Risk management

Risk management is an essential part of our business strategy. The overriding risk management objective is to identify and mitigate risks with a potential major impact on achievement of our strategic and financial goals, and therefore on the overall value of our business. Ultimate responsibility for risk management lies with the Board of Directors.

Our corporate culture, where employees' personal responsibility, autonomy and ownership come first, is the basis for fulfilment of this management responsibility and the organisation of the company's risk management. We have the firm belief that such ownership leads to optimum risk management. The Board of Directors, managers, as well as Supervisory Board members, play a key role in this respect. They are the guardians of a culture where everyone feels empowered and free to handle risks responsibly.

Thanks to this ownership and personal responsibilities, risk management is integrated into both the strategic planning process and day-to-day operations. Our long-term perspective, which is geared towards sustainable value creation, ensures that long-term effects are also considered in the decision-making process. This is something we require from everyone up and down the organisation.

Successful implementation of our Step Up! strategy coincides with an effective risk management approach. Timely identification of risks that may impede implementation of our strategy and taking mitigating measures are crucial in this respect.

Sustainability plays an increasingly prominent role in our value creation model, with respect to both the risks it may pose and the opportunities it may create for Nedap. The importance of sustainability has made integrating it into the risk management process a key focus point.

Risk appetite

Nedap specifically tries to strike a balance between acceptable risk on the one hand and entrepreneurship and long-term value creation on the other. Our risk appetite ranges from moderate to high in terms of proposition development and commercial initiatives. It is important for our portfolio to offer prospects for both the short and the long term. But when it comes to compliance with legislation and regulations, our risk tolerance is zero, whereby we respect the spirit of the law. The chart below shows Nedap's risk appetite by risk category.

Category	Risk appetite
Strategic risks	High
Operational risks	Moderate
Financial risks	Low
Compliance risks	Low

Risk management and control systems

Nedap Risk Management Framework

We have formal and informal frameworks in place for responsible risk management. These are based on the *Nedap Risk Management Framework* that was adopted by the Board of Directors and the Supervisory Board. The culture of entrepreneurship leads to widespread interaction within and between teams, business units and the Board of Directors, creating a solid system with strong informal checks and balances, supplemented with formal procedures and controls wherever these are compulsory or deemed useful. The Nedap Risk Management Framework identifies correlations between enterprise risk and the internal control system. The Nedap Risk Management Framework contextualises all COSO principles for Nedap and links them to business processes, procedures and available data. The framework has been organised around its business processes. For each business process, the risks involved were identified and their impact on the organisation estimated. The risks identified have been classified in the four risk categories mentioned above, which are also part of the risk table from page 9.

As part of the risk management process, we organise annual risk update sessions with all business units and corporate teams to raise awareness, share knowledge, and identify Nedap-wide trends and developments, which we can then take on board in the strategic process. These sessions are also used to further integrate sustainability risks into our risk management processes and the operations of the various business units. How to detect and prevent fraud is a regular item on the agenda for these sessions. The update sessions are basically an extra control alongside the risk management efforts that the business units themselves have implemented in line with the Nedap Risk Management Framework. This way, we are able to identify best practices at certain business units from which other units can learn, so as to further improve their processes. The Alignment team devoted a complete session to the topic of fraud (prevention).

Levels of control

The Nedap Risk Management Framework recognises three levels of control based on the extent of impact on the organisation and its operations.

Level of control 1. Normal Operation.

Whenever a risk manifests itself, and the impact of this risk is not critical or vital for the company or one of the business units, the consequences will be dealt with or repaired by those involved as they see fit. Reporting the situation to the Board of Directors at incident/operational level is not necessary.

Level of control 2. Critical Operation.

This level of control relates to risks that potentially cause substantial losses for a business unit or damage the company as a whole. Occurrence of such risks must trigger application of the processes that Nedap uses for risk management. The Board will decide on a possible follow-up in these situations.

Level of control 3. Vital Operation.

This level of control exists when a risk materialises that may have very serious consequences for a business unit and can cause substantial losses for the company as a whole. Such a risk must also be countered by implementing the risk management processes. In this kind of situation, the Board of Directors must receive a comprehensive report on the risk, fallout and process implemented as soon as possible. The Board will decide on a possible follow-up in these situations.

