



# ANNUAL REPORT 2022



# At a glance

## Key data of Northern Data Group

		2022	2021
Revenues	EUR million	193.3	189.9
Total income	EUR million	249.5	492.8
EBITDA	EUR million	-58.1	320.1
Adjusted EBITDA	EUR million	42.4	89.6
EBIT	EUR million	-265.4	254.1
Adjusted EBIT	EUR million	-59.1	10.7
Net result	EUR million	-265.8	287.2
Cash flow from operating activities	EUR million	1.0	88.1
Cash flow from investing activities	EUR million	-95.2	126.6
Cash flow from financing activities	EUR million	-82.9	-69.0
Shares outstanding (undiluted)	Thousand units	23,816	17,653
Shares outstanding (diluted)	Thousand units	23,816	23,816
Earnings per share (undiluted)	EUR	-11.16	16.27
Earnings per share (diluted)	EUR	-11.16	12.06
Employees (annual average)	FTE	209	144
		<b>31 Dec. 2022</b>	<b>31 Dec. 2021</b>
Cash and cash equivalents	EUR million	39.9	221.6

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TO THE  
SHAREHOLDERS

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» Northern Data continued to make progress toward its ambition to be the leading value generator of High-Performance Computing infrastructure solutions, laying firm foundations for future accomplishments. «

Aroosh Thillainathan

# Letter to the shareholders

## Dear shareholders, employees and friends of Northern Data,

In 2022, Northern Data continued to make progress toward its ambition to be the leading value generator of High-Performance Computing (HPC) infrastructure solutions, laying foundations for future accomplishments.

Amidst challenging conditions, including crypto market fluctuations, interest rate hikes, and rising inflation and energy prices, we met our market-adjusted annual targets. Specifically, we generated revenues of EUR 193.3 million, with an adjusted EBITDA of EUR 42.4 million, from our core segments, namely “Mining” and “Hardware & Other”. Nevertheless, depreciation of fixed assets as well as impairment of GPU servers, which resulted from the Ethereum network switch from proof-of-work to proof-of-stake, led to a net loss of EUR 266 million in the financial year.

Throughout the year, our focus was on optimizing revenue from our Bitcoin mining operations, a key contributor of the Group’s revenue and earnings. Bitcoin mining remains an important component of our broader strategy, and the generated revenue has been strategically reinvested in improving our data center infrastructure and advancing cloud computing solutions. These strategic investments position us for ongoing success within the HPC market.

To ensure ongoing stability in our business we initiated a structured optimization process, aligning our internal structure to complement the diversification of our data center infrastructure and cloud services. This reinforces our commitment to excellence and positions us strategically for ongoing success in the dynamic landscape of HPC.

### Momentum throughout fiscal year 2022

In the face of challenging market conditions, including a significant drop of over 60 percent in Bitcoin prices in 2022, Northern Data demonstrated resilience and met market adjusted targets, outside of the write-downs relating to legacy technology assets. Our prudent investment strategy allowed us to increase the number of ASIC servers for mining by 234 percent to over 36 thousand devices, resulting in a 210 percent boost in computing power to over 3.3 EH/s in fiscal year 2022.

In response to the increased profitability of Bitcoin mining on our own account, we strategically shifted our focus, moving away from providing hosting services to third-party miners. Simultaneously, the Ethereum transition from proof-of-work to proof-of-stake negatively impacted revenue. In addition, this resulted in impairments from the valuation of the affected GPU servers.

To drive advancement in the data center and cloud solutions business, Northern Data attracted top-tier executives to enhance our portfolio and maximize the potential of our HPC infrastructure.

While our cloud computing plans in 2022 fell short of our ambitions, we meticulously laid the groundwork for future success, establishing key partnerships and customer relationships. The adjustment of our investment strategy and active resource management in fiscal year 2022 addressed immediate challenges and established a foundation for future successes.

## From vision to strategy to growth

Our focus on a company-wide strategy for Northern Data aimed at driving value creation and achieving profitable, sustainable growth by 2025 and beyond, remains steadfast. We believe that the next waves of innovation will be driven by sustainable, state-of-the-art, and powerful HPC solutions, and we are committed to continuous investment in advanced technology roadmaps.

As part of this commitment, in 2022 we prepared for the segmentation of Northern Data's business structure into three independent, global business divisions: Bitcoin mining, Cloud Solutions and Data Center Infrastructure solutions, to fully utilize the opportunity in each specialization. This strategic move enhances transparency and accountability allowing us to articulate the value proposition of each of Northern Data's business divisions.

## Future-ready, today

We started 2023 with no financial liabilities and good cash reserves, positioning us to raise both equity and debt to accelerate the Company's growth, and readying us to make significant investments in scaling our business divisions. Accordingly we accelerated growth plans, entered the generative AI market, and acquired the latest mining hardware. The newly formed business units **Taiga Cloud**, **Ardent Data Centers** and **Peak Mining** operate as Northern Data Group branded companies, seizing major opportunities – from the near doubling of the Bitcoin price within a few months to the widespread use of various AI applications and the associated demand for computing power – and strengthening leadership teams.

## ESG remains a key focus

Our energy-intensive business drives our responsibility to act sustainably. With our new corporate structure and dedication, we are set to redefine our sustainability strategy, ensuring alignment with environmental, social, and governance (ESG) principles. We will continue to voluntarily report on our progress in this area, and detailed ESG reporting can be found in this year's ESG Report.

## Positive outlook for 2023

In 2023 we expect revenue to be between EUR 65 million to EUR 75 million and adjusted EBITDA to be in a range of EUR –20 million to EUR –5 million.

Looking forward, I would like to thank our shareholders, partners, and friends for your continued support of Northern Data. To our employees, your dedication fuels Northern Data's progress daily, as we collectively shape the future of HPC.

As we express our thanks, we eagerly anticipate sharing updates about our future developments. The horizon is filled with possibilities, and we look forward to the journey ahead. Stay tuned for more milestones as we navigate the landscape of tomorrow. Thank you for being an integral part of our journey!

Sincerely yours,



**Aroosh Thillainathan**

Chairman of the Management Board

# Report of the Supervisory Board

## Dear Ladies and Gentlemen,

Fiscal year 2022 was characterized by challenges for the global economy caused by the start of the war in Ukraine in February. Especially in the second half of the year, Bitcoin and Ethereum price dropped sharply affecting the entire crypto industry as well as the Ethereum merge from the proof-of-work to the proof-of-stake consensus mechanism in September. In trustful cooperation between the Supervisory Board and the Management Board, these challenges were well navigated at Northern Data.

### Composition of the Supervisory Board and Management Board

In accordance with the provisions of the Articles of Association of Northern Data AG, the Supervisory Board is composed of three members. In 2022, these were the Chairman of the Supervisory Board, Dr. Tom Oliver Schorling, the Deputy Chairman, Dr. Bernd Hartmann, and Hermann-Josef Lamberti. In addition to the Chairman, Aroosh Thillainathan, the members of the Management Board in fiscal year 2022 were Dr. Mathias Dähn (CFO) until February 28 and Stefan Sickenberger (COO) until October 31.

### Work and topics in the Supervisory Board plenum

In the reporting year 2022, a total of 30 meetings of the Supervisory Board were held, all of which were attended by the Supervisory Board as a whole. One meeting was held as a face-to-face meeting in Frankfurt/Main. Eighteen meetings were held as video conferences. In other cases, the Supervisory Board adopted resolutions outside meetings by written procedure, and on one occasion also by telephone.

The Supervisory Board monitored the management activities of the Management Board throughout fiscal year 2022 and advised the Management Board on the management of the Company. This included in particular the development of business, the earnings and financial situation, and the Company's investment plans. The Management Board always fulfilled its information duties to an appropriate extent. The Management Board provided the Supervisory Board with regular, prompt, and comprehensive written and oral reports on all relevant issues of corporate planning, the course of business, strategic development, and the current situation and overall development of the Group.

### Supervisory Board Meeting Attendance

Member of the Supervisory Board	Number of Meetings	Attendance Rate
Dr. Tom Oliver Schorling	30/30	100%
Hermann Josef Lamberti	30/30	100%
Dr. Bernd Hartmann	30/30	100%



## Overview of meetings and resolutions

With regard to the Company's operating business, 2022 was not characterized by acquisitions as in the previous year. Instead, the focus was on the commencement of the corporate reorganization of the Northern Data Group, with the goal of setting up three separate business units underneath the roof of Northern Data AG. The last resolution of the year at the end of December dealt with the sale of the Kelvin Emtech Group.

About a third of the meetings from the beginning of the year to the end of April focused primarily on topics relating to Northern Data's annual and consolidated financial statements for 2021 and their audit in accordance with IFRS standards. The Supervisory Board invited members of Northern Data's global management team, including the Management Board, representatives of the auditor KPMG, and the tax consultancy firm, in various constellations depending on the respective topic.

At a meeting in August together with the auditor, the annual financial statements of Northern Data AG, the consolidated financial statements, and the Group management report as of December 31, 2021, were discussed and approved, and the Supervisory Board Report 2021 was adopted. The following meetings and resolutions dealt with the Annual General Meeting, its implementation, agenda, invitation, and chairing of the meeting.

Other meetings and resolutions during the year focused on the following topics: Stock option program (January), unfounded allegations by Northern Data critics on the Internet (March), the new Group structure and CEO compensation (July), the reorganization plan (December).

## Audit and adoption of the annual financial statements

The annual financial statements and consolidated financial statements of Northern Data AG for fiscal year 2022 have been audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, the auditor appointed by the Annual General Meeting, and have been issued with an unqualified audit opinion. The Supervisory Board examined both the annual financial statements of Northern Data AG as of December 31, 2022, and the consolidated financial statements, in particular with regard to their legality, propriety and appropriateness, and discussed the documents in detail with the Management Board and the auditor on the basis of a draft audit report.

The auditor reported on the progress of the audit at several Supervisory Board meetings and participated in the Supervisory Board meeting of March 21, 2024, at which the results of the audit as a whole and the individual focal points of the audit were reported. The auditor was available to answer any questions arising from the members of the Supervisory Board. The members of the Supervisory Board noted and critically evaluated the audit reports and audit opinions and discussed them, as well as the audits themselves, among themselves and with the auditors. This included a questionnaire on the nature and scope of the audit and on the audit findings. In the process, the Supervisory Board was able to satisfy itself as to the appropriateness of the audits and the audit reports. The Supervisory Board has conclusively assessed the annual financial statements as of December 31, 2022, of Northern Data AG and the consolidated financial statements, taking the auditor's audit reports into account, and raises no objections based on the results of its review. The Supervisory Board approved and thus adopted the annual financial statements prepared by the Management Board by Supervisory Board resolution dated March 21, 2024; it also approved the consolidated financial statements.

## Acknowledgement

The Supervisory Board would like to thank the members of the Management Board and all employees of the Company for their personal commitment, their hard work in the interests of the Company and for the successes achieved in fiscal year 2022. The Supervisory Board would also like to thank the shareholders for their interest in our Company and for their trust.

Sincerely yours,



**Dr. Tom Oliver Schorling**

Chairman of the Supervisory Board

## Northern Data on the capital market

### Stock market year 2022

2022 was a difficult year for the global stock markets. The start of the war in Ukraine in February unsettled investors, but the stock markets initially recovered more quickly than expected. As a result of the geopolitical upheavals, however, inflation rates rose massively, to which the central banks responded with significant interest rate hikes, weighing on the stock markets. Even stable corporate profits and robust economic activity in the USA and Germany failed to have a positive impact on share prices. The first signs of declining inflation, an easing of the Chinese government's restrictive zero-Covid policy and hopes of a turnaround in interest rate hikes by central banks led to recovery trends toward the end of the year. Over the year, the DAX, S&P 500, EURO STOXX 600 and NASDAQ-100 all recorded significant double-digit percentage declines.

