smart parks

IF NOT US, THEN WHO?
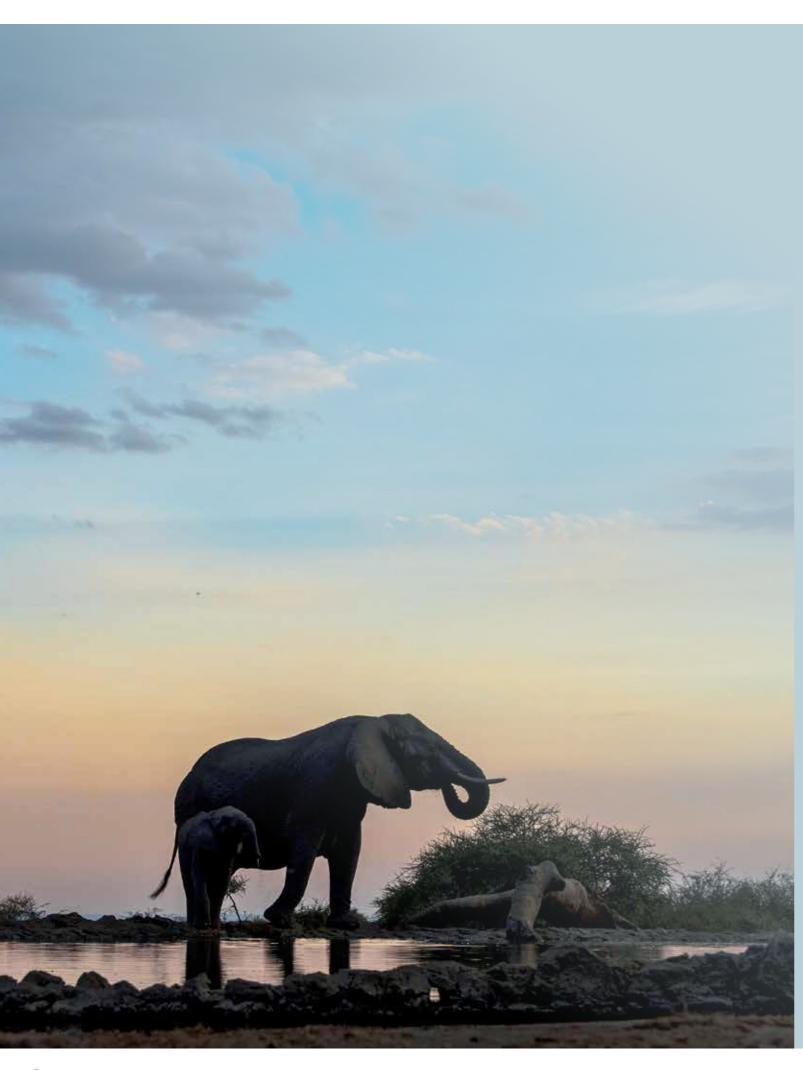# IF NOT NOW, THEN WHEN?
— JOHN LEWIS

ANNUAL REPORT SMART PARKS
– 2018 –

TABLE OF CONTENT

AN ADVANCED SENSOR SOLUTION TO CONSERVE ENDANGERED WILDLIFE AND EFFICIENTLY MANAGE LARGE PARK AREAS

1. ABOUT US

Smart Parks is a UK and Netherlands based charitable organization, established in 2016 as a response to the challenges that National Parks face from the illegal wildlife trade. We have identified that a key challenge is the absence of real-time information on people or vehicles entering the park and the location of the wildlife in the parks. We created our Smart Park solution in which we implement technology in order to protect the wildlife and establish solutions for the challenges national parks faces. We are proud to conclude that poaching has reduced to zero in the parks where we have been active for over two years.

