



# SPORT FOR HEALTH NETWORK

**D1.1 Report on sport community recognition  
Organisation: Sport Federation of Celje**

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### Report information

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## 1. General community health information of participating countries

General community health information of participating countries was assessed using the selected indicators:

- Indicators of safety at work
- Indicators of physical activity
- Health indicators

### *Indicators of safety at work*

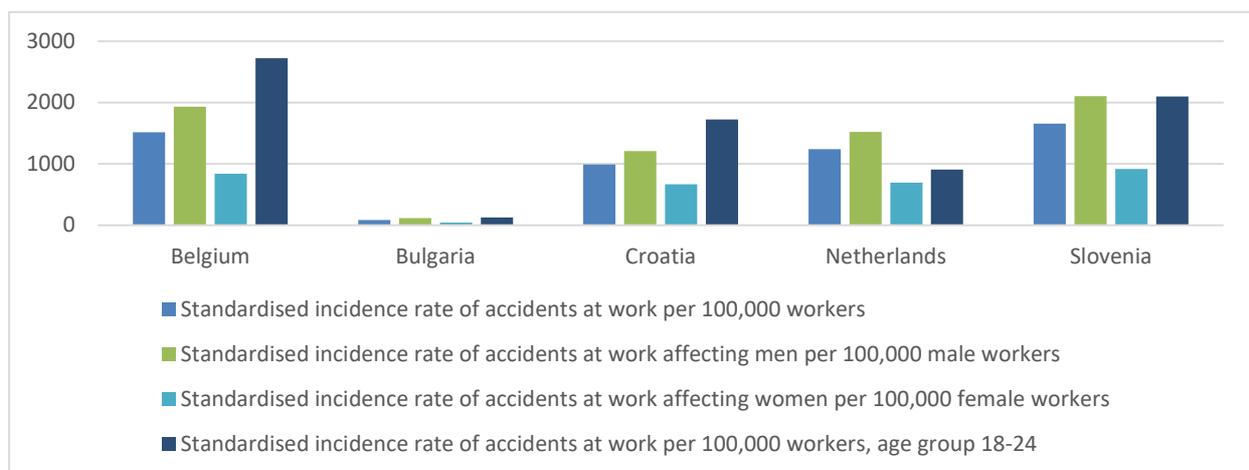
Figure 1.1 presents the accidents at work per 100,000 workers in 2015 in the countries of the organizations participating in the survey:

- The standardised incidence rate of accidents at work per 100,000 workers
- The standardised incidence rate of accidents at work affecting men per 100,000 male workers
- The standardised incidence rate of accidents at work affecting women per 100,000 female workers
- The standardised incidence rate of accidents at work per 100,000 workers, age group 18-24

The largest number of accidents occurred in Belgium, in all the observed categories, followed by Slovenia. On the other hand, a lower number of accidents at work per 100,000 workers occurred in Croatia and the Netherlands. The methodology for data collection was substantially different in Bulgaria, which results in different information for this country.

Table 1.1 presents detailed information about the accidents at work per 100,000 workers in 2015.

**Figure 1.1 Accident at work per 100,000 workers in 2015**



Source: Project team, using European health indicators, available at

[https://ec.europa.eu/health/indicators\\_data/indicators\\_en](https://ec.europa.eu/health/indicators_data/indicators_en)

Note: Data collection methodology is different in Bulgaria

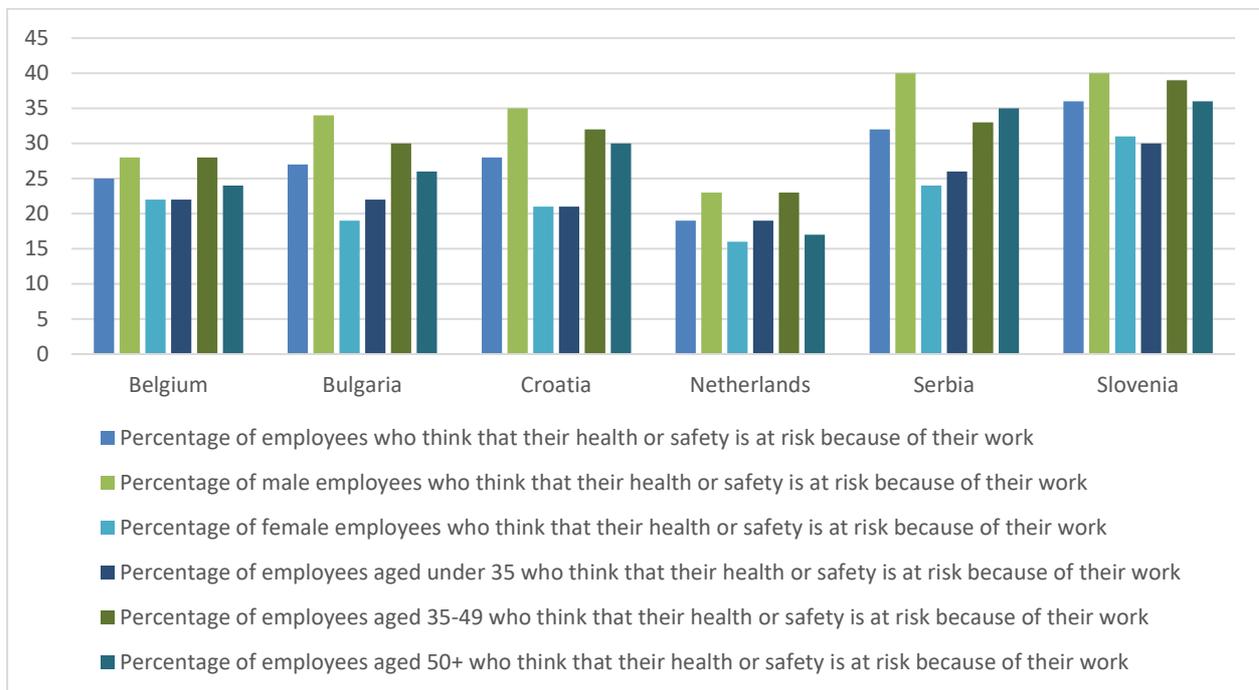
**Table 1. 1 Accident at work per 100,000 workers in 2015**

	Standardised incidence rate of accidents at work per 100,000 workers	Standardised incidence rate of accidents at work affecting men per 100,000 male workers	Standardised incidence rate of accidents at work affecting women per 100,000 female workers	Standardised incidence rate of accidents at work per 100,000 workers, age group 18-24
Belgium	1518,6	1931,0	837,6	2726,9
Bulgaria*	82,8	114,3	43,0	126,7
Croatia	989,0	1208,2	669,4	1727,5
Netherlands	1241,1	1522,3	694,5	910,0
Slovenia	1658,8	2103,1	917,0	2101,3

Source: Project team, using European health indicators, available at [https://ec.europa.eu/health/indicators\\_data/indicators\\_en](https://ec.europa.eu/health/indicators_data/indicators_en)

Note: \* difference in methodology

Although the actual number of accidents was the highest in Slovenia, on the other hand, the percentage of employees who think that their health or safety is at risk because of their work is among the lowest. The percentage of workers who perceive that their health or safety is at risk is the highest in Serbia. Table 1.2. presents the detailed data.

**Figure 1. 2 % of employees who think that their health or safety is at risk because of their work**

Source: Project team, using European health indicators, available at [https://ec.europa.eu/health/indicators\\_data/indicators\\_en](https://ec.europa.eu/health/indicators_data/indicators_en)

**Table 1. 2 % of employees who think that their health or safety is at risk because of their work in 2017**

	Percentage of employees who think that their health or safety is at risk because of their work	Percentage of male employees who think that their health or safety is at risk because of their work	Percentage of female employees who think that their health or safety is at risk because of their work	Percentage of employees aged under 35 who think that their health or safety is at risk because of their work	Percentage of employees aged 35-49 who think that their health or safety is at risk because of their work	Percentage of employees aged 50+ who think that their health or safety is at risk because of their work
Belgium	25	28	22	22	28	24
Bulgaria	27	34	19	22	30	26
Croatia	28	35	21	21	32	30
Netherlands	19	23	16	19	23	17
Serbia	32	40	24	26	33	35
Slovenia	36	40	31	30	39	36

Source: Project team, using European health indicators, available at [https://ec.europa.eu/health/indicators\\_data/indicators\\_en](https://ec.europa.eu/health/indicators_data/indicators_en)