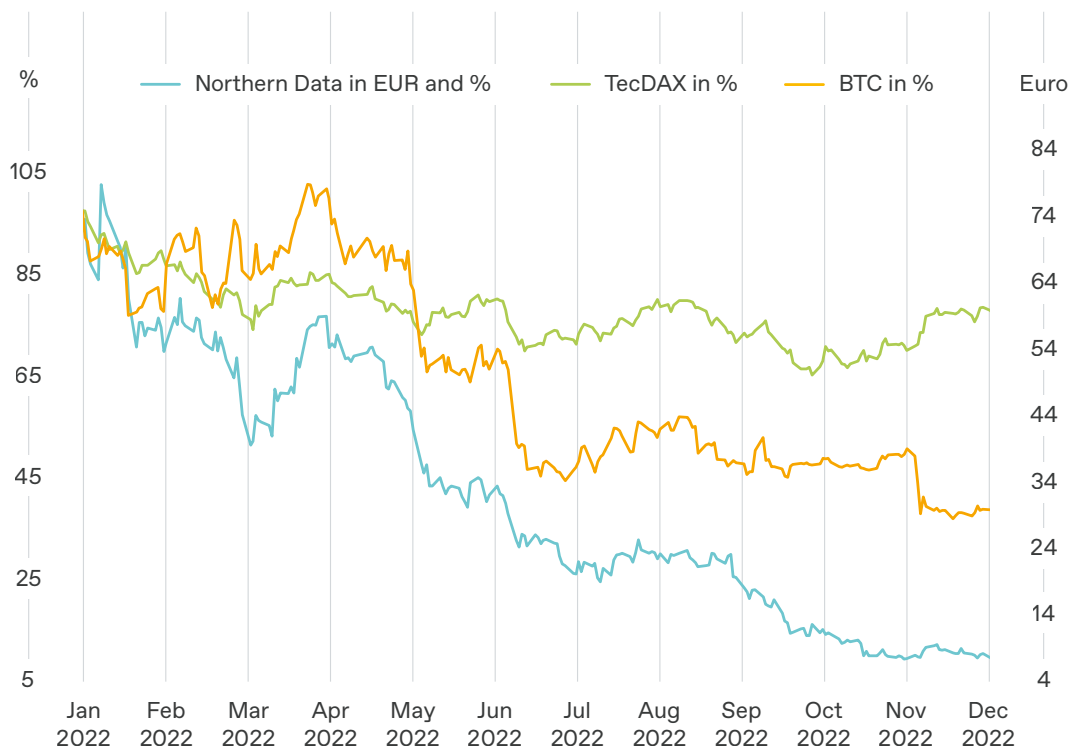
Northern Data shares started the trading year at EUR 77.20 on January 3, 2022, and reached their high for the year of EUR 79.20 on January 11. The lowest price for the year of EUR 5.75 was reached on December 29. With 23,815,514 shares, Northern Data's market capitalization at the end of the reporting year was EUR 144 million at a share price of EUR 6.05. Overall, Northern Data share price recorded a decline of 92.1 percent in 2022. In the reporting year 2022, the average daily trading volume in Northern Data shares on all German stock exchanges was 50,013 shares. In the full year 2021, an average of 70,023 shares were traded per day.

Northern Data share price development in 2022	2022	2021
Change of share price from previous year	-92.1%	0.0%
Lowest closing price	EUR 5.75	EUR 52.80
Highest closing price	EUR 79.20	EUR 138.50
Year-end closing price	EUR 6.05	EUR 77.00
Number of shares outstanding at the end of the year	23,815,514	23,815,514
Average number of shares traded daily	50,013	70,023
Market capitalization at the end of the year	EUR 144 million	EUR 1.8 billion

Source: Deutsche Börse, Xetra

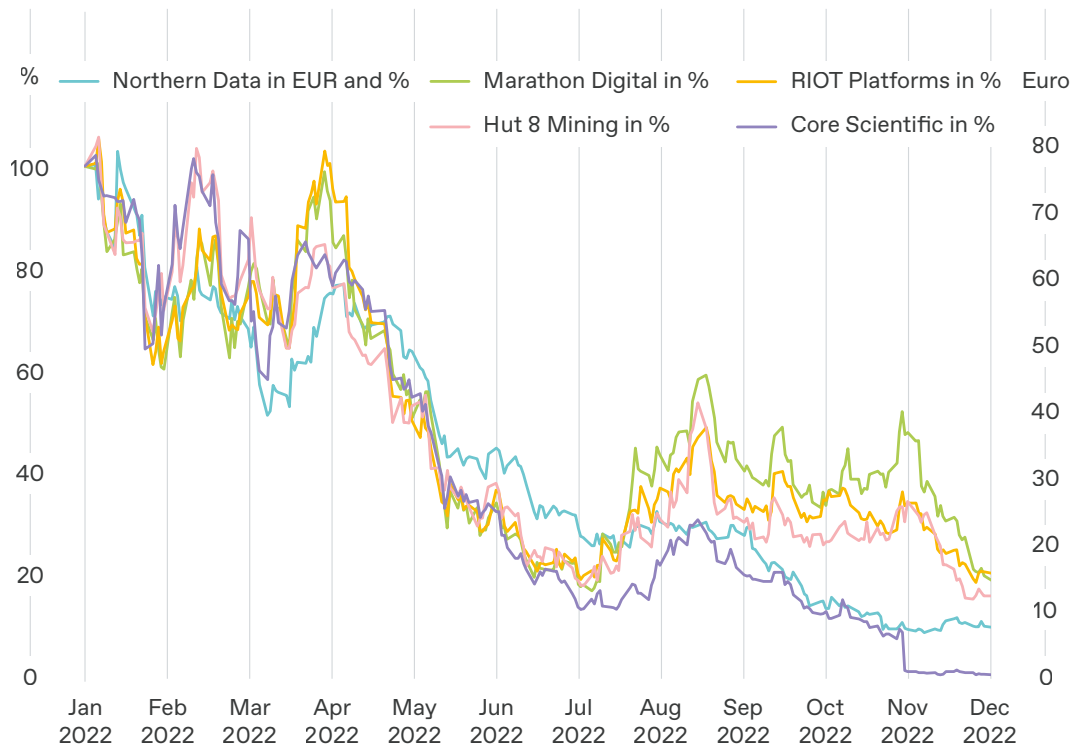
The unquestionably fierce headwinds of the year 2022 affected the entire crypto world, and thus Northern Data’s competitors as well. In 2022, the crypto industry suffered, in particular, from the price drop in Bitcoin and Ethereum with a simultaneous increase in energy costs. Northern Data continued to mine profitably on a gross profit level thanks to flexibly negotiated power contracts. Competitors struggled for economic survival. Additional uncertainty resulted from the collapse of stablecoin Terra in May, Ethereum’s switch from the proof-of-work to the proof-of-stake algorithm in September, and the bankruptcy of the crypto exchange FTX amid embezzlement allegations in November.

**Indexed development of the Northern Data share compared to the TecDAX and Bitcoin from January 1, 2022 to December 31, 2022**



Sources: Deutsche Börse, Coinbase

### Indexed development of the Northern Data share compared to a peer group from January 1, 2022, to December 31, 2022



Source: Deutsche Börse

### Shareholder structure

As of December 31, 2022, Northern Data was not aware of any individual shareholders holding a stake of more than 25 percent in Northern Data AG pursuant to Section 20 of the German Stock Corporation Act (AktG).

### Capital measures

No capital measures took place in the reporting year 2022.

### Dialogue with the capital market

Northern Data engaged in an intensive dialog with current and potential shareholders in the reporting year and is in continuous contact with media representatives, investors, and analysts. Presentation material and recordings of the events are available in the Investor Relations section of the homepage at [www.northern-data.de](http://www.northern-data.de). An overview of the conferences held in the reporting year is shown in the following table:

**Conference overview 2022**

March	Pareto Securities' TechIT Conference, Virtual
May	HAIB Stockpicker Summit, Berlin
May	H.C. Wainwright Global Investment Conference, Miami
September	Baader Investment Conference, Munich
September	H.C. Wainwright 24th Annual Global Investment Conference, NYC
September	B. Riley Securities Annual Crypto Conference, New York
October	Munich Stock Exchange Specialist Conference Financial Services/ Technology, Munich
November	Oppenheimer Blockchain & Digital Assets Summit, Virtual

**Research coverage**

In 2022, Northern Data AG shares were constantly analyzed and evaluated by Hauck Aufhäuser Lampe investment bank. In their research report from September 2022, they recommend the Northern Data share as a Buy citing a target price of EUR 65.00.

Research	Date	Target Price	Recommendation
Hauck & Aufhäuser Lampe	September 5, 2022	EUR 65.00	Buy

**Basic information on the Northern Data share****Share information on the Northern Data share as of December 31, 2022**

Initial listing	April 1, 2015
Stock exchange	Xetra, Frankfurt, Munich, Berlin, Düsseldorf, Hamburg, Hanover, Tradegate
Market segment	Open market
Transparency level	m:access
Symbol	NB2
ISIN/WKN	DE000A0SMU87/A0SMU8
Type of shares	Bearer shares with no nominal value
Total number of shares	23,815,514
Amount of share capital	EUR 23,815,514
Designated sponsor	mwb fairtrade Wertpapierhandelsbank AG

As designated sponsor, mwb fairtrade Wertpapierhandelsbank AG provides binding bid and ask quotes and ensures sufficient liquidity of the Northern Data share. Further information is available to interested investors in the Investor Relations section of the homepage at [www.northerndata.de](http://www.northerndata.de).



ESG REPORT

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(UNAUDITED)

# ESG Report (unaudited)

## ESG – acting responsibly with an eye to the future

As a company that builds and operates global HPC infrastructure, Northern Data Group (hereinafter also referred to as Northern Data, the Company or the Group) has a special responsibility, especially regarding the environmental aspects of ESG. Wherever possible, Northern Data strives to operate its data centers with renewable energy. When setting up the data centers and operating and maintaining the hardware, Northern Data relies on efficient software and hardware tools to ensure that every kilowatt-hour of electricity flowing into the data centers is used as efficiently as possible. At its most efficient data center, in Boden, Sweden, Northern Data achieves a best-in-class Power Usage Effectiveness (PUE) of 1.06 (2022). In addition to this, Northern Data continuously deals with options on how to improve the impact on the environment. At the same time, the Company takes the social and economic aspects of the sustainability agenda no less seriously.

Northern Data Group has already integrated ESG criteria into its corporate culture at an early stage and has also participated in ratings. This sustainability report is already the second that Northern Data presents, even though ESG reporting is not yet mandatory for the Company. The aim of this approach to sustainability is to continuously monitor relevant ESG topics, improve their implementation, and report on key ESG KPIs to be prepared for the upcoming regulatory requirements.

The Management Board, together with the IR department, has identified common international standards – such as the United Nations Sustainable Development Goals (SDGs) and the Global Reporting Initiative (GRI) standards – as guidelines for shaping the Company's sustainability agenda. Among the GRI standards, Northern Data has selected some of them as a guideline for its ESG report and as a basis for future improvement of its reporting practices. These include GRI 3 on the process for identifying material ESG topics, GRI 302 on energy reporting and GRI 402 on diversity reporting. In addition, Northern Data follows two of the six Principles for Responsible Investment:

Principle 1: Northern Data incorporates ESG issues into its decision-making processes.

Principle 2: The Company is committed to integrating ESG issues into its ownership policies and practices.



