

# Sport folio

 **knowledge centre**  
for sport & physical activity  
Netherlands

JANUARY 2021



Minister for Sport:  
'Share innovations  
to reach the full  
potential of sports  
and exercise'

Epke Zonderland  
'The Flying Dutchman'  
ambassador of  
Miffy Moves



**NL** Netherlands

Representing sport in economic missions of the Netherlands



## Colophon

This Sportfolio presents an overview of projects brought together by Knowledge Centre for Sport & Physical Activity Netherlands, in cooperation with the Ministry of Health, Welfare and Sport. Browse through the magazine to find a broad and diverse selection of national programmes and policies, exciting innovations and successful projects that have international ambitions. © January 2021

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### Design

Yolanda Exoo - Exoo grafisch bureau - Amsterdam

### Print

A limited edition is available in print - for economic missions of ministries and other purposes - at the Knowledge Centre for Sport & Physical Activity Netherlands.

### Photography

Hans Krudde (cover photo) • Winanda van Zwamen • WVZ Fotografie (Special Heroes) • Thijs Rooijmans (TeamUp) • Foto copyright KOGA (Olympic track bike Tokyo 2021) • Gerben Pul (Swim ABC) • Maurits van Hout • Shutterstock • Knowledge Centre for Sport & Physical Activity Netherlands • and photography with courtesy of the organisations mentioned in this Sportfolio

### Published by

Knowledge Centre for Sport & Physical Activity Netherlands  
[www.kenniscentrumsportenbewegen.nl/en/](http://www.kenniscentrumsportenbewegen.nl/en/)



# Introduction

**Sport inspires us, challenges us. Watching the Dutch team play at the Paralympic and Olympic Games and seeing them break records, motivates people to become better at what they do. In sports and in everyday life.**

Even more important: being active together with other people, outside or inside, is a lot of fun. You get to know other people and might learn new things. This could be during a stroll in the park with a colleague or during hockey practice with your teammates. Moving together is a good way to enjoy exercise.

During the year 2020, we became even more aware that moving is not only about fun and challenges. Being physically active is also really beneficial for your health. Staying healthy is extremely important in these times, in which we have to deal with the COVID-19 virus. We are faced with the challenges of having to stay at home more often. That means we lose a lot of moments where being active just comes naturally, for example because we don't travel to work anymore.

If there is an upside to this crisis, it is that we see a lot of innovations to make exercising and staying healthy available for everybody. It is important that we share these innovations, worldwide, to work together and inspire each other to reach the full potential of sports and exercise.

This Sportfolio presents an overview of projects, brought together by the Knowledge Centre for Sport & Physical Activity Netherlands. Projects that showcase opportunities to join forces. I hope this overview will inspire many new and successful international partnerships.

**Tamara van Ark**  
**Minister for Sport**



# Sport folio JANUARY 2021 - TABLE OF CONTENTS

- 2 Colophon
- 3 Introduction  
*Minister for Sport Tamara van Ark*
- 6 A sporting nation is growing and changing  
*Knowledge Centre for Sport & Physical Activity Netherlands*
- 8 National Sports Agreement  
*Ministry of Health, Welfare and Sport*
- 9 Special Heroes: discover that being healthy can be fun  
*Special Heroes Netherlands*
- 10 The main organisation for organised sports in the Netherlands  
*NOC\*NSF*
- 11 High Performance Centers for elite athletes  
*NOC\*NSF*
- 12 Game Changer project Tokyo 2020/2021  
*NOC\*NSF*
- 13 Sharing knowledge and data on sports injuries  
*VeiligheidNL*
- 14 Sports innovations in the spotlight  
*Sportinnovator*
- 16 TeamUp: activities for conflict-affected children  
*Unicef NL/War Child NL/Save the Children*
- 17 Miffy Moves gives children a head start for the rest of their lives  
*DutchGymnastics*
- 18 Sharing cycling expertise worldwide  
*Dutch Cycling Embassy*
- 19 Digitally improving skills in PE class  
*Windesheim University of Applied Sciences*
- 20 Sports innovation in the Netherlands: successful by cooperation  
*Sportinnovator*
- 21 Roadmap Sustainable Sports attributes to Paris Climate Agreement  
*Knowledge Centre for Sport & Physical Activity Netherlands*
- 22 New track bike helps Dutch Olympic Team to get medals  
*Delft University of Technology*



- 23 **Cross-fertilization between sports industries and academia**  
*A4SEE Alliance for Sport Engineering Education*
- 24 **Connecting Dutch sports industry to partners abroad**  
*Orange Sports Forum*
- 25 **WorldCoaches trains football coaches worldwide**  
*KNVB/Royal Dutch Football Association*
- 26 **Examples of inclusive sports and PA in the Netherlands**  
*'Come, join me' offers new perspectives - Life Goals: sport as a participation instrument - Unique Sports maps supply and demand of disabled sports - OldStars - Serious acceptance of LHBTI+ in sports*
- 28 **Citius Altius Sanius, injury-free exercise for everyone**  
*Delft University of Technology*
- 29 **The new public-private sports platform: SportsNL**  
*Ministry of Foreign Affairs/Netherlands Enterprise Agency RVO*
- 30 **Equal opportunities for all children to do sports**  
*Krajicek Foundation*

- 31 **Changing the world of sports with social impact projects**  
*More2Win*
- 32 **Introducing a new Knowledge Agenda Sport and Exercise**  
*Knowledge Centre for Sport and Physical Activity NL*
- 33 **Teaching children to swim safely with Swim ABC**  
*Nationaal Platform Zwembaden | NRZ*
- 34 **New model for creating physical activity-friendly cities**  
*Knowledge Centre for Sport and Physical Activity NL*
- 35 **Thermo Tokyo: Beat the heat**  
*Radboud University Medical Centre*
- 36 **Fund enables disadvantaged children to participate in sports**  
*Youth Sports & Culture Fund Netherlands*
- 37 **Creating space for children worldwide**  
*Johan Cruyff Foundation*
- 38 **World2Win (beach) volleyball in Senegal**  
*NEVOBO, NOC\*NSF*
- 39 **Knowledge Centre helps improve quality of sport and PA**  
*Knowledge Centre for Sport and Physical Activity NL*



31



26



19



33



# A sporting nation is growing and changing

Ouderenfonds

**In the Netherlands, the needs of athletes are changing due to increased age and prosperity, and a lack of time. More than half of the Dutch population exercises regularly. More and more, athletes choose to be active in self-organised sports.**

In recent years, the sports industry has become larger and more diverse. Sports for the elderly is a growing sector, youngsters seem to participate less. This is the state of the Dutch sporting nation in a nutshell.

No fewer than 8.8 million Dutch people (exceeding half the population) participate in sports at least once a week, 15% of the Dutch even exercise more than 4 times a week. 24% of the Dutch never exercise. They have a lack of time, do not feel healthy enough, or they consider family or hobbies to be more important.

Overall sports participation in the Netherlands is stable, but the share of the elderly is growing strongly. Partly because Dutch population is aging, but also because relatively more people over 65 take up sports or exercise.

Youngsters have been exercising less in the past 10 years, probably due to the popularity of online games, social media, and other challenges.

## **For better health and fun**

The Netherlands boasts 28,000 sports clubs; 23,000 of which are affiliated with one of the 100 sports associations. Together, all sports associations have 5.2 million members. In addition to their sporting motivation, these athletes also come for health reasons and fun, to a lesser extent for sporting performance.

8.2 million athletes mainly participate in sports using public facilities such as parks and forests or do sports at home. A total of 11,000 km of hiking trails, 37,000 km of cycle paths, and 36,000 hectares of recreational areas are available for them.

6,3 million athletes use the facilities of 6,600 commercial sport providers (such as fitness, swimming pools, dance schools, riding schools). Health, fitness, and weight loss are important motivations for these people to exercise. 30% of Dutch people exercising combine one or more physical activities, either organised or self-organised or in a commercial setting.

Increasing sports participation is a crucial goal for Dutch governing bodies, NOC\*NSF (main organisation for organised sports in the Netherlands) and POS (the Platform for commercial sport providers).

## **Most favourite branch of sport**

The number of members of all sports clubs has been slightly declining over the past 10 years, despite growing

diversity and new entrants such as anglers. Associations with sports activities suitable for the elderly, such as golf, walking, and swimming, have seen membership growth in recent years, but triathlon is also a popular grower. Associations for racket sports (tennis, squash, and badminton), but also for winter sports and equestrian sports, see declining membership numbers.

The 3 million people exercising at a fitness club define fitness as the largest branch of sport. Their share has stabilised since 2013 after a long period of rapid growth. The relative newcomers in group sports, such as boot camp, yoga, and kickboxing, are still growing. Due to the popularity of walking and cycling, clubs that offer these sports are also taking a part in the growth of members.

### Dutch elite sports

The Netherlands wants to belong to the 10 best sports countries in the world. Financial contributions to elite sport from the Ministry of Health, Welfare and Sport have therefore grown in 10 years. Since 2013, more money has gone to 8 successful Olympic sports.

The Netherlands is currently in the top 10 of the Winter Olympics, but not yet in the top 10 of the Summer Games. Since 2012, the growth of medals won has decreased slightly. The athletes of

long track speed skating and para-swimming received the most medals, the gymnasts and road cyclists the least. Female elite athletes participate more in elite sport than 10 years ago and have won more medals than men in recent years. Paralympic elite athletes also achieve more medals than regular elite athletes and are in the top 10 of the Paralympic Games.

