FINANCIAL STATEMENTS 2019

TNO innovation for life

TNO.NL

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The original financial statements were drafted in Dutch. This document is an English translation of the original. In the case of any discrepancies between the English and the Dutch text, the latter will prevail.

CONSOLIDATED BALANCE SHEET AS AT 31 DECEMBER 2019

(in thousands of euros)

after profit appropriation

			31/12/2019		31/12/2018
Fixed assets					
Intangible assets	1	3,920		4,415	
Property, plant and equipment	2	192,480		181,197	
Financial assets	3	23,367		20,366	
			219,767		**205,978**
Current assets					
Inventories		495		815	
Receivables	4	49,117		53,042	
Cash and cash equivalents	5	229,548		223,835	
			279,160		**277,692**
Total			**498,927**		**483,670**
Group equity					
General reserve	6	220,807		208,711	
Statutory reserve	7	15,399		12,549	
Special reserves	8	27,096		26,662	
			263,302		**247,922**
Minority interest			-		30
Provisions	9		13,375		12,898
Long-term liabilities	10		21,267		23,890
Current liabilities	11		200,983		198,930
Total			**498,927**		**483,670**

CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2019

(in thousands of euros)

			2019		2018
Revenue	12	534,731		482,986	
Other operating income	13	19,200		21,928	
Total operating income			**553,931**		**504,914**
Direct project costs	14	-79,889		-78,625	
Personnel expenses	15	-340,170		-313,189	
Amortisation		-483		-360	
Depreciation	16	-22,009		-19,229	
Impairment losses property, plant and equipment	16	-1,694		-	
Other operating expenses	17	-93,445		-86,512	
Total operating expenses			**-537,690**		**-497,915**
Operating profit (loss)			**16,241**		**6,999**
Finance income and expenses	18		-549		-274
Profit (loss) from ordinary activities before tax			**15,692**		**6,725**
Corporation tax	19		-3,948		-1,856
Share of profit (loss) of participating interests	20		3,636		-3,892
Profit (loss) from ordinary activities after tax			**15,380**		**977**
Minority interest			-		47
Net profit (loss)			**15,380**		**1,024**
Profit appropriation					
Net profit (loss)			**15,380**		**1,024**
Addition to:					
- special reserve for civil operating risks		-751		-2,585	
- statutory reserve		-2,850		-	
- special reserve for construction of new defence buildings		-5,110		-3,124	
			-8,711		-5,709
Withdrawal from:					
- special reserve for civil operating risks		751		2,585	
- statutory reserve		-		3,892	
- special reserve for construction of new defence buildings		4,676		16,157	
			5,427		22,634
Profit (loss) after changes in special reserves			**12,096**		**17,949**
Change in general reserve			-12,096		-17,949
			-		**-**

CONSOLIDATED CASH FLOW STATEMENT AND STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2019

(in thousands of euros)

		2019		2018
Operating profit (loss)	16,241		6,999	
Amortisation	483		399	
Amortisation	23,703		19,190	
Gain (loss) on disposal of fixed assets	-3,008		-5,817	
Change in provisions	477		3,752	
Change in working capital, excl. cash and cash equivalents	3,701		58,797	
Cash flow from business operations	**41,597**		**83,320**	
Interest received	381		253	
Dividends received	3,150		-	
Interest paid	-918		-526	
Corporation tax	-2,516		-2,780	
Cash flow from operating activities		**41,694**		**80,267**
Investments in intangible assets	-		33	
Investments in property, plant and equipment	-41,802		-40,416	
Investments in financial assets	-3,041		1,587	
Investments in acquisitions	-		-8,900	
Disposals of intangible assets	12		-	
Disposals of property, plant and equipment	7,703		21,079	
Disposal of participating interests	-		-	
Repayments received	557		617	
Cash flow from investing activities		**-36,571**		**-26,000**
Loans drawn	971		1,456	
Repayments on loans	-255		-117	
Cash flow from financing activities		**716**		**1,339**
Cash flow for financial year		**5,839**		**55,606**
Cash and cash equivalents as at 1 January		223,835		168,229
Cash flow for financial year		5,839		55,606
Deconsolidations / consolidations		-		-
Exchange differences		-126		-
Cash and cash equivalents as at 31 December		**229,548**		**223,835**

STATEMENT OF COMPREHENSIVE INCOME

		2019		2018
Consolidated net profit (loss) after tax		15,380		1,024
Comprehensive income		**15,380**		**1,024**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

ACCOUNTING POLICIES

1.1 GENERAL

TNO connects people and knowledge to create innovations which will strengthen the competitive ability of industry and promote the sustainable well-being of society.

Name: Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek TNO ('TNO').
Legal form: public corporate body with statutory task.
Chamber of Commerce number: 27376655
TNO has its place of business (under the articles of association) in Delft.

Reporting period

These financial statements have been prepared for a reporting period of one calendar year.

Basis of preparation

The financial statements of TNO are prepared in accordance with the TNO Guidelines for Financial Reporting issued by the Ministry of Education, Culture and Science. The TNO Guidelines for Financial Reporting are based on the statutory provisions of Part 9, Book 2 of the Dutch Civil Code. An additional order issued by the Ministry of Education, Culture and Science on 21 February 2014, reference OWB/FO/2004/8195, exempts TNO from the provisions of Dutch Accounting Standard 271 'Employee benefits'. Specifically, the provisions from pensions are declared not applicable. TNO does form an obligation for holiday pay and holidays, as well as a provision for jubilee benefits.

The accounting policies that are applied for the valuation of assets and liabilities and the determination of profits or losses are based on the historical cost convention.
For the implementation of the Public and Semi-Public Sector (Standards for Remuneration) Act (WNT), TNO has observed the WNT Application Policy Rules and used these as a system of standards during the preparation of these financial statements.

Comparative figures

Where necessary, the comparative figures for 2018 have been reclassified to improve comparability with the figures for 2019. See 1.14.
These financial statements have been prepared based on the going concern assumption.

1.2 ACCOUNTING POLICIES

Unless stated otherwise, assets and liabilities are stated at historical cost.

An asset is recognised in the balance sheet when it is probable that the future economic benefits associated with the asset will flow to TNO and the cost of the asset can be measured reliably. A liability is recognised in the balance sheet when it is probable that its settlement will result in an outflow of resources embodying economic benefits and the amount at which the settlement will take place can be measured reliably.
An asset or liability is derecognised from the balance sheet when a transaction results in the transfer of all or substantially all future economic benefits and all or substantially all risks associated with an asset or a liability to a third party. Furthermore, assets and liabilities are derecognised from the date on which they no longer meet the criteria regarding the probability of the future economic benefits or the reliability of their measurement.

Income is recognised in the income statement when an increase in future economic benefits related to an increase in an asset or a decrease of a liability has arisen that can be measured reliably. Expenses are recognised when a decrease in future economic benefits related to a decrease of an asset or an increase of a liability has arisen that can be measured reliably.

Expenses are allocated to the period to which they relate.

The financial statements are presented in euros, TNO's functional currency. All financial information in euros has been rounded to the nearest thousand.

1.3 CONSOLIDATION PRINCIPLES

The consolidated financial statements include the financial data of TNO, its group companies and other legal entities over which TNO can exercise control or which are under its centralised management. Group companies are participating interests where TNO has a controlling interest or can in some other way exercise significant influence over the entity's operational and financial policy. In assessing whether TNO can exercise significant influence over the entity's operational and financial policy, financial instruments containing voting rights that have economic significance are taken into account.
Interests held exclusively with a view to resale are not consolidated if there was already an intention to sell the interest at the time of its acquisition, it is probable that the interest will be sold within a year and the other relevant indicators are met. These assets are recognised under current assets, as part of securities (held exclusively for resale). Newly acquired participating interests are consolidated from the date on which significant influence can be exercised over their business and financial policy.

The items in the consolidated financial statements are prepared in accordance with the group's uniform accounting policies. Participating interests that have been sold are consolidated up to the date on which significant influence can be no longer exercised over their business and financial policy.

In preparing the consolidated financial statements, intra-group shareholdings, debts, receivables and transactions are eliminated. The group companies are consolidated in full and the minority interest is disclosed separately.

Where losses attributable to the minority interest exceed the minority interest in the equity of the consolidated company, this excess and any further losses are charged in full to the majority shareholder. The minority interest of third parties in the profit (loss) are deducted separately from the group profit (loss) as a final item in the income statement.

A list of the consolidated group companies and non-consolidated participating interests is included in the notes to the company financial statements.

1.4 PRINCIPLES FOR THE TRANSLATION OF FOREIGN CURRENCY

Foreign currency transactions
Transactions denominated in foreign currency are translated into the relevant functional currency of the group companies at the exchange rate applying on the transaction date. Monetary assets and liabilities denominated in foreign currency are translated into the functional currency on the balance sheet date at the exchange rate applying at that date. Currency translation gains and losses are taken to the income statement.

Foreign operations
The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on consolidation, are translated into euros at the exchange rate applying at the reporting date. Income and expenses of foreign operations are translated into euros at the average exchange rate for the reporting period, which is a good approximation of recognition based on the exchange rate applying on the transaction date.

Translation gains and losses are taken to the foreign currency translation reserve. If all or part of a foreign activity is sold, the amount in question is transferred from the reserve for translation differences to the income statement.

1.5 FINANCIAL INSTRUMENTS

Financial instruments include (other) receivables, cash, loans and borrowings and trade and other payables.

Financial instruments are initially recognised at fair value, which includes the share premium or discount and directly attributable transaction costs.
If subsequent to initial their recognition, instruments are not measured at fair value through profit or loss, then any directly attributable transaction costs are included in the initial measurement.

Embedded financial instruments which are not separated from the host contract are recognised in accordance with the host contract.

Subsequent to initial recognition, financial instruments are measured in the manner described below.

Loans granted, (other) receivables, loans drawn and trade and other payables
These financial instruments are measured at amortised cost on the basis of the effective interest method.

The effect of discounting is generally insignificant for current receivables and payables with short maturities for which no explicit interest is calculated. The amortised cost of these items is therefore deemed to consist of their nominal value.

Where necessary, the value of loans granted and (other) receivables is adjusted for impairmentlosses.

Deferred tax assets are stated at present value.

Long-term loans drawn are stated and are initially recognised at fair value. Subsequent to initial recognition, they are measured at amortised cost.

Derivatives
Derivatives are stated at cost or lower market value, except if hedge accounting under the cost price hedge accounting model is applied.