## ESG Data overview

Material topic	Reported indicator	Value 2022	Value 2021	Variation	
<b>E</b> Energy efficiency and energy mix	Total energy consumption	963 GWh	468 GWh	+106%	
	Share of renewable energy	45%	48%	-3%	
	Share of nuclear energy	23%	26%	-3%	
	Share of fossil fuel energy	32%	26%	+6%	
	Power Usage Effectiveness				
	Boden, Sweden	1.06	1.04	+2%	
	Lefdal Mine, Norway (contracted third-party data center)	1.15 (guaranteed)	-	-	
<b>S</b> Employee recruitment, appreciation and motivation	Employee number as of december 31	209	162	+28%	
	Diversity	Workforce breakdown: Contract	Contract without fixed term: 99%	Contract without fixed term: 97%	+2 pp
			Fixed-term contract: 1%	Fixed-term contract: 3%	-2 pp
	Workforce breakdown: Age	<30: 21%	<30: 20%	+1 pp	
		30-50: 52%	30-50: 50%	+2 pp	
		>50: 8%	>50: 7%	+1 pp	
		Unknown: 19%	Unknown: 23%	-4 pp	
	Workforce breakdown: Gender	Men: 75%	Men: 67%	+8 pp	
		Women: 25%	Women: 33%	-8 pp	
	Workforce breakdown: Nationality	Germany: 39%	Germany: 41%	-2 pp	
		Canada: 21%	Canada: 21%	-	
		USA: 15%	USA: 16%	-1 pp	
		Norway: 5%	Norway: 6%	-1 pp	
United Kingdom: 3%		United Kingdom: 3%	-		
Sweden: 3%		Sweden: 3%	-		
Other/Unknown: 14%	Other/Unknown: 10%	+4 pp			
<b>G</b> Anti-corruption and compliance	Reported whistleblowing cases	5	0	-	
	Investigated whistleblowing cases	2	0	-	
	Irrelevant whistleblowing cases	3	0	-	
	Data privacy	Known data privacy breaches	0	0	-
	Cyber security	Known cyber security breaches	0	0	-

# ESG Reporting at Northern Data

## ESG Management

The responsibility for ESG topics lies with the Management Board, which aims to ensure that sustainability with all its facets is implemented in group-wide processes. The overall operational management and the reporting process of ESG topics are led by the Investor Relations department that works together with other business divisions to develop and implement sustainable management processes.

## 2022 ESG Reporting

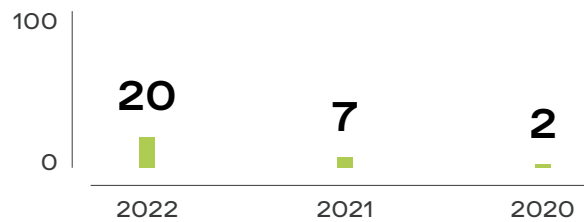
The 2022 ESG report is structured along the lines of Northern Data’s 2021 ESG report and therefore shows developments for the first time. For the year 2022, the Company held a workshop to review and update the materiality analysis from the previous reporting year. During the workshop, each identified ESG topic was again examined in the light of stakeholders’ expectations and the impact of the business activities. After updating the material ESG topics, the Company started to collect data. The departments responsible for energy, operations, human resources and risk & compliance played a key role. Wherever possible, data and information were included in the reporting. In cases in which data could not sufficiently be collected, planning and implementation of actions were started. The 2022 ESG reporting serves as a tool for Northern Data to identify the baseline from which to develop a long-term ESG strategy and define the ESG KPIs that will be reported on in future reports. Additionally, it provides a stable groundwork for ESG rating agencies to carry out sound ESG ratings on Northern Data in the future.

## ESG Rating

ESG rating agencies regularly evaluate and review the sustainability performance of companies. Intensive dialog on all ESG topics is very important to us. Northern Data is working hard to further increase transparency on all topics that are important to its stakeholders. Northern Data has been actively participating in the process of the S&P Global rating since reporting year 2020.

### Development of Northern Data’s S&P Global ESG ratings

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The S&P Global ESG Score measures companies’ exposure to and performance on key ESG risks and opportunities, the quality and completeness of public disclosures, and their awareness of emerging ESG issues. The score is measured on a scale of 0 – 100 (maximum) and reflects a company’s score compared to its industry peers. The scores in the chart are based on Northern Data’s responses for the years 2020, 2021 and 2022 to the Corporate Sustainability Assessment questionnaire (CSA) and on information available in the public domain.

More information available at <https://www.spglobal.com/esg/scores/results?cid=4812275>.

Source: S&P Global

# Material topics

## Stakeholder analysis

The stakeholder analysis describes the stakeholders' expectations of Northern Data. There were no changes in the stakeholder analysis in 2022 compared to the previous year. The results of the stakeholder analysis are presented in the table below:

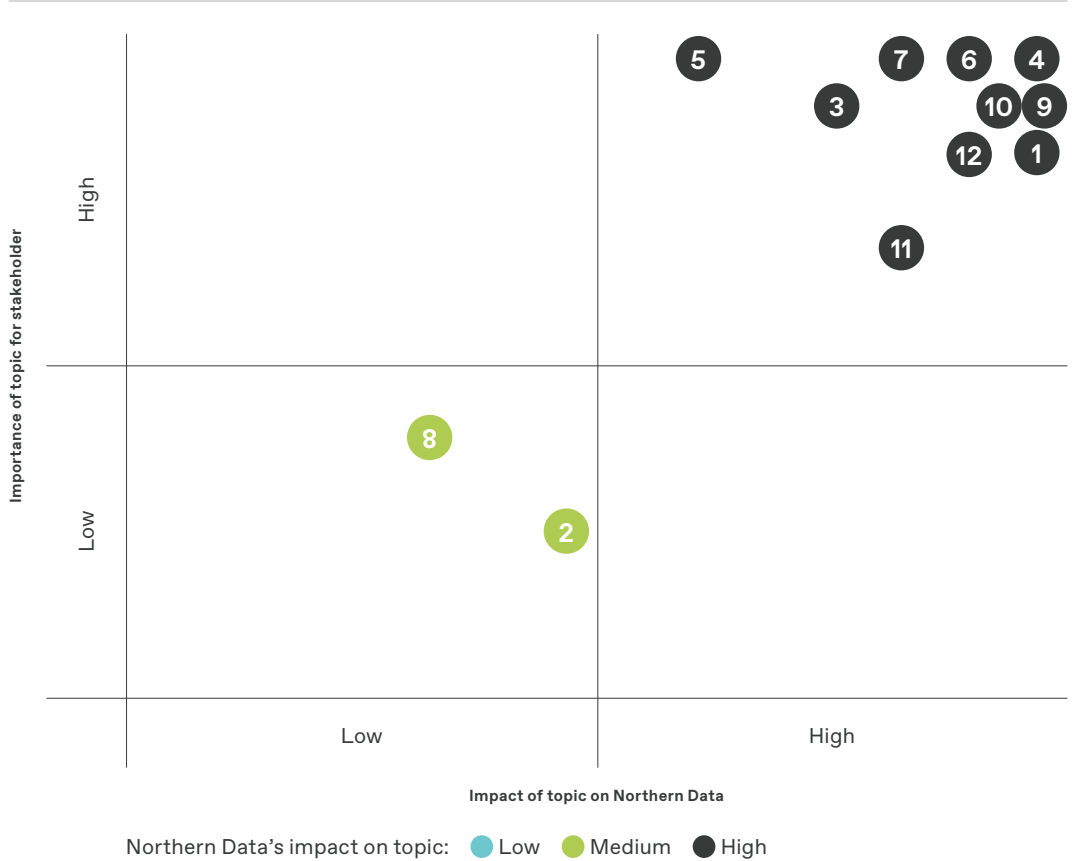
Stakeholder analysis		
	Stakeholder	Expectation from Northern Data
Internal	Employees	A secure job with career opportunities, flexible working conditions regarding working hours and opportunities for home office, work-life balance, recognition and appreciation of one's own work performance, pleasant working atmosphere, fair salary, training and learning opportunities, possibility to implement own ideas, benefits and incentives, sought-after employer with good image
	Students, interns	Assignment according to own abilities, learning opportunities, flexible working conditions regarding working hours and opportunities for home office, fair salary, excellent internship certification, approachable mentors
External	Investors	Sustainable growth, good operational performance, solid financial figures, research coverage with buy-rating, credible and experienced management, knowledge of market, high potential for innovations, transparent investor communication, ESG compliance, good ESG ratings
	Customers	Added value at good prices, reliability, competent and proactive advice and support, easy to reach, expert problem-solving, smooth running of customer projects, ESG-compliant behavior, highest data security, principal "one face to the customer"
	Partners, suppliers	Reliable adherence to agreements and prices, high quality and ESG standards, smooth and easy cooperation, expertise, professionalism
	Media, press	Easy and quick access to all relevant information, accessibility of spokespersons and management, quick response to inquiries, press releases with substantial content, transparent and continuous updated information
	NGOs	High environmental standards and moral values, transparency, safety, human rights commitment, environmental commitment
	Public	High environmental standards and moral values, taking corporate social responsibility seriously, local engagement as a "good citizen"
	HPC expertise industry	Supporting the goals of the Crypto and Bitcoin industry, engagement in HPC and crypto industry associations (events, fairs, representatives), sharing of expertise
	Legislator and authorities	Observing and meeting national laws and regulations as well as internal company guidelines (compliance), observing and fulfilling regulations of the stock exchange, EU taxonomy

## Materiality analysis

In 2022, the material topics published in the prior ESG report were revised and re-identified through a workshop, discussions and consultation. All assessments were based solely on internal group discussions, drawing on the information and experience that the Company regularly shares with its stakeholders, including management, employees, investors and customers. For the purpose of the materiality analysis, the Company was guided by common international standards and concepts such as the Sustainable Development Goals (SDGs) of the United Nations, the Global Reporting Initiative (GRI) and the Principles for Responsible Investment (PRI). The formulation of the topics was streamlined and restructured slightly in 2022 compared to 2021.

Thus, the topics “Power usage effectiveness” and “Energy consumption and sources” were summarized into “Energy efficiency and energy mix”. In addition, the topics “Employee recognition and engagement”, “Talent attraction” and “Learning and development” were summarized into the category “Employee recruitment, appreciation, and motivation”. The topics “resourcing”, and “innovation management” were eliminated. The topic “Corporate governance, corporate structure” was renamed “Corporate government and culture”. The topics identified were then ranked according to importance to key stakeholders and impact on Northern Data’s business activities. The ranking distinguishes between low and high importance to stakeholders (y-axis) and low and high impact on Northern Data’s activities (x-axis).

**Material analysis matrix**



Environmental	Social	Governance
1 Energy efficiency and energy mix	4 Employee recruitment, appreciation, and motivation	10 Cyber security
2 Disposal and electronic waste	5 Diversity	11 Anti-corruption and compliance
3 Carbon footprint	6 Employee health and safety	12 Corporate governance and culture
	7 Human rights	
	8 Social and local impact	
	9 Data privacy	

The table below explains the materiality of the chosen topics for Northern Data:

No	Topic	Definition of materiality
1	Energy efficiency and energy mix	Northern Data's business is very energy intensive. Therefore, factors such as the amount of energy used and where the energy comes from are important. Also, the more efficiently energy is used, the more profitable and environmentally sustainable Northern Data's business becomes.
2	Disposal and electronic waste	Northern Data operates tens of thousands of servers in its data centers. Computer hardware that runs constantly will eventually need to be replaced and therefore will be electronic waste by then.
3	Carbon footprint	Northern Data wants to comply with its own business ethics, such as global goals and standards that are aimed at controlling global warming.
4	Employee recruitment, appreciation, and motivation	The success of the Company is dependent on its employees. Northern Data believes that good work and development require employee satisfaction and well-being. Northern Data wants its employees to learn, grow, and realize their full potential to ensure employee satisfaction and to stay on track with developments in the business.
5	Diversity	Northern Data as a globally operating company is an employer of people from many different nationalities and backgrounds. Thus, diversity is at the core of the business.
6	Employee health and safety	The safety and well-being of its employees are the top priority for Northern Data. This applies to safety procedures in the data centers as well as in the offices.
7	Human rights	Northern Data commits to human rights under the UN Guiding Principles on Business and Human Rights. Northern Data wants to proactively identify and assess potential impacts and risks relating to respecting human rights and address these successfully.
8	Social and local impact	Northern Data wants to strengthen its reputation as a responsible company and have a positive impact on both local communities and society as a whole.
9	Data privacy	Due to the business model, data protection plays a major role at Northern Data. In times when even large amounts of data can be stored, duplicated, and sent very quickly, it is crucial to identify and avoid potential data violations at an early stage.
10	Cyber security	As a company that is digital, decentralized, and global with multiple locations in different countries, cyber security is an important component. Like any high-tech company, Northern Data also relies on digital and cloud services and needs to address how to maintain the operations and best protect its customers' data as well as its own.
11	Anti-corruption and compliance	Breaches of compliance guidelines, unlawful conduct and failure to comply with internal company standards can have far-reaching consequences for Northern Data. These include claims for damages and monetary fines, which can inflict both financial and major reputational damage on Northern Data.
12	Corporate governance and culture	Northern Data is growing rapidly, which means that the number of employees is also increasing at a fast pace. It is therefore important for Northern Data to establish a legal and factual regulatory framework for the management and supervision of the Company based on good corporate governance.