Strategic and financial management system

Nedap has an adequate and effective (financial) management system. Key components are the Strategic Calendar, which includes the multi-year plan and the budget, as well as the financial reporting system, which tracks both progress and actual outcomes of the company's operating activities. The financial management system is designed to:

- set and align the right priorities and targets at board and business unit level
- test actual progress and performance against the objectives
- enable management to retain control over responsibilities delegated to others
- manage cash and cash-equivalent flows within the organisation
- identify and restrict risks
- prevent fraud

Strategic Calendar

The making of strategic and financial plans for the medium and short term is facilitated by the Strategic Calendar. Every spring, the business units draw up both a financial plan and a multi-year strategic plan, whereby the latter sets out the strategic direction with associated goals to implement the strategy. The financial plan quantifies the ambition and sets out what resources are needed to carry out the plans. This is used as input for the Nedap-wide strategy.

In the autumn, the managers of the various business units make a budget based on their insights, whereby the multi-year plan serves as the starting point. This includes, on the basis of the financial objectives, plans relating to the market, R&D efforts, staffing and capital investments. These have been translated to an integrated financial budget. The Board of Directors presents both a multi-year plan and a budget to the Supervisory Board every year. This presentation encompasses the strategic plans and the financial details, but also the risks and opportunities in these plans and their substantiation. Progress made on the plans is subsequently assessed in monthly and quarterly progress reports.

Management and financial reporting systems

There is extensive monthly financial reporting to the Board of Directors on the actual state of affairs compared to the budget and the previous year (the financial report for the month of July is limited to a revenue report). In addition to this formal reporting system, a regular exchange of information takes place between the Board of Directors and the business units. This is made easier by the fact that the Board of Directors and management are based in Groenlo. Every month, the Board of Directors reports to the Supervisory Board on the actual state of affairs compared to the budget and the previous year. Aside from that, the Board of Directors and business unit leaders have specific consultations before making final decisions in the interest of Nedap as a whole on significant market-related matters, large investments, the progress of R&D projects and staff appointments that go beyond the budget.

The Group Controlling department in Groenlo plays a leading role in terms of financial management. This department ensures that the administrative organisation and data processing are sufficient to ensure uniform and correct handling of all financial and business matters. The department has implemented a uniform reporting system (including explanatory notes) that provides the Board of Directors with the information they need. It also ensures correct, complete and timely delivery of these reports

and assesses the various administrative organisations, which includes a focus on preventing possible fraud.

This department furthermore holds operational responsibility for financing, cash management, currency management and taxes. On such matters, they have timely and regular consultations with the Board of Directors. This department is also in charge of the risk management process globally, which sees them work closely together with teams of employees in both the Netherlands and other countries.

Nedap Compliance Framework

Applying worldwide to all business units and subsidiaries, the *Nedap Compliance Framework* describes the formal objectives, mission, responsibilities and scope of Nedap compliance, including its embedding in the organisation, compliance-related communications, compliance monitoring and enforcement. Subjects covered by the compliance framework include supplier liability, information security, privacy, insider trading, anti-bribery and anti-corruption, and competition, products and entities subject to sanctions under external legislation and regulations and product compliance (such as quality marks and certifications).

Nedap applies a three lines model that fits with the nature of the company.

- The first line is formed by employees working at Nedap business units and entities in the role of 'compliance theme champion'. They are the eyes and ears on the ground in Nedap's day-to-day operations and take action whenever they detect a situation that may pose a compliance risk for the company.

- The second line is formed by employees in the roles of 'compliance theme owner' and 'compliance officer'. Based on their knowledge, experience, and overview of the organisation, compliance theme owners connect the dots across business unit and entity boundaries and give feedback on this to those involved. The compliance officer does the same but on the level of the organisation as a whole, and reports on the findings. Compliance theme owners draw up an action plan to address and mitigate the risks attached to the compliance theme. They closely liaise with the compliance theme champions and monitor progress on the action plan. The compliance officer is responsible for developing, updating, and evaluating the Nedap Compliance Framework based on feedback received from compliance theme owners.

- The third line of defence is formed by the internal auditor. It is the internal auditor's responsibility to audit our organisation's internal processes and procedures and make sure these meet the requirements from laws and regulations. The internal auditor also performs audits to assess whether the organisation complies with the applicable rules, regulations, and aligned procedures.

There are monthly meetings of the compliance theme owners, the compliance officer, and the CFO to discuss relevant developments, in the presence of the internal auditor. These meetings are also intended as knowledge sharing opportunities and to discuss progress on the various compliance themes. As and when unusual developments occur, they are immediately raised with the Board of Directors. Compliance theme owners get together for meetings when they represent added value. The group privacy officers convene for regular meetings about privacy-related matters, around ten times a year.