2. WHAT WE DO

Smart Parks builds a unique and comprehensive private network infrastructure using amongst others LoRaWAN Gateways to cover an entire area with the ability to track thousands of animals, rangers, visitors, vehicles and other assets such as outposts, electric fences and gates. These gateways operate using solar power making it possible to stay active and online 24/7. Batteries in the sensors can last for several years due to their low energy usage. Our strategically placed sensors collect data and our bespoke interface transforms this into actionable intelligence to support the situational awareness and therefore improve anti-poaching (or park management) effectiveness. In short, we create a collected environment to enable seamless collection and consolidation of real-time data from various devices and sensors throughout the conservation area. The purpose of the integrated system is to provide park managers and rangers with improved insight into everything that is happening across vast conservation space, and to respond in a timely matter with the right resources. It will also allow for mapping rhino and other species movement and hotspots, and the subsequent planning and execution of more successful protection tactics.

When a wildlife park shows interest in Smart Parks, we first find out what their main challenges in wildlife protection and park management are. We then take them through the process and explain how Smart Parks can tackle these challenges. We carefully map their park area to determine what equipment is needed to establish a strong LoraWAN network infrastructure. We then decide in consultation with Park Management which sensor applications will be applied and which rangers will be trained on the deployment and maintenance of the solution. We always try to work on a partnership base with the park management.

To be always equipped to offer support to allied organizations with an environmental mission, our dedicated team is constantly researching new ideas to develop new high-tech solutions and improve our work.

Liwonde – Malawi

The largest Smart Parks to date has been installed in Liwonde National Park in Malawi. In July of 2018 Smart Parks started the preparation for the deployment of Liwonde in Malawi. Two pallets of equipment were wrapped up and send over to Liwonde.

The equipment arrived safely and we were ready to start the deployment of the largest Smart Parks to date in Liwonde National Park in Malawi. The team of Smart Parks went to Liwonde and in a period of two weeks 548km2 size national park was equipped with gateways and sensors that gather information to help improve park management and protection. The construction of the network was carried out in collaboration with a team from African Parks (the conservation NGO that manages the park on behalf of the Malawian government) that Smart Parks trained for the construction. With the arrival of this smart sensor technology, the tracking of animals, rangers and vehicles becomes possible without the use of GPS. It is now also possible to monitor equipment in the field from a great distance and in real-time. A new distance record was also set during the test phase in the nature reserve. One of the transmitter masts, or gateways, managed to pick up a signal at more than one hundred kilometers and process it into usable information for the rangers. Liwonde is the second site to be outfitted with a LoRa network, as the first site is Akagera National Park in Rwanda.

Smart Parks India

Smart parks was announced as the winner of the first Human Wildlife Tech Challenge, which is an initiative of the WWF. The award was 35.000 dollars to field test the Smart Park solution in India Assam. In India around 1.200 people lost their lives in clashes with wildlife between the years of 2014-2017. In return, hundreds of animals have been killed in defense or retaliation.

Our winning application for the Human Wildlife Tech Challenge was chosen from 47 innovative ideas from 14 countries to help solve the increasing confrontations between people and wildlife such as tigers, polar bears and elephants. The solution ShadowView (now Smart Parks) proposed concerned conflict in North Bank Landscape, Assam in India. To cover the human-elephant conflict area, we set up the minimum LoRaWAN infrastructure, including the installation of LoRaWAN Gateways along the borders of Sonitpur District. In addition, we also placed several low power, solar-powered base stations on the roofs of homes, which are close to recurring human-elephant conflicts

points and require little maintenance.

Once we established the stable LoRaWAN network, we deployed a number of sensors among with fence sensors, movement sensors and wildlife trackers. The fence sensors measures power leaks in the electric gences and the movement sensors and wildlife trackers allows to detect animal presence. All this data is collected and presented in a user-friendly web application. This allows the forest patrolling team to access a map of the area, with all sensor data presented in a clear and accessible way. This information can be used to monitor the elephants in the area and to plan and direct the team's operations (Situational Awareness).