# Environmental

As part of ESG compliance, Northern Data has a particular level of responsibility in the area of environmental protection due to its high electricity requirements. The Company aims to make its energy consumption, which is also a significant operational cost factor, as efficient and environmentally friendly as possible. At the end of 2022, Northern Data operated eleven data centers in Germany, the Netherlands, Sweden, Norway, the USA and Canada, whose design and operating processes are aimed at achieving maximum energy efficiency. The data centers include contracted third-party sites. The monitoring and recording of energy consumption and other relevant environmental parameters can currently only be fully documented for the site in Sweden but is planned for all data center sites in the future.

## Energy efficiency

Power Usage Effectiveness (PUE) defines the metric that describes how efficiently data centers use electricity to generate computing power. PUE is the ratio of the total amount of energy used by a data center facility to the energy delivered to computing equipment. An ideal PUE is 1.0. Anything that isn't considered a computing device in a data center (e.g. lighting, cooling, etc.) falls into the category of facility energy consumption. Northern Data calculates data center PUE by dividing the amount of energy fed into the data center by the amount of energy used to operate the IT infrastructure in the data center.

The PUE values for two data centers were determined in the reporting year 2022. A PUE value of 1.06 was determined for the data center in Sweden. According to Deutsche Rechenzentren GmbH, values of 1.5 are considered efficient and less than 1.2 are considered very efficient. Lefdal Mine, one of Northern Data's contracted third-party data centers, guarantees a PUE of 1.15. Northern Data is currently preparing the introduction of suitable measurement procedures in all data centers in order to determine the PUE value globally in a standardized procedure, as in Sweden.

### PUE values for two data centers

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Lefdal Mine Datacenter (LMD),  
Lefdal, Norway: PUE = 1.15



Data center in Boden, Sweden:  
PUE = 1.06 (2022)

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### Total energy consumption

The total energy consumption is defined as the sum of all electrical energy consumed in Northern Data’s data center operations, including contracted third-party data centers. The data for the energy consumption is provided by the contracted energy suppliers according to the data center location. Based on this information, the total energy consumption for 2022 was 963 GWh. The increase in total energy consumption compared to the previous year can be attributed to the commissioning of additional data centers in North America in 2022 and continuous operation of data centers that were only commissioned in the course of 2021, respectively.

#### Total energy consumption in GWh

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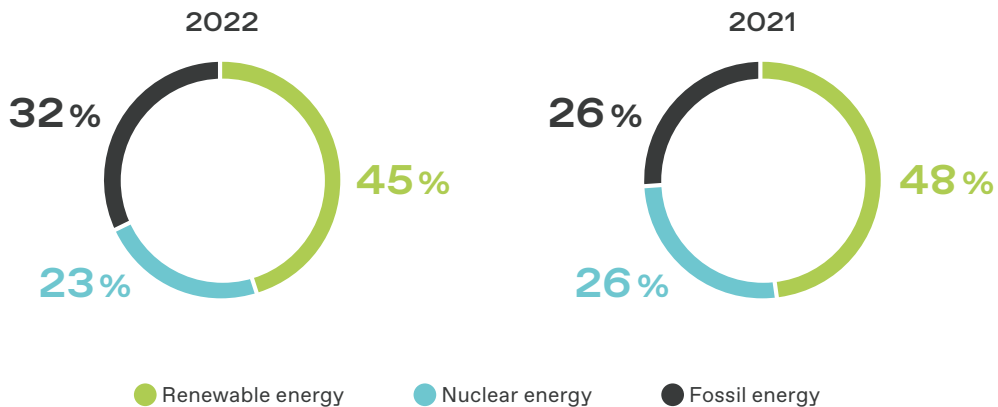


### Energy mix

Northern Data reports on the share of renewable, nuclear and fossil energy. The share of nuclear and renewable energy was determined by multiplying the data taken from the fuel mix by the amount of energy used in the data centers. In 2022, 45 percent (357 GWh) of the energy consumption was drawn from renewable energies and 23 percent (181 GWh) from nuclear energies. 250 GWh (32 percent) were drawn from fossil fuel sources. The total energy mix of Northern Data’s data centers has shifted slightly towards fossil fuels in 2022 compared to 2021. This is primarily due to the fact that the energy mix of some electricity grids, that some of the existing data centers are connected to, have shifted into the direction of fossil energies.

#### Energy mix

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## Compensation

In 2021, Northern Data purchased Renewable Energy Certificates (RECs) with a capital expenditure of EUR 570 thousand. In 2022, no additional RECs were purchased as Northern Data was reviewing its REC strategy.

## Carbon footprint

### of data center operations

In 2022, no carbon footprint was reported, as Northern Data was reviewing its measurement operations on a global level.

### of business travel

Northern Data is certified to offset 100 percent of the CO<sub>2</sub> from most of its business travel. The majority of business travel at Northern Data is booked through GreenPerk, TravelPerk's carbon-neutral business travel program. GreenPerk partners with carbon calculation and offsetting providers, so that Northern Data compensates for its CO<sub>2</sub> emissions directly through the platform. Offsetting is done on a per-trip basis, helping to reduce the carbon footprint of the Company's business travel. With this contribution, Northern Data supports projects to combat deforestation in Indonesia, to aid reforestation in Cambodia and to empower the use of hydropower in Turkey. All projects are VERRA/GOLD-awarded and audited.

## Electronic waste disposal

Electronic waste is regarded as all kinds of discarded electronic devices and assets. Northern Data manages its electronic waste by deciding whether it can be remarketed, refurbished, recycled, or must be disposed of. Hereby, the Company strives to give the discarded electronic devices and assets a second lifecycle through refurbishment and remarketing. In 2022, there were no significant amounts of electronic devices and assets discarded, therefore no waste was measured. The hardware impaired as of 31 December was not yet classified as decommissioned in 2022. Northern Data handles the recycling and disposal of electronic waste in accordance with local and European laws and guidelines.



# Social

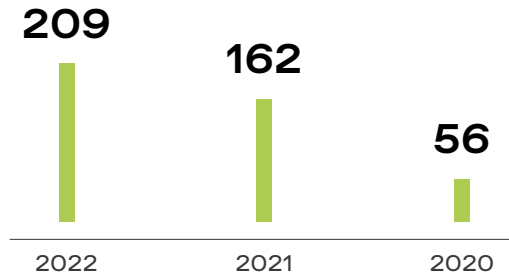
Attracting new and retaining existing employees is critical to Northern Data’s future success. In 2022, the focus was on expanding the HR department globally to implement a global strategy on people and culture, including standard processes, frameworks, and tools. As part of this program, job profiles at Northern Data were reviewed. Based on this analysis, job grades were then defined and a bonus system was developed. The result is a concept that clearly shows which career paths can be taken at Northern Data, at both the specialist and the management level.

## Employee recruitment

To achieve its recruiting goals, the HR department is continuing the employee referral program that motivates employees to recruit experts from their own network for the Company. In view of the many changes that have been made, the People Team focused on defining and adapting new processes. In 2022, Northern Data started hiring internationally in accordance with the global People & Culture strategy. On December 31, 2022, Northern Data employed 209 employees, 99 percent of whom have contracts without a fixed employment term and 1 percent with fixed-term contracts.

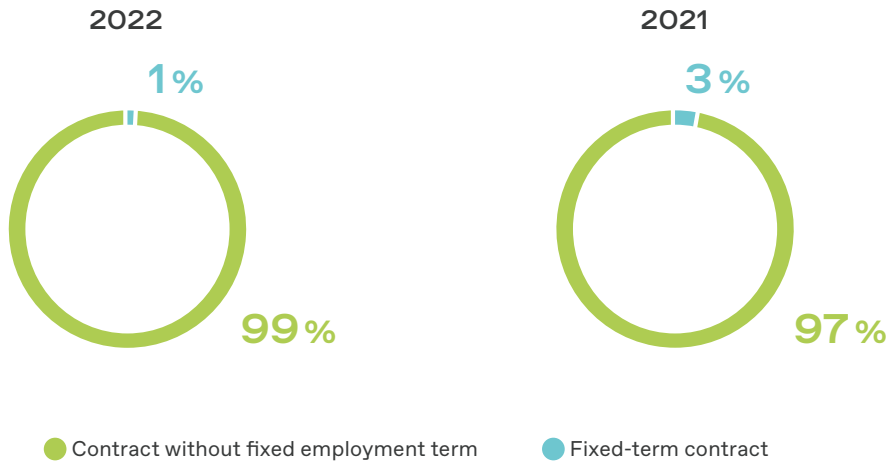
### Number of Employees as of Dec 31

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### Type of contract

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## Employee appreciation and motivation

Every employee should be given the opportunity to develop his or her personal and professional ambitions to the fullest. To underpin this belief, Northern Data is developing a recognition strategy. As part of this strategy, Northern Data already offers competitive salaries, flexible working hours and supports professional development. In line with the recognition strategy, a performance/bonus framework has been introduced to recognize good and reward exceptional performance. Quarterly appraisals are conducted as part of the performance process. These are designed to help the supervisor and employees track their performance and determine the next steps. The basic idea is to keep employees motivated and help them achieve their goals. At Northern Data, good performance is incentivized. However, to motivate employees to go one step further, we reward exceptional performance with even higher rewards. A performance enablement process/framework was established in 2022. This describes a structured approach to promoting and optimizing the performance of individuals and teams. Finally, an employer branding project was initiated, including the creation of the Northern Data People & Culture Blog.

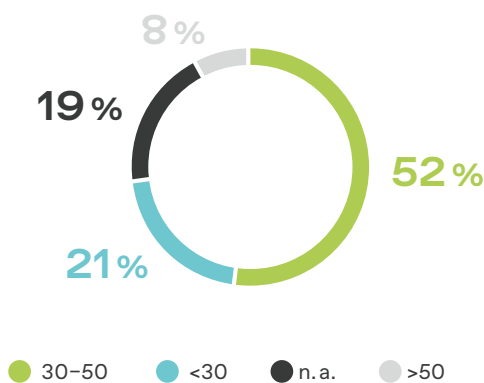
## Employee development

To support the employees in their development, Northern Data offers several training courses in various areas via the Haufe Academy, an e-learning platform. In addition to the development programs offered, Northern Data promotes individual training measures to enable employees to develop further. The Company also invests in individual training in line with the employee's individual performance plan.

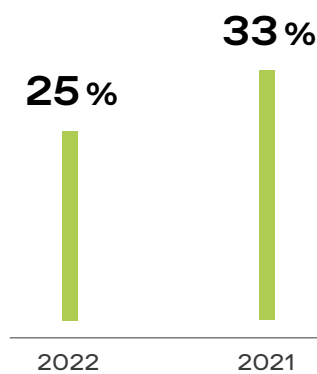
## Diversity

Northern Data consistently opposes discrimination based on gender, ethnicity, age, sexual orientation and religion. The Company documents its workforce data broken down by age, nationality and gender. In 2022, 52 percent of the workforce was between 30 and 50 years old, 21 percent was under 30, and 8 percent was 50 or older. 19 percent of the workforce is not registered with their date of birth due to individual countries' data protection laws. 25 percent of the workforce was female and 75 percent was male. In the reporting year, Northern Data had employees of 23 different nationalities, hailing from five continents. They are German (39 percent), Canadian (21 percent), American (15 percent), Norwegian (5 percent), British (3 percent) and Swedish (3 percent). The remaining 14 percent of the workforce yields from other countries or cannot be identified due to data privacy laws in the respective countries.