TNO makes limited use of forward exchange transactions to hedge foreign exchange risks arising from purchasing and selling transactions. If foreign exchange contracts are concluded to hedge monetary assets and liabilities, cost price hedge accounting is applied. Hedge accounting is applied to ensure that the results recognised in the income statement as a result of the conversion of monetary items are compensated value changes of foreign exchange contracts at the spot rate on the reporting date. The difference between the spot rate of the forward exchange contract at the date of inception and its forward rate is amortised over the term of the forward exchange contract and taken to the income statement.
When cost price hedge accounting is applied, derivatives are measured at fair value upon initial recognition. Derivatives are not remeasured as long as the derivative hedges the specific risk of an expected future transaction. As soon as the expected future transaction leads to the recognition of value changes in the income statement, the gain or loss associated with the derivative is recognised in the income statement.
When the hedged item relating to an expected future leads to the recognition of a non-financial asset, TNO adjusts the cost price of this asset by offsetting it against the hedging gains and losses that had not been recognised in the income statement yet.

If a derivative instrument expires or is sold, the hedging relationships are terminated. The cumulative gain or loss that has not yet been recognised in the income statement is recognised as a accrued or deferred item in the balance sheet until the hedged transactions occur.

If the transactions are no longer expected to occur, the cumulative gain or loss is transferred to the income statement.
TNO documents its hedge relationships in specific hedge documentation and regularly reviews the effectiveness of the hedge relationships by establishing whether the hedges are effective and that there are no overhedges.

1.6 INTANGIBLE ASSETS

Goodwill represents the excess of the cost of acquisition of the participating interests over TNO's interest in the net fair value of the assets acquired and the liabilities assumed from the acquiree, less accumulated amortisation, depreciation and any impairment losses. Goodwill is amortised over the expected useful life of the acquired participating interest.

The other intangible assets relate to development costs. They are capitalised insofar as they relate to projects deemed commercially feasible. The development of an intangible asset is considered to be commercially feasible if the completion of the asset is technically feasible, TNO intends to complete the asset and then to use or selling it (and there are also adequate technical, financial and other resources available to achieve this), TNO has the ability to use or sell the asset, it is probable that the asset will generate future economic benefits and the expenses incurred during the development phase can be determined reliably.
Development costs are stated at production cost, less accumulated amortisation and any impairment losses. These costs mainly comprise the salary costs of the relevant employees and the cost of obtaining external expertise, including fees paid to third parties for research and development, licence rights and software programs. Upon termination of the development stage, the capitalised costs are amortised over the expected useful life of the asset, which in principle does not exceed five years, using the straight-line method.
A statutory reserve is formed for the part of the capitalised development costs that has not yet been amortised.

1.7 PROPERTY, PLANT AND EQUIPMENT

Items of property, plant and equipment intended for TNO's own use are stated at cost of acquisition or, if they have been constructed by TNO itself, at cost of manufacture, less accumulated depreciation and any accumulated impairment losses and plus any costs incurred to bring the asset to its ultimate location. No interest expenses have been included in the cost of acquisition of items of property, plant and equipment. Any expenditures relating to items of property, plant and equipment that are made subsequent to their initial recognition and which meet the capitalisation criteria are included in the cost of the relevant item of property, plant and equipment.

Depreciation is calculated as a percentage of the cost of acquisition according to the straight-line method on the basis of the asset's useful life. Business land and property, plant and equipment under construction and prepayments on property, plant and equipment are not depreciated. When changes occur with respect to the expected depreciation method, useful life and/or residual value, such changes are accounted for as a change in estimates.

When costs are incurred due to an obligation relating to the dismantling and removal of an asset and the restoration of the site where the asset is located, and this obligation is the result of the fact that TNO has put the asset in place on the site, these restoration costs are included in the carrying amount of the asset and a provision for the same amount is recognised simultaneously.
Decommissioned items of property, plant and equipment are measured at their carrying amount or lower fair value less costs to sell. Items of property, plant and equipment are derecognised following their disposal or if no future economic benefits are expected to arise from their use or disposal. The income or expense arising from the disposal is recognised in the income statement.

1.8 FINANCIAL ASSETS

Non-consolidated participating interests where TNO can exercise significant influence over the entity's operational and financial policy are measured according to the equity method. In assessing whether TNO can exercise significant influence over the entity's operational and financial policy, financial instruments containing voting rights that have economic significance are taken into account. In accordance with the equity method, the participating interests are recognised in the balance sheet at the group's share of the net asset value of these entities. The following is added to the net asset value of the group's participating interests in these entities: the group's share of the profit or loss and direct changes in the equity of these entities from the date of their acquisition, measured in accordance with the accounting policies described in these financial statements, less the group's share of the dividends paid by these entities. The group's share of the profits or losses of these entities is recognised in the income statement under 'Share or profit (loss) of participating interests'.
Where TNO cannot effect the unlimited payment of dividends to TNO in respect of profits of these entities, TNO's share of these profits is added to a statutory reserve. The group's share of the direct increases and decreases in the equity of the entities in which it has a participating interest is also recognised in this statutory reserve.
Following the application of the equity method, the group determines whether it needs to recognise impairment losses for any if its participating interests. As at each balance sheet date, the group assesses whether there are objective indications that a participating interest may have been impaired. If that is the case, the group

recognises an impairment loss for the amount by which the carrying amount of the participating interest exceeds its recoverable amount. This impairment loss is recognised in the income statement.

If the value of a participating interest according to the equity method has become nil, this method is no longer applied and the participating interest continues to be measured at nil as long as the circumstances do not change. To this end, any other long-term interests of the group in the entity in which it has a participating interests that effectively qualify as a part of the group's net investment are also included in the measurement. A provision is recognised if and to the extent that the group guarantees the debts of the entity in which it has a participating interest or has a constructive obligation to enable the entity to pay its debts.

Any share of the entity's profit subsequently acquired is recognised only if and to the extent that the group's cumulative unrecognised share of the entity's loss has been made good.

Participating interests where no significant influence can be exercised over the entity's operational and financial policy are measured at cost of acquisition less any impairment losses. Dividends qualify as profit and are recognised under finance income and expenses.
Profits or losses on transactions with and between entities in which the group has a non-consolidated participating interest measured at net asset value are recognised proportionally. Profits or losses on transactions with and between entities in which the group has a non-consolidated participating interest measured at cost are recognised in full, except if they have in effect not been realised.

Loans to entities in which the group has a non-consolidated participating interest are stated at amortised cost using the effective interest method, less any impairment losses.

Dividends are accounted for in the period in which they are declared. Interest income is recognised in the period to which it relates, using the effective interest rate method. Any gains or losses are recognised under finance income and expenses.

1.9 IMPAIRMENT LOSSES

As at each balance sheet date, the group assesses whether a non-financial asset or a group of non-financial assets may have been impaired. At each balance sheet date, the group assesses whether there are indications that a fixed asset may have been impaired. If there are such indications, the recoverable amount of the asset is determined. If it is not possible to determine the recoverable amount of the individual asset, the recoverable amount of the cash-generating unit to which the asset belongs is determined.
An impairment is when the carrying amount of an asset is higher than the recoverable amount; the recoverable amount is the highest of the fair value and the value in use. An impairment loss is accounted for by recognising it directly in the income statement as an expense and simultaneously reducing the carrying amount of the relevant asset.

The fair value is initially derived from a binding sales agreement; failing that, the fair value is determined based on the active market, where the customary offer price is normally considered the market price. If there is no such active market, the fair value less costs to sell is determined based on generally accepted valuation models. The results of these models are verified on the basis of a multiple of the profit, quoted prices of listed companies and other available fair value indicators. The costs to be deducted in determining the fair value less costs to sell are based on the estimated costs that are directly attributable to the sale or which are necessary to realise the sale.

To determine the value in use, the future net cash flows that would be derived from the continued use of the asset or cash-generating unit are estimated. These cash flows are then discounted using a pre-tax discount rate that reflects the time value of money on the basis of both the market expectations and the specific risks for the asset. The discount rate does not reflect any risks which have already been taken into account in determining the future cash flows.

As at each balance sheet date, the group assesses whether there are indications that an impairment loss recognised previously for a fixed asset may no longer exist or may have decreased. If there are such indications, the recoverable amount of the asset or the cash-generating unit to which the asset belongs is determined.
A previously recognised impairment loss is only reversed if there has been a change in the estimates used to determine the recoverable amount since the last impairment loss was recognised.

If it is determined that a previously recognised impairment loss no longer exists or has decreased, the increased carrying amount of the relevant asset attributable to the reversal of the impairment loss will not exceed the carrying amount that would have been determined if no impairment loss had been recognised for the asset.
An impairment loss recognised for goodwill is not reversed.

1.10 INVENTORIES

Raw materials and consumables are stated at their cost of acquisition or lower net realisable value. The valuation of the inventories takes into account any impairment losses that may have arisen as at balance sheet date.

1.11 PROJECTS IN PROGRESS

Projects in progress concern projects carried out under contracts. Included in the valuation of projects in progress are the costs that relate directly to the relevant contract (for example, personnel costs for employees whose activities relate directly to the contract and costs of raw materials and consumables), the costs that are attributable to contract activities in general and can be allocated to the relevant contract, and other costs chargeable to the client under the terms of the contract. Expenditures related to project costs that will lead to the completion of required deliverables after the balance sheet date are capitalised if it is probable that they will lead to revenue in a subsequent period. Where necessary, a provision for expected losses is deducted from projects in progress. Amounts billed in advance are deducted from projects in progress.

1.12 RECEIVABLES

The principles applied for the valuation of receivables are described under the heading 'Financial instruments'.

1.13 CASH AND CASH EQUIVALENTS

Cash and cash equivalents are stated at nominal value. Where cash and cash equivalents are not at TNO's free disposal, this is reflected in their valuation.

Cash and cash equivalents denominated in foreign currency are translated at the balance sheet into the relevant functional currency at the exchange rate applying at that date. For further information, see the accounting principles for the costing of foreign currency transactions.

1.14 EQUITY

Financial instruments that qualify as equity instruments by virtue of their economic substance are presented under equity. Financial instruments that qualify as financial liabilities by virtue of their economic substance are presented under liabilities. Gains, losses, income and expenses with respect to these financial instruments are recognised in the income statement as finance income or expenses.

Statutory reserve

The statutory reserve concerns intangible assets and non-distributable profits from participating interests in group companies measured at net asset value.

Special reserves

In accordance with Section 22 of the TNO Act and Section 4 and 5 of the TNO Guidelines for Financial Reporting, special reserves may be formed to allow for future expenditures or costs, or to cover economic and technical risks. Withdrawals are charged to the special reserves as part of the appropriation of the profit (loss) for the year, provided they are in accordance with the special purposes of these reserves.

The special reserve for 'civil operating risks' is formed to cover economic and technical risks. Until the maximum amount of this special reserve has been reached, TNO's Board of Management annually adds a percentage of the funding and contracts from both the government and third parties to the reserve as part of the appropriation of the profit (loss) for the year. A maximum amount of EUR 9.1 million was agreed with the government at the time.