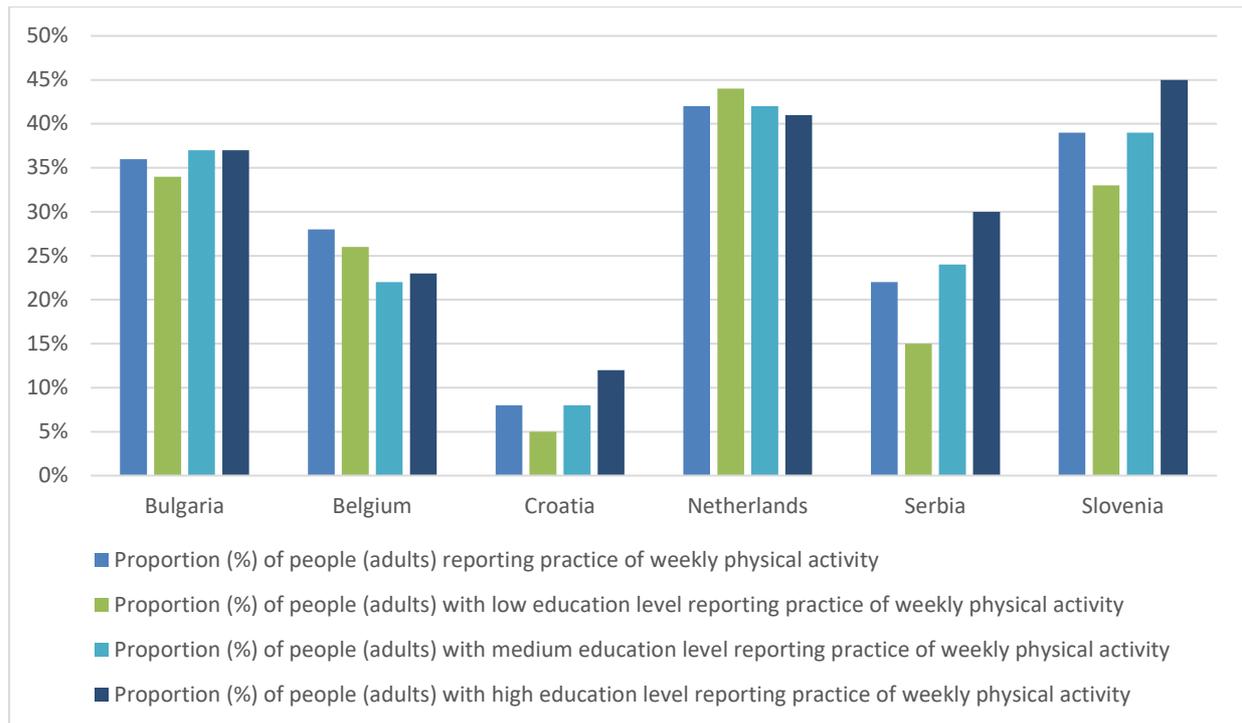
### *Indicators of physical activity*

Figure 1.3 presents the proportion of adults according to the weekly physical activity in 2017 in the countries of the partners that participated in the survey:

- Proportion (%) of people (adults) reporting the practice of weekly physical activity
- Proportion (%) of people (adults) with low education level reporting practice of weekly physical activity
- Proportion (%) of people (adults) with medium education level reporting practice of weekly physical activity
- Proportion (%) of people (adults) with high education level reporting practice of weekly physical activity

The lowest number of persons that participate weekly in physical activity in 2017 is observed in the Netherlands, followed by Bulgaria, Belgium, and Serbia. The highest number of persons that participate weekly in physical activity in 2017 was the highest in the Netherlands and Slovenia.

Table 1.3 presents detailed data on the proportion of adults according to the weekly physical activity in 2017.

**Figure 1. 3 Proportion of adults according to the weekly physical activity in 2017**

Source: Project team, using European health indicators, available at [https://ec.europa.eu/health/indicators\\_data/indicators\\_en](https://ec.europa.eu/health/indicators_data/indicators_en)

**Table 1. 3 Proportion of adults according to the weekly physical activity in 2017**

	Proportion (%) of people (adults) reporting the practice of weekly physical activity	Proportion (%) of people (adults) with low education level reporting practice of weekly physical activity	Proportion (%) of people (adults) with medium education level reporting practice of weekly physical activity	Proportion (%) of people (adults) with high education level reporting practice of weekly physical activity
Bulgaria	36%	34%	37%	37%
Belgium	28%	26%	22%	23%
Croatia	8%	5%	8%	12%
Netherlands	42%	44%	42%	41%
Serbia	22%	15%	24%	30%
Slovenia	39%	33%	39%	45%

Source: Project team, using European health indicators, available at [https://ec.europa.eu/health/indicators\\_data/indicators\\_en](https://ec.europa.eu/health/indicators_data/indicators_en)

### Health indicators

Figure 1.4 presents the proportion of obese adults in selected European countries in 2017:

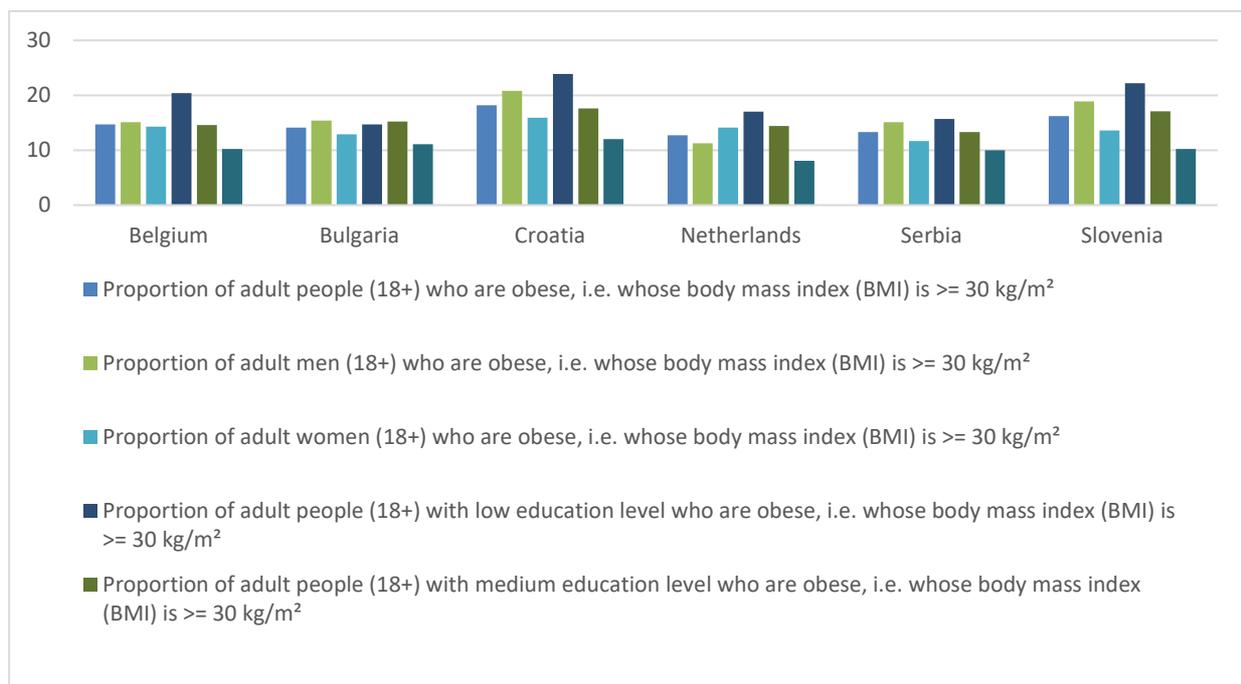
- Proportion of adult people (18+) who are obese, i.e. whose body mass index (BMI) is  $\geq 30 \text{ kg/m}^2$

- Proportion of adult men (18+) who are obese, i.e. whose body mass index (BMI) is  $\geq 30 \text{ kg/m}^2$
- Proportion of adult women (18+) who are obese, i.e. whose body mass index (BMI) is  $\geq 30 \text{ kg/m}^2$
- Proportion of adult people (18+) with low education level who are obese, i.e. whose body mass index (BMI) is  $\geq 30 \text{ kg/m}^2$
- Proportion of adult people (18+) with medium education level who are obese, i.e. whose body mass index (BMI) is  $\geq 30 \text{ kg/m}^2$
- Proportion of adult people (18+) with high education level who are obese, i.e. whose body mass index (BMI) is  $\geq 30 \text{ kg/m}^2$

The highest percentage of obese adults was observed in Croatia and Slovenia. Other countries have approximately the same percentage of adult people who were obese (Belgium, Bulgaria, Netherlands, and Serbia). In all the countries, the highest percentage of adult people who were obese where those how had a low level of education.

Table 1.4 provides detailed information about the proportion of obese adults in selected European countries in 2017.