### Age of workforce

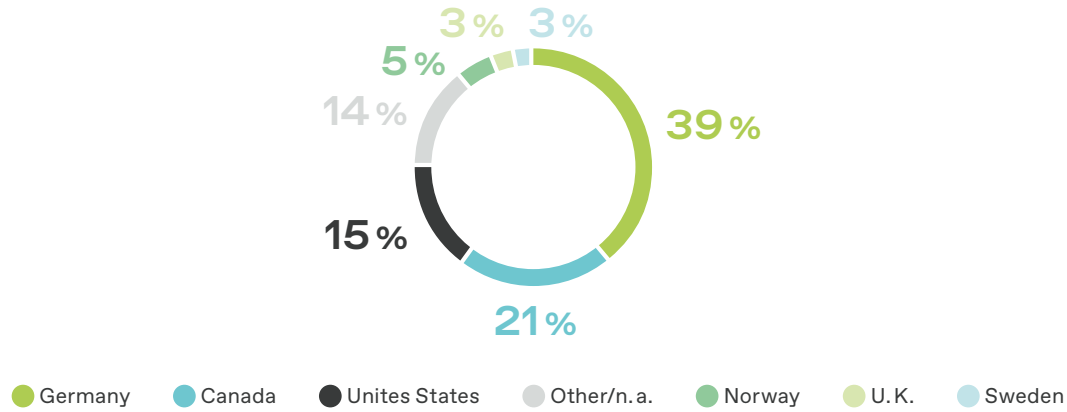


### Women in the workforce



**Origin of the workforce**

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**Employee health and safety**

Northern Data places great importance on the physical and mental well-being of its employees. The rules of conduct for a safe workplace and healthy interaction are documented in Northern Data’s Code of Ethics and Conduct. Most importantly, Northern Data has established a Health, Safety and Environmental (HSE) Program in 2022. The key elements of the program include a comprehensive safety plan, accident and damage reporting, safety, orderliness and cleanliness, organization of first aid, risk audits, instructions, training and drills, and contractor qualifications.

**Human rights**

Northern Data’s approach to respecting and complying with human rights is set out in the Company’s Human Rights Policy. The Company’s policy is based on the international human rights principles contained in the Universal Declaration of Human Rights, the International Labor Organization (ILO) Declaration, the Fundamental Principles and Rights at Work, the United Nations Global Compact and the United Nations Guiding Principles on Business and Human Rights. It applies throughout the Group and covers the topics of anti-discrimination, freedom of association and collective bargaining, a safe and healthy workplace, forced labor, human trafficking, child labor and working hours.

## Governance

Northern Data takes the topic of responsible corporate governance very seriously and aims to sustainably increase the value of the Company. In 2022, the relevant measures included the integration of ESG into the group-wide risk management system, the revision of the Code of Conduct, the establishment of a Conflict-of-interest register, and the improvement of the KYC strategy. Besides, there were obligatory training courses for all employees in the field of acting safely and responsibly in the workplace. Most importantly, the implementation of ISO 27001 has started, with the goal of being certified in 2023/24.

### Data privacy

Group-wide risk and compliance management is responsible for preserving data privacy. It is carefully considered – especially when hiring freelancers, implementing new software, making changes in processing personal data, answering incoming questions from customers, business partners or suppliers, video surveillance, and when personal data is transferred outside the EEA. To ensure company-wide data privacy, all employees attend data privacy training once a year. The requirements with regard to data privacy are recorded in Northern Data's privacy policies, which are all third-party audited. They cover all GDPR-relevant procedures and apply to the entire operations, including suppliers. There were no data protection breaches in 2022 and the Company is working towards maintaining this result.

### Cyber security

Cyber security is of critical importance for all departments that are directly connected with IT activities. In 2022, these departments included internal IT, the team responsible for the data center infrastructure and the team responsible for STEIGER, Northern Data's software for the management of data centers and cryptocurrency mining, and the cloud department. Notably, the STEIGER team was terminated in late 2022 due to the retirement of the STEIGER software. For the group-wide workforce, Northern Data has a cyber security policy in place that offers recommendations and sets rules in the fields of email security, password protection, and multi-factor authentication. Newly hired employees receive an IT guide during onboarding. Training materials and information are regularly provided on the intranet and via IT newsletters. To ensure that every employee knows the basics of IT security, everyone is required to attend IT security training once a year. Moreover, there are regular phishing simulations that show potential areas of risk. For the employees working with STEIGER Software, Northern Data provided additional guidelines covering the matters of network security (ensuring security in internal networks), 2-factor authentication, penetration-testing, and SSL (securing internet connections and protecting sensitive data transferred between two systems). Finally, the STEIGER Team met quarterly to discuss developments in the fields of data center network infrastructure and security.

To manage incidents and breaches in the internal IT, several security mechanisms (Defender for Endpoint, Defender for O365, Identity Security), that all report to one central location, are applied. Depending on the incident, the management system automatically executes actions or calls for a manually executed action. In addition, all software installed is analyzed frequently for possible vulnerabilities and outdated versions. STEIGER Software, which was used in 2022, had its own management system that performed regular tests and automatically provided notifications in case of internal or external cyber security threats. In the case of a pool change that indicated that crypto rewards are running into another wallet, the management system would sound an alarm. So far, there were no situations where crypto rewards were sent to unknown wallets. Northern Data reported no cyber security breaches in 2022.

## Anti-corruption and compliance

Northern Data does not tolerate any form of corrupt practices, including, but not limited to, extortion, fraud, or bribery. The Company encourages employees who suspect that serious issues exist to report them using a whistleblowing form without fearing any kind of reprisal. Normally, suspected irregularities must be reported to the respective manager, who examines the matter and seeks a solution. If, for whatever reason, an employee does not feel comfortable with reporting the issue to the manager, the Compliance or People Team may be approached directly. Whistleblowing, however, does not only concern employees. Northern Data provides a whistleblowing form on the Company's website to enable members of the public to report wrongdoing. In 2022, the topic of whistleblowing was again given special attention particularly within the workforce, which again was made aware of the opportunity to make use of the form. In 2022, 5 cases of whistleblowing were reported. 2 of the cases were investigated and 3 of them were considered irrelevant.

## Corporate governance and culture

Northern Data is committed to the highest values and morals. These are presented in the Company's Code of Conduct. Northern Data's Code of Conduct was revised and further developed in 2022. The "Code of Business Conduct & Ethics" applies to all employees, suppliers, customers and partners. It provides guidelines that must be followed under all circumstances. The code covers important topics such as health and safety, equality and anti-discrimination, conflicts of interest, the confidentiality of information, intellectual property, competition and anti-trust, risk management and awareness, money laundering and insider trading. The code is centrally placed on the Northern Data intranet and translated into German, English, and French. To ensure consent and compliance, all employees are required to complete a course that teaches the basics of the Code of Conduct and confirm that they agree with and follow it.

# ESG in the Future

As social actors, corporations share the responsibility for sustainable development. Northern Data has accepted this responsibility and decided to report on its contribution to sustainable development with this voluntary ESG Report. In accordance with the growth of the Company, its structures, and procedures, the professional monitoring of the ESG reporting will be implemented successfully. The goal for future ESG reporting is to maintain a transparent, sincere, and comparable ESG data record that is developed in line with global standards and frameworks and serves the overall vision to become as sustainable as possible. Northern Data wants to actively take part in the process of creating a more sustainable world for current and future generations.



# GROUP MANAGEMENT REPORT



# Group Management Report

## Basis of the Group

### Business model

Northern Data AG (hereinafter also referred to as Northern Data, the Company or the Group), headquartered in Frankfurt/Main, Germany, develops and operates global infrastructure solutions in the field of High-Performance Computing (HPC). HPC is characterized by the provision of computing power in a short period of time. In fiscal year 2022, the use cases cover two main areas: 1) Mining, especially Bitcoin and Ethereum as well as blockchain services. 2) Hardware & Other, including the area of cloud computing, which is set to play a significant role in the future. HPC accelerates computing and provides many times the computing power and storage capacity of conventional server systems. This comes with increased heat generation and therefore also requires special thermal management. The HPC computing power provided in the operation of Northern Data's data centers is based on two different types of microchips that are specialized for different applications: ASICs (Application-Specific Integrated Circuits) chips enabling Bitcoin mining and GPUs (Graphic Processing Units) enabling Ethereum mining till the change from proof-of-work to proof-of-stake as well as cloud computing. Following the switch to proof-of-stake, suitable hardware was used for cloud computing. The GPUs held as at December 31, 2022, were only partially classified as suitable for cloud computing and were therefore impaired in the amount of EUR 65 million as at December 31, 2022. On December 31, 2022, the Group had a total of 209 employees worldwide.

As in fiscal year 2021, reporting for fiscal year 2022 is based on the two operating segments "Mining" and "Hardware & Other".

### Mining

In terms of revenues, the Cryptocurrency Mining segment represented the main activity for the Group in the reporting year. Revenue was generated both from the sale of computing power and through payouts from a mining pool for Bitcoin and altcoin self-mining less a pool fee. During the full fiscal year 2022, Northern Data was active in cryptocurrency mining with three different operating models. The segment's main activity is Bitcoin mining for its own account. This involves purchasing ASIC machines and deploying these in Northern Data's own data centers or having these machines hosted by a third-party hosting provider. The ASIC machines consume power and generate hash power. In turn, this hash power is sent to external mining pools that pay out rewards and transaction fees in Bitcoin as new blocks are found. Northern Data's operations team installs, manages and maintains the machines to ensure high uptime.

Secondly, Northern Data provided ASIC hosting services to third parties. This involves installing, managing, and maintaining ASIC machines for other mining companies in data centers built and operated by Northern Data. For hosting services, the Company received a variable hosting fee. The remuneration for the computing power generated is in the corresponding cryptocurrency.

Finally, until mid-September 2022, the Group was also active in altcoin mining for its own account. The main altcoin mined was Ethereum. Altcoin mining was performed using a large cluster of GPUs owned, operated, and maintained by Northern Data.

### Hardware & Other

This segment focuses on Northern Data's data center infrastructure, that comprises all the Group's stationary and mobile data center operations, including their acquisition or planning, construction or conversion, and operation. The infrastructure serves as a platform for the Group's own colocation services as well as the Cloud Solutions business, which started to generate low-level revenues in the fourth quarter of 2022. Northern Data procures, installs, and manages server hardware in its data centers that is owned by customers or attributable to Northern Data. The data centers are located in North America and Europe. The revenues in this segment were mainly generated from hardware sales, hosting and colocation, engineering, and for the first time cloud computing.

## Corporate governance

### Management Board

Northern Data AG is run by the Management Board. The Group's strategic development is closely coordinated with the Supervisory Board. The Supervisory Board is always kept informed about new strategies as well as opportunities and risks by the Management Board.

The Management Board is responsible for the strategic development and successful management of Northern Data. In fiscal year 2022, the Management Board consisted of three members until the end of February 2022: Chief Executive Officer (CEO) Aroosh Thillainathan, Chief Operating Officer (COO) Stefan Sickenberger and Chief Financial Officer (CFO) Dr. Mathias Dähn. Dr. Mathias Dähn left the Company at the end of February and Stefan Sickenberger left the Company at the end of October. Since then, the Management Board has consisted of one person, CEO Aroosh Thillainathan.

### Supervisory Board

The Supervisory Board acts as an oversight body for the Management Board and consisted of three members in fiscal year 2022: Dr. Tom Oliver Schorling (Chairman), Hermann Josef Lamberti and Dr. Bernd Hartmann. Hermann Josef Lamberti left the Supervisory Board on January 17, 2023.

## Group structure overview as of December 31, 2022

The Northern Data Group is managed by Northern Data AG. Northern Data AG performs central management and administrative functions for the Group companies, such as finance, investor relations, controlling, legal, risk, compliance, data protection as well as purchasing and human resources.