In addition to the sensors, we placed numerous alarms within the LoRaWAN infrastructure. When the sensors detect elephant presence within a certain distance of the fence of the houses, the alarms will activate a buzzer flashlight and warn the villagers.

Smart Parks providing training

For the Deployment of a Smart Park solution in Liwonde Malawi, Smart Parks needed to train a team from African Parks, which is a conservation NGO that manages Liwonde National Park on behalf of the Malawian government. By training the African Parks team, they will be able to use the smart sensor technology, which helps track animals' activities in the park, but also the rangers. Also the team learned about the Bluetooth programming and smartphone app as well as new wearable trackers based on geolocation for the rangers. This training made the team of African Parks ready fort he construction of the site.

Smart Parks Tanzania – Serengeti

Frankfurt Zoological Society asked Smart Parks to deploy a test network in the Southern part of the Serengeti National Parks for Rhino tracking. In 2017 Smart Parks did a test expedition and installation with four advanced gateways in the Mabere and Maswa area. In the beginning of 2018 Smart Parks not only started the printing of the sensor for Serengeti, but also the deployment. The test set-up covers 2000 km2. Smart Parks made it possible that several rhinos were successfully tagged with a rhino horn sensor. The highest tower location is situated at 1900 meters above sea level, which allows Smart Parks to collect the location of every rhino every 7 minutes, coming down to 200 updates per day.
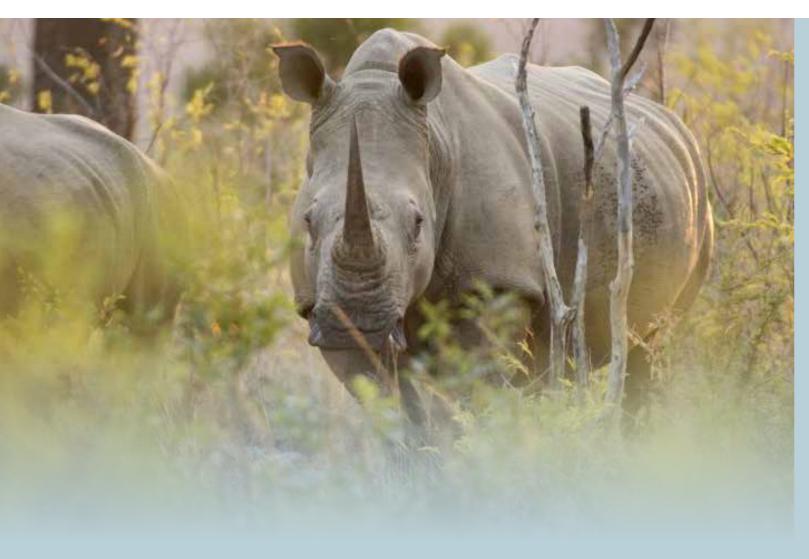
Smart Parks - Mkomazi

Smart Parks has improved and expanded its current installation at the eastern black rhino sanctuary based in Mkomazi, Tanzania. With a zero poaching track record and an increasing population this sanctuary runs one of the most successful eastern black rhino breeding programs.

Since 2016 Smart Parks has been working on improving the security of this vulnerable species. The Dutch non-profit organization designed, constructed and provided the LoRaWAN™ -equipped sensors which were successfully implanted directly into the horns of critically endangered black rhinos in Mkomazi. The sensors gave park rangers the ability to accurately monitor the whereabouts and activities of these large mammals and keep them safe from poachers.

Thanks to the growing population the park was now in need of an upgraded network to continue tracking of the rhinos. New gateways and improved sensor technology ensure complete coverage in the protected area. The Smart Parks project was co-funded by WWF Netherlands through their Innovation Fund.

Smart Parks Netherlands – Kennemerduinen.
In the near end of 2018 we had the honor to do a test case in The Netherlands. This would be in the near future our possible first Smart Park in Europe. We did a field test in the Dutch National Park Zuid-Kennermeland. It is important to gather information about the behavior of large grazers. This knowledge will help with complicated management issues and will contribute to a sustainable balance between nature, grazers and recreation.