### Watching sports

59% of the Dutch watch sports in the media at least once a month, especially men and the elderly. Despite the internet, television is still the most popular medium. Women watch sports less through the media than men. Popular media sports for men are football, Formula 1, and cycling. Women watch skating and swimming more often than men.

45% of the Dutch have attended a professional sports event at least once in the past year (excluding 2020). 33% of men attend elite sporting events at least monthly, 12% of women do so as well. Young people attend sporting events more often than older people.

### The sports market

Total expenditure on sports in the Netherlands in 2018 was 5,7 billion euros. 2,8 billion of this was spent by athletes themselves on sports



activities, of which 1,8 billion on commercial sports providers and 1 billion on contributions, catering costs, and other costs at sports clubs. The public sector spent 2,5 billion euros on sports in 2018, of which the local authorities accounted for the majority (2,2 billion), which was mainly spent on sports facilities and sports and recreation facilities in the open space. From 2008 onwards, expenditure on this has decreased by an average of 1% per year, while the use of public facilities for sports has increased.

Source: Sports Branch Report Netherlands, KPMG 2019, commissioned by NL Sportraad (National Sports Council)



Paul Bence

# National Sports Agreement



**The National Sports Agreement is an instrument used to define mutual ambitions on sport on a national and local level. At each level, representatives of the sports sector and government are involved and, if appropriate, representatives from the field of education, health, and infrastructure.**

The National Sports Agreement is an example of how ambition on sports policy is determined in the Netherlands. It is an instrument initiated at a national level by the national government, the sports sector (NOC\*NSF), and the Association for Sport and Municipalities (VSG). Together, they have set ambitions and with a clear division of responsibilities, they are now working on reaching their goals.

## Six topics

The National Sports Agreement focuses on six topics:

- Inclusive sports in the spirit of 'no one left behind'
- Sustainable (and accessible) sports infrastructure
- Vital sports providers
- Positive sports culture
- Enjoying physical activity from an early age
- Elite sports and sports events (performance, innovation, and experience)

## Local sports agreements

Since the National Sports Agreement was reached in 2018, local governments have been working on local agreements with the local sports sector. Every municipality could request €15,000,- to appoint a sports formateur. The role of the sports formateur is to bring local parties together to establish a local sports agreement. After that, every municipality can apply for extra funding to enroll the local agreement, for which a total of €30 million is guaranteed by the Ministry of Health, Welfare and Sport. In two years, more than 95% of the municipalities now (2020) have reached their own local sports agreement.

## Collateral advantages

The process of defining local sports agreements has had a positive side effect: not only more cooperation between stakeholders with clear goals and ambitions was developed, but there has also been an increase of cross-sectoral cooperation, at a local level. The stakeholders that are involved in the agreements represent the sports sector and the government, but we also see representatives of the education, health, and infrastructure sector.



## SPECIAL HEROES:

# Discover that being healthy can be fun

**Special Heroes stimulates a healthy and active lifestyle for children with physical or mental disabilities. By creating programmes in the areas of sports and exercise, work and participation, and nutrition and health, we enable the children to experience the fun of sports and health.**

### SPORT HEROES

Special Heroes offers with the programme *Sport Heroes* children the chance to get acquainted with a sport of their choice and join a sports club. The programme works closely with sports clubs nearby schools. Coaches from sports clubs offer different types of sports in the school. This creates the opportunity for children to get acquainted with sports, and then later continue exercising and practicing sports as a member of a sports club.

We guide schools in implementing the programme and in developing a network of qualified sports clubs. We train and coach sports clubs to work with youth with disabilities. We also advise municipalities in developing policies and plans for young people

with disabilities. Finally, we challenge companies to adopt corporate social responsibility in this domain.

### Results

Over the past five years, 40,000 children with disabilities, 400 special education schools, 500 sports clubs, 180 municipalities, and 50 companies in the Netherlands have participated in Special Heroes. 15% more young people with disabilities participated in sports and 85% of the special education schools adopted the Special Heroes programme on a long-term basis.

Special Heroes works closely together with NOC\*NSF, the main organisation for organised sports in the Netherlands, Knowledge Centre for Sport & Physical Activity Netherlands, and the Dutch Council for Primary Schools (PO-Raad).

### HEALTHY HEROES

### Additional programmes

*Healthy Heroes* is a new stimulation school programme that motivates children in special education schools to experience healthy eating and a healthy lifestyle. It is not meant as a commitment or an obligatory course but as an independent, personal choice that either can be tasty or fun or both.



The *I am Professional Assistant* programme focusses on strengthening the participation, self-confidence, and talents of young people in special education and practical training. Participants grow into a role as a volunteer professional assistant. They learn on the job how to perform their tasks and work together in a variety of environments, such as sports clubs, greeneries or a cultural organisation.



# Netherlands Olympic Committee \* Netherlands Sports Confederation



**Netherlands Olympic Committee\* Netherlands Sports Confederation (NOC\*NSF) is the main organisation for organised sports in the Netherlands. NOC\*NSF has 90 affiliated members (77 governing bodies and 13 associated organisations) representing nearly 24,000 sports clubs with a total of 5,2 million members.**

NOC\*NSF is the umbrella organisation for sports in the Netherlands. It is our mission to create optimal circumstances for everyone who aspires to take part in sport and physical activities, from recreational sportsmen and sportswomen to elite athletes and from people with an impairment to volunteers and fans. It is our ambition to keep sports an essential part of Dutch society with high sports participation numbers and excellent performances of our elite athletes.

## Diversity and inclusion

As the national Olympic and Paralympic committee and as the main organisation for sports for all in the Netherlands, we have a long and profound experience, extensive knowledge, and a comprehensive network in the Netherlands and abroad.

The sports participation percentage in the Netherlands is among the highest in the world. We focus on people who are, for any reason, not physically active, we remove barriers to join a club (Open Club model), and embrace diversity and inclusion. Paralympic sports and people with impairments are an integrated and important part of our

strategy and activities. TeamNL has put Dutch sports in a firm place within the top 10 of the international medal ranking. This is due to the high standard of the five national training centres (Centra Voor Topsport en Onderwijs), innovation, research, and cooperation with national and international partners.

## Worldwide sports partner

We are dedicated to developing sports worldwide even further. We are committed to cooperating with current and new partners to improve international sports and sports activities, and to serve as an advocate for good governance, inclusion, and sustainability.

With our social inclusion projects such as the Game Changer project in Tokyo and the World2Win project in Senegal, we use the power of sport to make the world a better place.

In the field of sporting events, we readily share our knowledge of innovation of advanced world and continental championships to make events worldwide even more attractive for athletes, fans, event organisers, and media.



# High Performance Centres for elite athletes



**NOC\*NSF, the main organisation for organised sports in the Netherlands, strives for an optimal support of Dutch elite sports athletes. Therefore, it has developed an elite sports infrastructure, in co-association with regional sports federations. The infrastructure exists of five High Performance Centres (HPCs) that each strive to create optimal conditions to support the national high performance sports and talent programmes from the sports federations.**

The responsibility for vision and policy lies within NOC\*NSF as a sports umbrella organisation. However, we work together with regional parties to facilitate HPCs and deploy the right

experts. The HPCs allow athletes to live, train, and study in one location in a high performance sports culture with the best coaches and experts.

For the five HPCs, NOC\*NSF works together with five regional organisations, mostly public parties, which, in addition to the deployment of financial resources and the appointment of experts, take on all the coordination for the daily training setting of talented athletes and elite athletes. They are also responsible for housing, providing meals, transport and - elite sport-friendly - education for athletes.

We have developed five fields of expertise: nutrition, strength & conditioning, (para) medical services, performance behavior, sport science & innovation. An HPC supplies lifestyle, study, and (after) career coaching for both athletes and coaches. The coordination of all facilities and amenities requires good coordination between NOC\*NSF, the sports associations, and the HPCs.

The sports federations remain responsible at all times for the elite sports and training programmes. In this triangle, we train approximately 1,500 talented and elite athletes in full-time sports programmes every day.

## Delivering elite athletes and social relevance

The elite sports infrastructure forms the foundation for the training of athletes and the top 10 ambition of NOC\*NSF. Despite the high level of satisfaction among sports associations with the daily training setting, the deployment of experts, and other facilities offered by HPCs, the facilitation of top sport requires continuous attention and improvement to remain the best.

The challenge of the HPCs is also to develop social relevance. This includes the responsibility to achieve a safe sports climate in a continuously changing societal playing field. Elite sport sets an example in this respect. Our rich network us the opportunity to share knowledge and experience with other environments in which children develop and learn.

## Sharing visions and knowledge internationally

NOC\*NSF is a member of ASPC (Association of Sports Performance Centres). On this platform, we share our knowledge and expertise. Many other Olympic Committees have visited one of the Dutch HPCs in the last years. We are very pleased that we can share our vision and strategy about high performance management.



# Game Changer project Tokyo 2020-2021



**The National Olympic Committee/Netherlands Sports Federation (NOC\*NSF) wants to contribute to a long-lasting social legacy of the Olympic and Paralympic Games in the host cities of the Games. Therefore, NOC\*NSF launched the Game Changer project for the 2020 Games in Tokyo. This project supports the integration of people with an impairment in Japanese society.**

Better integration of people with an impairment is one of the main objectives of the Tokyo 2020 organising committee and the Japanese government for the 2020 Games.