Reporting was carried out in the "Mining" and "Hardware & Others" segments and included the following significant subsidiaries:

### Mining

- › Northern Data AG, registered in Frankfurt/Main, Germany, has been the contracting entity for our framework hardware purchasing contracts with SuperAcme Technology (Hong Kong) Limited (i.e. MicroBT). The entity does not have any direct activity in cryptocurrency mining.
- › Minondo Ltd., registered in Gibraltar, is not directly active in cryptocurrency mining nor does it generate hash power but was solely active in the sale of hash power to one or more mining pools that use an FPPS payout structure. Business activity of this entity has been terminated in 2023.
- › Northern Data Hosted Mining, LLC, registered in New Castle County, Delaware, USA, is not directly active in the area of cryptocurrency mining, but is active in the generation of hash power and the subsequent sale of hash power to one or more mining pools that use an FPPS payout structure.



- › Northern Data US procurement, LLC, registered in New Castle County, Delaware, USA, is active in owning and procuring Bitcoin mining hardware and leasing hardware to Northern Data Hosted Mining, LLC.
- › Decentric Europe B.V., registered in Amsterdam, the Netherlands, is primarily active in owning Bitcoin mining hardware and GPUs and leasing hardware.
- › 1277963 B. C. LTD. is primarily active in owning hardware used for generation of hash power and the subsequent sale of hash power.

#### Hardware & Others

- › Northern Data NY, LLC, registered in New Castle County, Delaware, USA, is active in the area of hardware sales.
- › Northern Data PA LLC, registered in New Castle County, Delaware, USA, is active in the area of hardware sales.
- › Kelvin Emtech Inc. Group and its three direct subsidiaries Kelvin Emtech Inc., Kelvin Emtech Technologies Inc. and CEDTECH Construction Inc., all located in Montreal, Canada, are responsible for manufacturing containers used to house server equipment. Its activities included, among other tasks, statics testing, needs analysis, planning, and construction and operation of the facilities.
- › ND CS (Services) GmbH, registered in Frankfurt/Main, Germany, is the entity set up to initially transact with customers in the Cloud Solutions space in the preliminary phase. ND CS (Services) GmbH (NDCS) was purchased as shelf company (former: Youco F22-H427 Vorrats-GmbH) with sale and purchase agreement dated July 20, 2022.

#### Significant changes from the previous year

The following significant changes occurred within the Northern Data Group's subsidiaries in fiscal year 2022:

- › Northern Data (CH) AG was established for the purpose of hash power trading (purchasing hash power from 1277963 B. C. LTD. and European entities and selling the hash power to the pools). Northern Data (CH) AG is not active in cryptocurrency mining, nor generation of hash power, but solely the purchase and sale of hash power to pools with a FPPS payout structure.
- › In the US, several companies were founded to provide efficient corporate structures for cryptocurrency mining operations, intercompany transactions, and equipment leasing to third parties. Please refer to the Notes for further details.
- › ND CS (Services) GmbH was founded to initially transact Northern Data Group's Cloud Solutions startup phase.
- › Kelvin Emtech Inc. Group and its three direct subsidiaries Kelvin Emtech Inc., Kelvin Emtech Technologies Inc. and CEDTECH Construction Inc., all located in Montreal, Canada, were divested on December 31, 2022. Kelvin Emtech Group was responsible for manufacturing containers used to house server equipment. Its activities included, among other tasks, statics testing, needs analysis, planning, and construction and operation of the facilities.

In 2022 Northern Data has begun to simplify its business structure, as announced in the September 2022 shareholder letter. The new structure consists of three autonomous, global business segments: Cryptocurrency Mining (Peak Mining), Cloud Solutions (Taiga Cloud) and Data Center Infrastructure Solutions (Arden Data Centers). The structure is only effective beginning of 2023.

# Economic Report

## Macroeconomic and industry-specific conditions

### Global economy

Global economic growth was only 3.4 percent in 2022, down from 6.2 percent the previous year, according to the International Monetary Fund (IMF). The expected recovery from the effects of the Covid-19 pandemic was slowed down by Russia's attack on Ukraine at the end of February 2022. The war had a significant impact on global energy prices which rose at a rapid rate in 2022.<sup>1</sup>

### Mining of Cryptocurrencies

The undoubtedly strong geopolitical and global economic headwinds also hit the cryptocurrency mining industry in 2022. In particular, the decline in cryptocurrency prices combined with rising energy costs had a negative impact. With energy supply being one of the most important components in mining of cryptocurrencies, the rise in energy prices prevented several miners from operating profitably, leaving cryptocurrency mining companies struggling to survive economically.<sup>2</sup> Another major event was Ethereum's switch from the proof-of-work to the proof-of-stake algorithm, the date of which was uncertain for a long time and finally took place. Since the switch, Ethereum no longer requires mining devices, relying instead on validators to verify transactions. As a result, Ethereum miners saw a 100 percent loss in revenue overnight. Other uncertainties weighing on cryptocurrency prices included the collapse of the Terra stablecoin<sup>3</sup>. Overall, the market capitalization of all current cryptocurrencies decreased significantly compared to the end of the previous year and stood at EUR 796 billion (USD 849 billion) as of December 31, 2022, about 63 percent lower than the previous year's level.<sup>4</sup> Bitcoin recorded a decline of around 63 percent to around EUR 15,400 per Bitcoin, while the decrease of Ethereum was around 67 percent.<sup>5</sup>

### Data Center Infrastructure

The market research firm Global Market Insights assumes that the data center infrastructure market was valued EUR 53 billion<sup>6</sup> (USD 57 billion) in 2022, representing an increase of 8 percent compared to the prior year. Growth drivers have been the increased data consumption and volume collected through digital channels along with the adoption of advanced technologies by enterprises to shift big data and its business-critical processing to data centers. In conjunction with this, investments by data center providers have also increased in order to meet customers' infrastructural requirements.<sup>7</sup> Unhinged by the pandemic, supply chains will remain tight in 2022 due to continued demand for new data center capacity and facility upgrades, according to the advisory organization Uptime Institute. Owner-operator confidence in AI as a tool for managing data centers increased significantly from the previous year, with 57 percent of respondents saying they would trust a properly trained machine learning model to make operational decisions, up from 49 percent in 2021. At the same time, the challenges of attracting and retaining staff have increased. Employees who leave companies are predominantly recruited by competitors, and only few leave the industry completely.<sup>8</sup>

1 <https://www.imf.org/-/media/Files/Publications/WEO/2023/Update/January/English/text.ashx>

2 <https://tcrn.ch/3fsKMo8>

3 The Death Spiral: How Terra's Algorithmic Stablecoin Came Crashing Down (forbes.com)

4 <https://coinmarketcap.com>

5 Will Bitcoin and Ethereum prices stagnate, sink or rebound in 2023? – TechCrunch

6 <https://www.gminsights.com/industry-analysis/data-center-infrastructure-market>

7 <https://dcmn magazine.com/data-centres/global-data-center-infrastructure-market-growth/>

8 <https://uptimeinstitute.com/resources/research-and-reports/uptime-institute-global-data-center-survey-results-2022>

## Business Performance

In fiscal year 2022, the Northern Data Group progressed in market development and establishment. Revenue from our Bitcoin and Ethereum mining activities still accounted for the vast majority of our revenue. Progress in the reporting period was characterized by the group's efforts to strengthen and expand Northern Data's position in Bitcoin mining while focusing primarily on implementing the cloud computing business through significant investments.

However, the past fiscal year 2022 presented a difficult environment for cryptocurrency mining. When mining cryptocurrencies, the three most important factors are the trading prices of the respective cryptocurrency, the energy costs, and the hardware prices. Bitcoin mining was characterized by prices that fell sharply in the first half of the year in particular, recording a decline of 63 percent over the year as a whole. Extreme increases in electricity<sup>9</sup> prices, specifically felt throughout the EU, and the hash rate<sup>10</sup>, over the course of the year, were also characteristic. The hardware value tends to follow the decreased profitability of mining, with somewhat of a time lag. At the end of 2022, the prices of new hardware were still high even when profitability was very low. This meant that purchasing new hardware to expand the business at that time was not economical and growth slows down until hardware prices decrease or newer, more efficient models are introduced.

In this environment, Northern Data proactively reviewed its investment policy and focused only on investments in existing revenue streams. Thus, the Company used the flexibility of the electricity contracts concluded on a daily basis to ensure maximum profitability by specifically controlling the utilization time of the hash power. The more measured capital investment policy also led to fewer new ASIC miners being commissioned in 2022 than the 100 thousand devices initially assumed.

### Expansion of Bitcoin mining

Northern Data increased the number of ASIC servers installed for mining on its own account by around 128 percent to over 36 thousand devices. The corresponding computing power increased by around 133 percent to over 3.3 EH/s in fiscal year 2022. In view of the sharp fall in Bitcoin prices, extreme increases in electricity prices, and peak hash rates, the production of additional computing power for Bitcoins and thus an increase in revenue would only have been possible at a cost that would have exceeded the equivalent value of the Bitcoins produced. In contrast to many of its competitors, however, Northern Data had the advantage of being able to balance the operating electricity costs with the yield of the computing power, as it had the foresight not to conclude any fixed electricity supply contracts. Northern Data's power portfolio consists of different agreements. Northern Data has various types of contracts with fixed prices, spot prices as well as fixed (or minimum) volumes and variable volumes. In 2022, due to the energy price crisis and a drop in mining profitability, the Company had to curtail at various locations. In other locations, e.g. in the US, it had attractive fixed price arrangements and therefore could continue to generate income.

Following the collapse of Bitcoin price in June, Northern Data realigned its mining strategy. This included the immediate sale of the generated coins and the flexible activation and deactivation of miners depending on the respective operating costs and the current Bitcoin price. The Company also prioritized the conservation of cash reserves by postponing capital outlays for investment purposes. In addition, the focus was placed on mining for own account and, where possible, the hosting business was wound up for the account of third parties in compliance with contractual obligations. Particularly in the difficult environment of the past fiscal year 2022, it became clear that Bitcoin mining for own account is much more profitable and, above all, more controllable and predictable than providing hosting services for mining customers.

9 [https://www.dashboard-deutschland.de/indicator/data\\_preise\\_strom](https://www.dashboard-deutschland.de/indicator/data_preise_strom)

10 Bitcoin Hashrate Chart 2022 – CoinWarz

### End of Ethereum mining

Following the merge of the Ethereum cryptocurrency from proof-of-work to another consensus mechanism called proof-of-stake in September 2022, after a period of uncertainty as to when it should happen, revenue from Ethereum mining fell to zero. Accordingly, Northern Data increasingly began to shift part of the freed-up GPU computing capacity, to the extent possible, to the cloud computing business, which was recognized in the Hardware & Other segment in fiscal year 2022. The hardware for which no alternate use was decided upon by Management was impaired as at December 31, 2022.

### Progress in Hardware & Other

The progress in cloud computing and the provision of data center infrastructure was demonstrated in fiscal year 2022 with Northern Data joining the NVIDIA Partner Network as a Preferred Partner for Cloud Services in Europe.

The strategic partnership entered into with the State of Oklahoma in March 2022 to establish the North American operational headquarters near Tulsa, Oklahoma, for the implementation of Northern Data's expansion plans in the United States, was meanwhile also discontinued with the change in mining strategy.

### Alignment of the organizational structure into three business divisions

To illustrate the depth and breadth of its business model, Northern Data began to simplify the organization of its business structure into three independent, global business units in the 2022 fiscal year:

- › Cryptocurrency Mining
- › Cloud Solutions
- › Data Center Infrastructure Solutions

This structural adjustment was only made in the second half of the year and not yet had any impact on the reporting segments "Mining" and "Hardware & Others" for 2022. The alignment of business activities to three independent business divisions was continued in fiscal year 2023 with the introduction of divisional brands that were assigned to the three core business areas:

- › Taiga Cloud: European regional provider of Generative AI Cloud services
- › Ardent Data Centers: Provider of data center environments purpose-built with liquid-cooling technology
- › Peak Mining: Active in the purchasing and operation of Bitcoin mining hardware and mining data centers for the purpose of generating hash power

For further discussion around events after the reporting period, please refer to the Notes to the Group Financial Statements.