Group information security officers come together with the same frequency to discuss information security.

The Nedap Compliance Framework is reviewed annually and updated as necessary.

The Nedap Code of Conduct

Nedap's vision is to create a culture of ethical behaviour and integrity where people abide by laws and are committed to honesty and respect for each other, our customers, partners, suppliers, and all other stakeholders. To uphold a culture of integrity and ethical behaviour, Nedap has laid down a number of rules in the Nedap Code of Conduct. The Nedap Code of Conduct sets out the principles that underpin Nedap's culture. The Nedap Code of Conduct is about the standards and values that we live by, detailing the corresponding behaviour and outlining the expectations that employees have of each other and of others. The idea behind the Nedap Code of Conduct is to make sure that everyone applies its principles in the right way and that both employees on the one hand and suppliers and customers on the other know what Nedap stands for and what we can expect from each other. The Nedap Code of Conduct has been laid down in documents that are accessible to all.

In order to strengthen understanding of and compliance with the Nedap Code of Conduct, Nedap requires all employees or external contractors working within the organisation to take and pass an e-learning course. Monthly compliance meetings are held to measure progress and discuss measures that can be taken to support and/or refine the process.

Nedap has incident reporting procedures in place. In 2021, three confidential counsellors were appointed, to whom employees can turn when they have been confronted with undesirable behaviour such as discrimination, sexual harassment, bullying, aggression, and violence. The confidential counsellors help employees with advice and may refer them to external professionals, if necessary. They also meet on a regular basis to evaluate, reflect, and share knowledge. All three of them have taken specific training for this role.

In addition, a whistle-blower policy is applicable that facilitates internal reporting of suspicions of wrongdoing. Nedap's whistle-blower policy is open to both current and former employees and others working for Nedap.

Furthermore, informal processes at Nedap help create a safe and respectful environment for employees. This includes low-threshold access to each other, open communication, events, and encouraging employees to give feedback.

The main risks and developments

In order to make Nedap's risk profile transparent for stakeholders, we will provide further details of the main risks and developments in 2022 below. The risk table (from page 9) provides a broader overview of all risks, of the developments on each risk, and of the mitigating measures. Other than stated in the Directors' Report (the full annual report without chapter 6 'Financial Statements'), there have not, to the best of the Board of Directors' knowledge, been any exceptional events that do not have to be taken into consideration in the financial statements.

Proposition development

It is and will continue to be of vital importance to Nedap to have a sufficient number of value-creating propositions to be able to stay relevant for customers in the future. Given the increasing speed of changes and technological progress, it is crucial to keep a close eye on our market positions and propositions. The Create-Scale-Core model helps us strike a balance between new create initiatives, proven scale propositions, and mature core solutions within each market position. Through careful evaluation of the performance and potential of individual propositions, both in isolation and within the market positions that the propositions helps Nedap sustain, we mitigate the risk of a proposition creating insufficient value. In this respect, it is very beneficial to have various market positions, as it reduces the impact of poor market conditions and makes us less dependent on a limited number of propositions. It also means that much more focus can be applied to the development of and investements in new propositions (explorations). While a considerable number of new initiatives is being explored, we only scale up if we have validated the potential of a new initiative and it is clear how it will contribute to the success of our market positions.

Geopolitical risks

The risk of geopolitical tensions increased over the past year. Even though the Russian invasion of Ukraine had few direct consequences for Nedap's commercial operations, the conflict could end up spreading to several of our suppliers' markets. Since many of our suppliers are based in Eastern Europe, we could envisage supply issues if the tensions were to spill over into other areas.

In addition, Nedap also keeps close track of tensions between China and Taiwan and China's relations with the rest of the world. After all, being a technology company means that we depend considerably on supplies of electronic components. We analyse various scenarios to stay on top of this issue.

Nedap uses an export compliance system to screen all new and existing customers in a risk-based way to check whether they are subject to sanctions. On top of that, the Group Controlling department and the business units have short lines of mutual communication to enable them act fast. They keep each other fully posted on the latest regulations and make sure the rules are abided by.

IT/Cybersecurity

Relevant, reliable, and timely information provision is becoming ever more important. This applies to our internal processes and increasingly to the services we provide to our customers. IT is an integrated part of many of our propositions to ensure they are aligned with current and future market requirements. If IT is not available due to technical or organisational reasons, a proposition loses a lot of its functionality, exposing customers and partners to potential losses.