The special reserve for the construction of new defence buildings related to defence research has been formed to cover future investments in renovation and/or new-build projects. Additions to and withdrawals from this reserve are made annually as part of the appropriation of the profit (loss) for the year on the basis of specific agreements with the Council for Defence Research.

Effects system reform recognition of provision for jubilee benefits and release of provision for major maintenance

Elaboration system reform recognition of provision for jubilee benefits:

The provision for jubilee benefits is recognised for future jubilee benefits. TNO is subject to a so-called voluntary system reform for the recognition of the jubilee benefits.
The recognition of the system reform was completed with retrospective effect.

Elaboration of system reform release of provision for major maintenance:

TNO is subject to a so-called voluntary system reform for the recognition of the major maintenance.
The recognition of the system reform was completed with retrospective effect.

The calculated provisions for jubilee benefits at year-end 2017 and 2018 amount to EUR 2,685 thousand and EUR 2,953 thousand respectively.
At year-end 2017, the balance of the provision for major maintenance was nil.

The effects of the system reform on TNO's equity and the provisions as at 1 January 2018, for 2018 and as at 31 December 2018 are shown below:

Change statement of movements equity 01/01/2018 (reviewed)

(amounts in thousands of euros)

Description	Amounts
Equity 01/01/2018	249,583
Recognition provision jubilee benefits	-2,685
Release provision major maintenance	0
	246,898

Change statement of movements provisions 01/01/2018 (reviewed)

(amounts in thousands of euros)

Description	Amounts
Provision 01/01/2018	6,461
Recognition of provision for jubilee benefits	2,685
Release of provision for major maintenance	0
	9,146

On 31/12/2018 (and for 2018)

An addition of EUR 268 thousand is made to the provision for jubilee benefits. The balance of addition to/withdrawal from the provision for major maintenance was EUR 1,582 thousand in 2018.
The CORPORATION TAX effect is EUR 329 thousand negative.

Change statement of movements equity 31/12/2018 (reviewed)

(amounts in thousands of euros)

Description	Amounts
Equity 31/12/2018	249,622
Recognition of provision for jubilee benefits	-2,685
Addition to provision for jubilee benefits	-268
Addition to/withdrawal from provision for major maintenance	1,582
Corporation tax effect	-329
	247,922

Change statement of movements provisions 31/12/2018 (reviewed)

(amounts in thousands of euros)

Description	Amounts
Provision 31/12/2018	11,527
Recognition of provision for jubilee benefits	2,685
Addition to provision for jubilee benefits	268
Addition to/withdrawal from provision for major maintenance	-1,582
	12,898

In the short term, this system reform for major maintenance will have a positive impact on the utilisation for 2019 and subsequent years, which will be made up in the long term.
This effect on the utilisation for 2019 during a transition to the component method is approximately EUR 1.3 million positive.

1.15 MINORITY INTEREST

The minority interest concerns the minority interest of third parties in entities in which TNO has a consolidated participating interest measured at net asset value.
The minority interest is measured in accordance with TNO's accounting policies.

1.16 PROVISIONS

A provision is recognised in the balance sheet when:
– TNO has a present legal or constructive obligation as a result of a past event; and
– the amount can be estimated reliably; and
– if it is probable that an outflow of economic benefits will be required to settle the obligation.

Unless stated otherwise, provisions are stated at present value, which is determined by using the relevant discount rate that reflects the current market interest rate.

The provision for employee and post-employment benefits has been formed to cover current benefits and agreed future benefits payable to former and current employees of TNO under TNO's terms and conditions of their employment. The portion of the provision relating to current pension benefits is based on actuarial calculations.

The jubilee provision is a provision for future jubilee benefits. The provision concerns the present value of the jubilee benefits to be paid out in the future.
The provision is based on promises made, the likelihood of staff staying and age.

The provision for claims has been formed for potential liabilities arising from ongoing legal proceedings.

The provision for restructurings has been formed to cover costs associated with ongoing or impending (partial or full) restructurings.

The provision for redundancies has been formed to cover the expected costs associated with the planned termination of employment contracts with employees, other than in the context of restructurings.

The other provisions have been formed mainly to cover the expected costs of onerous tenancy contracts.

The main estimates relate to the restructuring provision, the provision for redundancies, claims and the other provisions.

1.17 EMPLOYEE BENEFITS/PENSIONS

TNO has a number of pension schemes. The most significant pension scheme is administered by Stichting Pensioenfonds TNO and qualifies as a defined benefit scheme.

An order issued by the Ministry of Education, Culture and Science exempts TNO from the provisions of Dutch Accounting Standard 271 'Employee benefits'.
The basic principle is that the pension expense to be recognised in the reporting period is equal to the pension contributions payable to the pension fund for the period. To the extent that the payable contributions have not been paid as at balance sheet date, a liability is recognised. If as at balance sheet date, the contributions already paid exceed the contributions payable, an asset is recognised under 'Prepayments and accrued income' to account for any refund by the pension fund or settlement with future pension contributions payable.

In addition, a provision is recognised as at balance sheet date for existing additional obligations towards the pension fund and the employees if it is probable that there will be an outflow of resources embodying economic benefits to settle the obligations and the amount of the obligations can be estimated. The existence or non-existence of additional obligations is assessed on the basis of the administration agreement with pension the pension fund, the pension agreement with the employees and other (explicit or implicit) commitments made to employees. The provision is stated at the best estimate of the present value of the amounts expected to be required to settle the obligations at the balance sheet date.

1.18 LONG-TERM LIABILITIES

Government or third-party resources that compensate TNO for an investment in an asset are turned into liabilities on the balance sheet and systematically credited to the income statement during the useful life of the asset.

1.19 CURRENT LIABILITIES

The valuation of current liabilities is explained in the section on financial instruments.

1.20 REVENUE RECOGNITION

Revenue is defined as the total of:
– contract revenue; and
– government funding.

Contract revenue comprises the amounts invoiced for work performed, less any value added tax and changes in projects in progress.
As there is an even flow of projects that are completed at regular intervals throughout the year and tend to be completed within one year, profit recognition on projects in progress takes place upon completion. The government provides funding to support the demand-driven programme research for Top Sectors and societal transition themes. These funds are recognised as revenue in proportion to the stage of completion of the relevant work. Direct costs are defined as the tangible costs (including costs of outsourced work) that are directly attributable to a project.

1.21 GOVERNMENT GRANTS

Government grants are initially recognised in the balance sheet as deferred income when it is reasonably certain that they will be received and that TNO will comply with the conditions associated with the grant.
Grants that compensate TNO for expenses incurred are systematically recognised in the income statement as revenue in the same period as in which the expenses are recognised.
For information on grants that compensate TNO for an investment in an asset, see under 'Long-term liabilities'.

1.22 OTHER OPERATING INCOME

If the result of a transaction relating to the performance of services can be reliably estimated and it is probable that revenue will be received for these services, revenue is recognised pro rata to the stage of completion of these services.
Licensing revenues are recognised in the income statement according to the attribution principle in accordance with the content of the agreement, provided that the amount of the revenues can be reliably determined and their receipt is probable.

1.23 SHARE OF PROFIT (LOSS) OF PARTICIPATING INTERESTS

The share of the profit (loss) of participating interests consists of TNO's share of the profits or losses of the entities in which it has a participating interest, determined on the basis of the group's accounting policies.
Profits or losses on transactions, are not recognised in the consolidated income statement insofar as they cannot be considered realised.
The profits or losses of participating interests acquired or disposed of during the financial year are included in TNO's profit (loss) for the year from the date of acquisition or until the date of disposal, respectively.

1.24 FINANCE INCOME AND EXPENSES

Interest income is recognised in the period to which it relates, taking into account the effective interest rate for the relevant asset. Interest paid and similar expenses are recognised in the period to which they relate.

1.25 CORPORATION TAX/DEFERRED TAX ASSETS

With effect from the financial year of 2016, TNO will be liable to pay corporation tax for the integrated profit (loss).
As at 1 January 2016, when TNO first became liable for corporation tax, the opening tax balance sheet was prepared on the basis of the applicable tax accounting policies. The opening tax balance sheet as at 1 January 2016 has not been definitively determined yet.

TNO Tech Transfer Holding BV; TNO International Holding BV and TNO Affiliates Holding BV and all their Dutch subsidiaries are also subject to corporation tax.

Tax comprises the current corporation tax payable or recoverable for the reporting period and deferred corporation tax. Tax is recognised in the income statement, except it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable (recoverable) in respect of the taxable profit (tax loss) for the financial year, calculated using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

A provision for deferred tax liabilities is recognised for taxable temporary differences between the carrying amounts for financial reporting purposes and tax bases of assets and liabilities.

Deferred tax assets are recognised for deductible temporary differences, unused tax loss carryforwards and unused tax credits, provided that it is probable that taxable profits will be available in future against which they can be offset or utilised. Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Deferred tax assets are stated at present value.

1.26 CASH FLOW STATEMENT

The cash flow statement is prepared using the indirect method. Cash flows in foreign currency are translated into euros using the average exchange rates for the relevant periods.

1.27 FAIR VALUE MEASUREMENT

A number of accounting policies and disclosures in the financial statements of TNO require the fair value measurement of both financial and non-financial assets and liabilities. For valuation and information purposes, fair values are determined based on the following methods.

(Other) receivables

The fair value of trade and other receivables is estimated based on the present value of the future cash flows.

Derivatives

The fair value of forward exchange contracts and interest rates swaps is based on their quote market price, where available. If a quoted market price is not available, the fair value is estimated by discounting the expected cash flows to their present value using current interest rates, which include a risk premium for the relevant risks.

Non-derivative financial liabilities

The fair value of non-derivative financial liabilities (loans) is determined for information purposes only and is calculated based on the present value of future principal and interest payments, discounted at the market interest rate at the reporting date.
Further information about the principles of fair value measurement is provided in the notes applicable to the relevant asset or liability.

1.28 USE OF ESTIMATES

The preparation of the financial statements requires that management makes judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

The estimates and the underlying assumptions are constantly assessed. Revisions of estimates are recognised in the period in which the estimate is revised and in future periods for which the revision has consequences.
The estimates mainly relate to fixed assets, projects in progress, deferred tax assets and provisions (including provisions for restructurings, a provision for redundancies, claims and onerous contracts).

1.29 RELATED PARTIES

Transactions with related parties occur when a relationship exists between TNO, its participating interests and their directors and key management personnel. As part of its ordinary activities, TNO provides and receives services to and from various related parties in which TNO has an interest of 50% or less. These transactions are generally conducted at arm’s length, i.e. under terms and conditions comparable to those applying to third parties with whom no relationship exists.