National Park Zuid-Kennermerland is a much visited dune area, where large grazers, such as European bison, highland cattle and fallow deer play an important role in the landscape. The grazers prevent the dunes from becoming dense and leave room for vulnerable species such as the dune pansy and the dune pearl fern.

To create insight in the movement and behavior of these animals will help PWN (who is responsible for managing the area) to shape the management more efficient. An essential part of this is to see how the free flow of the animals works alongside the visiting public in one of the Netherlands busiest recreational areas.

Smart Parks South Africa - Hluhluwe-iMfolozi
The South African game reserve Hluhluwe-iMfozoli has been provided with Smart Parks power monitoring sensors. This enables park management to check the charge control unit at their LoRaWAN gateway stations in real-time.

The devices provide the anti-poaching command and control center with information on the charge of the battery, the actual solar power and other details. These power monitoring sensors are another step in an ongoing collaboration between Peace Parks Foundation and Smart Parks aimed at supporting conservation agency Ezemvelo KZN Wildlife to enhance anti-poaching efficiencies in its protected areas.

5. GENERAL INFORMATION 2018

Spreading Conservation Tech awareness
Smart Parks explaining IOT-solutions at UN Biodiversity Conference in Egypt. During a panel discussion on big data and monitoring solutions Smart Parks co-founder Laurens de Groot presented how Smart Parks has delivered IoT-solutions for the protection of endangered species and biodiversity.

3D printer added to lab
In the beginning of 2018 Smart Parks invested in an Open Source 3D printer which is added to the lab at the office. The 3D printer is a Prusa MK3, which we build ourselves. With this printer we can finally print our own sensors and other important parts for our sites. We even printed the first OpenCollar prototype. To develop and create your own technology is a very important part of Smart Parks. We now have the knowledge and the equipment to work on new technologies with the 3D printer.

The TECH award
Smart Parks received the title of 'Tech for Global Good 2018 laureate' from the American Tech Museum for Innovation. They win this award for its innovative and sustainable approach to nature protection.

The Tech for Global Good program recognizes innovators using technology to benefit humanity. The laureates of 2018 have created innovative technology benefiting our environment and battling the threat of climate change.

An exhibition on the Upper Level of The Tech Museum featured the story of the organization and its founders. Our work was also being incorporated into educational materials available on field trips to The Tech and made available to teachers online.

WE SUPPORT OTHERS ON HOW TO USE CUTTING-EDGE TECHNOLOGY FOR THE PROTECTION OF WILDLIFE AND THE ENVIRONMENT.

———

1st ranger wrist tracker
Smart Parks developed wearable trackers for the rangers in the national parks. These wrist trackers are easy to wear and based on geolocation.

1st fence HV probe
Smart Parks was the winner of the first international Human Wildlife Conflict Tech Challenge, which gave Smart Parks the opportunity to further develop and field test their solution for human-wildlife conflicts. Smart Parks created the elephant alarm in order to improve elephant protection and reduce human-wildlife conflict.

New Board Member Steven Schuurman

Steven is an internationally acclaimed high-tech entrepreneur and CEO, best known for co-founding two of the most successful enterprise open source software companies in history; SpringSource (acquired in 2009 by VMware) and Elastic. Steven is also co-founder of Media & Entertainment company Atlantis Entertainment, with it's California based headquarters and studio in The Hollywood Hills.

FINANCES

Stichting Smart Parks
Hogerbeetsstraat 13A
3039 XH ROTTERDAM

Annual report 2018

Annual report 2018

TABLE OF CONTENTS   **Page**

1. REPORT OF THE AUDITORS

Stichting Smart Parks
de heer L. de Groot
Hogerbeetsstraat 13A
3039 XH ROTTERDAM

Rotterdam, March 17, 2020

Reference: 113802
Subject: Annual report 2018

Dear Board of Trustees,

Herewith we submit you a report of our activities on the annual account 2018 of your foundation.