NOC\*NSF is the main organisation for organised sports in the Netherlands. In the last few decades, NOC\*NSF and Dutch federations have gained a lot of experience in the field of Paralympics and sports for people with an impairment.

Sports, by all means, are an excellent way to provide people with an impairment with more self-confidence, to facilitate their integration in society as well, and to strengthen and enhance the contact between individuals with and without impairment. NOC\*NSF is pleased to share this experience and knowledge with Japan and, therefore, the organisation has decided to put the integration of disabled people at the heart of its social project.

## Inspire and motivate people with an impairment

Since 2017, at least twice a year, Dutch experts share their knowledge and experience with regards to sports for people with an impairment with sports clubs, schools, and governmental bodies in Tokyo. The knowledge transfer focuses on the strengthening of these organisations, enabling them to offer, realise, and independently implement a sports programme for individuals with an impairment in the future.

Also, Dutch Paralympic and Olympic athletes travel regularly to Tokyo to inspire and motivate people with an impairment, their families, teachers, coaches with their personal stories, their passions, and their Paralympic or Olympic accomplishments.

In the Game Changer project, NOC\*NSF closely cooperates with the Japan Sport Council (JSC), the Dutch Embassy in Japan, and three Tokyo districts: Edogawa City, Nishitokyo, and Adachi City. Due to the postponement of the Tokyo Games, the project will run until 2021. During COVID-19 travel restrictions in the Netherlands and Japan, the Game Changer project will continue remotely through online workshops and meetings.



# VeiligheidNL shares knowledge and data on sports injuries

**VeiligheidNL (the Dutch Consumer Safety Institute) strives to empower and strengthen participation in sustainable sports by providing athletes, coaches, physical therapists, and physicians with an insight into healthy and safe behavior to prevent sports injuries.**

VeiligheidNL gathers yearly epidemiological data on injuries sustained across all sports in the Netherlands. Subsequently, we develop and

implement evidence- and practice-based interventions for athletes, coaches, physical therapists, and physicians to prevent sports injuries. We report the results in scientific publications and campaigns. The effective interventions of VeiligheidNL can be adapted for specific countries, whilst collaboration with international partners would facilitate thorough evaluation and implementation.

## Results

VeiligheidNL has a significant track record of grants for sports injury research. Examples of interventions we developed: the interactive App 'Strengthen your ankle', and various warming-up protocols for field hockey-, volleyball-, and soccer

veiligheid  nl  
kenniscentrum letselpreventie

players. Independent research showed that up to 85% of the athletes that used these interventions changed their behavior towards injury prevention.

## More about VeiligheidNL

VeiligheidNL has been collecting and monitoring data on sports injuries in the Netherlands since 1986. Based on these data, VeiligheidNL provides the Dutch Ministry of Health, Welfare and Sport and national sports federations with advice and strategies for the prevention of sports injuries. VeiligheidNL collaborates with universities and sports federations. Experts from VeiligheidNL are involved in national and international projects related to prevent sports injuries.





# Dutch sports innovations in the spotlight



The Sportinnovator programme stimulates innovation that is not only beneficial for elite athletes, grass roots sports, and for people who don't exercise enough, but can also generate economic, societal, and sportive benefits. Take a look at a couple of these Dutch innovations.

## Steering assistance in handlebars prevents cyclist from falling

The Dutch road safety institute SWOV has established that the total number of serious traffic accidents is still decreasing every year. However, accidents involving cyclists increased

by some 30% between 2000 and 2010. Serious bike accidents are often the result of cyclists losing control of the bicycle, and, in many cases, the cyclist is an elderly person. Technical University Delft and the bicycle manufacturer Royal Gazelle have developed a prototype of a bike with smart steering assistance. That may help to reduce the number of falls with bicycles, using a technique that is also used in top track cycling. The bike has a smart motor in the handlebars that provides steering assistance if the cyclist is in danger of falling.



## Outdoor sports accommodations providing solar energy

Up to 80% of outdoor sports accommodations is left unused during daytime. Wouldn't it be great to use this huge amount of surface to make the city a more durable place to live in?

With Solar Carpet it is possible to cover artificial grass surfaces with flexible, rollable solar panels. In this way, sports playfields (and many other surfaces) become multi-functional: used for sports and generating solar energy. When it's sporting-time, the system simply rolls up and is safely stored in a casing on the edge of the field.

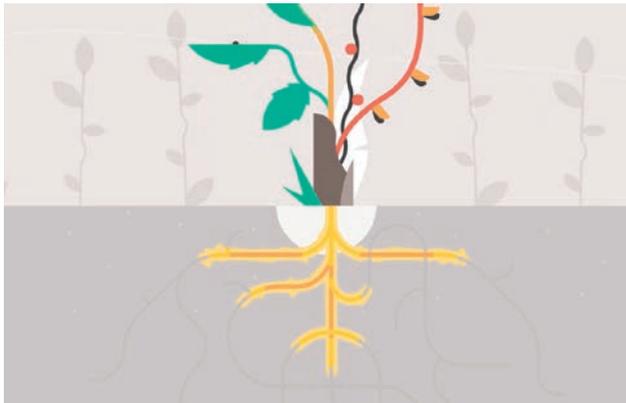
### The world's first circular climbing holds

Research indicates that the global market for climbing holds will double in the next ten years. Only in Europe, 800 climbing halls are estimated to be built in this period. Greenholds climbing holds will be the world's first circular climbing holds used for the Olympic climbing sport. The aim is to make the infrastructure of the climbing gyms more sustainable. At the end of the lifecycle, 100% recycling of the product will be possible. Not only the product but also the circular business model will become non-disruptive.

Prototypes are now being tested and market introduction is foreseen in 2021. The ambition is that the climbing holds that will be used at the Paris 2024 Summer Olympics will be circular.

### Non-chemical weed control on sport playfields

How can one develop automatic electrical weed control for sports and recreation areas without the use of chemicals and emissions to air, soil, and water? This question contains some important elements in 'greening' the sports. ▼



Together with the University of Wageningen, Ramm BV develops recognition with camera technology and plant-specific pictures. With 'deep learning algorithms' the computer can recognize the five most common weeds, in a velocity of five to twenty frames per second. With the use of Rootwave technology, the weed is killed with electricity. The technical features are combined on a machine running behind a compact tractor.

### The world's first compostable artificial grass surface

The advantages of using synthetic turf for outdoor sports are manifold. Sporting on an artificial turf pitch is possible 24 hours a day and all days of the week without a resting pause that natural grass playfields need. However, ►



through wear and tear, the spread of artificial fiber, as well as the infill granules that artificial grass produces, is harmful to the environment.

The Sweco company is dedicated to the mitigation of this environmental impact. At the end of its life cycle, the synthetic turf should be disposed of sustainably. Sweco has taken the lead in forming a consortium of expert service providers to solve this problem. Through this consortium, a unique type of fiber and artificial grass surface is being developed, consisting of fibers that, under the right conditions, can be composted at the end of their usage.



# TeamUp: movement-based activities for conflict-affected children



**TeamUp is a psychosocial support intervention of structured movement-based activities for children (affected by conflict), developed by a coalition of War Child Holland, Save the Children, and UNICEF Netherlands.**

TeamUp was developed in 2015 to respond to the social-emotional needs of refugee children in the Netherlands. A proven positive track record in 5 countries, the interest of external partners, and millions of children exposed to traumatic events due to conflict allow the TeamUp intervention to be of added value for programming by others.

## Offering stability through sports sessions

TeamUp offers activities based on play, movement, and body awareness for conflict-affected children aged 6 to 18. Each activity has a specific goal, related to a social-emotional or psychosocial theme. The non-verbal movement-based facilitation by trained facilitators allows all children regardless of their language to participate. The structured sessions following the principles of 'same place, same face, same time' create a much-needed sense of stability and normalcy for the children. TeamUp aims to improve the psychosocial well-being of children to strengthen their resilience. This is realised through four main outcomes:

- Children have an increased feeling of safety and protection
- Children experience an increased sense of social connectedness
- Children have a positive outlook
- Children are better able to self-regulate their emotions and behaviour.



## Evaluations

In 2019, 4,358 refugee children participated in TeamUp in the Netherlands of which the majority lived in reception centres. In 2018, an evaluation carried out at Dutch reception centres concluded that TeamUp is seen as an outlet of high energy and strong emotions, as a time to experience normalcy, and a way to strengthen relationships with other children. In 2019, an evaluation at Dutch schools concluded that TeamUp supports children to practice regulating their emotions, to make new friends, and to enjoy movement activities that they can look forward to.

## Expanding internationally

Since 2017, TeamUp was gradually implemented in Uganda, Sri Lanka, the occupied Palestinian Territories and Colombia. The methodology was contextualized and translated. In-country staff were trained and they cascaded the training to facilitators of TeamUp sessions. A mentoring system was set up to support facilitators. The sessions are provided in safe spaces, schools, and youth community groups. Specific TeamUp resources were developed for a Covid-19 context. In 2020, preparations were made to roll out TeamUp to Sweden and with SOS Children's Villages to Italy, Greece, Burundi, Ethiopia, Somalia, Somaliland, Rwanda, and Nigeria. The ambition is to further scale the intervention for other partners to implement the intervention as well.