NOTES TO THE CONSOLIDATED BALANCE SHEET AS AT 31 DECEMBER 2019

(in thousands of euros)

1 INTANGIBLE ASSETS

Changes in intangible assets in 2019:

	Goodwill	Software	Total
Balance at 31/12/2018			
Cost of acquisition	4,705	109	4,814
Accumulated depreciation and impairment	-353	-46	-399
Carrying amount	**4,352**	**63**	**4,415**
Change in carrying amount			
Investments	-	-	-
Disposals	-	-12	-12
Amortisation	-470	-13	-483
	-470	**-25**	**-495**
Balance at 31/12/2019			
Cost of acquisition	4,705	97	4,802
Accumulated depreciation and impairment	-823	-59	-882
Carrying amount	**3,882**	**38**	**3,920**

On 1 April 2018, TNO took over the energy activities of Stichting Energieonderzoek Centrum Nederland (NRG) for a purchase price of EUR 9.9 million and EUR 2.5 million for the working capital. On 1 October 2018, the activities from the Energy Engineering & Environment unit were returned from TNO to NRG. This involved a price of EUR 1.0 million and EUR 0.9 million for the working capital. The acquisition was measured according to the purchase accounting method. The fair value of the net assets and liabilities taken over amounted to EUR 4.2 million, including working capital. The amount in goodwill is EUR 4.7 million, which will be depreciated over a 10-year period.
The carrying amount of the acquired working capital corresponds to its fair value. As at 31 December 2019, there was no reason for an impairment loss.

2 PROPERTY, PLANT AND EQUIPMENT

Changes in property, plant and equipment in 2019:

	Land and buildings	Plant and equipment	Other operating assets	Fixtures and fittings	Assets under construction and development	Property, plant and equipment not used in operations	Total
Balance at 31/12/2018							
Cost of acquisition	117,790	123,541	132,589	9,628	49,088	30,772	463,408
Accumulated depreciation and impairment	-83,715	-74,470	-97,043	-5,231	-	-21,752	-282,211
Carrying amount	**34,075**	**49,071**	**35,546**	**4,397**	**49,088**	**9,020**	**181,197**
Change in carrying amount							
Investments	27,713	19,033	17,797	2,020	-	363	66,926
Impact consolidations/deconsolidations	-	-	-59	-	-	-	-59
Disposals	-4,137	-84	-53	-195	-	-	-4,469
Impairment losses	-333	-394	-897	-70	-	-	-1,694
Amortisation	-2,032	-8,372	-12,363	-879	-	-883	-24,529
Assets under construction and development recognised in financial year	-	-	-	-	-55,654	-	-55,654
Disposal of assets under construction	-	-	-	-	-226	-	-226
Assets under construction, new investments in 2019	-	-	-	-	30,988	-	30,988
	21,211	**10,183**	**4,425**	**876**	**-24,892**	**-520**	**11,283**
Balance at 31/12/2019							
Cost of acquisition	141,366	140,712	135,390	9,659	24,196	31,135	482,458
Accumulated depreciation and impairment	-86,080	-81,458	-95,419	-4,386	-	-22,635	-289,978
Carrying amount	**55,286**	**59,254**	**39,971**	**5,273**	**24,196**	**8,500**	**192,480**

The depreciation expense presented in the income statement also includes the release from the investments grants equalisation account.

The carrying amount of property, plant and equipment as at 31 December 2019 includes land, buildings, plant and equipment for EUR 23.4 million (2018: EUR 27.0 million), of which TNO only has economic ownership. This relates to investments in rented premises.

Applied depreciation periods in years

	2019	2018
Land	nil	nil
Buildings	40	40
Plant and equipment	15	15
Renovations	4-15	4-15
Computer hardware	3-5	3-5
Other operating assets	5	5
Fixtures and fittings	10	10

3 FINANCIAL ASSETS

	Non-consolidated participating interests	Other loans	Deferred tax assets	Total
	Share in equity			
Balance at 31/12/2018	13,680	1,572	5,114	20,366
Changes:				
Investments and loans granted	2,841	200	-	3,041
Disposals and repayments	-	-557	-	-557
Value changes	-	-	-	-
Share of profit (loss) of participating interests	3,636	-	-	3,636
Dividends	-3,150	-	-	-3,150
Change in deferred tax assets	-	-	31	31
Balance at 31/12/2019	**17,007**	**1,215**	**5,145**	**23,367**

A list of all direct and indirect participating interests of TNO is included in the notes to the company financial statements.

DEFERRED TAX ASSETS

	2019		2018
Balance as at 1 January	5,114		6,156
Change in difference between tax bases and carrying amounts of PP&E	31		-1,042
Balance as at 31 December	**5,145**		**5,114**

Deferred tax assets are stated at present value. For the present value calculation, an interest rate of 2.6% is used. The nominal value of deferred tax assets is EUR 11.2 million (2018: EUR 11.1 million). The present value of nominal deferred tax assets is EUR 8.6 million (2018: EUR 8.5 million).
Of the deferred tax assets, EUR 4.6 million is more than one year old (2018: EUR 4.4 million).
Due to the lack of a profit target and insufficient certainty, not all tax positions can be realised. The valuation of the deferred tax asset as at 31 December 2019 has been evaluated and set at EUR 5.1 million.

4 RECEIVABLES

	31/12/2019	31/12/2018
Contract receivables	40,441	41,589
Receivables from participating interests	300	1,523
Other receivables	1,481	3,190
Prepayments and accrued income	6,895	6,740
Total	**49,117**	**53,042**

Of the receivables, a sum of EUR 1.5 million (2018: EUR 0.4 million) has a term to maturity of more than one year. All prepayments and accrued income have a term to maturity of less than one year.

5 CASH AND CASH EQUIVALENTS

The balance of cash and cash equivalents as at year-end 2019 exceeds the special reserve for the construction of new defence buildings (see note 8).

6 GENERAL RESERVE

	2019	2018
Balance as at 1 January	208,711	190,762
Profit appropriation	12,096	17,949
Balance as at 31 December	**220,807**	**208,711**

7 STATUTORY RESERVE

	2019	2018
Balance as at 1 January	12,549	16,441
Change	2,850	-3,892
Balance as at 31 December	**15,399**	**12,549**

The change in statutory reserve concerns non-distributable profits from participating interests measured at net asset value.

8 SPECIAL RESERVES

	Balance at 31/12/2018	Withdrawn in 2019	Added in 2019	Balance at 31/12/2019
Civil operating risks	9,075	751	751	9,075
Construction of new defence buildings	17,587	4,676	5,110	18,021
Total	**26,662**	**5,427**	**5,861**	**27,096**

9 PROVISIONS

	Balance at 31/12/2018	Withdrawn in 2019	Added in 2019	Release in 2019	Balance at 31/12/2019
Employee and post-employment benefits	563	120	-	1	442
Jubilee provision	2,953	141	178	-	2,990
Claims	800	-	-	-	800
Restructurings	2,894	2,529	1,101	-	1,466
Redundancies	1,029	1,038	922	30	883
Other	4,659	589	2,816	92	6,794
Total	**12,898**	**4,417**	**5,017**	**123**	**13,375**

Of the other provisions, EUR 6.8 million concerns onerous tenancy contracts (2018: EUR 4.5 million).
Of the provisions, approximately EUR 5.8 million is long-term (2018: EUR 6.6 million).
Further information about the provisions can be found under the heading ‘Accounting policies’ in the notes to the consolidated financial statements for the year ended 31 December 2019.

10 LONG-TERM LIABILITIES

	31/12/2019	31/12/2018
Investment grants equalisation account	14,650	17,170
Other loans	6,803	6,720
Present value correction interest-free loans	-186	-
Total	**21,267**	**23,890**

INVESTMENT GRANTS EQUALISATION ACCOUNT

	2019	2018
Balance as at 1 January	17,170	19,758
Release in connection with disposals	-	-
Grants awarded	-	9
	17,170	**19,767**
Release added to profit (loss) for the year	-2,520	-2,597
Balance as at 31 December	**14,650**	**17,170**

Of the investments grants equalisation account, EUR 2.5 million has a term to maturity of less than one year (2018: EUR 2.5 million) and EUR 5.2 million has a term to maturity of more than five years (2018: EUR 5.9 million).

Of the other loans, EUR 3.3 million has a term to maturity of between one and five years (2018: EUR 3.8 million).
The remainder of the other loans, amounting to EUR 3.3 million, has a term to maturity of more than five years (2018: EUR 2.9 million).
No securities have been issued. The other loans are interest-free.

11 CURRENT LIABILITIES

	31/12/2019	31/12/2018
Payables	11,557	17,661
Amounts owed to participating interests	-	192
Taxes and social insurance contributions	22,152	17,418
Pensions	143	105
Holiday pay	8,513	8,049
Outstanding leave entitlement	15,472	14,643
Other liabilities	32,770	21,291
Accruals and deferred income	29,077	44,181
Accrued government funding	38,719	36,001
Projects in progress	42,580	39,389
Total	**200,983**	**198,930**

The other liabilities largely relate to costs accounted for in 2019 for which the settlement will take place in 2020. These current liabilities do not bear interest.
Accruals and deferred income largely relate to advances received in respect of specific research projects.
The accruals and deferred income for 2019 includes EUR 5.7 million in investments grants that will result in an expenditure in 2020, as well as EUR 23.4 million in project advances that must be transferred to third parties in 2020.
Of the accruals and deferred income, EUR 3.8 million has a term to maturity of more than one year (2018: EUR 5.8 million).
Accrued government funding includes EUR 14.4 million for assets under construction in Petten (2018: EUR 26.0 million).

TNO cannot claim back the VAT paid for non-economic activities and applies the pre-pro rata method. This method involved elements of estimation. In 2020, TNO will coordinate this calculation method with the tax authorities.

Projects in progress	**31/12/2019**		**31/12/2018**
Accumulated costs less provisions for losses and risks	224,760		261,166
Debit: Cumulative declared instalments	-267,340		-300,555
Total projects in progress	**-42,580**		**-39,389**
Balance of projects in progress > 0	127,614		122,958
Balance of projects in progress < 0	-170,194		-162,347
Advances received			
Total projects in progress	**-42,580**		**-39,389**

The item 'Projects in progress' includes a provision for losses and risks of EUR 5.3 million (2018: EUR 5.5 million).

FINANCIAL INSTRUMENTS

General

As part of its ordinary activities, TNO uses various financial instruments that expose TNO market and/or credit risks. These financial instruments, as well as forward exchange contracts and interest rate swaps for hedging future transactions, cash flows and interest rate risks, are recognised in the balance sheet. TNO does not trade in these financial instruments and has in place procedures and a code of conduct to limit the amount of credit risk to which it is exposed in respect of each counterparty or market. If a counterparty defaults on payments due to TNO, any risks arising from this default are limited to the market value of the relevant instruments. The contract value or notional principal amounts of the financial instruments serve only as an indication of the extent to which such financial instruments are used, and not of the amount of the credit or market risks.