**Figure 1. 4 Proportion of obese adults in selected European countries (2017)**



Source: Project team, using European health indicators, available at [https://ec.europa.eu/health/indicators\\_data/indicators\\_en](https://ec.europa.eu/health/indicators_data/indicators_en)

**Table 1. 4 Proportion of obese adults in selected European countries (2017)**

	Proportion of adult people (18+) who are obese, i.e. whose body mass index (BMI) is $\geq 30$ kg/m <sup>2</sup>	Proportion of adult men (18+) who are obese, i.e. whose body mass index (BMI) is $\geq 30$ kg/m <sup>2</sup>	Proportion of adult women (18+) who are obese, i.e. whose body mass index (BMI) is $\geq 30$ kg/m <sup>2</sup>	Proportion of adult people (18+) with low education level who are obese, i.e. whose body mass index (BMI) is $\geq 30$ kg/m <sup>2</sup>	Proportion of adult people (18+) with medium education level who are obese, i.e. whose body mass index (BMI) is $\geq 30$ kg/m <sup>2</sup>	Proportion of adult people (18+) with high education level who are obese, i.e. whose body mass index (BMI) is $\geq 30$ kg/m <sup>2</sup>
Belgium	14,7	15,1	14,3	20,4	14,6	10,2
Bulgaria	14,1	15,4	12,9	14,7	15,2	11,1
Croatia	18,2	20,8	15,9	23,9	17,6	12
Netherlands	12,7	11,3	14,1	17	14,4	8,1
Serbia	13,3	15,1	11,7	15,7	13,3	10
Slovenia	16,2	18,9	13,6	22,2	17,1	10,2

Source: Project team, using European health indicators, available at [https://ec.europa.eu/health/indicators\\_data/indicators\\_en](https://ec.europa.eu/health/indicators_data/indicators_en)

## 2. Sport4HealthNet community analysis (all sport-related stakeholders who can join the network – prospective members)

### 2.1. Methodology

Sport4Health Network consisted of 6 national partners researched national potentials for future partnership and discovered that there are many different types of potential partners which could be divided into the following groups:

1. Business partners
2. Institutional partners

Both categories could be implemented at the national and Trans-European project level.

**Business partners** are companies, organizations, or clubs that are providing goods, services, or finances which is needed to improve the quality of the project and at the same time quality of services for all stakeholders. All business partners will act according to the regulation of the project and will after implementation and start of

the second phase in July 2021 start to offer to users of the project S4H their commercial services. Business partners will be divided into 3 groups:

- a. Golden partners (limited to up to 3 companies per country)
- b. Silver partners (limited to up to 5 companies per country)
- c. Bronze partners (limited to up to 10 companies per country)

**Institutional partners** are local communities, ministries, or governments that will support projects providing subsidized or free services or facilities to improve the level of fitness of employees that will use programs S4H and its services. All institutional partners will act according to the regulation of the project and will after implementation offer to users of the project S4H their subsidized or free services at all times.

The current network consists of faculties, local, and private sports organizations that represent the governmental and non-governmental sectors and will search for new partners according to the need and development of the project.

## 2.2. Potential partners

### 2.2.1. Slovenia

Slovenia as a country with a high percentage of regular sport activity of population has developed sports infrastructure at the level of local communities, reliable medical support that offers testing possibilities, and many companies, that are involved providing services and goods for an active population. When we researched potential partnerships with institutions, companies, or organizations, we discovered that many potential stakeholders already have some experiences with sport dealing with employees and that they would be ready to enter a partnership with S4Hnetwork.

Potential partners that after individual interviews in Slovenia already showed interest and could be part of S4Hnet, cover different fields of activity connected with:

- a) Sports facilities, training facilities, and conference facilities - <http://www.zpo.si/>
- b) Know-how in the testing of psychophysical activities – potential partners that <https://www.zrs-kp.si/index.php/en/about-us/>
- c) Telekomunikation – <https://novatel.si/en/home/>
- d) Nutrition - <https://prehranazazmage.si/>
- e) Know-how in the training of instructors for S4Hnet project - <https://www.fitnesszeza.si/>
- f) Active sport tourism <https://www.rogla-apartments.com/>
- g) Insurance and health-related companies - <https://www.medifit.si/>

### 2.2.2. Netherlands

In the Netherlands, health and prevention are on the agenda of most companies but what is offered to companies on the topic health enhancement is also huge. Nevertheless, there is a lot of interest and the government is promoting it more and more.

Many companies offer company fitness to their employees, we think a lot will be interested in an easy to use health program, specifically targeted on the sitting occupations. Think about the financial sector, accountants companies, and insurance companies.

Small and medium companies often find corporate fitness a step too far but may be interested in programs that are easier to use and affordable, like the Sport4Health Net solution.

At this moment of the corona crisis, the focus of the companies is on dealing with the crisis, but we think and hope there will be a lot of interest to join the pilot later this year or in 2021.

Potential partners that could be in the future part of S4H network in Holland are:

[www.lifestylevitae.nl](http://www.lifestylevitae.nl)

<https://hddgroup.com/>

<https://basebyte.nl/nl>

[www.efaa.nl](http://www.efaa.nl)

<https://yogirya.com/>

### 2.2.3. Serbia

Over the past month, we have established cooperation with 10 companies, of which we have established a remarkable partnership with the three companies.

1. Health Institution / Laboratory Diagnostics (<https://www.jugolab.rs>)
2. Factory of wires, wire products, and tools, (<http://www.lampone.rs/>)
3. Minuta, Restaurant chain (<https://minuta.rs/>)

Their leadership has shown great interest in implementing our program into their companies. They believe that this would improve their company productivity and above all the health-related fitness and habits of their employees.

We hope that in the coming period we will have now companies as a partner.

Some of the companies with who we have been in contact with delayed cooperation to avoid a more severe situation caused by the COVID 19 virus epidemic. Companies were forced to reduce wages for workers, and some were forced to lay off workers.

## 2.2.4. Belgium

The Kingdom of Belgium has three distinctive regions including Dutch-speaking Flanders to the north, French-speaking Wallonia to the south, and a German-speaking community to the east. Brussels is a bilingual capital, where Dutch and French are both equally spoken; this is important to mention to enhance the multicultural opportunities to promote the Sport4H project and gain more potential partners.

We can classify possible partners as private, public, and non-profit organizations. Brussels as a Center of the European affairs where different EU (Commission, Parliament) and other international institutions (e.g. NATO) can be reached to use the Sport4H employees' mobile app and promote it at the EU level and beyond.

According to the last data (2017) for Belgium, the population of enterprises active in sport is 6129<sup>1</sup>. Important collaboration for the SPORT4H Network will be seeking in this area.

Potential partners in the banking community and other financial sector companies should be reached in all regions, as well as other companies where people are predominantly sedentary at work, with little to no other activity.

Academic partners such as Université Libre de Bruxelles (ULB) and Vrije Universiteit Brussel (VUB) will be approached, together with other well-known Belgian academic institutions - for possible cooperation in the domain of further cooperation and sport innovation.

Sports associations and coaches could also be an important part of the network to promote SPORT4H, develop further training modules for employees, enhance e-learning possibilities and train the wider range of employees, that would otherwise be reached.

Potential partners are identified among public institutions, private entities, and academia.

Public institutions:

- City of Brussels: <http://www.bruxelles.be/>
- ADEPS **Fédération Wallonie-Bruxelles** : <http://www.sport-adeps.be/>

Private entities:

- BNP Paribas: <https://www.bnpparibasfortis.be/en/>
- ING : <https://www.ing.be/fr/retail>

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<sup>1</sup> Source: EUROSTAT, web page: <https://ec.europa.eu/eurostat/web/sport/data/databaseBusiness>  
demography by size class (from 2004 onwards, NACE Rev. 2) (bd\_9bd\_sz\_cl\_r2)

- Loterie nationale: <https://www.loterie-nationale.be/>
- Brussels Enterprises Commerce & Industry: <https://www.beci.be/a-propos/>

Academia:

- Vrije Universiteit Brussel: <https://www.vub.be/en/home>
- ULB Brussels: <https://www.ulb.be/en>

### 2.2.5. Croatia

The Sport4Health project in Croatia can seek co-operation and partnerships in several different areas:

1. Business companies (micro, small, and large). The level of awareness of the management structures in Croatia is different. There is an awareness of the need to promote and involve employees in physical activity and health programs, but the investment for these needs is modest at the moment. However, educational programs and good electronic platforms can give some opportunities and shifts.

- **Potential business companies:** Orbico, Zagreb; Croatia Bank, Zagreb; Zagreb Holding

2. NGOs already involved in European or national physical activity and health promotion projects. These organizations are well-suited to promoting activities that are closely related to the Sport4Health project products, and therefore also to physical activity in the workplace.

- **Potential NGO:** Sport for All, Zagreb.

3. Government national (GO) and local organizations (LO). Sports and health offices at the national and local level have in their programs different activities envisaged for the promotion of physical activity and health in which the working population is involved.

- **Potential GO and LO:** the City of Zagreb, Office for Sport and Youth, Croatian Economic Chamber

4. Corporate fitness and wellness companies. These companies are already implementing various programs to enhance corporate fitness and health. It is possible to offer collaboration to these companies to take advantage of their network and portfolio of companies that use corporate fitness programs.

- **Potential fitness and wellness companies:** Biotrening Ltd., Zagreb, and Biosport Ltd., Zagreb.

In the end, all of these options depend to a large extent on the recognition of mutual interest in the collaboration regarding the capabilities and products of the Sport4Health project.

- Sport for all Zagreb - <https://sportzasve-zagreb.hr/>

- Biotrening Ltd., Zagreb <https://biotrening.hr/>
- Orbico d.o.o. - <https://www.orbico.com/>

### 2.2.6. Bulgaria

In Bulgaria, health and prevention are on the agenda of the big companies in the main cities. The companies offered to employees free fitness cards and multi-sport cards with discounts for different sports clubs (dances, Zumba, aerobic, etc). In the main Business Parks in Sofia, Varna, Plovdiv, and Burgas the management of the parks offer seasonally outdoor activities as athletic competitions, football, volleyball, darts, etc. Usually, this is the competition between companies with offices in the same Business Parks.