# Miffy Moves gives children a head start for the rest of their lives



**The Miffy Moves programme consists of a series of exercise classes for children aged 2-6 years. Every week, children have fun doing physical exercises and simultaneously learn fundamental movement and social skills. In 2014, the programme was developed by the Royal Dutch Gymnastics Federation (KNGU) in close cooperation with sports clubs, schools, and a day-care centre. Now, the time has come for Miffy to move abroad.**

We playfully teach children how to move correctly and encourage them to develop their locomotor, cognitive, and social skills. Children who learn to exercise and who are provided with a basic knowledge of sports at a young age will grow up healthier, and will be happier and more balanced in their later lives.

In the Miffy Moves classes, toddlers and preschoolers will for example learn how to balance, roll, hop, jump, catch, swing, throw, and kick. All basic movement components are covered through fun exercises and games. This

way children learn responsibly with a lot of variation. This is essential to be able to move and exercise well. They also learn social skills when playing together, waiting for their turn, and dealing well with each other. And did you know that good and varied exercise is the most important tool in the development of their brains? This way Miffy Moves contributes to the health and happiness of all children.

The programme has been carefully compiled by Dutch Gymnastics and is only given by specially trained coaches. After completing the lessons, the children will receive a Miffy Moves certificate that shows what they have learned. A certificate to be proud of,

and which gives the children a lifetime of benefits in sports, at school, with friends, and at home.

## **Miffy Moves abroad**

Miffy Moves was introduced in the Netherlands in 2014. Today, more than 50,000 children have earned their certificates. We have worked with more than 400 sports clubs, primary schools, and day-care centres to achieve this. We would like to export Miffy Moves to other countries. Since children abroad face similar challenges, and obesity is a growing issue, the importance of exercise for a longer and happier life is universal. Please contact us if you want to find out more.

Olympic medalist gymnastics Epke Zonderland is an ambassador of Miffy Moves



Thijs Rooijmans



## MAKING THE WORLD CYCLING-FRIENDLY

# Dutch Cycling Embassy

**As the Netherlands is a well-known cycling nation, many cities and professionals all around the world are interested in learning how the Dutch managed to build such livable cities where cycling is safe and efficient. This is especially important in these hard times during which our mobility habits are being questioned due to the pandemic.**

Worldwide, the Netherlands has the highest bicycle use and provides the widest range of cycling know-how, products, and infrastructure.

With over 40 years of experience in bicycle policy and practical bicycle solutions, the Netherlands are a unique international testing ground. The Dutch Cycling Embassy (DCE) has been working for the past 10 years on transferring Dutch expertise to cities, professionals, or activists abroad who are interested in learning more about how their cities can become more cycling-friendly. Our goal is that ultimately everyone can use this active mode of mobility as their way to move around their cities.

To do so, the DCE organises webinars, study tours, workshops, online classes and coaching projects, both virtual or

physical (when possible), for all those interested in learning about it, and with experts who wish to share this knowledge.

### **Sharing cycling expertise worldwide**

We want to share our expertise and technology, being the world's number one cycling country, to facilitate cycling worldwide as the most modern, efficient, and sustainable method of transport.

The growing interest in Dutch practices in urban transport is mainly due to a transition of the transport sector towards sustainability and the rediscovery of the bicycle as a means of transport. Cycling not only contributes significantly to urban mobility, road safety and emission reductions, but has also positive impacts on the economy, social inclusion, and health.



# Digitally improving skills in physical education

University of  
Applied Sciences

**Windesheim**



**Can movement games, video registration, and other digital tools improve the quality of Physical Education (PE) lessons? Windesheim University of Applied Sciences Zwolle investigated how digital applications can be implemented successfully in PE-lessons.**

Many Dutch PE teachers embrace new technologies in their lessons but are wondering about the effectiveness. Windesheim University investigated the effects of digital applications in the *Digitization in PE class* project. Researchers investigated, for instance, how PE teachers can use digital observation tools in their lessons. A tool like *video tagging* can be integrated into PE, stimulating the analysis of tactical situations in games by students. Such technology supports teachers in the selection of appropriate video images that are also directly available in the learning situation. The effectiveness and user-friendliness of such tools were examined to foster games teaching processes and to create rich learning situations for students in team sports settings.

## Pedagogical boundaries

Technological applications have their pedagogical boundaries: they should never negatively interfere with the initial objectives of PE. Also, cameras and images should not disrupt the pupil's motivation. Technology in PE class should adhere to the pedagogical vision that we shouldn't create an idealized image. Pupils should believe in their ability. The goal is to teach children to move better and motivate them to incorporate physical activity into their lives permanently. The pleasure of improving movement is crucial. Technology should serve to increase this pleasure.

## Other research projects

*Smart Sports Exercises* (2018-2021) is a collaboration with the University of Twente, focusing on new forms of (volleyball) sports training. Athletes perform training exercises in a 'smart sports hall' that provides high-quality video display across the surface of the playing field. A digital-physical training system offers tailored interactive

exercise activities. Exercises incorporate visual feedback from the trainer as well as feedback given by the system. They can be tailored through a combination of the most fitting exercises and setting the right parameters. In this project, expertise on embodied gaming and instruction and pedagogy in sports training are combined.

*The master's eye* (2019-2023). This programme researches to what degree the perceptual skills of PE teachers are determined by professional experience, and to what degree, and how, these skills can be enhanced by deliberate practice. Accurate perception is a crucial prerequisite for providing adequate learning support to the students as well for reliably grading their performances. The programme focuses on new insights into the degree, and the nature of the perceptual skills of PE teachers, and on effective methods for deliberate practice to enhance the perceptual skills of PE teachers.

*Life Experience Through Sport (LETS)* (2020-2023) is a research programme in cooperation with Wageningen University, that aims to examine how socially vulnerable adults transfer newly learned skills and competences in a sports context to other life domains, and what societal costs and benefits these programmes bring about.





# Sports innovation in the Netherlands: Successful by cooperation

In 2019, Sportinnovator launched a challenge for funding innovative projects for inclusion on playgrounds.

**Knowledge and innovation in sport are priorities on the Dutch sports agenda. In the past years, the national programme Sportinnovator created a network of highly qualitative innovation centres and helped to set up national and international cooperations and various innovation projects. The launch of the unique digital platform Sport Data Valley in 2020 enables coaches and researchers to analyse and safely administer research data on sports and physical activity.**

The Netherlands are a sports loving nation: no other country in Europe counts relatively more sports club members than the Netherlands. A web of 26,000 sports clubs covers the country, as well as many pitches and play areas.

In elite sports, we want to hold a permanent position in the world's top 10 major sporting events. Science and technology account for a major proportion of our exports. We strive to be one of the top 5 knowledge economies in the world. These ambitions provide a positive breeding ground to boost knowledge and innovation in the field of sports.

## Sportinnovator

Sportinnovator is the Dutch national programme for sports innovation. It focusses on:

- Increasing the economic and societal value of sports innovation
- Increasing participation in sports/ healthy lifestyles
- Winning more medals at important elite sports events.

The programme is led by a team of prominent Dutch leaders in business, government, science, and sports and is supported by the Ministry of Health, Welfare, and Sport (VWS). Sportinnovator contributes to the ambitions of national policy on sports and physical exercise by focusing on innovations within the Dutch National Sports Agreement.

We endorse the European Commission's ambition to become

'the healthiest region in the world'. Therefore, we aim at sustainable, long-term innovation cooperation between member states.

A wide range of highly qualitative innovation centres is supported to increase (inter)national cooperation, creating new opportunities for starting innovations and realizing a strong climate for innovation in sport.

Besides that, Sportinnovator stimulates innovation through providing funding, using various financial instruments. In this Sportfolio you will find examples of innovation centres and projects supported by Sportinnovator.

## Successful by cooperation

Sportinnovator has developed a 'quadruple helix' model for innovation in sports. The innovation projects involve close collaboration between local authorities, businesses, scientists, and sports institutions. An example of this is research carried out in 2020. The study aimed to gain insight on how gyms and other indoor sports areas can remain open to athletes in a responsible way, thus diminishing the risk of Covid-19 contamination during sports in enclosed areas.

22,000  
sport clubs and  
sport entrepreneurs



5.7  
million sqm

10,000  
sports facilities

Main goal Roadmap: in 2050 all sports  
accommodation in the Netherlands low-carbon.

 **knowledge centre**  
for sport & physical activity  
Netherlands



## CONTRIBUTION TO PARIS CLIMATE AGREEMENT

# Roadmap Sustainable Sports

In January 2020, the Dutch sports sector took an important step in its contribution to the Paris Climate Agreement. The Ministry of Health, Welfare and Sport, NOC\*NSF (National Olympic Committee/The Netherlands Sports Federation), the provinces, and a representation of Dutch sports entrepreneurs have signed the Roadmap Sustainable Sports.

The Roadmap will help and motivate all Dutch municipalities and sports clubs to become fully sustainable, and make their sports facilities and locations future-proof. With this Roadmap, the sports sector shows that it is committed to the Paris Agreement, and that it will take the lead in making social real estate future-proof. For instance, in 2050 all sports accommodations must be low-carbon.

### Early results

Even though the Roadmap is a long-term instrument and only started in 2020, we can already share some early results:

- More than 600 sports clubs have already signed up for a (subsidised) counseling process
- Task forces have been formed for the three pillars of the Roadmap: CO2 reduction,

circularity, and environmentally friendly field management (including Integrated Pest Management)

- These task forces regularly meet with municipalities and suppliers.

The Knowledge Centre for Sport & Physical Activity Netherlands has launched an online platform offering inspiring case studies and best practices, tools, and news articles. In November 2020, we have even launched an innovative virtual game for policy advisors about 'greening the sports' in municipalities. Our team of experts advises and informs owners of sports accommodations. We share our knowledge through webinars, in news articles, and at trade fairs. We also participate in the three task forces.