### Development of the asset, financial, and earnings position

The comparability of the asset, financial, and earnings position of the current reporting period with the corresponding comparative period of the previous year is only possible to a limited extent, as there have been certain divestitures as at the end of 2022.

#### Asset position

In fiscal year 2022, Northern Data Group's total assets decreased by 43.59 percent to EUR 450,586 thousand (December 31, 2021: EUR 798,766 thousand).

Overall non-current assets in total assets fell in 2022 at 29.77 percent (December 31, 2021: non-current assets rose by 13.03 percent). They decreased to EUR 323,535 thousand (December 31, 2021: EUR 460,675 thousand) in particular due to impairments of EUR 64,592 thousand processed on GPUs previously used for Ethereum mining. Goodwill decreased to EUR 13,376 thousand (December 31, 2021: EUR 20,099 thousand) due to the impairment of the Hydro Mining CGU Goodwill of EUR 5,714 thousand, as well as

the disposal of goodwill of EUR 1,008 thousand associated with the divestiture of Kelvin Emtech Groupe. Other intangible assets decreased by 97.31 percent to a total of EUR 1,766 thousand (December 31, 2021: EUR 65,538 thousand) due to a change in business model, resulting in cryptocurrencies not being held for long term anymore and instead was disposed of in its entirety.

Property, plant and equipment decreased by 20.26 percent to a total of EUR 282,745 thousand (December 31, 2021: EUR 354,573 thousand) due to impairments recognized during the year as described above.

Rights of use assets from leasing agreements increased by 14.40 percent to a total of EUR 10,191 thousand (December 31, 2021: EUR 8,908 thousand) due to new leasing arrangements for Data Center Infrastructure.

Shares in other companies increased to a total of EUR 9,851 thousand (December 31, 2021: EUR 1,449 thousand) mainly due to increased fair valuation of the shares in Lancium.

Other non-current assets increased by 48.77 percent to a total of EUR 2,541 thousand (December 31, 2021: EUR 1,708 thousand) due to issuance of a long-term loan by the Northern Data Group to a third party.

Recognized deferred tax assets decreased to a total of EUR 3,065 thousand (December 31, 2021: EUR 8,401 thousand) due to increased temporary differences between the tax base of assets and their carrying amount in accordance with IFRS. This is due to the fact that higher netting of deferred tax assets and deferred tax liabilities results in a lower amount of deferred tax assets.

Current assets in total amount to EUR 127,051 thousand (December 31, 2021: EUR 338,093). Here, the inventories increased to EUR 7,200 thousand (December 31, 2021: EUR 4,689 thousand) due to higher inventories being held on hand at year end. Total trade receivables decreased to EUR 2,908 thousand (December 31, 2021: EUR 5,254 thousand). Contract assets amount to Nil (December 31, 2021: EUR 2,684 thousand). Income tax receivables increased to EUR 5,122 thousand (December 31, 2021: EUR 1,310 thousand) due to refunds expected on prepaid taxes in Gibraltar and Canada. Other assets decreased by 29.80 percent to EUR 71,942 thousand (December 31, 2021: EUR 102,483 thousand) mainly due to cryptocurrency being largely disposed of in the fiscal year 2022. Cash and cash equivalents decreased by 82.00 percent to EUR 39,879 thousand (December 31, 2021: EUR 221,597 thousand) due to greater utilization of cash resources on hand.

### Financial Position

On the liabilities side, the equity share fell by 41.30 percent to EUR 359,407 thousand (December 31, 2021: EUR 612,269 thousand). Here, the subscribed capital remained constant at EUR 23,816 thousand (December 31, 2021: EUR 23,816 thousand) due to the fact that no new shares were issued.

The capital reserve increased by 4.18 percent to EUR 419,392 thousand (December 31, 2021: EUR 402,552 thousand) due to additional share options from the share option program launched in 2021. The translation differences increased to EUR -10,780 thousand (December 31, 2021: EUR -505 thousand).

The non-current liabilities in total amount to EUR 10,077 thousand (December 31, 2021: EUR 18,283 thousand). Here, lease liabilities amounted to EUR 7,872 thousand (December 31, 2021: EUR 7,049 thousand) increasing by 11.67 percent associated with new leasing arrangements described above. Contract liabilities decreased to EUR Nil (December 31, 2021: EUR 270 thousand). Provisions decreased to EUR 5 thousand (December 31, 2021: EUR 2,478 thousand) due to the reversal of indirect tax reimbursement provision. Deferred tax liabilities decreased by 72.95 percent to EUR 2,200 thousand (December 31, 2021: EUR 8,133 thousand) due to a change in the temporary differences between the tax base of assets and their carrying amount in accordance with IFRS. Other non-current liabilities decreased to EUR Nil (December 31, 2021: EUR 353 thousand).

The current liabilities in total amount to EUR 81,102 thousand (December 31, 2021: EUR 168,216 thousand). Here, financial liabilities amounted to EUR Nil (December 31, 2021: EUR 76,891 thousand) due to repayment of the shareholder loan in August 2022. Lease liabilities increased by 39.36 percent to EUR 2,783 thousand (December 31, 2021: EUR 1,997 thousand) due to new leasing arrangements described above. Trade payables increased by 43.03 percent to EUR 35,829 thousand (December 31, 2021: EUR 20,410 thousand) due to increased working capital management. Contract liabilities decreased to EUR 222 thousand (December 31, 2021: EUR 20,793 thousand) due to an associated decrease in engineering revenue. The income tax liabilities decreased to EUR 27,992 thousand (December 31, 2021: EUR 33,584 thousand). The current provisions decreased by 5.33 percent to EUR 1,919 thousand (December 31, 2021: EUR 2,027 thousand) due to a decrease in tax provisions. Other current liabilities decreased slightly to EUR 12,357 thousand (December 31, 2021: EUR 12,496 thousand).

### Cash development

Cash and cash equivalents comprising bank balances amounted to EUR 39,879 thousand as of the reporting date (previous year: EUR 221,597 thousand). Cash flow from operating activities amounted to EUR 960 thousand (previous year: EUR 88,066 thousand). The cash flow in fiscal year 2022 is characterized by lower cash inflows due to lower revenues and other income as well as higher cash inflows from cryptocurrencies sold. On the other hand, there were payments in the fiscal year for electricity costs and to suppliers for hardware deliveries. Cash flow from investing activities (EUR -95,217 thousand; previous year: EUR 126,618 thousand) mainly comprises the investments in property, plant and equipment (EUR -100,151 thousand; previous year: EUR -200,334 thousand). Investments in property, plant and equipment mainly relate to technical installations within data centers and Pods (mobile data centers) as well as advance payments made for hardware. The negative cash flow from financing activities (EUR -82,914 thousand; previous year: EUR -69,033 thousand) in fiscal year 2022 resulted mainly from the repayment of financial liabilities to shareholders (EUR -76,561 thousand; previous year: EUR -89,930 thousand).

### Earnings

Northern Data Group reported sales revenues of EUR 193,287 thousand (previous year: EUR 189,860 thousand) and EBITDA of EUR -58,117 thousand (previous year: EUR 320,058 thousand).

Sales revenues of EUR 193,287 thousand in fiscal year 2022 (previous year: EUR 189,860 thousand) resulted primarily from the provision of computing power for cryptocurrency mining (EUR 155,165 thousand; previous year: EUR 110,657 thousand), the sale of hardware (EUR 25,544 thousand; previous year: EUR 52,113 thousand); hosting and HPC services (EUR 5,955 thousand; previous year: EUR 12,512 thousand); engineering services of EUR 5,022 thousand (previous year: EUR 14,330 thousand) and cloud computing EUR 1,593 thousand (previous year: Nil) and Other EUR 8 thousand (previous year: EUR 248 thousand). The associated costs for this purpose are reported under cost of materials (EUR 98,864 thousand; previous year: EUR 76,319 thousand) mainly comprising electricity costs of EUR 59,980 thousand (previous year: EUR 35,553 thousand).

Other income in the fiscal year (EUR 56,181 thousand; previous year: EUR 302,961 thousand) resulted mainly from favorable currency translation differences, amounting to EUR 38,608 thousand (previous year: EUR 27,379 thousand) and refunds from reclaimable energy taxes. In the previous year other income resulted mainly from the deconsolidation result of Whinstone US, Inc. (EUR 159,451 thousand) and refunds from electricity contracts of Whinstone US, Inc. (EUR 104,453 thousand) for electricity units not purchased.

The increase in personnel expenses by EUR 30,729 thousand to EUR 49,898 thousand (previous year: EUR 19,169 thousand) is mainly due to the increased share option expense of EUR 16,840 thousand (previous year: EUR 5,356 thousand).

Other expenses (EUR 158,823 thousand; previous year: EUR 77,275 thousand) mainly include trading losses from the sale of cryptocurrencies (EUR 42,010 thousand; previous year: EUR 3,885 thousand), legal and consulting fees (EUR 24,025 thousand; previous year: EUR 26,244 thousand), the impairment of other receivables (EUR 29,122 thousand; previous year: EUR 21,840 thousand), the loss on the disposal of tangible and intangible assets (EUR 12,182 thousand; previous year: EUR 0 thousand) and expenses from currency translation (EUR 24,792 thousand; previous year: EUR 8,354 thousand). The US Dollar appreciated significantly against the Euro in fiscal year 2022, with the result being that the Euro weakened from USD 1.13 on December 31, 2022, to USD 1.07 at the end of the reporting period. The unfavorable differences from currency translation resulting from this development is recognized in Other Comprehensive Income in the amount of EUR 10,275 thousand. Consequently, EBITDA amounted to EUR -58,117 thousand (previous year: EUR 320,058 thousand) in the fiscal year.

Depreciation, amortization, and impairment losses (EUR 207,234 thousand; previous year: EUR 65,932 thousand) in the fiscal year include, among other items, depreciation of EUR 91,318 thousand (previous year: EUR 37,549 thousand) for property, plant and equipment; impairments of EUR 64,592 thousand related to miners previously used for Ethereum mining (previous year: EUR 173 thousand); impairment losses on cryptocurrencies of EUR 29,050 (previous year: EUR 7,529 thousand), and impairment losses on goodwill amounting to EUR 5,714 thousand (previous year: EUR 11,065 thousand). Compared to the prior year, the increase in depreciation for property, plant and equipment resulted from a greater number of servers being acquired and put into operation.

Financial expenses of EUR 3,166 thousand (previous year: EUR 7,170 thousand) mainly comprise interest expenses related to the shareholder loans (EUR 2,824 thousand; previous year: EUR 4,884 thousand). Financial income (EUR 99 thousand; previous year: EUR 89,765 thousand) is comprised of interest income.

Income tax income (EUR 2,643 thousand; expense in previous year: EUR 49,562 thousand) includes effective tax income of EUR 3,501 thousand (expense in previous year: EUR 41,933 thousand) and deferred tax expense of EUR 858 thousand (expense in previous year: EUR 7,629 thousand). The expenses from deferred taxes mainly result from temporary differences in asset tax vs. book values, and the netting with deferred tax assets.

In total, a consolidated net loss for the year of EUR -265,775 thousand (previous year: consolidated net profit EUR 287,159 thousand) is reported.

The consolidated net loss for the fiscal year 2022 is influenced by significant effects in the amount of EUR 206,272 thousand. The effects mainly comprise the impairments of GPU servers that are no longer usable for Ethereum mining, impairments of cryptocurrencies held as intangible assets, the trading losses from cryptocurrency and stock option plan expenses. Accordingly, the consolidated net loss for the year adjusted for these effects amounts to EUR -59,503 thousand.

## Financial Performance Indicators

### Northern Data Group

The key figures of sales revenues and adjusted EBITDA (adjusted income from operations before depreciation and amortization) contribute to the management of the Group and serve as the basis for strategic decisions. Adjusted EBITDA is a financial measure defined as Northern Data's EBITDA, adjusted to eliminate the effects of certain non-cash and/or other items, that do not reflect the ongoing strategic business operations. EBITDA is computed as net income before interest, taxes, depreciation, and amortization. Management believes this performance measurement represents a key indicator of the Company's core business operations.