Almost all of the high-technology companies (software developers) and head offices of the multinational companies offered to their employees room for sport and/or gymnastic in the area of the same business building only for the company usage.

Companies from financial sectors giving opportunities to their employees to choose fitness and/or sports clubs and monthly taxes are paid as part of the remuneration package. Some of the companies are interested in health programs for life and food control. Government Institutions dealing with local areas sports clubs and halls for fitness, dances, and other indoor sports activities.

Of course, at the moment the situation with Covid-19 any fitness and sports facilities are closed and outdoor areas are restricted for any sports activities.

List of potential partners is as follows:

- Nutrition: <http://www.bebelan.bg/>
- Software Development: <http://bulpros.com/>
- Business properties (office rents): <https://www.businesspark-sofia.com/>
- Financial Institution: <https://www.easycredit.bg/>
- Government Institution: <https://sgs.justice.bg/>

## 3. Competitors analysis

### 3.1. Methodology

To our best knowledge, there is no online program in the form of a mobile app that would be used by companies to increase their employee's engagement in sports activities. On the other hand, numerous mobile apps are available for the individual usage of various sports.

The number of exercise apps is large. A search of Google store on the 28<sup>th</sup> of April, with the keywords "exercise" AND "app", resulted in the 250 exercise apps.

A selection of mobile apps will be presented for this report. For each app, a short description will be provided, as well as the price. A selection of 25 mobile exercise apps with the highest customer mark form Google store is presented in the following chapter.

### 3.2. Realization of the competitors' analysis

Table 3.1 presents a description of the selected mobile exercise apps, which had the highest grades in the Google store. To our best knowledge, the mobile app or a solution that would be offered to companies for their employees is not available at the market.

**Table 3. 1 Description of the selected mobile exercise apps**

Name of the app	Platform	Price	Sports
PEAR Personal Fitness Coach	Android, iOS	Free & 5.99\$/month	Fitness
Fitbit Coach	Android, iOS	\$39.99/year	Measures daily activity
Workout Trainer	Android, iOS	6.99\$/month	Fitness
Peloton Digital	Android, iOS	\$12.99/£12.99 per month	Various sports, yoga, cardio, stretching
Nike Training Club	Android, iOS	Premium price	Nutrition and wellness; various programs, fitness to stretching
Shred	Android, iOS	\$12.99 per month	gym, body weight, and cardio
FitOn	Android, iOS	Free	pilates, HIIT, or dance, and classes designed for different workout targets
The Be.Come Project	Android, iOS	\$35/month	yoga, pilates, and dance
JEFIT	Android, iOS	Free	strength training and bodybuilding
You Are Your Gym	Android, iOS	Free or 4.99\$	Bodyweight Training
Aaptiv	Android, iOS	\$9.99 / £8.99 per month	2,500 workouts in hundreds of fitness classes, whether for running, cycling, high-intensity interval training
Daily Burn	Android, iOS	\$14.99/£14.99/AU\$14.99 per month	live daily workouts

Kineticcoach	iOS	\$9.99 monthly	a rich library of 1,000-plus workouts
ASICS Studio (iOS: 14-day Free Trial)	Android, iOS	Free trial, premium price	strength training or cardio
Freeletics	Android, iOS	Free	workout routines covering a variety of muscle groups and fitness levels
8Fit	Android, iOS	Free	workout training and meal planning
Yoga Studio	Android, iOS	\$3.99/£1.79/AU\$2.99	a library of more than 70 yoga and meditation classes
Seven	Android, iOS	Free	seven-minute workout
Keelo	iOS	Free	high-intensity interval training (HIIT)
Sworkit	Android, iOS	Free	build strength, do yoga, practice cardio, stretch, pilates or build a custom routine
Pocket Yoga	Android, iOS	\$2.99 / £2.51	Yoga
FitRadio	Android, iOS	\$3.99 per month	Audio-coached workouts or go freestyle with some activity-oriented or genre-based playlists
Tone It Up	Android, iOS	\$12.99/Month	a fitness app marketed for women; HIIT, yoga, and kickboxing
Seconds Pro (Android, iOS:)	Android, iOS	\$4.99 / £4.99 / Month	templates for Tabata, circuit training, and HIIT
StrongLifts 5x5	Android, iOS	Free	strength training program

Source: <https://www.tomsguide.com/best-picks/best-workout-apps>

### 3.3. Key findings

Analyzed mobile apps have the following characteristics:

- Most of the mobile apps are available for both Apple and iOS platforms (92%), while only 4% were available only for iOS
- Only 6 apps (24%) were completely free, but they were targeted the specific sports groups, such as pilates, HIIT, or dance, and classes designed for different workout targets; strength training and bodybuilding; workout routines covering a variety of muscle groups and fitness levels; workout training and meal planning; seven-minute workout; and strength training program
- Other apps are commercial (76%) with the price that ranges from 2,99\$ (the lowest price) to 14,99\$ (the highest price)
- Only a few apps offer live programs, most offer pre-recorded video and audio programs.

The potential mobile app that would be offered to companies for their employees could be competitive in terms of pricing since much lower prices could be offered to companies for their employees in bulk (e.g. 50 EUR per 100+ users). However, the quality of such an app should be at the level of the best mobile health apps. It is recommended to use pre-recorded video and audio programs.

## 4. Target group analysis

### 4.1. Methodology

Target group analysis has been conducted on a sample of employers from several European countries. The research instrument has been developed that covers several areas:

- Company characteristics (e.g. size measured in several employees)
- Areas of concern for their employees (e.g. stress)
- Health (employee wellbeing) promotion used in the company (e.g. exercise)
- Activities already used in a company aimed at improving the health of its employees (e.g. Recreation – fitness)
- Possible goals for the activities (e.g. Stress Reduction)
- Willingness to use a wellbeing program (e.g. to introduce regular workouts, using mobile apps, etc)
- Information about the respondent (age, gender).

### 4.2. Survey template

The following table presents the research instrument used in a survey (Table 4.1).

**Table 4 1 Research instrument used in a survey**

Variable code	Variable description	Possible answers
Q1	Company size (number of employees)	Total number of employees
Q2	Number of employees doing VERY risky jobs. - Stress work, workloads, risk of injury, work with clients, and exposure to illness, constant sitting work, standing work, lifting loads, conflict resolution (eg complaints), fieldwork.	Number of employees doing very risky jobs
Q3	Number of employees performing SEMI risky jobs.	Number of employees doing semi risky jobs
Q4	Number of employees performing LOW risky jobs.	Number of employees doing low risky jobs
Q5a	Highlight areas of concern for: stress	(1) Present in company; (2) not present in company
Q5b	Highlight areas of concern for: injuries	(1) Present in company; (2) not present in company
Q5c	Highlight areas of concern for: diseases	(1) Present in company; (2) not present in company
Q5d	Highlight areas of concern for: chronic pain	(1) Present in company; (2) not present in company
Q5e	Highlight areas of concern for: spinal problems	(1) Present in company; (2) not present in company
Q5f	Highlight areas of concern for: problems with other parts of the body	(1) Present in company; (2) not present in company

Q5g	Highlight areas of concern for: reduced mobility	(1) Present in company; (2) not present in company
Q5h	Highlight areas of concern for: conflicts with colleagues	(1) Present in company; (2) not present in company
Q5i	Highlight areas of concern for: non-cooperation	(1) Present in company; (2) not present in company
Q5j	Highlight areas of concern for: other:	(1) Present in company; (2) not present in company
Q5j_text	Highlight areas of concern for: other: (tekst)	(1) Present in company; (2) not present in company
Q6	Do you already have a health (employee wellbeing) promotion plan in place?	(1) we have a tentative health promotion plan; (2) we have a detailed health promotion plan
Q7	Does the promotion of health in your company include employee mobility (physical exercise) activities?	(1) not at all; (2) very little; (3) some; (4) pretty much; (5) a lot
Q8a	Wellbeing activity: Teambuilding	(1) Used in a company; (2) not used
Q8b	Wellbeing activity: Recreation - workout exercise	(1) Used in a company; (2) not used
Q8c	Wellbeing activity: Recreation - fitness	(1) Used in a company; (2) not used
Q8d	Wellbeing activity: Recreation - Guided Exercises (TNZ, Pilates ...)	(1) Used in a company; (2) not used
Q8e	Wellbeing activity: Recreation - Pool/swimming	(1) Used in a company; (2) not used
Q8f	Wellbeing activity: Personal counseling and individual programs	(1) Used in a company; (2) not used
Q8g	Wellbeing activity: Relaxation - Yoga	(1) Used in a company; (2) not used
Q8h	Wellbeing activity: Relaxation - Massage	(1) Used in a company; (2) not used
Q8i	Wellbeing activity: Release - Exercise at work	(1) Used in a company; (2) not used
Q8j	Wellbeing activity: Workshops -quality nutrition	(1) Used in a company; (2) not used
Q8k	Wellbeing activity: Workshops - stress management	(1) Used in a company; (2) not used
Q8l	Wellbeing activity: Workshops - conflict resolution	(1) Used in a company; (2) not used
Q8m	Wellbeing activity: Workshops - proper physical exercise	(1) Used in a company; (2) not used
Q8n	Wellbeing activity: Workshops - fatigue and lack of energy	(1) Used in a company; (2) not used
Q8o	Wellbeing activity: Wellness - thermal pools	(1) Used in a company; (2) not used
Q8p	Wellbeing activity: Wellness - sauna	(1) Used in a company; (2) not used
Q8q	Wellbeing activity: Wellness - analgesic massage	(1) Used in a company; (2) not used
Q8r	Wellbeing activity: Testing - body composition	(1) Used in a company; (2) not used
Q8s	Wellbeing activity: Testing - fitness	(1) Used in a company; (2) not used
Q8t	Wellbeing activity: None of the above	(1) Used in a company; (2) not used
Q8u	Wellbeing activity: Other:	(1) Used in a company; (2) not used
Q9a	What is your goal: Increasing productivity	(1) Stated as a goal; (2) not stated
Q9b	What is your goal: Stress Reduction	(1) Stated as a goal; (2) not stated
Q9c	What is your goal: Raising vitality	(1) Stated as a goal; (2) not stated
Q9d	What is your goal: Healthy lifestyle	(1) Stated as a goal; (2) not stated
Q9e	What is your goal: Greater affiliation with the company	(1) Stated as a goal; (2) not stated