The balance sheet as of December 31, 2018, the profit and loss account 2018 and the notes, together forming part of the annual report 2018 are components of this report.

1.1 Accountant's compilation report

The financial statements of Stichting Smart Parks, registered office at Rotterdam, have been compiled by us using the information provided by you. The financial statements comprise the balance sheet as at December 31, 2018 and the profit and loss account for the year 2018 with the accompanying explanatory notes. These notes include a summary of the accounting policies which have been applied.

This compilation engagement has been performed by us in accordance with Dutch law, including the Dutch Standard 4410, "Compilation engagements", which is applicable to accountants.
The standard requires us to assist you in the preparation and presentation of the financial statements in accordance with Part 9 of Book 2 of the Dutch Civil Code. To this end we have applied our professional expertise in accounting and financial reporting.

In a compilation engagement, you are responsible for ensuring that you provide us with all relevant information and that this information is correct. Therefore, we have conducted our work, in accordance with the applicable regulations, on the assumption that you have fulfilled your responsibility.
To conclude our work, we have read the financial statements as a whole to consider whether the financial statements as presented correspond with our understanding of Stichting Smart Parks.

During this engagement we have complied with the relevant ethical requirements prescribed by the "Verordening Gedrags- en Beroepsregels Accountants" (VGBA). You and other users of these financial statements may therefore assume that we have conducted the engagement in a professional, competent and objective manner and with due care and integrity and that we will treat all information provided to us as confidential.

1.2 General

Incorporation
The private limited company Stichting Smart Parks was incorporated by way of deed dated February 8, 2013.

Objects
The objects of Stichting Smart Parks are defined in article 2 of the articles of assocation as follows:
The promoting of humanitarian help, conservation of nature and biodiversity and combating environmental violations and environmental crimes, as well as everything related to the above.

Board of Trustees
The management is conducted by:
- De heer L. de Groot
- De heer R.S.P. van Deventer
- De heer K.W.P. Aarts

1.3 Financial position

Below we provide an analysis of the enterprise's financial position, based on the balance sheet.

	December 31, 2018		December 31, 2017	
	€	€	€	€
In short term available:				
Cash at bank and in hand	129.391		184.570	
Total current assets		129.391		184.570
Less: current liabilities		3.961		1.960
Working capital		125.430		182.610
Fixed on long term:				
Financial fixed assets	1		-	
		1		-
Funded with on long term available assets		125.431		182.610
Funding occurred as follows:				
Shareholders' equity		125.431		182.610
		125.431		182.610

According to this analysis the working capital as of December 31, 2018 compared to December 31, 2017 decreased by € 57.180.

We trust to have been of service. We are available to provide further explanation.

Yours sincerely,
MIJN Accountantskantoor B.V.

A. Kreeft
Accountant-Administratieconsulent

2.1 Directors' report

The directors' report is available for inspection at the office of Stichting Smart Parks.

3. FINANCIAL STATEMENTS

3.1 Balance sheet as at December 31, 2018
(After result appropriation)

ASSETS		December 31, 2018		December 31, 2017	
		€	€	€	€
Fixed assets					
Financial fixed assets					
Other participations	[1]	1		-	
			1		-
Current assets					
Cash at bank and in hand	[2]		129.391		184.570
Total assets			129.392		184.570

Compilation report issue dated March 17, 2020

LIABILITIES		December 31, 2018		December 31, 2017	
		€	€	€	€
Balance of income and expenses					
Balance of income and expenses	[3]	125.431		182.610	
			125.431		182.610
Current liabilities					
Taxes and premiums social insurance	[4]	2.260		-	
Accrued liabilities	[5]	1.701		1.960	
			3.961		1.960
Total liabilities			129.392		184.570