# New track bike helps Dutch Olympic Team to get medals

The creation of a completely new track bike is one of the most visible Dutch innovations for the Olympic Games in Tokyo 2021. Also, the project is a great example of the collaboration between industry, academia, and sports.



The Royal Dutch Cycling Federation (Koninklijke Nederlandsche Wielrenunie, KNWU), bike manufacturer KOGA, Delft University of Technology (TU Delft), Pontis Engineering, and Actiflow have jointly created a completely new track bike for the Dutch Olympic Team. The bike is predicted to contribute to achieving good results at the Olympic Games in Tokyo in 2021. It has been designed to deliver an optimum combination of lightweight and aerodynamics as well as to correspond to the individual characteristics of the cyclist and his/her particular discipline. The bike is expected to yield an advantage of 0.5 seconds during the team sprint event.

## Cyclists and staff attribute to the development

KOGA had already developed a special bike, the Kimera, for Olympic cyclist Theo Bos during the

2008 Beijing Olympic Games. This time, new track bikes will be designed and developed for the entire Olympic cycling team – specifically tailored to each cyclist.

The cyclists in the national team selection and their training staff have played an active role in the development of the new bike. Each Olympic cyclist will receive a custom-made KOGA track bike. The frame and handlebars have been adapted to the individual cyclist's length and posture, ensuring the stability of the bike. This is important because sprinters in particular exert unprecedented forces on the bike at peak times at the start or in full sprint.

The project is a good example of the added value of a close collaboration between industry, academia, and elite sports.



# Cross-fertilisation between sports industries and academia

The EU-funded A4SEE project seeks to promote education in sports engineering by establishing innovative curriculum projects, joint courses, and modules. Higher education institutes can adopt new ideas, methods, and processes that improve the quality of teaching and multi-disciplinary cooperation, by partnering with world-leading companies in sports equipment, data analytics, and sports organisations.



The relatively young academic field of sports engineering is growing rapidly, due to the growth of the economic impact of sports and sports equipment. The industry and the services around it are rapidly growing, and as such the need for sports engineers is growing as well.

The currently growing demand for skilled sports engineers, and its growth, create both a challenge and opportunity for education. The global sports industry is diverse, fragmented, and rapidly changing. It is a large industry (comparable to aerospace) and an early adopter. It comprises numerous different sectors and therefore relies on innovation and technology that spans many disciplines. Sport is known to play a major positive role in societal challenges such as health, demographic change, and inclusion.

## Speeding up innovations

The diverse range of technology disciplines however slows down the innovation process. Cross-sectoral cooperation between universities, research centres, industries, and sports bodies could accelerate entrepreneurial behaviour, and improve the innovation climate. Effective knowledge transfer is inhibited by differences in culture and language between industry and academia. This also hampers academic staff to educate students with appropriate transversal skills.

## A4SEE joins industry and sports engineering

The A4SEE programme hopes to assist in cross-fertilisation between industry and academia, to ensure that the rapid changes in the sports industry are mirrored in sports engineering education. For example, university

courses in sports engineering could (and should) provide education on emerging technologies (e.g. big data, self-healing materials, Internet of Things (IoT), artificial intelligence, etc.) or societal changes (e.g. demographics, sedentary behaviours, and so on). Furthermore, university graduates from sports engineering curricula need to possess the appropriate innovation and entrepreneurial skills (also 'transversal skills' or '21st-century skills') to meet the needs of the sports industry.

## Consortium

We have created a consortium of academic and industrial partners to create an outstanding programme of both fundamental and applied teaching as well as practical experience in both summer and winter schools, an apprenticeship in companies, and a well-coordinated thesis programme. By this, the consortium can answer the increasing demand of the industry of well-educated sports engineers.

## ORANGE SPORTS FORUM

# Connecting Dutch sports industry to partners abroad

**Orange SportsForum**®

**Orange Sports Forum (OSF) is a platform for internationally promoting companies, organisations, and institutes connected to Dutch sport. It involves 'hardware' (infrastructure, accommodation, financing, advice) and 'software' (training, coaching, nutrition, education, sports marketing).**

One of OSF's most important roles is to identify opportunities in and for other countries, and to provide a platform that allows Dutch companies,

organisations, and institutes to come into contact with parties abroad. OSF's network currently consists of more than 300 companies and institutions, and works closely with the Dutch government and foreign missions (embassies and consulates). Ultimately, the forum aims at optimal use of opportunities abroad. Orange Sports Forum also serves as a beacon that attracts parties from abroad.

We do this through a twin branch of OSF, *Holland Sports & Industry*. HS&I focuses on foreign partners with an interest in the Dutch market and brings them into contact with the best Dutch companies, organisations, and institutions in the field of sport. Our network includes a broad variety of companies, sports federations, and organisations with state-of-the-art knowledge, products, and services relating to sport. We are therefore the go-to resource for information in the field.

### OSF in China: We Parks

OSF has started structural cooperation with China on behalf of the consortium *Dutch Football Partners* (DFP) that consists of Dutch companies. In the multi-year programme *Partners for International Business* (PIB), the consortium, in cooperation with the Dutch government, focuses on opportunities for the development of football in China.

The consortium will use its expertise to stimulate and contribute to the development of football in Western China. In this context, OSF has organised various incoming missions from China, as well as various trade missions and trade fair participations. One of the results of this program is the development of 'WePark', an innovative and interactive Sino-Dutch concept that can be applied in urban development to promote healthy lifestyles. The first WeParks were opened in Chengdu, Chongqing, Foshan, and Wuhan.





# WorldCoaches trains football coaches worldwide

**Training football coaches in their own neighbourhood or village, so that they can be trainers and role models in their own local communities.**

That, in a nutshell, is the main philosophy behind WorldCoaches, the international social programme launched by the Royal Netherlands Football Association (KNVB) in 2009. The programme is based on the KNVB's long-standing experience and expertise in coaching and training.

**The WorldCoaches programme focuses on three strategic goals:**

- Personal development
- Social cohesion
- Health.

Football connects people anywhere in the world. WorldCoaches plays its part by inspiring children and guiding them in a natural, playful way in sports, and in their social behaviour. The activities, organised by local World Coaches, not only focus on football, but they also serve to nurture

life skills. Life skills include communication and creative competences as well as critical thinking, dealing with emotions, and solving problems. These are all skills that children learn by playing football, and they can apply the same skills in their daily lives.

### Identifying social issues

WorldCoaches trainers can also make a difference by addressing relevant local themes during their training sessions, such as crime, health issues, diversity, and girls' and women's rights. Educating people on these subjects can sometimes be challenging.

For this reason, the WorldCoaches programme teaches its pupils what it means to be a role model, how to identify and analyse social problems, open them up for discussion, and refer their target group to the local institutions. This is how WorldCoaches pupils can become role models and confidants that guide children on and off the pitch.

### Results

The WorldCoaches courses are held in countries with which the Netherlands, the KNVB or one of its partners has a



relationship. Since 2009 we have trained over 15,000 World Coaches (24% of which female coaches) and reached more than 600,000 children. Anyone with a passion for football and the right mindset can become a World Coach. Motivated and talented coaches can develop their skills to an advanced level or even become an instructor themselves. That is how we create an independent network of local knowledge.

### Organisation

WorldCoaches is one of the five pillars of KNVB's international strategic agenda. KNVB has teamed up with various organisations to generate the biggest impact. The KNVB invests in the programme, with the Dutch Ministries of Foreign Affairs and Health, Welfare, and Sport, and works together with local organisations, other football associations, companies, and international non-governmental organisations as UNICEF and War Child.

# EXAMPLES OF INCLUSIVE SPORTS AND PHYSICAL ACTIVITY IN THE NETHERLANDS



## OldStars

**With the OldStars programme, the Dutch National Elderly Foundation strives for senior-friendly sports environments by starting sports clubs and introducing adjusted sports activities such as walking football, basketball, hockey, handball, rugby, tennis, and table tennis.**

OldStars allows elderly people to participate, meet new people, do adjusted exercises, and become active at a sports club as a trainer, group leader, or volunteer. Fun, the social aspect, and autonomy can be tackled and brought back to the life of elderly people through participation in sport. OldStars' philosophy is founded on the following three pillars:

- **Physical fitness:** health risks are reduced by enabling seniors to participate with an adjusted fitness level. Any OldStars training has a format that is supported by the Athletic Skills Movement strategy that chooses several movement forms, instead of the form that fits the sport. OldStars also organises special days for trainers.
- **Social fitness:** the programme lowers the threshold by free demonstration days for the elderly. Trainers can see the social part as part of the training. Also, the elderly can become OldStars trainers themselves.
- **Strategic fitness:** OldStars is a national movement that serves as a catalyst. We stimulate local cooperation and use the network of sports associations to reach more sports clubs. We also support the organisation of national events to facilitate the movement towards senior friendly sports clubs.

Contact 🌐 [www.oldstars.nl](http://www.oldstars.nl)

## Life Goals: sport as a participation instrument

The Life Goals foundation stimulates vulnerable people to participate through sport. We focus on people who are stuck in life for whatever reason: homeless people, people who suffer from addiction, refugees, teenage mothers, former prisoners, or people who suffer from mental health issues. They all share the desire to get a better grip on their lives. The foundation uses sport as a means to make people move again.