Raising awareness of different forms of digital threats, as well as the implementation of measures to minimise the chance of business disruptions caused by such threats and the potentially ensuing losses, is a continuous process for Nedap. We are committed to and maintain a continuous focus on privacy and data security. As well as internal procedures, there are also annual external audits by certified bodies. Additionally, possible risks and vulnerabilities in our systems are tracked down preventively through penetration testing by external parties and contracts are in place with parties that can provide support in the event of IT/Cybersecurity incidents.

In 2022, IT/Cybersecurity was again high on the agenda and several new initiatives were launched by the *Information Security Committee*, on which all business units and several support functions are represented. The Information Security Committee's work includes drawing up the security policy, approving general security standards, and monitoring security projects and programmes. A number of business units have also appointed an Information Security Officer who will work on this subject full-time. Furthermore, Nedap has had KPMG perform a Cyber Maturity Assessment, which resulted in a targeted roadmap for further improvement of our information security. An incident response exercise was also conducted.

To further raise awareness of cybersecurity risks among employees, Nedap runs an Information Security Awareness programme across the whole organisation, which includes an e-learning programme and the sending of test phishing emails to Nedap employees. The results are shared with all employees to raise awareness. Attention was also paid to running disaster recovery tests.

Like in previous years, several external audits were conducted at a number of Nedap business units as part of our certifications (ISAE 3402, ISO 9001, ISO 14001, ISO 27701, ISO 27018 and ISO 27001/NEN 7510). On top of that, Nedap Retail was awarded SOC2 certification for its iD Cloud platform.

Carenzorgt.nl security incident
Despite all efforts, Nedap faced a security incident in the Carenzorgt.nl digital health environment in the past financial year. For further details, please refer to section 3.1 in annual 2022. In response to this incident, Nedap is again assessing all processes and frameworks and taking all the lessons learned on board to prevent possible risks of repetition of this kind of incident.

Supply chain
Ever since the COVID-19 pandemic broke out, global supply chains have been under enormous strain. In 2021, ensuring continuity in the supply chain was already high on our list of priorities. Component shortages led to longer delivery times and postponed deliveries for customers of the various business units. This situation continued into 2022, with supply chains still grappling with longer and unpredictable delivery times.

Close collaboration between the Nedap-wide procurement escalation team and the various business units, suppliers, and customers helped reduce the impact of component shortages. Redesigning products to be able to use alternative components also helped reduce our exposure to component shortages. We are also taking our suppliers' perspective, for example, by agreeing on shorter payment terms with them on a temporary basis.

On the other hand, however, the strain on the distribution network and the internal organisation increased as component shortages persisted. The affected business units maintained an ongoing dialogue and set delivery priorities in consultation with business partners. With the COVID-19 pandemic now behind us and given the current macroeconomic challenges, we expect demand for components to level out somewhat, which could ease the shortages in the long term.

Attracting, developing and retaining talent
Employees in the Netherlands and internationally form the basis of our competitive strength, our capacity for innovation and the company's continuity. One of the biggest risk factors is, therefore, an inability to attract, retain and develop enough top talent. To reduce this risk, we have launched various initiatives in the area of attracting and developing talent in recent years.

Nedap has, furthermore, formulated specific expectations in its sustainability policy for the training and development of its employees.

Besides improving recruitment efforts, we also stepped up our focus on Learning & Development (L&D) and the HR business partners supported the business units in their HR policy. This is intended to keep staff turnover down at Nedap.

Risk table

The risk table provides a summary of identified risks and the associated impact and probability trend, as well as the main measures taken to mitigate these risks. For the sake of completeness, the main risks that were already explained above are also included in the risk table. Since specific financial risks, such as the credit risk, liquidity risk, and currency risk, are addressed separately in the financial statements, they have not been included in the risk table. These risks are not considered vital risks for Nedap, and have also largely been mitigated, meaning that any consequences are covered.

Risk description	Potential impact	Impact trend	Probability trend	Mitigation
Strategic risks				
Sensitivity to economic cycles	Less demand for Nedap services and products, resulting in a drop in revenue.	Stable	Rising	The portfolio of activities is spread over different markets and geographical areas. Revenue from recurring software subscriptions (licences) and services outgrows total revenue. Investments in create and scale propositions should bring more balanced growth.
Geopolitical conflicts in relevant regions	Possible supply chain disruptions or loss of sales channels.	Rising	Rising	A dual sourcing strategy to have multiple suppliers available for the most important components. Use of sanction screening systems. Implementation of scenario management to analyse the implications of materialising risks. Spreading the portfolio over different markets and regions.
Speed of technological developments	Decreased relevance of core technologies such as RFID leading to a worsening competitive position.	Stable	Rising	A proposition's success hinges not only on the technology used, but also on customer relationships, the supply chain and the greater ecosystem. Every year, new developers are hired with up-to-date knowledge of current and emerging technologies. Technology scans and analyses of emerging technologies.