Q9f	What is your goal: Better relationships within the company	(1) Stated as a goal; (2) not stated
Q9g	What is your goal: Reduction of absenteeism (absences, delays, staff turnover, absence from work,...)	(1) Stated as a goal; (2) not stated
Q9h	What is your goal: Decrease in presentism (cost of lower productivity and additional infections at the expense of workers who come to work despite illness)	(1) Stated as a goal; (2) not stated
Q9i	What is your goal: Other	(1) Stated as a goal; (2) not stated
Q10a	What does sports activity mean: Fun	(1-do not agree at all; 5-compeltely agree)
Q10b	What does sports activity mean: Relaxation	(1-do not agree at all; 5-compeltely agree)
Q10c	What does sports activity mean: Health	(1-do not agree at all; 5-compeltely agree)
Q10d	What does sports activity mean: Increased job satisfaction	(1-do not agree at all; 5-compeltely agree)
Q10e	What does sports activity mean: Higher productivity	(1-do not agree at all; 5-compeltely agree)
Q10f	What does sports activity mean: Other:	(1-do not agree at all; 5-compeltely agree)
Q11	Are you ready to introduce regular workouts for a few minutes a day?	(1) we are not ready at all; (2) we are not ready; (3) we are neutral about it; (4) we are ready; (5) we are very ready
Q12	Are you ready to use the mobile app with instructions/photos/videos to perform a short workout?	(1) we are not ready at all; (2) we are not ready; (3) we are neutral about it; (4) we are ready; (5) we are very ready
Q13	Are you ready to pay membership fees for access to a mobile app for your employees that supports customised active training, exercise location information and structured exercise programme for specific employee types, please check the proposed payment stru	(1) 10 EUR for up to 5 individual users; (2) 20 EUR for use from 6 to 15 individual users; (3) 30 EUR for the use from 16 to 50 individual users; (4) 40 EUR for the use from 51 to 100 individual users; (5) 50 EUR for the use of over 100 individual users
Q14	Please tick the information about the person who completed the questionnaire	(1) female, (2) male
Q15	Age	(1) 18 - 25; (2) 26 - 45; (3) 46 - 55; (4) above 55

Source: Project team survey (2020)

### 4.3. The realization of the surveys

Table 4.2 presents the distribution of the employers according to selected European countries that participated in the survey. The survey was conducted in January – February 2020. In total, 417 employers participated in the survey, among which the largest number are from Belgium, followed by Slovenia, Netherland, and Bulgaria.

**Table 4 2 Distribution of employers according to selected European countries**

	Frequency	Percent	Cumulative Percent
Belgium	124	29,7	29,7
Bulgaria	63	15,1	44,8
Croatia	44	10,6	55,4
Netherlands	65	15,6	71
Serbia	50	12	83
Slovenia	71	17	100
Total	417	100	

Source: Project team survey (2020)

Table 4.3 presents the breakdown of the countries according to the number of employees (in total) and according to the riskiness of their jobs (very risky, semi risky, and low risky jobs). For example, 70 companies participated in a survey from Slovenia, with the average number of employees of 187,07. In these companies there were in average 92,83 employees with very risky jobs, 44,58 employees with semi risky jobs, and 33,32 employees with low risky jobs.

**Table 4 3 Companies according to the number of employees doing very risky, semi risky and low risky jobs**

Country		Total number of employees	Number of employees doing very risky jobs	Number of employees doing semi risky jobs	Number of employees doing low risky jobs
Belgium	Mean	44,9	5,11	4,78	34,04
	N	124	123	123	122
	Std. Deviation	96,223	45,243	27,347	41,503
Bulgaria	Mean	34,72	20,43	10,63	6,89
	N	60	58	54	53
	Std. Deviation	63,379	54,939	24,131	10,901
Croatia	Mean	32,27	2,27	1,23	27,64
	N	44	44	44	44
	Std. Deviation	73,638	15,076	7,548	51,896
Netherlands	Mean	423,08	10,03	3,56	29,53
	N	65	65	64	64
	Std. Deviation	608,92	52,787	9,648	24,349
Serbia	Mean	105,64	43,14	25,18	39,1
	N	44	43	39	39
	Std. Deviation	152,394	47,394	29,247	158,978
Slovenia	Mean	187,07	92,83	44,58	33,32
	N	70	69	64	63

	Std. Deviation	649,481	286,891	107,509	66,968
Total	Mean	133,45	26,93	13,61	29,22
	N	407	402	388	385
	Std. Deviation	394,354	129,437	50,346	65,361

Source: Project team survey (2020)

Most of the respondents that participated in a survey were male (55,4%), while there were 44,6% female respondents. Most of the respondents were from 26 to 45 ages-old (57,1%), followed by those from 46 to 55 ages (22,0%), 18 to 25 ages (11,8%), and above 55 years (9,2%).

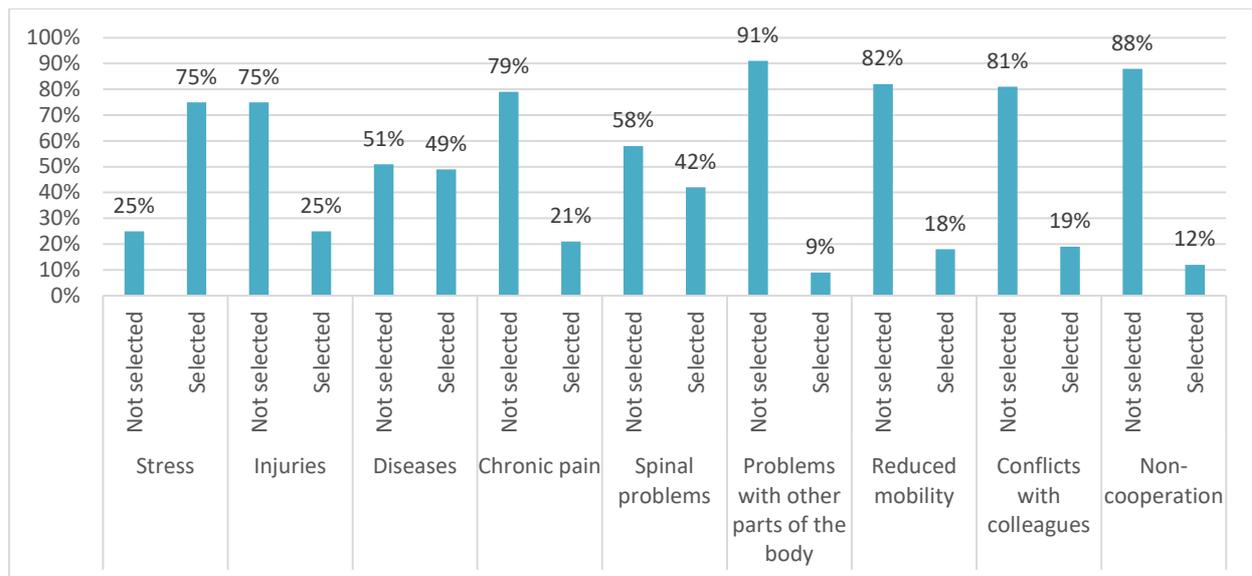
## 4.4. Key findings

### 4.4.1. Areas of concern related to the well-being of company employees

Figure 4.1 presents the countries according to the presence of health problems among the companies that participated in the survey. Stress is the urging problem in all countries. Various diseases are also often present, while the least number of companies report reduced mobility and problems with other parts of the body. It is interesting to note that companies from Slovenia reported a high number of problems with conflict at work and low cooperation.

Table 4.4 presents these numbers in detail, and substantial differences are present among the countries.