Interest rate risk

The interest rate risk is limited to any changes in the market value of the loans drawn and loans granted and cash and cash equivalents. The interest rate risk for the cash and cash equivalents concerns the risk of fluctuations in the fair value of the future cash flows of financial instruments due to changes in market interest rates. As the current cash position does not bear fixed interest at fixed rates, TNO is not exposed to interest rate risk on this position.
It is preferable for all loans to have a fixed interest rate throughout their term to maturity. Where this is not the case, the policy of TNO is to use derivative financial instruments to control (interim) interest rate fluctuations.The loans are held to maturity.

Credit risk

TNO runs a credit risk by virtue of transactions. This risk relates to the loss that may occur when a counter party remains in default. This risk is limited due to the large number and diversity of parties from which TNO's receivables are due.
There is only a concentration of credit risk in terms of the geographic distribution of the outstanding receivables, which is concentrated in the Netherlands. TNO has spread its risk over various banks.

Market value

The market value of most of the financial instruments recognised in the balance sheet, including loans granted (other) receivables, cash and cash equivalents and trade and other payables, approximates their carrying amount. TNO has remeasured all individual contracts by recalculating from the price at the date of inception to the price at the balance sheet date. The hedged position at the balance sheet date (EUR 13.9 million) and at the date of inception (EUR 13.6 million) is included in the notes.
The market value of the outstanding USD forward contracts is EUR 5.0 million, the contract value is EUR 5.0 million (2018: EUR 7.9 and EUR 7.6 million respectively). The market value of the outstanding GBP forward contracts is EUR 0.2 million, the contract value is EUR 0.2 million (2018: EUR 1.1 and EUR 1.1 million respectively). The market value of the outstanding JPY forward contracts is EUR 8.7 million, the contract value is EUR 8.4 million.

As at 31 December 2019, the total of operational lease obligations for the 2020-2024 period is approximately EUR 4.1 million (2018: EUR 3.4 million), of which a sum of EUR 1.7 million will lapse in 2020 (2019: EUR 1.6 million), and EUR 2.4 million between one and five years (2018: EUR 1.8 million). In 2019, the amount of paid operational lease was EUR 2.5 million (2018: EUR 1.8 million).

The total of rental obligations is EUR 60.9 million (2018: EUR 55,9 million), of which a sum of EUR 12.8 million (2018: EUR 12.1 million) has a term of maturity of less than one year, EUR 37.1 million (2018: EUR 33,6 million) lapses between one and five years and EUR 11.0 million (2018: EUR 10.2 million) after five years. In 2019, the amount of paid rent was EUR 14.2 million (2018: EUR 12.5 million).

As at 31 December 2019, investment obligations in respect of property, plant and equipment totalled EUR 4.2 million (2018: EUR 3.2 million).

The total of bank guarantees issued is EUR 0.3 million (2018: EUR 0.3 million). The total credit facility and bank guarantee facility amount to EUR 13.3 million (2018: EUR 13.3 million) and EUR 11.0 million (2018: EUR 11.0 million).

Other securities and conditions for the total credit facility consist of:
– negative pledge/pari passu and cross-default covenant;
– joint liability agreement security type: RC plus one party.
The total security deposits at year-end 2019 was nil (2018: nil).
TNO is currently a litigant in various legal proceedings that relate to its ordinary activities. TNO does not expect that the total liabilities arising from these proceedings will be of material significance to its financial position.

Provisions have been recognised for all disputes and legal proceedings based on the nominal value of the expenditures that are expected to be required to settle the liabilities and losses.

NOTES TO THE CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2019

(in thousands of euros)

12 REVENUE

	2019	2018
Contract revenue	292,085	266,663
Government funding	242,646	216,323
Total	**534,731**	**482,986**

Revenue includes the change to projects in progress of EUR 3.2 million negative (2018: EUR 5.4 million negative).

CONTRACT REVENUE

Contract revenue breaks down by category as follows:

		2019		2018
Domestic contract revenue				
Government	101,990		89,307	
Industry	91,638		83,114	
Total domestic contract revenue		**193,628**		**172,421**
International contract revenue				
International organisations	26,978		24,912	
Other	71,479		69,330	
Total international contract revenue		**98,457**		**94,242**
Total		**292,085**		**266,663**

13 OTHER OPERATING INCOME

	2019	2018
Gain (loss) on disposals of property, plant and equipment	3,008	5,817
Other income	16,192	16,111
Total	**19,200**	**21,928**

Other income includes, among other things, income from licences and patents, non-project-related income and costs passed on externally.

14 DIRECT PROJECT COSTS

	2019	2018
Accommodation and energy costs	43	987
Materials	19,532	19,014
Use of operating assets	4,126	2,679
General administrative expenses	7,020	6,352
Outsourced work	48,629	48,527
Other expenses	539	1,066
Total	**79,889**	**78,625**

Direct costs are defined as the tangible costs (including costs of outsourced work) that are directly attributable to a project.
The general administrative expenses include approximately EUR 4.8 million (2018: EUR 5.3 million) in directly attributable travel and accommodation costs.

15 PERSONNEL EXPENSES

	2019	2018
Wages and salaries	219,767	202,688
Pension costs	26,249	24,215
Other social expenses	32,144	28,250
Other personnel expenses	62,896	56,469
Change in outstanding leave entitlement	772	-147
Utilisation and release of provisions:		
- employee and post-employment benefits	-121	-84
- jubilee	-141	-
- redundancies	-1,068	-1,122
- restructurings	-2,529	-3,087
	337,969	**307,182**
Addition to provisions:		
- employee and post-employment benefits	-	44
- jubilee	178	268
- restructurings	1,101	4,526
- redundancies	922	1,169
Total	**340,170**	**313,189**

The average number of FTEs in 2019 is 3,081, 20 of which outside the Netherlands (2018: 2,865, of which 28 outside the Netherlands). The remuneration, including pension contributions, of the members of TNO’s Board of Management totalled EUR 0.7 million (2018: EUR 0.8 million).
The remuneration of the members of TNO’s Supervisory Board totalled EUR 0.1 million (2018: EUR 0.1 million).

As at 31 December 2019, the preliminary policy coverage ratio of Stichting Pensioenfonds TNO (12-month rolling average of the market value of the plan assets expressed as a percentage of the defined benefit obligation according to the accounting policies of the Dutch central bank) came to 107.1%.
As the preliminary policy coverage is below 110% (this is the statutory lower limit to be able to index), no indexation can be allocated. The missed indexation for 2019 of 1.73% can be added to the total of missed indexations. The total premium for 2020 has been set at 18.2% of the wage sum, like last year. This includes the fixed additional premium of 0.3%.

16 DEPRECIATION

	2019	2018
Depreciation of:		
- buildings	2,365	1,665
- plant and equipment	8,766	9,037
- other operating assets	13,260	10,315
- fixtures and fittings	949	809
- property, plant and equipment not used in operations	883	-
	26,223	**21,826**
Release from:		
- investment grants equalisation account	-2,520	-2,597
Total	**23,703**	**19,229**

17 OTHER OPERATING EXPENSES

	2019	2018
Accommodation costs	38,863	36,483
Costs of materials	2,742	5,138
Use of operating assets	11,548	10,526
General administrative expenses	22,863	21,423
Outsourced work	11,315	7,746
Changes in provisions	2,136	2,038
Other expenses	2,941	1,779
Contributions paid	1,037	1,379
Total	**93,445**	**86,512**

18 FINANCE INCOME AND EXPENSES

	2019	2018
Interest income	515	322
Interest expenses	-938	-638
Exchange differences	-126	42
Total	**-549**	**-274**

19 CORPORATION TAX

	2019	2018
Tax expense		
Current financial year	3,979	958
Previous financial year	-	-144
Deferred tax		
Change in deferred tax assets	-31	1,042
Total	**3,948**	**1,856**

When TNO first became liable for corporation tax, the opening tax balance sheet was prepared on the basis of the applicable tax accounting policies. Deferred tax assets were formed for the difference between the valuation on the fiscal balance sheet (tax base) and the balance sheet for reporting purposes (commercial carrying amount). The commercial valuation is lower than the fiscal valuation, which results in deferred tax assets of EUR 5.1 million (2018: EUR 5.1 million).

The reconciliation between the Dutch nominal tax rate and effective tax rate is as follows:

	2019	2018
Nominal tax rate in the Netherlands	25.0%	25.0%
Non-tax-deductible items	0.2%	2.6%
Effective current tax burden	**25.2%**	**27.6%**

20 SHARE OF PROFIT (LOSS) OF PARTICIPATING INTERESTS

	2019	2018
Participating interests:		
- Non-consolidated participating interests	3,636	-3,892
- Disposal of participating interests	-	-
Total	**3,636**	**-3,892**

21 AUDITOR'S FEES

The following fees as referred to in Section 2:382a of the Dutch Civil Code were charged to TNO, its subsidiaries and other consolidated companies by Ernst & Young.

	2019	2018
Audit of the financial statements	240	225
Other audit engagements	247	115
Total	**487**	**340**

22 SUBSEQUENT EVENTS

The corona crisis is a major subsequent event which is more than likely to have an impact on TNO's financial performance in 2020. It is currently too early to establish the exact financial consequences. With a view to the current liquidity and equity position, TNO's continuity is unlikely to be jeopardised.