Participating in sport within the regular infrastructure is hard for these groups. Therefore, we developed the necessary tools to engage local municipalities, clubs, and healthcare institutions in facilitating sport activities for these groups. We believe in local ownership by educating local organisations and professionals to adequately apply our methods. We have educated more than 200 professionals to become a Social Sports Coach. They are the motor of our programmes and they apply methods that focus on the personal development of participants and help them tackle challenges such as homelessness, addiction, illiteracy, and criminal behaviour among youth. In recent years, our coaches have directly contributed to the development of over 5,000 people.

Contact 🌐 [www.stichtinglifegoals.nl](http://www.stichtinglifegoals.nl)



## Alliance Equal Playing 4.0. for serious acceptance of LHBTi+ in sports

The Alliance Equal Playing 4.0. is a cooperation of organisations to advance acceptance of LHBTi+ people in sport. The John Blankenstein Foundation is a partner, along with the Football association, the field hockey association, NOC\*NSF, and the Foundation Pink Soccer Fanclubs. The alliance is supported by the Ministry of Education, Culture and Science (OCW) and the Ministry of Health, Welfare and Sport (VWS). In November 2018, the Alliance Equalplaying 4.0. was launched with a national conference meeting. The purpose for 2028: complete acceptance of LHBTi+-people in sports in the Netherlands.

Contact: 🌐 [www.johnblankensteinfoundation.nl](http://www.johnblankensteinfoundation.nl)



## 'Come, join me' offers new perspectives

**Many people can't enjoy sport because of physical or social disabilities, even if they would want to. In the project 'Come, join me' (Dutch: 'Ik neem je mee') these people are linked to sport ambassadors, in order to lower the threshold for people towards a sporting life.**

Sport and physical exercise are not accessible to everyone. Some people experience obstacles to exercise due to health problems or physical or mental disability. Some have little money or do not feel comfortable in a sports environment. The exercise programme 'Ik neem je mee' tries to link people with a physical or mental disability or other issues that reduce their possibilities to sport to a sport ambassador, who occasionally helps and motivates.

The sport ambassador is an athlete who knows what it is like to enjoy sport and likes to help someone else to experience this as well. Sport ambassadors vary from elite athletes who perform at the Olympic or Paralympic Games in Tokyo, to competitive athletes who just want to contribute.

Contact 🌐 [www.nocnsf.nl](http://www.nocnsf.nl)

## Unique Sports maps supply and demand of disabled sports

**'Unique Sports' is an online sport community that maps the supply and demand of sport for the people with disabilities.**

They can be helped by Unique Sports (Dutch: Uniek Sporten) to find a suitable sport in their region. Unique Sports consists of a website and an app for people with disabilities, their

immediate surroundings, and sports clubs that connect them to information and to each other.

Since 2016, 3,400 clubs, 5,600 activities, and 3,750 locations have gathered on the platform already. Our goal is to reach 1.7 million people with disabilities and their environment to get them to exercise structurally. Unique Sports offers services to support people with disabilities in starting or continuing sport such as crowdfunding, sport advice, tools, accessibility of accommodations, and much more. The online community received around 1 million unique visitors from the start of the campaign in September 2017.

Unique Sports forms regional partnerships that promote sport for people with disabilities. These partnerships support sport providers who want to offer sports for the disabled, and also help people with a disability to find the right sport. In this way, athletes and sports providers can connect.

Contact 🌐 [www.unieksporten.nl](http://www.unieksporten.nl)



# Citius Altius Sanius: Injury-free by technological aid



## The *Citius Altius Sanius* project is a six-million-euro research programme that aims to develop technology to prevent sports injuries.

The programme is led by the Delft University of Technology and VU Amsterdam and consists of 9 projects and more than 20 partners including universities, sports organisations and companies. The programme is one of the largest research projects in sports and technology worldwide. In 2016, 121,000 people in the Netherlands sought emergency care for sports injuries. Every year, there are 4.5 million injuries in the Netherlands, accounting for 5 million euro in direct medical costs. Half of these injuries could potentially be prevented through effective support and self-management. In a new, wide-ranging research project, universities, businesses, and sports organisations are set to join forces to reduce this large number of sports injuries with the help of technology.

### Data-driven prevention

*Citius Altius Sanius* (Latin for: quicker, higher, healthier) aims to stimulate

people at all performance levels to engage in and sustain physical activity through sports and fitness, to improve their performance, and to prevent injuries by providing informative and motivating information using advanced sensor and data science techniques. The information provided is tailored to the individual user, using his or her characteristics, and effective, personalized feedback methods.

### Wearable measurement equipment

Innovative unobtrusive wearable sensors (in clothing, and advanced cameras) will be used to estimate the mechanical and physiological load. Data science techniques will relate the load to injury mechanisms and provide individual training advice, either to stimulate the athlete to prevent injuries or to return to sports and exercise quicker. Six applied projects are defined incorporating the activities that are associated with most injuries in sports such as fitness, football, tennis, running, and cycling.

### Combining fundamental and applied research

The CAS programme combines three fundamental research lines (P1-P3) with six applied research lines (P4-P9) focusing on specific sports and injuries:



- P1 - Sensor Technology for unobtrusive athlete monitoring
- P2 - Data science for injury prevention and performance improvement
- P3 - Personalized feedback that works
- P4 - Show your muscles! Fitness & strength training
- P5 - Run-Work-Sleep-Repeat: 24/7 monitoring for healthy running
- P6 - Reducing hamstring injuries in soccer and field hockey using smart sensor shorts
- P7 - Breaking the high load - bad coordination multiplier in overhead sports injuries
- P8 - Monitor and prevent thermal injuries in endurance and Paralympic sports
- P9 - Fall prevention in elite and consumer cycling.

### Different usability

Sports associations, sports medicine, and physical therapy, but also many small-to-medium-sized companies are involved to commercialise this innovative approach for recreational and elite athletes, as well as for rehabilitation patients.



# The new public-private sports platform: SportsNL



**Changing the Game together! With this slogan, sports organisations, the business community, civil society organisations, and Dutch government are now internationally joined in SportsNL.**

Dutch top sectors have an international strategy, but the international interests surrounding sports were not yet organised as such. Through regular coordination with various private and public organisations, SportsNL ensures that the various international initiatives reinforce each other.

Major sports events such as the 2024 Olympic Games in Paris may be interesting from a sporting and diplomatic point of view; they also provide an opportunity to Dutch companies to offer technologies or services to build the Olympic Village or the new Olympic swimming pool. Under the leadership of the Ministry of Foreign Affairs, in 2020 SportsNL has been developed with various public and private partners. Not only does the new sports platform offer

the opportunity for coordination and consultation, but it has also formulated a joint vision, supported by all members: in 2030, the Netherlands will be seen worldwide as the partner for an inclusive, sustainable, and innovative sports experience. This is expressed and translated into social sports programmes, sustainable and innovative sports products, and infrastructure.

## Identify opportunities

Collaboration on an international level is certainly not new. For example, various international programmes on sports have been organised in recent years, for example in Brazil, India, Qatar, and China.

However, more profit can be made by developing a strategy and making joint choices for the countries in

which cooperation provides much-added value. For example, the international network of the Ministries of Foreign Affairs and of Health, Welfare and Sport offers a great deal of opportunity to help Dutch sports organisations internationally, but also to build relationships and identify opportunities for Dutch business and knowledge institutions.

## Social themes

Also, sports offers the opportunity to work on various social themes such as health and inclusivity. Through a multi-year approach and cooperation, SportsNL wants to ensure that international cooperation around the sport is better organised, creating more sustainable cooperation and relationships with regards for mutual international interests. The SportsNL network offers an opportunity for various network partners to join existing initiatives or to share new initiatives with the network.



# Krajicek Foundation creates equal opportunities for all children to do sports

The Krajicek Foundation motivates youth in deprived urban areas in the Netherlands to develop an active and healthy lifestyle. Children who regularly do sports and play outside are happier, healthier and learn to develop their talents.



Our approach is unique. In collaboration with municipalities, we create Krajicek Playgrounds where children can do sports and play outside in a socially safe environment, close to home. They are guided by professional community coaches and by our Krajicek Scholars: youngsters from the community who, in return for a scholarship, regularly organise activities on their Playground.

## Results

Currently, we have 126 Krajicek Playgrounds in 41 municipalities with a reach of over 5,600 children. In the current academic year, we support 200 youngsters via our Krajicek Scholarship Programme and, in total, we have awarded over 2,150 scholarships since the start of the programme in 2006.

## Over 20 years of experience

The Krajicek Foundation was founded in 1997 by former tennis player Richard Krajicek. After his victory at Wimbledon in 1996, he decided to organise a tennis clinic in a deprived

neighbourhood instead of a celebratory ceremony. He was touched by the sincere joy but also shocked to learn that many of the youngsters had never held a tennis racket before. He learned that for many it was not common to do sports and play outside. Right then and there, he decided to try and make a positive change in their lives.

## Contact

Through our activities, and in collaboration with our partners, we want to contribute to the positive development of Dutch youth, and thus an active, social and connected society.





# More2Win changes the world of sports with social impact projects

**More2Win believes in the well-known quote from Nelson Mandela: “Sport has the power to change the world”. As far as we are concerned, the unique strength of sports is that sports can make the difference in every social theme. Whether it concerns a more inclusive society, public health, or a more sustainable world: sports can contribute.**

More2Win was founded in 2014, with attributions to the FIFA World Cup 2014 and the Rio Olympics in 2016 as our first major projects. Our goal is to ensure that everyone who is professionally involved in sports can put the social value of (elite) sport first. We support every organisation that believes in the power of sport to manage the impact, from governments and federations to event organisers and sponsors.