Compilation report issue dated March 17, 2020

3.2 Statement of income and expenses 2018

		2018		2017	
		€	€	€	€
Income	[6]		114.772		241.307
Gross operating result			114.772		241.307
Personnel costs	[7]	11.026		-	
Expenses of objects	[8]	155.237		116.211	
Expenses of management and administra	[9]	5.688		4.032	
Total operating costs			171.951		120.243
Operating result			-57.179		121.064

Compilation report issue dated March 17, 2020

3.3 Notes to the annual report

General notes

Activities
The activities of Stichting Smart Parks, having its registered office at Rotterdam primarily consist of:
- Supporting other organizations through innovative technologies, including unmanned aerial vehicles, GPS wildlife tracking and other specialized search and rescue equipment;
- Monitoring and/or managing a humanitarian crisis situation or a situation where the wildlife or the environment is threatened;
- Organize activities where the use of innovative technologies is encouraged, or activities where these techniques are used to achieve the objects of the foundation;
- Other tasks to achieve the objects, such as all the other tasks: to protect and/or save a human and/or animal species, gather evidence to establish an environmental violation or environmental crime denounced and prosecution of the offender stimulate the intervening when an environmental violation or environmental crime, providing technical assistance during humanitarian crises or disasters.
The actual activities are carried out at Hogerbeetsstraat 13A, Rotterdam.

Registered office, legal form and registration number at the chamber of commerce
Stichting Smart Parks, B31Rotterdam has been registered at the Chamber of Commerce under file number 57254370.

Estimates
In applying the principles and policies for drawing up the financial statements, the management of the Company makes different estimates and judgments that may be essential to the amounts disclosed in the financial statements. If it is necessary in order to provide the transparency required under art. 362, sub 1, book 2 of the Dutch Civil Code the nature of these estimates and judgments, including related assumptions, is disclosed in the Notes to the relevant financial statement item.

General accounting policies

General
The financial statements are drawn up in accordance with the provisions of Title 9, Book 2 of the Dutch Civil Code and the firm pronouncements in the Dutch Accounting Standards applicable to small legal entities, as published by the Dutch Accounting Standards Board ('Raad voor de Jaarverslaggeving').
Assets and liabilities are generally valued at historical cost, production cost or at fair value at the time of acquisition. If no specific valuation principle has been stated, valuation is at historical cost.

Comparison with previous year
The valuation principles and method of determining the result are the same as those used in the previous year, with the exception of the changes in accounting policies as set out in the relevant sections.

Foreign currency

Functional currency
Items included in the financial statements of the company are valued with due regard for the currency in the economic environment in which the company carries out most of its activities (the functional currency). The financial statements are denominated in euros; this is both the functional currency and presentation currency of the company.

Exceptional items
Exceptional items are items of income and expense from the normal, non-incidental activities or transactions, but which need to be disclosed separately on the basis of the nature, size or incidental character of the item.

ACCOUNTING POLICIES APPLIED TO THE VALUATION OF ASSETS AND LIABILITIES

Financial fixed assets

Participations
Participations over which no significant influence can be exercised are valued at historical cost. The result represents the dividend declared in the reporting year, whereby dividend not distributed in cash is valued at fair value.
In the event of an impairment loss, valuation takes place at the realisable value (see also section "Impairment of fixed assets"); an impairment is recognised and charged to the income statement.

Cash at banks and in hand
Cash at banks and in hand represent cash in hand, bank balances and deposits with terms of less than twelve months. Overdrafts at banks are recognised as part of debts to lending institutions under current liabilities. Cash at banks and in hand is carried at nominal value.

Current liabilities
On initial recognition current liabilities are recognised at fair value. After initial recognition current liabilities are recognised at the amortised cost price, being the amount received, taking into account premiums or discounts, less transaction costs. This usually is the nominal value.