BALANCE SHEET OF TNO AS AT 31 DECEMBER 2019

(in thousands of euros)

after profit appropriation

		31/12/2019		31/12/2018	
Fixed assets					
Intangible assets	1	3,882		4,352	
Property, plant and equipment	2	189,526		177,812	
Financial assets	3	86,638		85,097	
			280,046		**267,261**
Current assets					
Inventories		495		591	
Receivables	4	49,008		53,428	
Cash and cash equivalents		168,062		161,146	
			217,565		**215,165**
Total			**497,611**		**482,426**
Equity					
General reserve		220,807		208,711	
Statutory reserve		15,399		12,549	
Special reserves		27,096		26,662	
	5		**263,302**		**247,922**
Provisions	6		13,375		12,898
Long-term liabilities	7		21,267		23,890
Current liabilities	8		199,667		197,716
Total			**497,611**		**482,426**

INCOME STATEMENT OF TNO FOR THE YEAR ENDED 31 DECEMBER 2019

(in thousands of euros)

			2019		2018
Domestic and international contract revenue		189,937		176,607	
Contract revenue government		101,990		89,307	
Market sales			291,927		265,914
Government funding			242,646		216,323
Revenue	9		**534,573**		**482,237**
Other operating income			18,507		21,660
Total operating income			**553,080**		**503,897**
Direct project costs		-80,226		-78,181	
Personnel expenses	10	-339,818		-312,844	
Amortisation		-470		-353	
Depreciation		-21,637		-18,855	
Impairment losses property, plant and equipment		-1,694		-	
Other operating expenses		-92,931		-85,888	
Total operating expenses			**-536,776**		**-496,121**
Operating profit (loss)			**16,304**		**7,776**
Finance income and expenses	11		-31		-48
Profit (loss) from ordinary activities before tax			**16,273**		**7,728**
Corporation tax	12		-3,847		-1,853
Share of profit (loss) of participating interests			2,954		-4,851
Net profit (loss)			**15,380**		**1,024**

CASH FLOW STATEMENT OF TNO FOR THE YEAR ENDED 31 DECEMBER 2019

(in thousands of euros)

		2019		2018
Operating profit (loss)	16,304		7,776	
Amortisation	470		353	
Depreciation	23,331		18,855	
Gain (loss) on disposal of fixed assets	-3,008		-5,817	
Change in provisions	477		3,752	
Change in working capital, excl. cash and cash equivalents	4,001		60,021	
Cash flow from business operations	**41,575**		**84,940**	
Interest received	465		331	
Interest paid	-614		-493	
Corporation tax	-2,516		-2,780	
Cash flow from operating activities		**38,910**		**81,998**
Investments in intangible assets	-		103	
Investments in property, plant and equipment	-41,861		-40,336	
Investments in financial assets	-165		-	
Investments in acquisitions	-		-8,900	
Disposals of property, plant and equipment	7,703		21,061	
Repayments received	1,609		10,517	
Cash flow from investing activities		**-32,714**		**-17,555**
Loans drawn	971		1,456	
Repayments on loans	-255		-117	
Cash flow from financing activities		**716**		**1,339**
Cash flow for financial year		**6,912**		**65,782**
Cash and cash equivalents as at 1 January		161,146		95,322
Cash flow for financial year		6,912		65,782
Exchange differences		4		42
Cash and cash equivalents as at 31 December		**168,062**		**161,146**

ACCOUNTING POLICIES

General

For the accounting policies,
reference is made to the consolidated financial statements. This also applies to other notes, to the extent they are not included below.

NOTES TO THE BALANCE SHEET OF TNO AS AT 31 DECEMBER 2019

(in thousands of euros)

1 INTANGIBLE ASSETS

Changes in intangible assets in 2019:

	Goodwill	Software	Total
Balance at 31/12/2018			
Cost of acquisition	4,705	-	4,705
Accumulated depreciation and impairment	-353	-	-353
Carrying amount	**4,352**	**-**	**4,352**
Change in carrying amount			
Investments	-	-	-
Disposals	-	-	-
Amortisation	-470	-	-470
	-470	**-**	**-470**
Balance at 31/12/2019			
Cost of acquisition	4,705	-	4,705
Accumulated depreciation and impairment	-823	-	-823
Carrying amount	**3,882**	**-**	**3,882**

On 1 April 2018, TNO took over the energy activities of Stichting Energieonderzoek Centrum Nederland (NRG) for a purchase price of EUR 9.9 million and EUR 2.5 million for the working capital. On 1 October 2018, the activities from the Energy Engineering & Environment unit were returned from TNO to NRG. This involved a price of EUR 1.0 million and EUR 0.9 million for the working capital. The acquisition was measured according to the purchase accounting method. The fair value of the net assets and liabilities taken over amounted to EUR 4.2 million, including working capital. The amount in goodwill is EUR 4.7 million, which will be depreciated over a 10-year period.

The carrying amount of the acquired working capital corresponds to its fair value. As at 31 December 2019, there was no reason for an impairment loss.

2 PROPERTY, PLANT AND EQUIPMENT

Changes in property, plant and equipment in 2019:

	Land and buildings	Plant and equipment	Other operating assets	Fixtures and fittings	Assets under construction and development	Property, plant and equipment not used in operations	Total
Balance at 31/12/2018							
Cost of acquisition	116,090	123,282	129,237	9,624	49,088	30,772	458,093
Accumulated depreciation and impairment	-83,715	-74,211	-95,375	-5,228	-	-21,752	-280,281
Carrying amount	**32,375**	**49,071**	**33,862**	**4,396**	**49,088**	**9,020**	**177,812**
Change in carrying amount							
Investments	27,713	19,033	17,797	2,020	-	363	66,926
Disposals	-4,137	-84	-53	-195	-	-	-4,469
Impairment losses	-333	-394	-897	-70	-	-	-1,694
Amortisation	-2,032	-8,372	-11,991	-879	-	-883	-24,157
Assets under construction and development recognised in financial year	-	-	-	-	-55,654	-	-55,654
Disposal of assets under construction	-	-	-	-	-226	-	-226
Assets under construction, new investments in 2019	-	-	-	-	30,988	-	30,988
	21,211	**10,183**	**4,856**	**876**	**-24,892**	**-520**	**11,714**
Balance at 31/12/2019							
Cost of acquisition	139,666	140,453	132,099	9,655	24,196	31,135	477,204
Accumulated depreciation and impairment	-86,080	-81,199	-93,381	-4,383	-	-22,635	-287,678
Carrying amount	**53,586**	**59,254**	**38,718**	**5,272**	**24,196**	**8,500**	**189,526**

The depreciation expense presented in the income statement also includes the release from the investments grants equalisation account. The carrying amount of property, plant and equipment as at 31 December 2019 includes land, buildings and plant for a sum of EUR 23.4 million (2018: EUR 27.0 million), of which TNO only has economic ownership. This relates to investments in rented premises.

3 FINANCIAL ASSETS

	Group companies	Participating interests	Loans	Deferred tax assets	Total
	Share in equity	Share in equity			
Balance at 31/12/2018	**53,898**	**-**	**26,085**	**5,114**	**85,097**
Changes:					
Investments and loans granted	-	-	165	-	165
Disposals and repaid loans	-	-	-1,609	-	-1,609
Share of profit (loss) of participating interests	2,954	-	-	-	2,954
Change in deferred tax assets	-	-	-	31	31
Balance at 31/12/2019	**56,852**	**-**	**24,641**	**5,145**	**86,638**

Of the loans item, EUR 23.6 million relates to loans to group companies (2018: EUR 24.5 million).
Of the loans, EUR 23.0 million has a term to maturity of more than one year (2018: EUR 24.5 million).

DEFERRED TAX ASSETS

	2019	2018
Balance as at 1 January	5,114	6,156
Change in difference between tax bases and carrying amounts of PP&E	31	-1,042
Balance as at 31 December	**5,145**	**5,114**

Deferred tax assets are stated at present value. For the present value calculation, an interest rate of 2.6% is used. The nominal value of deferred tax assets is EUR 11.2 million (2018: EUR 11.1 million). The present value of nominal deferred tax assets is EUR 8.6 million (2018: EUR 8.5 million).
Of the deferred tax assets, EUR 4.6 million is more than one year old (2018: EUR 4.4 million).
Due to the lack of a profit target and insufficient certainty, not all tax positions can be realised. The valuation of the deferred tax asset as at 31 December 2019 has been evaluated and set at EUR 5.1 million.

4 RECEIVABLES

	31/12/2019	31/12/2018
Contract receivables	39,910	41,219
Receivables from group companies	584	811
Receivables from participating interests	300	1,523
Other receivables	1,319	3,135
Prepayments and accrued income	6,895	6,740
Total	**49,008**	**53,428**

Of the receivables, EUR 1.5 million has a term to maturity of more than one year (2018: EUR 0.4 million). All prepayments and accrued income have a term to maturity of less than one year.

5 EQUITY

For information on TNO's equity, please refer to the 'Equity' item in the notes to the consolidated financial statements.

6 PROVISIONS

	Balance at 31/12/2018	Withdrawn in 2019	Added in 2019	Release in 2019	Balance at 31/12/2019
Employee and post-employment benefits	563	120	-	1	442
Jubilee provision	2,953	141	178	-	2,990
Claims	800	-	-	-	800
Restructurings	2,894	2,529	1,101	-	1,466
Redundancies	1,029	1,038	922	31	882
Other	4,659	589	2,816	91	6,795
Total	**12,898**	**4,417**	**5,017**	**123**	**13,375**

Of the other provisions, EUR 6.8 million concerns onerous contracts (2018: EUR 4.5 million).
Of the provisions, approximately EUR 5.8 million is long-term (2018: EUR 6.6 million).

7 LONG-TERM LIABILITIES

	31/12/2019	31/12/2018
Investment grants equalisation account	14,650	17,170
Other loans	6,803	6,720
Present value correction interest-free loans	-186	-
Total	**21,267**	**23,890**

Of the investments grants equalisation account, EUR 2.5 million has a term to maturity of less than one year (2018: EUR 2.5 million) and EUR 5.2 million has a term to maturity of more than five years (2018: EUR 5.9 million). No securities have been issued.
The other loans are interest-free. Of the other loans, EUR 3.3 million has a term to maturity of between one and five years (2018: EUR 3.8 million).
The remainder of the other loans, amounting to EUR 3.3 million, has a term to maturity of more than five years (2018: EUR 2.9 million).

8 CURRENT LIABILITIES

	31/12/2019	31/12/2018
Payables	11,518	17,625
Amounts owed to group companies	113	25
Amounts owed to participating interests	-	192
Taxes and social insurance contributions	22,059	17,444
Holiday pay	8,513	8,047
Outstanding leave entitlement	15,472	14,643
Other liabilities	31,658	20,169
Accruals and deferred income	29,077	44,181
Accrued government funding	38,719	36,001
Projects in progress	42,538	39,389
Total	**199,667**	**197,716**

The other liabilities largely relate to costs accounted for in 2019 for which the settlement will take place in 2020. These current liabilities do not bear interest. The accruals and deferred income largely relate to advances received in respect of specific research projects. Of the accruals and deferred income, EUR 3.8 million has a term to maturity of more than one year (2018: EUR 5.8 million).
TNO cannot claim back the VAT paid for non-economic activities and applies the pre-pro rata method. This method involved elements of estimation.
In 2020, TNO will coordinate this calculation method with the tax authorities.

PROJECTS IN PROGRESS

	31/12/2019	31/12/2018
Accumulated costs less provisions for losses and risks	224,760	261,166
Debit: Cumulative declared instalments	-267,298	-300,555
Total projects in progress	**-42,538**	**-39,389**
Balance of projects in progress > 0	127,614	122,958
Balance of projects in progress < 0	-170,152	-162,347
Advances received	-	-
Total projects in progress	**-42,538**	**-39,389**

The item ‘Projects in progress’ includes a provision for losses and risks of EUR 5.3 million (2018: EUR 5.5 million).

NOTES TO THE INCOME STATEMENT OF TNO FOR THE YEAR ENDED 31 DECEMBER 2019

(in thousands of euros)

9 REVENUE

		2019		2018
Domestic contract revenue industry		91,481		82,879
Contract revenue international organisations	26,977		24,912	
International contract revenue	71,479		68,816	
Total international contract revenue		98,456		93,728
Contract revenue government		101,990		89,307
Market sales		**291,927**		**265,914**
Government funding		**242,646**		**216,323**
Total		**534,573**		**482,237**

Revenue includes the change to projects in progress of EUR 3.1 million negative (2018: EUR 5.4 million negative).