Risk description	Potential impact	Impact trend	Probability trend	Mitigation
Strategic risks				
Supply chain disruptions due to climate change	Delayed or aborted delivery of products due to flooding, forest fires, or other natural disasters.	Stable	Stable	Geographical spread of the main suppliers and dual sourcing strategy. Diversity of products and designs mitigates the revenue risk. Greater design flexibility for R&D teams to offer alternatives in case of shortages.
IT/Cybersecurity	A successful cyberattack can potentially do our company great harm, both financially and legally, as well as damage our reputation (customer confidence).	Stable	Rising	Further roll-out of various ISAE and ISO certifications. The Retail business unit has been awarded SOC2 certification for its iD Cloud proposition. Recruitment of Information Security Officers for the largest business units in 2022. Continued e-learning programmes and phishing testing, as well as testing of the disaster recovery plan. Cyber Maturity Assessment conducted, resulting in a roadmap that Nedap will be using to take its cybersecurity to an even higher level.
Unsuccessful proposition and product development	Excessive strain on financial and human resources over a prolonged period of time without returns on these investments, resulting in: i) dependence on a limited number of growth factors; ii) limited long-term growth due to a shortage of propositions.	Falling	Falling	Nedap closely monitors the development and potential of propositions and products. R&D draws on various business units' many years of experience. Periodic review of the portfolio of propositions, clear process and key performance indicators for propositions in various phases. Nedap has a portfolio with various propositions and multiple market positions, which reduces Nedap's dependency on individual propositions.

Risk description	Potential impact	Impact trend	Probability trend	Mitigation
Strategic risks				
Attracting, developing, and retaining talent	Insufficient availability of talented potential employees, leading to a delay in the implementation of the strategy.	Stable	Stable	Organising the Nedap Masterclass and Nedap University to attract new employees. Actively encouraging employees to dedicate at least 40 hours a year on personal development. Curbing unwanted staff turnover by fostering a culture of entrepreneurship and offering competitive employment terms, including an employee participation plan. Developing leadership talent by offering a Leadership Development programme and an organisational structure that fosters leadership talent development.
Operational risks				
Dependency on the supply chain (production and logistics outsourced)	Insufficient or late product availability.	Stable	Stable	Nedap takes great care in selecting its production and logistics partners by holding them to the highest standards, while conducting frequent audits at its partners. Creating buffer inventories, including stockpiling components. Centralised procurement team that provides cross-business unit support in navigating component shortages. Dual sourcing strategy to reduce dependence on a number of parties. Greater design flexibility for R&D teams to offer alternatives in case of shortages and improve testing and measuring systems.
Internationalisation, including new partners	Insufficient access to or insufficient implementation capacity at customers.	Stable	Stable	Availability of an ecosystem with business partners, implementation partners and technology partners.

Risk description	Potential impact	Impact trend	Probability trend	Mitigation
Operational risks				
IT	Losses for our customers or partners caused by non-functioning or malfunctioning IT in propositions due to technical or organisational reasons.	Stable	Stable	The Nedap IT Security framework. Appointment of information security officers and creation of the Information Security Committee. Audits at the various business units as part of their certifications (SOC2, ISAE 3402, ISO 9001, ISO 14001, ISO 27001/NEN 7510, ISO 27701 and ISO 27018).
Compliance Risk				
Compliance with (international) legislation and regulations	Fines, sanctions and/or damage to reputation.	Stable	Stable	Nedap Compliance Framework monitored by the Nedap-wide compliance committee which theme owners take part in and which meets on a monthly basis. This committee decides on actions to take to guarantee compliance.
Fraude en corruptie	Boetes, sancties en/of reputatieverlies.	Stable	Stable	Strong informal system of checks & balances. Several formal rules and policies, including a whistle-blower policy and a code of conduct. Nedap Compliance Framework to monitor compliance with the anti-bribery and anti-corruption policy. Zero tolerance on fraud. Various e-learning programmes and workshops on fraud. Further implementation and embedding of the fraud assessment framework in the organisation.