PRINCIPLES FOR THE DETERMINATION OF THE RESULT

General
The result is the difference between the realisable value of the goods/services provided and the costs and other charges during the year. The results on transactions are recognised in the year in which they are realised.
Profit or loss is determined taking into account the recognition of unrealised changes in fair value of investment property, securities included in current assets and derivative financial instruments not designated as hedging instruments.

Revenue recognition

General
Net turnover comprises the income from the supply of goods and services and realised income from construction contracts after deduction of discounts and such like and of taxes levied on the turnover.

Sales of goods
Revenues from the goods supplied are recognised when all significant risks and rewards in respect of the goods have been transferred to the buyer.

Sales of services
Revenues from the services rendered are recognised in proportion to the services delivered, based on the services rendered up to the balance sheet date in proportion to the total of services to be rendered.

Costs
Costs are determined on a historical basis and are attributed to the reporting year to which they relate.

Employee benefits

Benefits to be paid periodically
The benefits payable to personnel are recorded in the profit and loss account on the basis of the employment conditions.

Exceptional items
Exceptional items are items of income and expense from the normal, non-incidental activities or transactions, but which need to be disclosed separately on the basis of the nature, size or incidental character of the item for reasons of analysis and comparability of the results.

Capitalisation of interest charges
Interest charges are capitalised during the manufacturing period of an asset, if it requires a significant amount of time to bring the asset into a condition for its use or sale. The interest to be capitalised is calculated based on the interest payable on loans specifically taken out for the manufacturing or based on the weighted interest rate of loans which cannot be explicitly attributed to the manufacturing of an asset, in proportion to the manufacturing expenses and period.

3.4 Notes to the balance sheet

ASSETS

FIXED ASSETS

Financial fixed assets

Other participations [1]
The participations in other companies have been divided as follows:

Name	Place of business	Share in capital	Equity in accordance with last annual account	Result in accordance with last annual account
		%	€	€
Smart Parks B.V.	Utrecht	0,1%	5.434	4.434

	December 31, 2018	December 31, 2017
	€	€
Other participations		
Smart Parks B.V.	1	-

	2018	2017
	€	€
Smart Parks B.V.		
Value as of January 1, 2018	-	-
Acquisition participation	1	-
Value as of December 31, 2018	1	-

CURRENT ASSETS

	December 31, 2018	December 31, 2017
	€	€
Cash at bank and in hand [2]		
Triodos Bank, current account 78.14.16.45	129.391	184.570

3.4 Notes to the balance sheet

LIABILITIES

Balance of income and expenses

	2018	2017
	€	€
Balance of income and expenses [3]		
Balance as at January 1, 2018	182.610	61.546
Result appropriation	-57.179	121.064
Balance as at December 31, 2018	125.431	182.610

CURRENT LIABILITIES

	December 31, 2018	December 31, 2017
	€	€
Taxes and premiums social insurance [4]		
Wage tax	2.260	-

	December 31, 2018	December 31, 2017
	€	€
Accrued liabilities [5]		
Accrued auditor's costs	1.010	1.960
Reservation vacation allowence	691	-
	1.701	1.960

3.5 Notes to the statement of income and expenses

	2018	2017
	€	€

Income [6]

Income of own fundraising	114.772	241.307

Personnel costs [7]

Wages and salaries	9.333	-
Social security costs	1.693	-
	11.026	-

Average number of employees:
During the year 2018 an average of 0,13 employees has been in service on base of a fulltime employment.

Expenses of objects [8]

Expenses of objects	155.237	116.211

Expenses of management and administration [9]

Auditors' costs	1.912	1.111
Legal costs	1.390	-
Expenses current account bank	361	1.095
Office equipment	2.025	1.826
	5.688	4.032

Rotterdam, 1 april 2020

De heer L. de Groot

De heer R.S.P. van Deventer

De heer K.W.P. Aarts

4. Other information

4.1 Legal exemption
The company has made use of the possibility of audit exemption under Article 396 (7), Book 2 of the Dutch Civil Code.