**Figure 4. 1 Presence of health problems among the companies that participated in the survey**



Source: Project team survey (2020)

**Table 4 4 Areas of concern related to the well-being of company employees**

		Total
Stress	Not selected	25%
	Selected	75%
Injuries	Not selected	75%
	Selected	25%
Diseases	Not selected	51%
	Selected	49%
Chronic pain	Not selected	79%
	Selected	21%
Spinal problems	Not selected	58%
	Selected	42%
Problems with other parts of the body	Not selected	91%
	Selected	9%
Reduced mobility	Not selected	82%
	Selected	18%
Conflicts with colleagues	Not selected	81%
	Selected	19%
Non-cooperation	Not selected	88%
	Selected	12%

Source: Project team survey (2020)

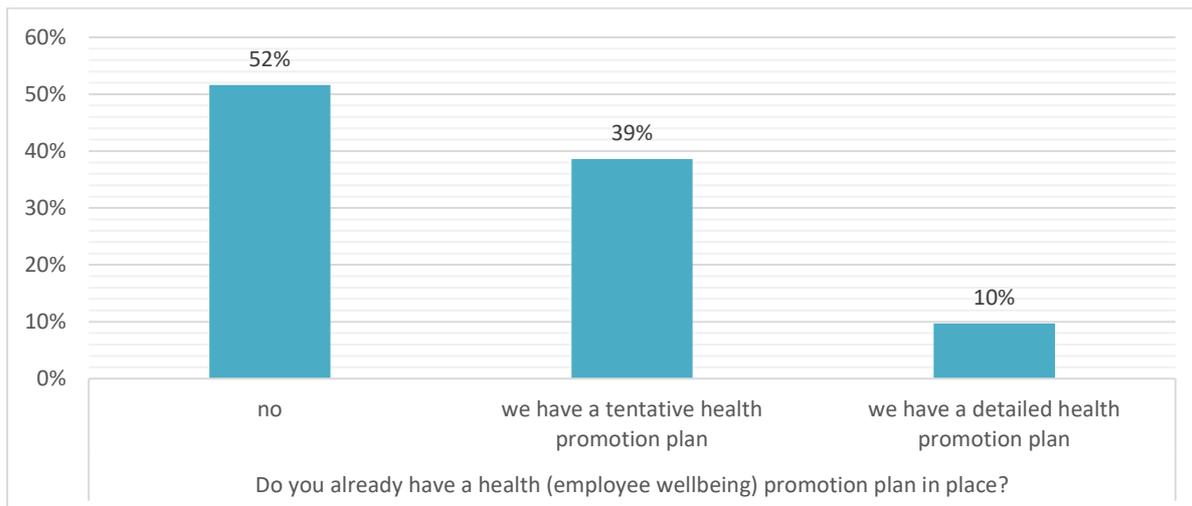
#### 4.4.2. Health (employee wellbeing) promotion used in the company

Figure 4.2 presents the percentage of companies that participated in the survey according to the health promotion plan that they have implemented. A detailed health promotion plan is implemented in the fewer number of companies compared to the tentative health promotion plan.

The tentative promotion plan is present in the largest number of companies in Bulgaria, Serbia, and Slovenia. However, the tentative health plan is present in a similar range in observed countries. On the other hand, a detailed health promotion plan was the most often mentioned by the companies in Serbia and Slovenia. Table 4.5 presents detailed information about the companies according to the health promotion plan (employee wellbeing).

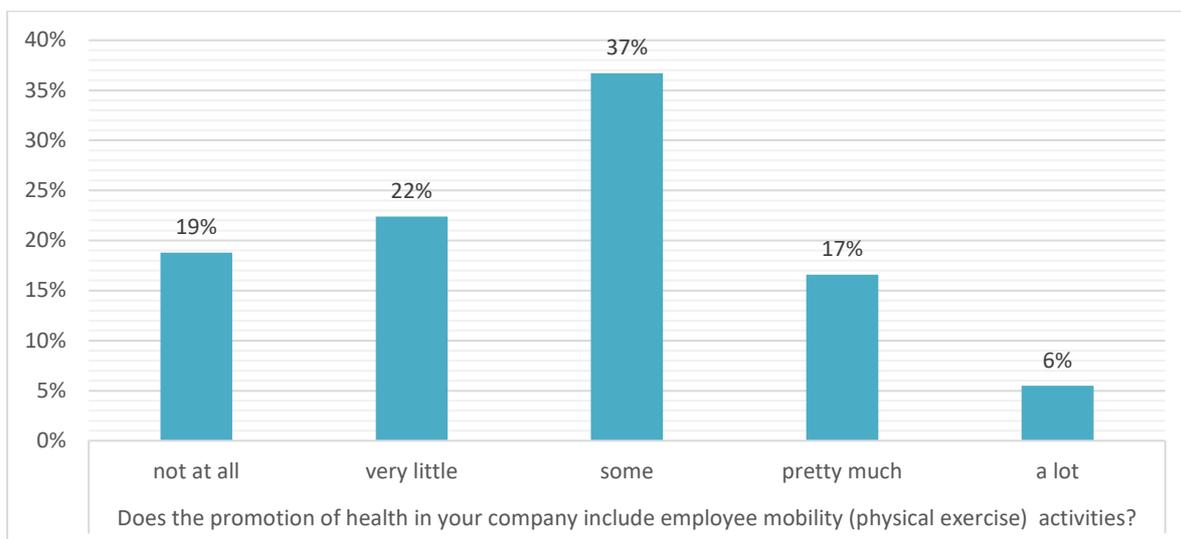
Figure 4.3 presents the percentage of companies according to the promotion of physical exercise in their health promotion plan. Most of the companies promoted some exercise in their health promotion plan, while only a few promoted a lot of exercise in their health promotion plan. Detailed information is presented in Table 4.5.

**Figure 4. 2 Companies according to the health promotion plan (employee wellbeing)**



Source: Project team survey (2020)

**Figure 4. 3 Companies according to the health promotion plan that includes physical exercise**



Source: Project team survey (2020)

**Table 4 5 Health (employee wellbeing) promotion used in the company (e.g. exercise)**

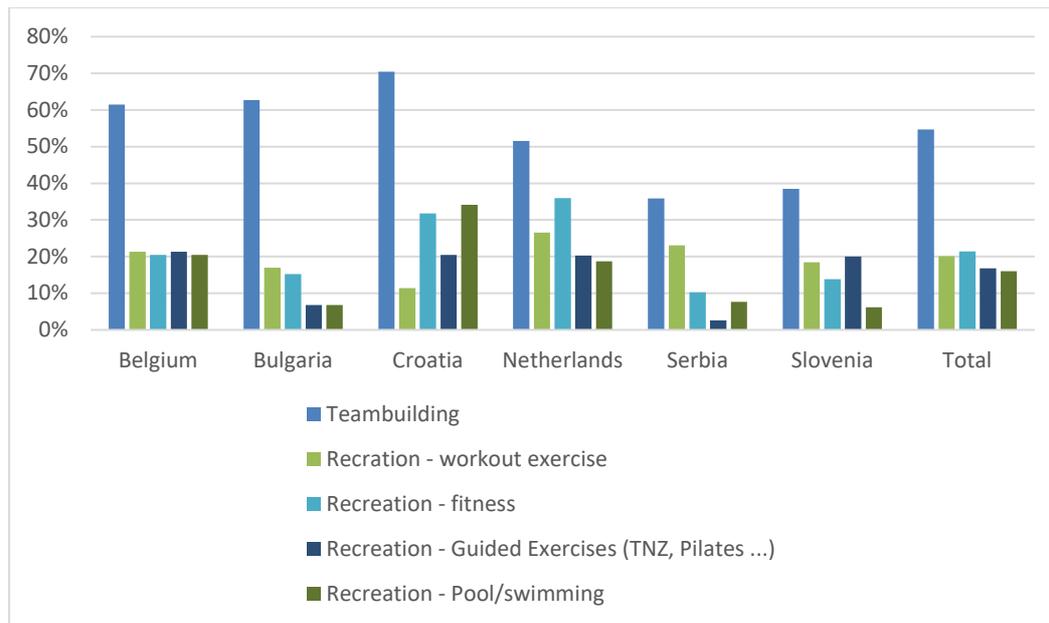
	Frequency	Percent	Cumulative Percent
Do you already have a health (employee wellbeing) promotion plan in place?			
no	175	51,6	51,6
we have a tentative health promotion plan	131	38,6	90,3
we have a detailed health promotion plan	33	9,7	100
Total	339	100	
Does the promotion of health in your company include employee mobility (physical exercise) activities?			
not at all	75	18,8	18,8
very little	89	22,4	41,2
some	146	36,7	77,9
pretty much	66	16,6	94,5
a lot	22	5,5	100
Total	398	100	

Source: Project team survey (2020)

#### 4.4.3. Activities already used in companies aimed at improving the health of its employees

Figure 4.4 presents the top five activities already used in companies aimed at improving the health of its employees. Teambuilding is the most often used activity in all countries. The second most-often used activity is fitness, while pool and swimming are rather often used in Croatia and Belgium.

Table 4.7 presents detailed information about all the activities survey according to countries.