10 PERSONNEL EXPENSES

	2019	2018
Wages and salaries	219,528	202,492
Pension costs	26,249	24,215
Other social expenses	32,079	28,202
Other personnel expenses	62,848	56,368
Change in outstanding leave entitlement	772	-147
Changes in provisions	-1,658	1,714
Total	**339,818**	**312,844**

The average number of FTEs for 2019 is 3,079, 18 of which outside the Netherlands (2018: 2,860, of which 24 outside the Netherlands).
The remuneration, including pension contributions, of the members of TNO’s Board of Management totalled EUR 0.7 million (2018: EUR 0.8 million).
The remuneration of the members of TNO’s Supervisory Board totalled EUR 0.1 million (2018: EUR 0.1 million).

11 FINANCE INCOME AND EXPENSES

	2019	2018
Interest income	599	400
Interest expenses	-634	-490
Exchange differences	4	42
Total	**-31**	**-48**

12 CORPORATION TAX

	2019	2018
Tax expense		
Current financial year	3,878	955
Previous financial year	-	-144
Deferred tax		
Change in deferred tax assets	-31	1,042
Total	**3,847**	**1,853**

When TNO first became liable for corporation tax, the opening tax balance sheet was prepared on the basis of the applicable tax accounting policies. Deferred tax assets were formed for the difference between the valuation on the fiscal balance sheet (tax base) and the balance sheet for reporting purposes (commercial carrying amount). The commercial valuation is lower than the fiscal valuation, which results in deferred tax assets of EUR 5.1 million (2018: EUR 5.1 million).

The reconciliation between the Dutch nominal tax rate and effective tax rate is as follows:

	2019	2018
Nominal tax rate in the Netherlands	25.0%	25.0%
Non-tax-deductible items	-1.4%	-1.0%
Effective tax burden	**23.6%**	**24.0%**

The taxable profit for 2019 amounted to EUR 15.5 million. This taxable profit results in a current tax burden of EUR 3.9 million (i.e. 25%).

13 SUBSEQUENT EVENTS

The corona crisis is a major subsequent event which is more than likely to have an impact on TNO's financial performance in 2020. It is currently too early to establish the exact financial consequences. With a view to the current liquidity and equity position, TNO's continuity is unlikely to be jeopardised.

REPORT OF TNO ON COMPLIANCE WITH STANDARDS FOR REMUNERATION (WNT) FOR 2019

The Senior Officials in the Public and Semi-Public Sector (Standards for Remuneration) Act (WNT) came into effect on 1 January 2013. This compliance report has been prepared based on the following regulation applicable to TNO: the general maximum remuneration under the WNT (WNT maximum).
The maximum remuneration for TNO in 2019 was EUR 194,000.00. This has been determined on the basis of the Reduction of Maximum Remuneration (WNT) Act (*Wet verlaging bezoldigings maximum WNT*), which came into effect on 1 January 2015.
The applicable WNT maximum shown per person or per position is calculated in proportion to the working hours under the employment contract (and for senior officials also the period of service), with the proviso that the employment may not exceed 1.0 FTE for the purposes of this calculation. An exception is the WNT maximum for members of the Supervisory Board: 15% of the maximum remuneration for the chair and 10% for the other members.

REMUNERATION OF SENIOR OFFICIALS
1. Senior management officials

Amounts x EUR 1	P. de Krom	F. Marring	W. Nagtegaal	M.G.L.H. Tossings	Prof. P.J. Werkhoven
Job details	Member of Board of Management (Chair)	Member of the Board of Management	Member of the Board of Management	Member of the Board of Management	Member of the Board of Management
Start and end job performance in 2019	01/01 - 31/12	01/01 - 31/12	01/01 - 12/1	15/3 - 31/12	1/5 - 31/12
Employment in FTEs	1.0	1.0	1.0	1.0	1.0
Employed?	yes	yes	yes	yes	yes
Remuneration					
Remuneration plus taxable expense allowances	179,915.68	202,804.01	7,653.46	136,472.34	113,915.60
Long-term and post-employment benefits	11,419.08	11,419.08	349.21	9,062.76	7,612.72
Subtotal	**191,334.76**	**214,223.09**	**8,002.67**	**145,535.10**	**121,528.32**
Applicable individual maximum remuneration	194,000.00	194,000.00	6,378.08	155,200.00	130,219.18
-/- amount paid in excess of statutory maximum that has not been refunded yet	n/a	n/a	n/a	n/a	n/a
Remuneration 2019	**191,334.76**	**214,223.09**	**8,002.67**	**145,535.10**	**121,528.32**
Reason why the transgression is permitted or not		1	2		
Further information about the claim for undue payment	n/a	n/a	n/a	n/a	n/a

1. On account of joining the company before 1 January 2015, this falls under transitory law in accordance with Article 7.3 in conjunction with 7.3a of the Reduction of Maximum Remuneration (WNT) Act. Accordingly, the scaling back of their maximum remuneration will start 4 years after 1 January 2015, the effective date of the Reduction of Maximum Remuneration (WNT) Act, so with effect from 1 January 2019. The remuneration agreements for Ms Marring pre-date the entry into force of the WNT II. Ms Marring is subject to transitory law phase B. The year 2019 is the first phasing out year. To determine the phasing out in 2019, Article 11a of the policy rules was observed.
2. Payment regarding EUR 4.244,80 if holiday pay entitlements for the period between 1 June 2018 and 31 December 2018. The (subsequent) payment received is allocated to the previous calendar year (2018) which this relates to, based on Article 3.2 of the WNT implementing regulation.
3. The identified senior officials in the Board of Management of TNO are not employed as senior management officials at multiple institutions that fall under the WNT (under employment contracts entered into effective from 1 January 2018).

DETAILS FOR 2018

Amounts x EUR 1	P. de Krom	F. Marring	W. Nagtegaal
Job details	Member of Board of Management (Chair)	Member of the Board of Management	Member of the Board of Management
Start and end job performance in 2018	01/01 - 31/12	01/01 - 31/12	01/01 - 31/12
Employment in FTEs	1.0	1.0	1.0
Employed?	yes	yes	yes
Remuneration			
Remuneration plus taxable expense allowances	175,169.60	204,944.79	112,628.04
Long-term and post-employment benefits	11,098.56	11,098.56	11,098.56
Total remuneration for 2018	**186,268.16**	**216,043.35**	**123,726.60**
Applicable individual maximum remuneration	189,000.00	189,000.00	189,000.00
Remuneration	**186,268.16**	**216,043.35**	**123,726.60**

Senior officials in Supervisory Board (1)

Amounts x EUR 1	C.A. Linse	I.G.C. Faber MBA	I.H.J. Vanden Berghe	J.D. Lamse-Minderhoud RA	Prof. P.P.C.C. Verbeek	P.J.M. van Laarhoven
Job details	Member of Supervisory Board (Chair)	Member of Supervisory Board	Member of Supervisory Board	Member of Supervisory Board	Member of Supervisory Board	Member of Supervisory Board
Start and end job performance 2019	01/01 - 30/06	01/01 - 30/09	01/01 - 31/12	01/01 - 31/12	01/01 - 31/12	01/01 - 31/12
Remuneration						
Remuneration	13,548.00	13,041.00	17,388.00	17,388.00	17,388.00	17,388.00
Applicable individual maximum remuneration	14,430.41	14,510.14	19,400.00	19,400.00	19,400.00	19,400.00
-/- amount paid in excess of statutory maximum that has not been refunded yet	n/a	n/a	n/a	n/a	n/a	n/a
Total remuneration for 2019	**13,548.00**	**13,041.00**	**17,388.00**	**17,388.00**	**17,388.00**	**17,388.00**
Reason why the transgression is permitted or not	n/a	n/a	n/a	n/a	n/a	n/a
Further information about the claim for undue payment	n/a	n/a	n/a	n/a	n/a	n/a

DETAILS FOR 2018

Amounts x EUR 1

Job details	Member of Supervisory Board (Chair)	Member of Supervisory Board	Member of Supervisory Board	Member of Supervisory Board	Member of Supervisory Board	Member of Supervisory Board
Start and end job performance 2018	01/01 - 31/12	01/01 - 31/12	01/01 - 31/12	01/01 - 31/12	01/01 - 31/12	01/01 - 31/12
Remuneration						
Total remuneration for 2018	**26,340.00**	**16,896.00**	**16,896.00**	**16,896.00**	**16,692.00**	**16,896.00**
Applicable individual maximum remuneration	28,350.00	18,900.00	18,900.00	18,900.00	18,900.00	18,900.00

Senior officials in Supervisory Board (2)

Amounts x EUR 1	Prof. H. Bijl	P.G. de Vries	L. Verheij van Wijk
Job details	Member of Supervisory Board	Member of Supervisory Board (Chair)	Member of Supervisory Board
Start and end job performance 2019	01/01 - 31/12	1/7 - 31/12	1/10 - 31/12
Remuneration			
Remuneration plus taxable expense allowance	17,388.00	13,548.00	4,347.00
Applicable individual maximum remuneration	19,400.00	14,669.59	4,889.86
-/- amount paid in excess of statutory maximum that has not been refunded yet	n/a	n/a	n/a
Total remuneration for 2019	**17,388.00**	**13,548.00**	**4,347.00**
Reason why the transgression is permitted or not	n/a	n/a	n/a
Further information about the claim for undue payment	n/a	n/a	n/a

DETAILS FOR 2018

Amounts x EUR 1

Job details	Member of Supervisory Board
Start and end job performance 2018	1/9 - 31/12
Remuneration	
Total remuneration for 2018	**5,632.00**
Applicable individual maximum remuneration	6,300.00

2. TERMINATION BENEFITS AWARDED TO CURRENT AND FORMER SENIOR OFFICIALS

Amounts x EUR 1	Prof. J.T.F. Keurentjes
Job details	
Position(s) held at termination of employment	Member of Board of Management
Employment in FTEs	1.0
Year of termination of employment	2018
Benefits on account of termination of employment	
Agreed termination benefits	75,000.00
Individual WNT maximum	**75,000.00**
Total termination benefits awarded	**75,000.00**
of which paid in 2019	75,000.00
-/- amount paid in excess of statutory maximum that has not been refunded yet	n/a
Reason why the transgression is permitted or not	n/a
Further information about the claim for undue payment	n/a

3. REMUNERATION OF NON-SENIOR OFFICIALS The maximum remuneration does not apply to these officials. Disclosure of their remuneration is mandatory, however.