In our work, there are three major things you can expect from us:

- We ensure that we demonstrate (y)our impact
- We provide a correct story. Impact first, transparent, but also profitable
- We not only provide a creative concept, a new strategy, or a plan of action, we are also doers who support you with the realisation of your project.

### Social impact is key

We have realised social impact projects at many sporting events all around the world. We cannot, therefore, accept that this potential is being hugely underused in many areas. Whether it concerns sporting events, top sports policy, or sponsor campaigns: the social impact is rarely the goal, but is often seen as a by-catch.

We are a social enterprise on social impact. We have an entrepreneurial attitude in everything we do. This means that we can make creative connections between social themes,

sports, and commerce and that we always reflect some form of pay for success or pay for impact.



MORE2WIN

### Projects we are proud of

- Side-events for children at the Archery World Championships in 2018 in the Netherlands, for instance Archery birthday parties for poor children and ‘Stay Focused exam trainings’ for youngsters
- Work in progress: Women Volleyball World Championship in 2022 in the Netherlands: making the world championship a more sustainable event, creating regional impact
- Work in progress: in the bid team for Formula E racing in Eindhoven; creating regional legacy impact programs regarding innovative mobility and a sustainable living environment.

# Introducing a new Knowledge Agenda Sport and Exercise



**In 2016, the first Dutch Knowledge Agenda Sport and Exercise was published. The agenda aimed to develop sustainable partnerships between universities, universities of applied sciences, sports, local and national government, and industry. Now, Dutch experts are developing a new Knowledge Agenda with a longer time perspective and more scientific and innovative activities.**

The Knowledge Agenda Sport and Exercise was a unique collection of all research relevant for sports and physical exercise. It expressed a clear vision and strategy, had strong content, and was future proof. It emphasized a broad multidisciplinary approach: from individual psychological processes to physiological measurements, smart materials, and virtual reality.

A new aspect was the vital role of big data and data science as a connecting and cross-disciplinary link between the three main themes of this agenda:

- 1 Improving performance
- 2 Exercising a lifetime
- 3 The values of sport.

The Knowledge Agenda also served international ambitions. It closely followed developments in the United States and the United Kingdom.

## Data science at the top

Based on these developments, the Netherlands developed into a major player in this field over the last five years. Universities, universities of

applied sciences and other research institutes together formed an infrastructure for internationally renowned research. Furthermore, Dutch data science entered the international top.

Because of these developments and positions, we want to develop state-of-the-art knowledge and innovations, especially with the countries that organise the Olympic Games. The aim was and is to start a long-term programme and an international network based on the Olympic cycle.

## New Knowledge and Innovation Agenda 2040

In 2020, at the end of the agenda, we want to build further on what has been achieved. At this moment, we are developing a mission-driven knowledge and innovation agenda for sport and exercise. A group of experts is currently working on a new agenda with a time perspective of 20 years or more.

These experts are supported by NOC\*NSF, the Ministry of Health, Welfare and Sport, and the federation of sporting cities. If we succeed in defining this new Knowledge and Innovation agenda 2040 for sport and exercise, the Netherlands will have a very strong, competitive, and durable research programme on a national level, leading to even more knowledge and state-of-the-art innovations in the field.

The main principle of the new agenda remains the same: investing and performing together, based on a multidisciplinary collaboration with a vital role of big data and data science as a connecting and cross-disciplinary link between the three main themes.

Launch of the first Knowledge Agenda in 2016 at the Utrecht University Auditorium



# Teaching children to swim safely with Swim ABC

Gerben Pul

**11 % of the total surface of the Netherlands is open water area. Hence, Dutch children are taught to swim at a very early age. The Swim ABC is a successful national teaching programme that contributes to lowering the risk of drowning. 98% of Dutch youngsters nowadays possess one or more swimming diplomas.**



**Dutch National  
Water Safety  
Council**

'Learning to swim well is learning a skill for life'. This proverb is embedded in Dutch culture: most Dutch children are taught how to swim at a young age. The most critical aspects of learning to swim are being able to save yourself from drowning and being able to enjoy recreational swimming safely. Swimming is also a healthy and pleasant form of exercise for everyone. Safety, health, and fun go together when swimming.

The Dutch National Water Safety Council (Nationale Raad Zwemveiligheid) aims to ensure that every inhabitant complies with the Dutch National Standard for Water Safety. This is the Dutch national directive that indicates the desired level of swim safety of the Dutch population.

The Swim ABC is a child-friendly teaching method, with safety in a prominent role, which provides all the necessary skills to survive and move around freely in different kinds of water. It consists of three National Swimming Diplomas: A, B, and C. Once children have earned these three diplomas, they will be aware of the safety aspects of swimming in modern swimming pools and in open water.

### **15 million diplomas**

The Swim ABC provides children with increasing skill levels with each diploma. Lessons focus not only on teaching the various swimming strokes but also on moving underwater in a safe and free manner in different situations. Since 1985, the Dutch National Water Safety Council

has awarded more than 15 million swimming diplomas to children and adults. Drowning as a cause of death has declined from 9.6 per 100,000 inhabitants in 1925, to 0.5 per 100,000 inhabitants in 2016.

### **Research is important**

It is critical that any improvements in quality concerning water safety and swimming skills, including the Dutch National Swimming Diploma Examination Regulations, are also based on up-to-date knowledge and research. Project *NL Zwemveilig* is responsible for gathering knowledge on water safety, drowning, and learning how to swim. The knowledge contributes to the greater goal: attaining the highest possible level of water safety for the Dutch population. *NL Zwemveilig* is coordinated by the NRZ in cooperation with various partners, including the Ministry of Health, Welfare and Sport (VWS).

# New model for creating physical activity-friendly cities

A Physical Activity Friendly Environment (PAFE) facilitates and stimulates people to be physically active or to do sports. Many Dutch cities tend to include PAFE in their city policy. The Knowledge Centre for Sport & Physical Activity Netherlands designed a model that helps to create these safe, activity-friendly environments.



The Netherlands has a dense sports infrastructure: there are approximately 21,1 sports facilities per 10,000 inhabitants. In each area code, at least three different kinds of sports facilities can be found. The average distance between home to the nearest sports facility is just over 600 meters. No wonder that the Dutch, compared to other Europeans, are most satisfied with their sports facilities (European Commission 2014).

In many Dutch municipalities, initiatives are growing to create an environment that promotes physical activity. PAFE-policies are part of municipal city planning strategies. The Dutch can choose from roughly 35,000 km of cycle paths, and more

bicycle highways for commuting and recreational purposes underway.

## Developing activity-friendly cities: PAFE model

The Knowledge Centre for Sport & Physical Activity Netherlands has developed instruments (a model, a scan, an indicator, a roadmap, a whitepaper, and a theme website) and published more than a hundred articles on Physical Activity Friendly Environment about good and best practices, policy examples, and scientific research results.

The PAFE-model consists of software, 'orgware', and hardware. *Software* contains a supply of activities (interventions, programmes, events), coaching (community sports coach, youth workers, volunteers), and communication (information, campaigns, websites, apps).

'Orgware' concerns the process of (participatory) designing, building, and maintaining (citizen participation, ownership, management, maintenance, enforcement, finance, monitoring & evaluation, policymaking).

*Hardware* is the physical environment for which we have developed an indicator: SPORT+. It contains 6 sub-indicators:

- 1 Sports accommodations/venues: pitches, sports halls, gyms, pools;
- 2 Playgrounds: schoolyards, skatepark, outdoor fitness
- 3 Open space: green areas, parks, exercise gardens for the elderly, and play ponds
- 4 Routes for walking, cycling, horse riding, inline skating, mountain biking
- 5 Touristic & recreational areas: forest, heath area, dunes, beach
- 6 + Proximity public services (schools, supermarket, church)

## International participations

Many cities consider a Physical Activity Friendly Environment to be a goal in their policy (also due to the new National Strategy on Spatial Planning and the Environment in which health is a key factor). The Knowledge Centre has participated on an international level in Active City projects of WHO (a technical package for increasing physical activity), HEPA, TAFISA (Active Cities), and physical activity-friendly environment project IMPALA (Finland, Germany, I, Est, A, NL).





# Thermo Tokyo: Beat the heat

**Elite athletes regularly train under extreme environmental conditions. The Thermo Tokyo Consortium develops strategies for safe and optimal performance in these circumstances.**

The combination of endogenous heat production during exercise with exogenous heat stress due to high air temperature and humidity places the athlete at risk. He or she could develop heat-related disorders or severe performance loss. Both are highly undesired and underline the need for effective mitigation measures. The Thermo Tokyo consortium developed and performed personalised heat stress tests to determine the individual vulnerability of an athlete for hyperthermia and performance loss. Based on the outcomes of these tests, the athlete and coach were advised on which mitigation measures fitted best to their profile.

Second, individualised cooling solutions for different sports were developed, optimised, and implemented into a training regime.