**Figure 4. 4 Top 5 activities already used in companies aimed at improving the health of its employees**

Source: Project team survey (2020)

**Table 4 6 Activities already used in companies aimed at improving the health of its employees**

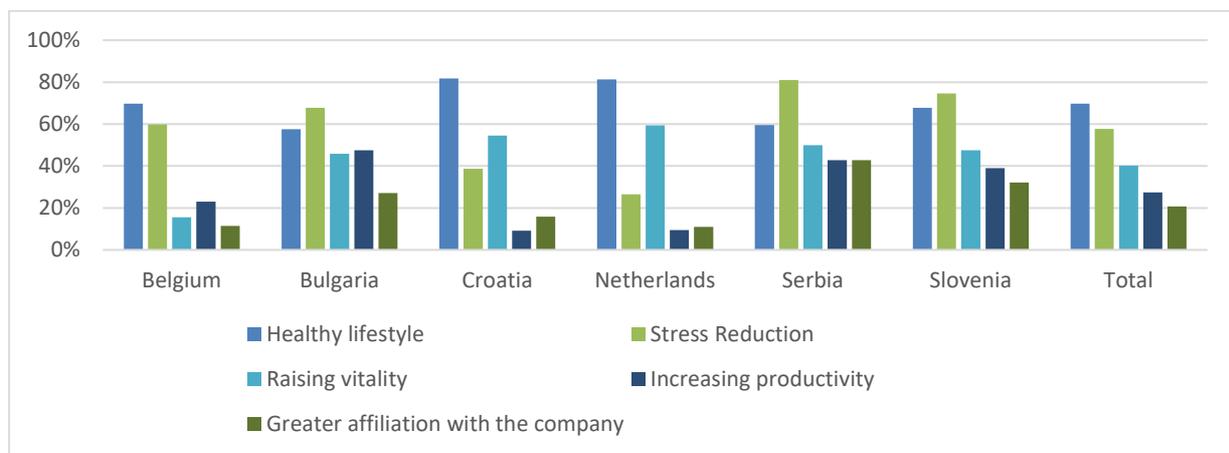
	Belgium	Bulgaria	Croatia	Netherl.	Serbia	Slovenia	Total
Teambuilding	61%	63%	70%	52%	36%	38%	55%
Recreation - workout exercise	21%	17%	11%	27%	23%	18%	20%
Recreation - fitness	20%	15%	32%	36%	10%	14%	21%
Recreation - Guided Exercises (TNZ, Pilates ...)	21%	7%	20%	20%	3%	20%	17%
Recreation - Pool/swimming	20%	7%	34%	19%	8%	6%	16%
Personal counseling and individual programs	2%	12%		5%	3%	5%	4%
Relaxation - Yoga	24%	10%	5%	5%		8%	11%
Relaxation - Massage	2%	19%			5%	2%	4%
Release - Exercise at work	16%	17%	2%	3%		17%	11%
Workshops -quality nutrition	2%	8%		13%	8%	17%	7%
Workshops - stress management	6%	12%	2%	5%	5%	32%	10%
Workshops - conflict resolution	6%	15%	5%	3%	3%	20%	9%
Workshops - proper physical exercise	2%	8%	5%	2%		6%	4%
Workshops - fatigue and lack of energy		2%				5%	1%
Wellness - thermal pools	1%	5%			3%	2%	2%
Wellness - sauna	1%	7%	2%		3%	6%	3%
Wellness - analgesic massage		3%		2%	3%	2%	1%
Testing - body composition		3%		2%		2%	1%
Testing - fitness	1%	10%		3%	3%	8%	4%
None of the above	10%	14%	11%	6%	49%	18%	15%

Source: Project team survey (2020)

Figure 4.5 presents the top five possible goals for the activities. The most often used activity is a healthy lifestyle (70% of companies overall), followed by stress reduction (58%), raising vitality (40%), increasing productivity (27%), and general better affiliation with the company (21%). However, among the countries, there are substantial differences. For example, stress reduction is the most often mentioned goal in Bulgaria, Serbia, and Slovenia.

Table 4.8 provides detailed information according to all goals investigated according to countries.

**Figure 4. 5 The top five possible goals for the activities**



**Table 4 7 Possible goals for the activities (e.g. Stress Reduction)**

		Belgium	Bulgaria	Croatia	Netherlands	Serbia	Slovenia	Total
Increasing productivity	Not selected	77%	53%	91%	91%	57%	61%	73%
	Selected	23%	47%	9%	9%	43%	39%	27%
Stress Reduction	Not selected	40%	32%	61%	73%	19%	25%	42%
	Selected	60%	68%	39%	27%	81%	75%	58%
Raising vitality	Not selected	84%	54%	45%	41%	50%	53%	60%
	Selected	16%	46%	55%	59%	50%	47%	40%
Healthy lifestyle	Not selected	30%	42%	18%	19%	40%	32%	30%
	Selected	70%	58%	82%	81%	60%	68%	70%
Greater affiliation with the company	Not selected	89%	73%	84%	89%	57%	68%	79%
	Selected	11%	27%	16%	11%	43%	32%	21%
Better relationships within the company	Not selected	96%	59%	93%	91%	76%	54%	81%

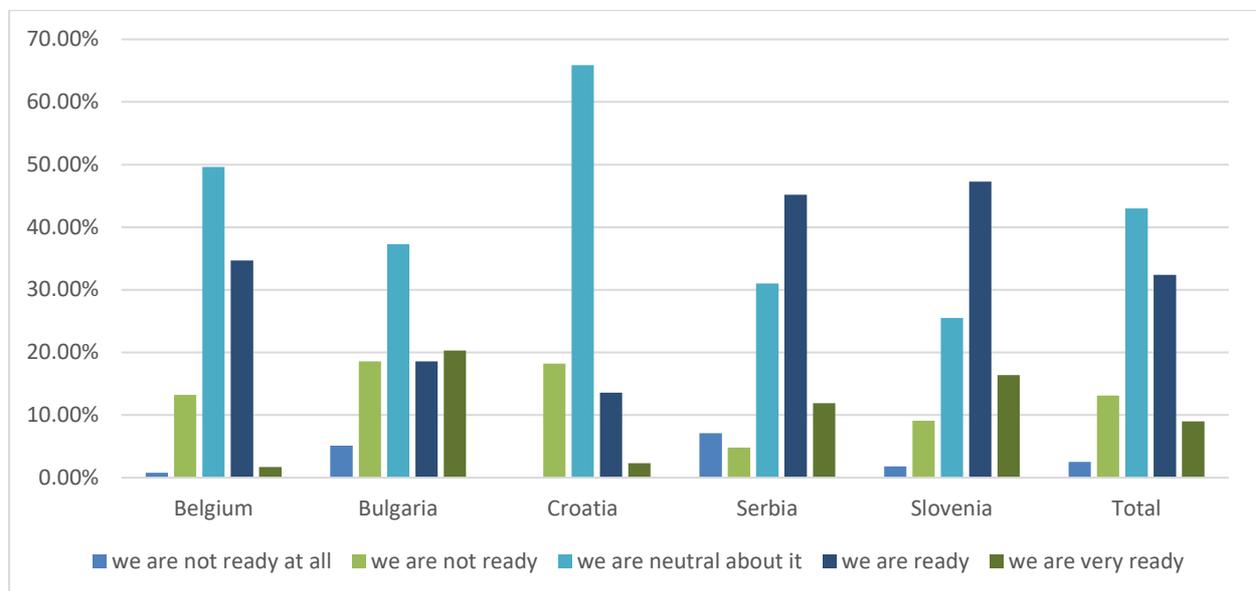
	Selected	4%	41%	7%	9%	24%	46%	19%
Reduction of absenteeism	Not selected	86%	85%	93%	89%	79%	64%	83%
	Selected	14%	15%	7%	11%	21%	36%	17%
Decrease in presentism	Not selected	95%	75%	98%	97%	88%	81%	90%
	Selected	5%	25%	2%	3%	12%	19%	10%
Other	Not selected	100%	98%	100%	100%	100%	98%	99%
	Selected		2%				2%	1%

Source: Project team survey (2020)

#### 4.4.4. Plans for introducing exercise as part of companies health plan

Figure 4.6 presents the readiness of companies for the introduction of regular workouts for a few minutes a day according to countries. The largest number of companies are neutral about it (43%), followed by 32,4% of ready companies. A smaller number of companies are very ready (9%) or not ready (13,1%). The smallest number of companies is no ready at all (2,5%). Differences across countries are substantial. Table 4.10 presents detailed information according to countries.

