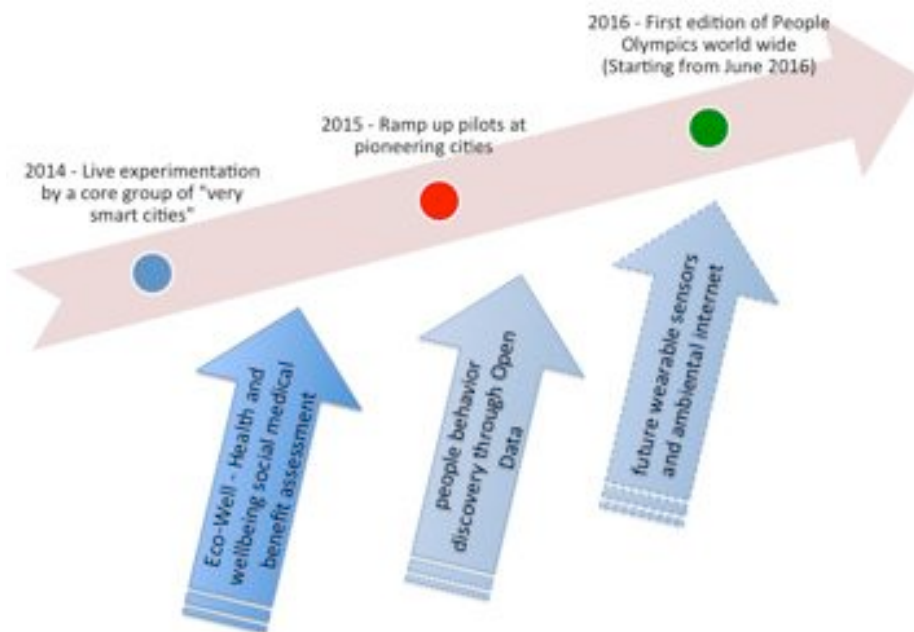
Research program

Furthermore this initiative will also form the basis for launching several research and innovation project proposals in the HORIZON 2020 framework. In particular specific themes under investigation are:

- ICT Challenge 3 – Future Internet
- Societal Challenges -Health, demographic change and wellbeing
- International Cooperation – North America, Brazil, Japan, China...

People Olympics and supporting Research Activities

Eco-Well is one of the research activities needed to study the phenomenon, the challenge and the big social transformation target that People Olympics is putting in place, especiall from Health and Wellbeing social medical benefit assessment. The Eco-Well initiative is being launched now and is framed in the logic reported in the below dyagram.



Founding Members and Participating Cities

The Founding Members are Living labs, Innovation Communities and their City wishing to be initiators of a major Social Innovation initiative for the benefit of their citizens and Society.

Participating Cities and their supporting organizations, typically a Living Lab, have the opportunity of becoming member of the International Organizing Committee.

The City Administration per se is not expected to take an active role in the organization and conduction of the People Olympic Games. Its role would be a support and promotional role. In particular, it is expected to facilitate the safe execution of the People Olympic team events, taking place in the City.

The role of organizing and conducting People Olympic activities will be assigned to a local organization, experienced in engaging and motivating people to participate to collective initiatives, typically a Living Lab, a sport or cultural associations and similar organizations.

Partner Cities receive a People Olympic KIT, including organizational, communication and technical guidelines, and access to the ICT platform.

Partner Cities will engage in ramp up pilots with at least 1.000 participants during 2015.

5 How to join the initiative

Organizations and individual can participate at different level according to their wished role. Sponsor programs are offered at Global and City level.

Who are the pioneering organizations?

The core group of the "very smart cities" and their supporting organizations that have expressed their intention to conduct early experimentations in 2014, and will actively participate to the activities of the International Organizing Committee are:

Rome, ESoCE Net
 Milan, City of the Future LLAB
 Madrid, Smart House LLAB
 Bilbao, Sportis LLAB
 Barcelona, Design for All Foundation
 Montreal, Montreal Couture
 Lyon, Cluster I-Care
 Saint Etienne, Cite du Design LLAB
 Helsinki, Laurea Living Labs
 Oulu, Oulu LLAB
 Taipei, Taiwan LLAB
 Sofia, VirtSOI LLAB
 Belfast, Ulster LLAB

What are the objectives and activities of the 2014 Trials?

The trial consists of an experimentation of People Olympics events organization and participation by a pilot city over a selected group of 100 users, adopting the People Olympics first POP app prototype. The People Olympics POP app (©Roberto Santoro 2013) is a mobile-based tool for People Olympics game and people interaction, event creation, event sharing and activity tracking. Main activities will be the co-creation by the people team of events which are attractive, give a chance to do some physical activity, and especially other people are eager to join!

The POP app will be available for the following mobile devices:

- iOS (last version with compatibility in the interface also with iPad)
- Android (compatible at least with version 2.1)

Here is the list of the first 27 organizations/cities which submitted their Expression of Interest or Letter of Support:

Basakşehir-Istanbul	Enschede	Montreal	Saint-Étienne
Bilbao	Helsinki	Newcastle	Shenzhen
Belfast	Londonderry	Norrköping	Sofia
Birmingham	Lulea	Oulu	Taipei
Bremen	Lyon	Pafos-Nicosia	Trento
Covilhã	Madrid	Rome	Barcelona
Edinburgh	Milan	San Francisco	

The table below provides simple instructions on how to join the People Olympics initiative.

The Role you wish to take	Benefits	Action required
PO - Community member (individual)	track your individual physical activity with the PO system and get coupons on PO gadgets	Register to the PEOPLE OLYMPICS Community (http://www.peopleolympics.org)
PO – 10.000 team member (individual)	become a member of the people Olympic team in your city and accrue PO KBS credits and vouchers	Register to the PEOPLE OLYMPICS Community as PO team member candidate (http://www.peopleolympics.org)
PO - Supporter (organization: LLABS, Research Centers, Associations and their City)	Get access to info and support to become a PO-Partner	Submit your Expression of Interest (EoI) form and your city's letter of support (LoS). Request the EoI and LoS templates by mailing to info@peopleolympics.org
PO - Partner (organization: LLABS, Research Centers, Associations and their City)	Get access to PO KIT for participating to PO Games	Become member of the People Olympic International Association and register to the People Olympic Games

In order to become to become a member of the PO International Association the candidate organization must meet the membership criteria issued by the Association.

References

- [Santoro 2013], Santoro R. and Conte M: “The Social Innovation Behavioral Model for Collective Awareness - ICE 2013 Conference proceedings – IEEE Xplore
- [Santoro 2012], Santoro R. and Conte M: “Living Labs in Functional Regions” Book chapter 2012 in Globalization and Innovative Business Models ISBN: 978-93-8212-715-4
- [Santoro 2008] Santoro R. and Bifulco A. (2008): “Professional Virtual Communities PVC Reference Framework”. In: Methods and tools for Collaborative Networked Organizations. Springer. ISBN 978-0-387-79423-5
- [Santoro 2005] Santoro R. and Bifulco A. (2005): “A Conceptual Framework for ‘Professional Virtual Communities’”. In: IFIP International Federation for Information Processing, Vol. 186 (January), pp. 417-424
- [Fleming 2004] Fleming L. (2004): “Perfecting Cross-pollination”. In: Harvard Business Review, Vol. 82, No. 9 (September), pp. 22-24