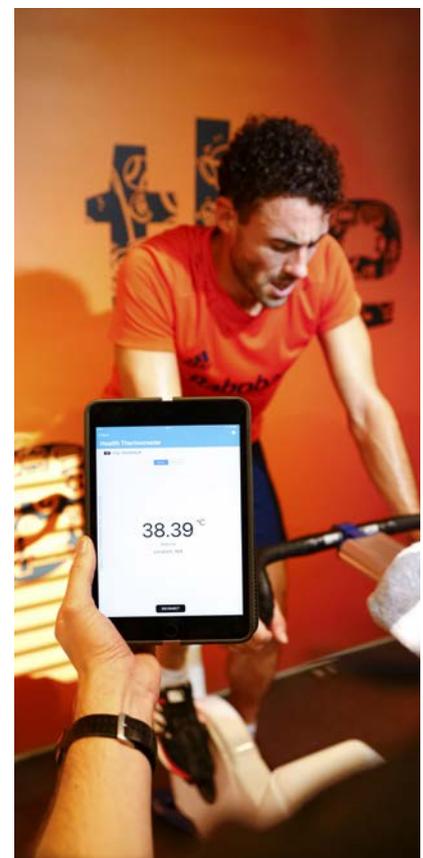
Third, the feasibility and effectiveness of a novel heat acclimation protocol were evaluated, which aids elite athletes to incorporate this more easily during their taper phase. Thermo Tokyo outcomes are currently implemented in the Olympic training schedules of a large group of TeamNL athletes.

### **Interdisciplinary research**

The consortium is an excellent example of interdisciplinary research and innovation, evidenced by a strong and fruitful collaboration between universities, professional sports associations, elite athletes, coaches, small and medium-sized, and the Dutch Olympic Team.

Shortly, the consortium will develop and implement novel strategies to allow safe and optimal exercise performance in extreme environmental conditions, such as expected during the Tokyo 2021 Olympic Games.

**Radboud University**





# Fund enables disadvantaged children to participate in sports



Since 1999, the Youth Sports & Culture Fund Netherlands has offered children from disadvantaged families a chance to participate in sports and creative activities.

About 10% of the pupils in every average classroom in the Netherlands is growing up in a family with money worries. These children miss opportunities to enjoy sports and creative activities, which are very important for their physical, mental, and social development and have a lasting impact on their lives. The Youth Sports & Culture Fund Netherlands (Dutch: Jeugdfonds

Sport & Cultuur Nederland) helps by paying the contribution fees, sports outfits, sports equipment, and creative equipment for children of families living below the poverty threshold in the Netherlands. Families do not have to apply for this grant themselves. That is being taken care of by professionals, such as teachers, youth care workers, or the family's doctor. These intermediaries are key to the success of the Fund.

### More about the Fund

The Youth Sports & Culture Fund Netherlands receives funding from the Ministry for Social Affairs, the

Ministry for Health, Welfare and Sport, municipalities, and sponsors. Private partners include the Rabobank Foundation, Vriendenloterij (a Dutch national lottery), and Zilveren Kruis Health Insurance. The Fund has a small national office and 43 local funds that work closely together with more than 240 municipalities and 8,000 intermediaries.

### More applications

In recent years, applications have been growing steadily by more than 10% per year. In 2019, we offered 81.936 children a chance to play sports or participate in creative activities.



## JOHAN CRUYFF FOUNDATION

# Creating space for children worldwide

By playing a sport, children can discover their talents and build their self-confidence. Dutch national soccer hero Johan Cruyff's dream was to help children to move up in society. The founding of the Johan Cruyff Foundation in 1997 made it possible to connect children through sport. It has supported and developed sports activities for children all over the world ever since.



The Johan Cruyff Foundation focuses on children in need. Through sports projects for children, we create space for these children: space to grow, to make friends, and to improve physical and mental health. Space to become who they are.



The Cruyff Court in Aberdeen (Scotland)

### Cruyff Courts

Children need a safe place that encourages them to play outside. Cruyff Courts provide safe places for getting together, where children learn to understand the importance of togetherness, making friends, discovering their talents, and winning and losing. They carry these valuable experiences with them as they develop physically and mentally, and as they move into society. The Cruyff Foundation also creates Cruyff Courts at institutions for children with disabilities. These Special Cruyff Courts are adapted

to the children's needs: they have a special playing surface, include adjustments to the background, and feature adapted sports equipment.

### Schoolyard14

"Playing outside should be a subject at school", was Johan Cruyff's firm belief. So the Cruyff Foundation came up with a relatively simple solution. *Schoolyard14* makes schoolyards attractive playgrounds again. It allows schools and school children to pick their particular playing fields, which take the form of lines and colored areas (markings) applied to the ground and walls.

### 14 rules

A Schoolyard14 and a Cruyff Court are both meeting places. Places where respect, health, integration, self-improvement, and playing together have a central role. These themes are

derived from the 14 rules of Johan Cruyff, which can be found on every Schoolyard14 and Cruyff Court in the world. These are rules of conduct to which everyone must adhere and hold each other to account. Themes like teamwork, creativity, and initiative make children aware of their responsibility and how to interact with each other.

### Results

With over 270 Cruyff Courts and Special Cruyff Courts and more than 500 Schoolyard14's in over 21 countries, we allow thousands of kids to play. We have also educated over 300 youth workers and community sports coaches around the world, which have guided over 2,000 youngsters on the Cruyff Courts via the Heroes of the Cruyff Courts programme. The Cruyff Foundation develops projects in the Netherlands, Spain, UK, Malaysia, and South-Africa.



# World2Win (beach) volleyball in Senegal

**With the project World2Win (beach) volleyball, NOC\*NSF wants to make a significant contribution to the development of volleyball in Senegal. We believe we can make a change and build a better world through sport. In this context, we share our knowledge about elite sports and sports participation by exchanging insights with and exploring opportunities in Senegalese volleyball.**



In 2026, the Youth Olympic Games will be the first Olympic event in history to take place on the African continent. A special occasion, that we use as an inspiration to build a strong connection between the EU and Africa.

## World2Win (beach) volleyball

World2Win is an international project that establishes relationships between several EU-partners and Senegal, focusing on the development of volleyball in Senegal. World2Win is co-funded by the European Union. Six partners from four countries in

the EU and Africa have joined forces in this project:

- the National Olympic Committees from the Netherlands and Senegal
- 4 Volleyball Federations: Nevobo (Netherlands), Volley Vlaanderen (Belgium), Fédération Française de Volley (France), Fédération Sénégalaise de Volleyball (Senegal)

## Aim

For the coming years, World2Win catalyzes development in Senegal and between Senegal and Europe. The international dimension of the sport will be promoted by the support of learning mobilities, exchanges, and knowledge transfer. We will:

- develop staff by exchanges, mobilities and training

- build an EU/African network of staff/coaches with potential for further collaboration
- deliver a model for volleyball development in Senegal, developed in collaboration with all partners, which can be used by other sports associations and countries in the EU/Africa
- inspire youth in EU and Africa with the sport from grassroots to high performance
- contribute to sustainable development goals with a focus on girls' empowerment with a programme called Volleyball4life.

## Coordination

NOC\*NSF is responsible for the overall coordination of the project. Hereby we share our knowledge with partners and focus on the management development of the Senegalese Volleyball Federation. Besides this, we provide contacts with international organisations (for example IOC and EU). Together with the partners, we work on a sustainable impact based on long-lasting partnerships. Nevobo is responsible for technical development as well as the girls' empowerment programme Volleyball4life. The other partners support these themes.





# Knowledge Centre helps improve quality of sport and PA

**The Knowledge Centre for Sport & Physical Activity Netherlands believes that its expertise can help improve the quality and effectiveness of sport and physical activity. And therefore it can contribute to a society in which people can take part in sports and other physical activity in a proper, safe and enjoyable way, while also having fun.**



up-to-date with the latest scientific insights, they have the tools to take sporting performances to a higher level.

## Our ambition

We want to be an involved and committed authority; the ideal partner for professionals, policymakers and researchers in the Netherlands and abroad. We aim to increase the quality and effectiveness of sport and physical activity and contribute to a vital society in which everyone can take part in sport and physical activity, whatever their level. We have a strong network of partners, stakeholders, other knowledge institutes, sports associations, municipalities, and universities (of applied sciences), both national and international. Their - and your - questions guide us in our work.

Funding for the work of the Knowledge Centre Sport & Physical Activity comes mostly from the Ministry of Health, Welfare and Sport.

The knowledge centre ensures that scientific, policy and practical expertise is made available for use by professionals in the field. Such expertise relates to the importance, the effects, and the effectiveness of sport and physical activity.

We develop practical plans, computer models, guidelines and methodologies in partnership with universities, knowledge centres, policymakers and professionals in the field. We also share inspiring ideas, innovative examples and practical experiences and stories. We help find answers to questions about sport and physical activity, or to initiate new research. This helps professionals achieve their objectives and provides them with the motivation to apply their knowledge in their day-to-day practice.

## Who do we support?

We support community sports coaches and other professionals in their efforts to ensure that the elderly, people with a disability, and people from disadvantaged areas can also take part in society.

We also support general practitioners and nurse practitioners who want to help their patients become more active. We advise teachers who want to motivate their pupils to take part in a sport or other physical activity. We help policy advisors to develop a future-proof policy for sports clubs with professionals from related fields. We also support sports administrators to create a safe sporting environment that is based on fair play and respect for all. Elite athletes also profit from our work. By keeping trainers and coaches

This Sportfolio presents an overview of projects brought together by Knowledge Centre for Sport & Physical Activity Netherlands, in cooperation with the Ministry of Health, Welfare and Sport. Browse through the magazine to find a broad and diverse selection of national programmes and policies, exciting innovations and successful projects that have international ambitions. Limited edition available in print, for economic missions and other purposes.

January 2021