**Figure 4. 6 Readiness of companies for the introduction of regular workouts for a few minutes a day according to countries**



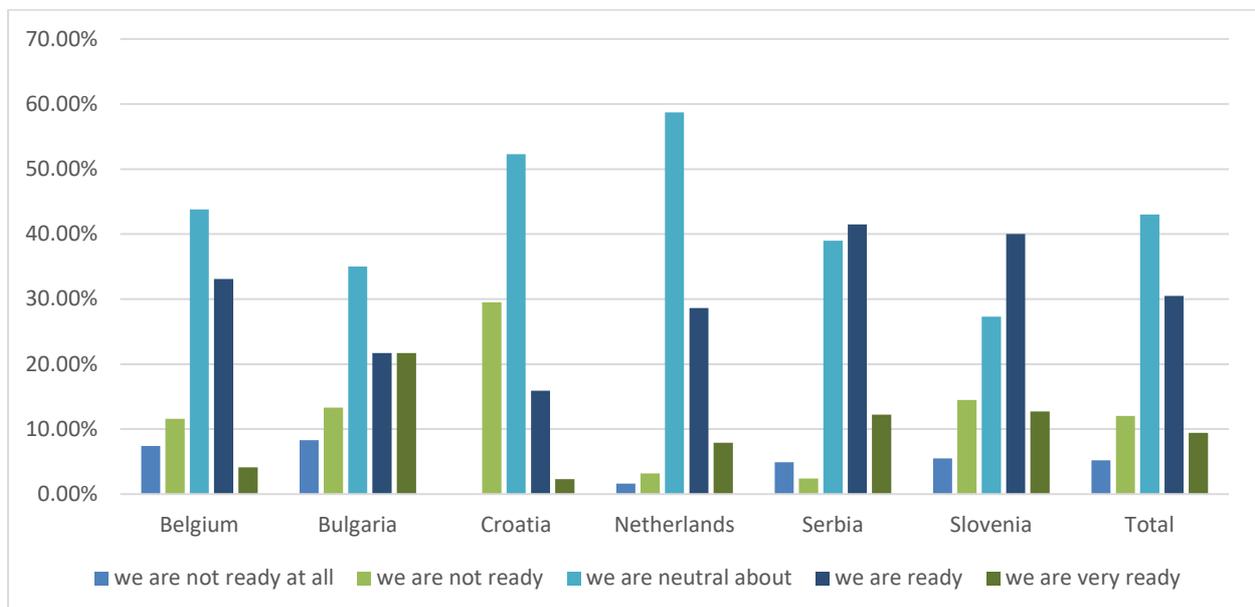
Source: Project team survey (2020)

**Table 4 8 Are you ready to introduce regular workouts for a few minutes a day?**

	Belgium	Bulgaria	Croatia	Serbia	Slovenia	Total
we are not ready at all	0,80%	5,10%		7,10%	1,80%	2,50%
we are not ready	13,20%	18,60%	18,20%	4,80%	9,10%	13,10%
we are neutral about it	49,60%	37,30%	65,90%	31,00%	25,50%	43,00%
we are ready	34,70%	18,60%	13,60%	45,20%	47,30%	32,40%
we are very ready	1,70%	20,30%	2,30%	11,90%	16,40%	9,00%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

Source: Project team survey (2020)

Figure 4.7 presents the readiness of companies for the introduction of mobile apps according to countries. The largest number of companies are neutral about it (43%), followed by 30,5% of ready companies. The smaller number of companies are very ready (9,4%) or not ready (12%). The smallest number of companies is no ready at all (5,2%). Differences across countries are substantial. Table 4.11 presents detailed information according to countries.

**Figure 4. 7 Readiness of companies to use the mobile app with instructions/photos/videos to perform a short workout**

Source: Project team survey (2020)

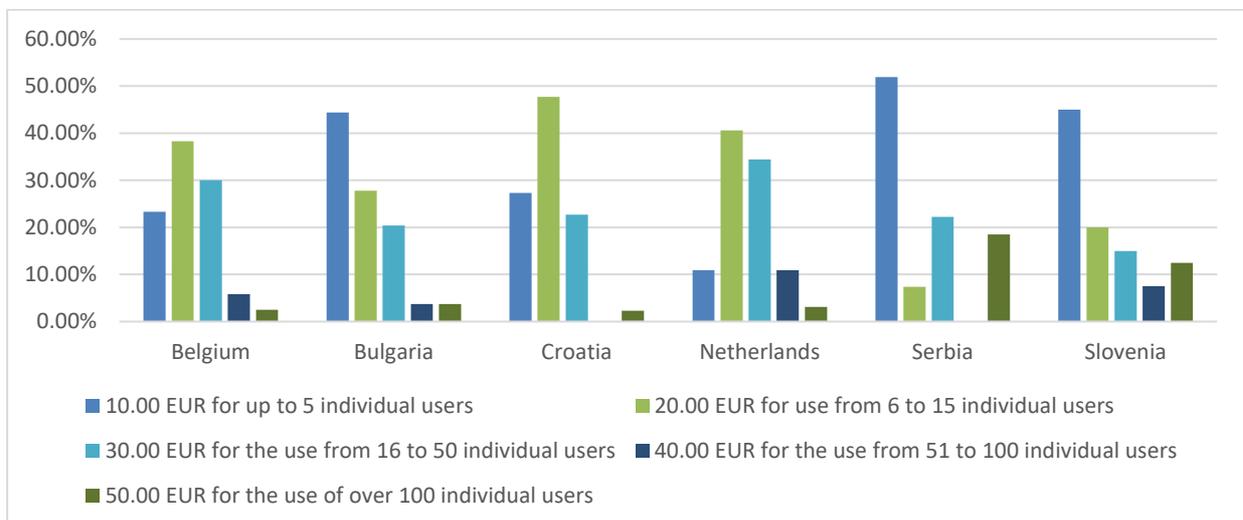
**Table 4 9 Are you ready to use the mobile app with instructions/photos/videos to perform a short workout?**

	Belgium	Bulgaria	Croatia	Netherlands	Serbia	Slovenia	Total
we are not ready at all	7,40%	8,30%		1,60%	4,90%	5,50%	5,20%
we are not ready	11,60%	13,30%	29,50%	3,20%	2,40%	14,50%	12,00%
we are neutral about	43,80%	35,00%	52,30%	58,70%	39,00%	27,30%	43,00%
we are ready	33,10%	21,70%	15,90%	28,60%	41,50%	40,00%	30,50%
we are very ready	4,10%	21,70%	2,30%	7,90%	12,20%	12,70%	9,40%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

Source: Project team survey (2020)

Figure 4.8 presents the readiness of companies to pay membership fees for access to a mobile app for your employees that supports customized active training, exercise location information, and structured exercise program for specific employee types. The largest number of companies would pay 20.00 EUR for use from 6 to 15 individual users (33,8%), followed by the 29,5% of companies that would pay 10.00 EUR for up to 5 individual users, and 26,1% of companies that would pay 10.00 EUR for up to 5 individual users.

**Figure 4. 8 Readiness of companies to pay membership fees for access to a mobile app for your employees that supports customized active training, exercise location information and structured exercise program for specific employee types**



**Table 4 10 Are you ready to pay membership fees for access to a mobile app for your employees that supports customized active training, exercise location information, and structured exercise program for specific employee types?**

	Belgium	Bulgaria	Croatia	Netherl.	Serbia	Slovenia	Total
10.00 EUR for up to 5 individual users	23,30%	44,40%	27,30%	10,90%	51,90%	45,00%	29,50%
20.00 EUR for use from 6 to 15 individual users	38,30%	27,80%	47,70%	40,60%	7,40%	20,00%	33,80%
30.00 EUR for the use from 16 to 50 individual users	30,00%	20,40%	22,70%	34,40%	22,20%	15,00%	26,10%
40.00 EUR for the use from 51 to 100 individual users	5,80%	3,70%		10,90%		7,50%	5,40%
50.00 EUR for the use of over 100 individual users	2,50%	3,70%	2,30%	3,10%	18,50%	12,50%	5,20%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

Source: Project team survey (2020)

## 5. Conclusion

Results of the general community health information of the countries that participate in the project indicate that all of the countries are faced with a large percentage of obese persons, who at the same time do no exercise sufficiently. The proportion of these persons is the highest for the low educated. At the same time, workers are worried about their health and safety at work. This indicates that there is a growing need for the introduction of programs that would increase exercise and activity for health promotion at work.

Project partners have conducted a thorough analysis of the potential stakeholders in their countries, and have developed a landscape of them. Each partner has identified several potential stakeholders from various groups such as sports organizations and academia that would be willing to support the introduction of a mobile app for exercise and activity for health promotion at work.

Competitor analysis has revealed that mobile apps are abundant for promoting physical exercise at the individual level. Although there are numerous free apps, the ones that are more comprehensive and that provide a higher level of support are also at the same time more expensive. Such apps provide support for a wide variety of sports. Besides, these apps are rather expensive, taking into account that they are paid by the individuals, ranging from 2,99\$ (the lowest price) to 14,99\$ (the highest price). Our analysis of the competitor landscape did not reveal the existence of the app that would be targeted the market of companies that would use mobile app for health promotion in the form of physical exercise at work.

Target group analysis has been conducted at the sample of companies in countries that participate in the project. Results revealed that the largest number of companies would pay 20.00 EUR for use from 6 to 15 individual users (33,8%), followed by the 29,5% of companies that would pay 10.00 EUR for up to 5 individual users, and 26,1% of companies that would pay 10.00 EUR for up to 5 individual users. These prices are substantially lower than the prices for individual mobile apps identified by the competitor analysis, thus indicating that there is a potentially strong market for an app that would be used by the companies to promote health and exercise among their workers.

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