Amounts x EUR 1

Job details	Director	Director	Senior Scientist
Start and end job performance in 2019	01/01 - 31/12	01/01 - 31/12	01/01 - 31/12
Employment in FTEs	1.0	1.0	0.05
Remuneration			
Remuneration plus taxable expense allowances	193,461.42	205,172.63	10,538.24
Long-term and post-employment benefits	11,419.08	11,419.08	570.96
Total remuneration for 2019	**204,880.50**	**216,591.71**	**11,109.20**
Applicable individual remuneration threshold	194,000.00	194,000.00	9,700.00
Compulsory explanation for the transgression of the applicable individual remuneration threshold	a	a	a

a. The WNT does not apply to these senior officials. Disclosure of their remuneration is mandatory, however. The reasons for the transgression of the remuneration threshold are remuneration agreements made when the officials are appointed.

DETAILS FOR 2018

Amounts x EUR 1

Job details	Director	Director	Senior Scientist
Start and end job performance	01/01 - 31/12	01/01 - 31/12	1/4 - 31/12
Employment in FTEs	1.0	1.0	0.05
Remuneration			
Remuneration plus taxable expense allowances	204,591.12	202,322.52	7,475.20
Long-term and post-employment benefits	11,098.56	11,098.56	416.16
Total remuneration for 2018	**215,689.68**	**213,421.08**	**7,891.36**

DETAILS OF PARTICIPATING INTERESTS

AS AT YEAR-END 2019, TNO HAD DIRECT PARTICIPATING INTERESTS IN THE FOLLOWING ENTITIES

Name	Registered office	%
TNO International Holding BV	Delft	100%
– TNO Japan K.K. / TNO Japan Co. Ltd	Yokohama	100%
– TNO Singapore CLG LTD	Singapore	100%
– ECN Beijing New Energy Technologies Co, Ltd	Beijing	100%
TNO Affiliates Holding BV	Delft	100%
– TNO Heimolen BV	Bergen op Zoom	100%
– TNO Powertrain Test Services BV	Delft	100%
– Sunlab BV	Petten	100%
– ECN-Ambigo BV	Petten	100%
TNO Tech Transfer Holding BV	Delft	100%

THE FOLLOWING ENTITIES ARE NOT CONSOLIDATED

Name	Registered office	%
Yes!Delft BV	Delft	20%
MILENA-OLGA Joint Innovation BV	Amsterdam	50%
Warmtebron LEAN BV	Schiedam	3%
Nearfield Instruments BV	Delft	26%
Bibo Innovations BV	Maastricht	32%
Tiledmedia BV	Rotterdam	7%
Innovation Industries Fund Coöperatief UA	Enschede	2%
Solar Visuals BV	Alkmaar	33%
LeydenJar Technologies BV	Oegstgeest	5%
Blue Hart Energy BV	Alkmaar	10%
MorePV BV	Schoorl	6%
TBQ BV	Delft	27%
Gexcon Netherlands BV	Utrechtse Heuvelrug	30%
Sightlabs BV	Amsterdam	20%
First Dutch Innovations BV	Delft	45%
Solaroad BV	Delft	40%
SALDTech BV	The Hague	34%
TrustTester Solutions BV	Naarden	25%
CollaneX Therapeutics BV	Voorhout	20%
Delta Diagnostics BV	Rotterdam	20%
Valley Optics Holding BV	Delft	17%
SHM Next BV	The Hague	21%
AMSYSTEMS BV	Eindhoven	25%

Also, by the end of 2019, TNO will have one branch office in Singapore.

Delft, 8 April 2020

PROFIT APPROPRIATION

The TNO Guidelines for Financial Reporting issued by the Ministry of Education, Culture and Science stipulated in Article 4: Reserves are formed as part of the appropriation of the profit. As part of the appropriation of the profit, special reserves may be formed or existing special reserves may be updated. The updates may be additions or withdrawals. For example, a special reserve may be formed for future expenditures or expenses as part of the appropriation of the profit (loss) for the year. Any recognition of special reserves must take place on the basis of concrete policy plans and concrete financing plans. In addition, withdrawals may be made for purposes for which the special reserves were originally recognised, such as for expenditures made in the financial year. Expenditures that qualify as costs which exclusively relate to the relevant financial year are charged to the income statement for the relevant year. Expenditures that qualify as investments in knowledge development are capitalised.

The amortisation costs related to this investment are systematically charged to the income statement. As part of the appropriation of the profit (loss) for the year, an amount equal to the aforementioned amortisation costs or expenditures that qualify as costs in the financial year must be withdrawn from the special reserves.

INDEPENDENT AUDITOR'S REPORT

To: Supervisory Board and Board of Management of Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek TNO

REPORT ON THE FINANCIAL STATEMENTS FOR 2019

Our opinion
We have audited the financial statements for 2019 of the Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek (hereinafter 'TNO') in Delft.

We believe that the financial statements included in this annual report represent the extent and composition of the assets of TNO as at 31 December 2019 and the profit (loss) for 2019 in accordance with the TNO Guidelines for Financial Reporting issued by the Ministry of Education, Culture and Science, the additional order of 21 April 2004, reference OWB/FO/2004/8195, and the provisions of and by virtue of the Public and Semi-Public Sector (Standards for Remuneration) Act (WNT).

The financial statements comprise:
1. the consolidated and company balance sheet as at 31 December 2019;
2. the consolidated and company income statement for the year ended 31 December 2019; and
3. the notes, comprising a summary of the accounting policies and other explanatory information.

Basis for our opinion
We conduced our audit in accordance with Dutch law, including the Dutch Standards on Auditing, the TNO Auditing Protocol and the WNT Auditing Protocol 2019. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report.

We are independent of TNO in accordance with the Independence of Accountants in Assurance Engagements Regulation (Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO)) and other Dutch independence rules relevant to the engagement. Furthermore, we have complied with the Regulation on the Code of Conduct and Professional Practice for Auditors (Verordening gedrags- en beroepsregels accountants (VGBA)).

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of corona-related developments
The developments in connection with the coronavirus (COVID-19) have a major impact on our health and society, as well as on the operational and financial performances of organisations and the assessment of the possibility to maintain continuity. The financial statements and our auditor's report are based on the conditions as at the day on which they were prepared and the situation changes day by day. The impact of these developments on TNO are set out in the management report on pages 7, 12 and 54 and in the notes to the financial statements, under 'subsequent events' (see page 27 for the consolidated financial statements and page 38 for the company financial statements). We draw your attention to these statements.

This situation has not changed our opinion.

No audit activities undertaken in connection with the anti-cumulation provision of Article 1.6a of the WNT and Article 5.1(j) of the WNT implementing regulation
In accordance with the WNT Auditing Protocol 2019, we did not audit data in the report on compliance with standards for remuneration (WNT) or the lack of it, based on the anti-cumulation provision of Article 1.6a of the WNT and Article 5.1(j) of the WNT implementing regulation. Therefore, we did not audit whether a remuneration maximum was exceeded by a senior management official because such an official was also employed at other institutions that fall under the WNT, nor did we audit whether the required information in this respect has been fully and correctly disclosed.

REPORT ON THE OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

In addition to the financial statements and our auditor's report thereon, the annual report contains other information, consisting of:
– the annual report for 2019 'Growth and impact';
– the other information.

Based on the procedures we performed as described below, we conclude that the other information:
– is consistent with the financial statements and does not contain material misstatements;
– contains all information required in accordance with the TNO Guidelines for Financial Reporting issued by the Ministry of Education, Culture and Science.

We have read the other information and based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we have complied with the requirements in Dutch Standard 720 and the TNO Auditing Protocol. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements.

The Board of Management is responsible for the preparation of the management report and the other information in accordance with the TNO Guidelines for Financial Reporting issued by the Ministry of Education, Culture and Science.

DESCRIPTION OF THE RESPONSIBILITIES WITH REGARD TO THE FINANCIAL STATEMENTS

Responsibilities of the Board of Management and Supervisory Board for the financial statements

The Board of Management is responsible for the preparation and faithful representation of the financial statements in accordance with the TNO Guidelines for Financial Reporting issued by the Ministry of Education, Culture and Science, the additional order of of 21 April 2004, reference OWB/FO/2004/8195, and the provisions of and by virtue of the Public and Semi-Public Sector (Standards for Remuneration) Act (WNT). In this context, the Board of Management is responsible for such internal control as the Board of Management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Management is responsible for assessing TNO's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, the Board of Management should prepare the financial statements using the going concern basis of accounting, unless the Board of Management either intends to liquidate TNO or to cease operations, or has no realistic alternative but to do so.

The Board of Management should disclose events and circumstances that may cast significant doubt on TNO's ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the financial reporting process of TNO.

Our responsibilities for the audit of the financial statements

Our responsibility is to plan and perform the audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion. Our audit has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material errors or fraud during our audit.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they may reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

We have exercised professional judgement, where relevant, and have maintained professional scepticism throughout the audit, in accordance with the Dutch Standards on Auditing, the TNO Auditing Protocol, the WNT Auditing Protocol 2019 and the ethical requirements and independence requirements. Our audit included e.g.:

- identifying and assessing the risks of material misstatement of the financial statements, whether due to errors or fraud, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. In the event of fraud, the risk of a material misstatement not being detected is greater than in the event of errors. Fraud may concern conspiracy, forgery of documents, the intentional omission to document transactions, the intentional misrepresentation of facts or breaking through internal control;
- gaining an insight into the internal control relevant to the audit, with the aim of selecting audit activities that are appropriate in the circumstances. These activities do not serve to pass judgement on the effectiveness of TNO's internal control;
- evaluating the appropriateness of the accounting policies used and evaluating the reasonableness of the accounting estimates made by the Board of Management and the related disclosures in the financial statements;
- concluding that the going concern assumption adopted by the Board of Management is acceptable. Also, using the audit evidence obtained to conclude if there are any events and circumstances that may cast significant doubt on TNO's ability to continue as a going concern. If we conclude there is any significant uncertainty, we are obliged in our auditor's report to focus on the relevant associated notes to the financial statements. If the notes are insufficient, we have to adjust our auditor's report.Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or circumstances may cause the entity to cease to continue as a going concern;
- evaluating the overall presentation, structure and content of the financial statements, including the disclosures contained therein; and
- evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Because we are responsible for the opinion on the financial statements, we are also responsible for the direction, supervision and performance of the group audit. In this context, we determined the nature and extent of the procedures to be performed for the group components. This was determined by considering the size and/or risk profile of the group components or activities. On this basis, we selected the group components for which an audit or review of the complete set of financial information or specific items had to be performed.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Rotterdam, 8 April 2020

Ernst & Young Accountants LLP

signed M. Verschoor

ACKNOWLEDGEMENTS AND CONTACT INFORMATION

If you want to find out more about TNO, if you have questions about this report or if you have any suggestions, send an e-mail to info@tno.nl

EDITING AND PRODUCTION:
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TEXT
TNO

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TNO.NL

TNO innovation for life