While the initial forecast on sales revenues in the range of EUR 200 million to EUR 250 million was not achieved, the updated guidance on sales revenue forecast in the range of EUR 190 million to EUR 194 million for fiscal year 2022 was achieved. With an EBITDA of EUR -58.1 million, Northern Data could not achieve its initial target EBITDA in the range of EUR 6 million to EUR 40 million for the fiscal year 2022. At EUR 42.4 million, adjusted EBITDA was within the updated forecast for adjusted EBITDA in the range of EUR 40 million to EUR 75 million.<sup>11</sup> The adjustments add back the impacts of non-cash and non-recurring items which currently include (i) trading losses/gains from cryptocurrency, (ii) stock option plan expenses, (iii) lawsuits (including Whinstone and BaFin), (iv) systems implementation, (v) executive severance payments and (vi) impairment of receivables related to third party bankruptcy and (vii) write-down of assets not commissioned.

in EUR '000	2022
EBITDA	-58,117
Trading losses/gains from cryptocurrency	44,970
Stock option plan expenses	16,840
Lawsuits (including Whinstone and BaFin) (legal fees associated with these matters)	18,487
Systems implementation	5,695
Executive severance payments	4,132
Impairment of receivables related to third party bankruptcy	4,656
Write-down of assets not commissioned	5,737
<b>adjusted EBITDA</b>	<b>42,400</b>

At EBITDA of EUR 320,1 million in the prior year, adjusted EBITDA in the financial year 2021 amounted to EUR 89,6 million.

### Business Divisions

In assessing operating performance, Northern Data's management focuses on the core businesses, which consist of the segments "Mining" and "Hardware & Other" for 2022. In this context, Northern Data's management uses the financial performance indicators of sales and adjusted EBITDA to manage the segments.

For the reporting period, the Mining segment generated EUR 155,165 thousand (previous year: EUR 135,541

<sup>11</sup> <https://ir.northerndata.de/news/corporate-news/northern-data-releases-shareholder-letter-2/>



thousand) in external sales. The revenue result is therefore within the expected target range of the Group. The revenue in this segment is mainly attributable to the computing power generated in the area of crypto mining. The revenues are hereby volume-driven and also directly depend on the development of the cryptocurrency exchange rate. EBITDA for the segment amounts to EUR -103,260 thousand (previous year: EUR 310,798 thousand). In the reporting period, the Hardware & Other segment generated external sales of EUR 38,122 thousand (previous year: EUR 54,319 thousand). The main revenue drivers within this were hardware sales. The segment posted EBITDA of EUR 70,222 thousand (previous year: EUR 70,102 thousand).

## Non-Financial Performance Indicators

### Environmental protection

One focus of the Group is on resource-conscious management and environmental protection. The generation of computing power and the cooling of the equipment require a lot of energy. The data centers in Scandinavia obtain their electricity mostly from hydroelectric power.

Furthermore, the software is constantly optimized for the careful use of the servers. The careful use of resources is of vital importance to the Northern Data Group not only from an ecological but also from an economic point of view. The Northern Data Group is already focusing on energy efficiency in the expansion of new data centers as well as in the operation of its current facilities.

### Employees

The Northern Data Group is in a state of constant growth. As of December 31, 2022, the Group employed a total of 209 people, 29.01 percent more than at the end of the previous year. The increase in employees is mainly due to the newly established U.S. companies and the expansion of the mining business.

### Ethical principles

The group-wide Code of Business Conduct & Ethics reflects social, cultural and societal standards.

# Opportunity, Risk and Forecast Report

## Opportunity and risk management at Northern Data

For Northern Data, systematically addressing potential opportunities and risks is one of the cornerstones of responsible corporate governance. Identifying and quickly acting on opportunities as well as mitigating risks is essential to the Company’s success. Northern Data defines opportunities and risks as events that, if they occur, will lead to positive or negative deviations from its business objectives. To act in a forward-looking and controlled manner, Northern Data identifies potential opportunities and risks and evaluates them in terms of their probability of occurrence and possible extent of their impact.

As an international company, Northern Data has exposure to macroeconomic, segment-specific, and company-specific risks and opportunities. This Opportunity and Risk Report presents the risks and opportunities considered material for Northern Data.

Responsibility for the development and maintenance of an effective Risk Management System (RMS) at Northern Data lies with the Management Board. The Management Board, as well as the operative management level of the respective business areas and segments, have the direct responsibility for the early and ongoing identification, assessment and management of risks and opportunities. To ensure that a holistic approach is taken, the Risk & Compliance Team works throughout the Northern Data Group in close coordination with the Risk Owners of relevant departments, segments and significant companies affected by the opportunities and risks.

### Structure of the Risk Management System (RMS)

The Risk Management Policy defines the strategic principles for the development, implementation and operation of the RMS of the Northern Data Group. Northern Data’s RMS provides the organizational roles, responsibilities and authorities, as well as the processes to identify, assess, manage and report risks.

The RMS is reviewed regularly and further developed to fit the evolving needs of the Group. In 2022, the RMS was automated in preparation for the upcoming ISO 27001 certification and the risk register was incorporated into Jira, a system used throughout the business.

The Risk Management process is integrated into Northern Data business processes. They are designed as a continuous cycle that enables timely feedback to all functions involved in Risk Management activities.

### Northern Data’s risk management process



**Objectives of the Risk Management System**

The objectives of the RMS are the early identification of risks that could threaten the Company’s ability to continue as a going concern, the maintenance of transparency for decision-makers to determine respective appropriate actions, the promotion of a risk culture and the maintenance of a common understanding of risks within the Northern Data Group.

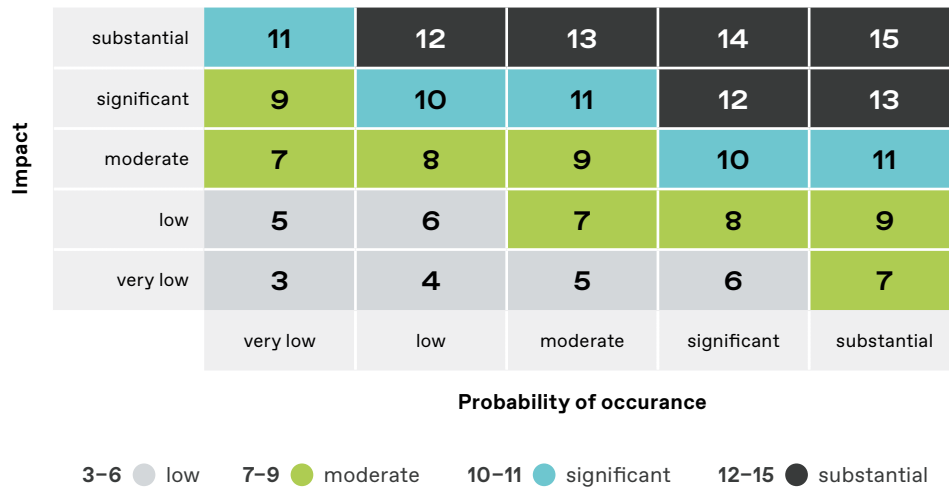
**Identification and monitoring of risks and opportunities**

Through existing processes (including workshops and self-assessments), the identification and assessment of risks and opportunities is carried out by both the Risk Owners during the day-to-day operations and the Risk & Compliance Team on an annual basis.

Northern Data has also embedded a reporting process for urgent risk events and major changes in materiality levels to be escalated to the Risk & Compliance Team and the Management Board.

**Risk management**

All individual risks identified are assessed in terms of their probability of occurrence and their potential impact is continuously assessed. The risks identified are then summarized and classified according to the following scale: low (risk score: 3–6), moderate (risk score: 7–9), significant (risk score: 10–11) and substantial (risk score: 12–15). The summary is presented using the following risk matrix:



The probability of occurrence represents the probability with which a certain impact of a risk could materialize within the defined period of one year. The assessment of the potential impact is made using quantitative or qualitative scales. The quantitative scale refers to the potential operating profit impact against EBIT as well as considering the KPI against adjusted EBITDA (see section “Financial Performance Indicators“ in the Group Management Report). The qualitative scale considers the impact on Northern Data’s reputation, financial performance, customers and changing regulatory requirements.

Net risks are considered when assessing individual risks. The net risk is the residual risk remaining after all reasonably practicable risk-reducing measures have been taken into account. The risks presented in this report exclusively reflect the net risk.

Based on the assessment and the respective combination of probability of occurrence and impact, risks are classified as low, moderate, significant or substantial. The main risks currently identified are described in detail in this report.

**Management of risks and opportunities**

Risk Owners are responsible for developing and implementing effective measures to mitigate risks within their areas of responsibility. Depending on the nature, characteristics and assessment of the risks, different risk responses, or a combination of responses, could be applied by the Risk Owners to reduce or accept the risk after considering their costs and benefits. Possible risk responses include acceptance, avoidance, mitigation or the transfer of a risk to third parties.

**Improvement in risk management and reporting**

The Risk & Compliance Team reports to the Management Board on an annual basis on the company-wide risk situation, while risks events occurring during the year and major changes in materiality levels of previously reported risks are reported on an ad-hoc basis.

In 2022, the RMS was automated in preparation for the upcoming ISO 27001 certification and the risk register was included in Jira.

**Opportunity report**

Opportunity management is based on strategic planning and the resulting measures for the development of the Group and their segments. The Management Board, as well as the operative management level of the respective business areas and segments, have the direct responsibility for the early and ongoing identification, assessment, and management of opportunities.

The Management team makes use of evaluations on current and future trends regarding technologies, products, and market potential in the Group’s fields of activity. The potential opportunities identified during these strategic analyses are then examined with regard to the critical success factors and existing external conditions and possibilities in planning discussions between the Management Board, Supervisory Board, and operational managers before being implemented in the form of specific measures, targets and milestones. The progress and success of these measures is continuously monitored and analyzed by operational management as well as the Management Board and the Managing Directors of the respective segments.

The Group’s management follows the latest developments in the cryptocurrency sector as well as in the Generative AI industry. The Company mainly benefits from a positive global development in the cryptocurrency mining sector. In addition, Northern Data is upscaling its business in Cloud Solutions and creating additional growth opportunities, focusing on the fast-growing Generative AI industry. The growth has been fueled by the latest technology being developed by NVIDIA which has stimulated a new wave of products and services, including OpenAI and ChatGPT. This has set a mega-trend of other hyperscalers, enterprises and start-ups to invest in Generative AI as well.

The main opportunities arising for Northern Data or the segments 2022 – “Mining” and “Hardware & Other” – are described below.

## Strategic opportunities

In this opportunities report, Northern Data presents a strategic overview of its material opportunities sorted according to their significance, to guide its focus and efforts towards maximizing potential benefits for the Group.

### Opportunities due to the continued interest in cryptocurrencies (Segment: Mining)

Due to the sharp decrease in price of Bitcoin and other cryptocurrencies in 2022, many analysts have questioned the viability of cryptocurrencies. However, as of December 2022, the cryptocurrency market still has a market capitalization of EUR 796 billion (USD 849 billion)<sup>12</sup> and cryptocurrencies are used by a growing number of more than 400 million people across the globe.<sup>13</sup> In December 2022, the Bitcoin price was below EUR 16,000 (USD 17,600) and thus at a three-year low in a bear market from which investors were hoping for an imminent breakout<sup>14</sup>. A December 2022 CoinWire survey shows that 64 percent of investors believe the market is about to bottom and that Bitcoin will rise to EUR 33 thousand (USD 35 thousand) by the end of 2023<sup>15</sup>. As at March 13, 2024, the current Bitcoin price is EUR 66,770 (USD 72,961).<sup>16</sup>

Many factors determine the value of and demand for Bitcoin. The main driving demand factor is the increase in global adoption of Bitcoin, its subsequent increase in utilization, and inclusion of Bitcoin as an asset class in the traditional financial ecosystem. At the same time, Bitcoin's fundamental principle of reducing supply through halving events (roughly every four years), is expected to lead to a higher price when demand stays steady. On the other hand, macroeconomic factors such as global interest rates, inflation and economic growth, typically add to volatility in the price of Bitcoin. From the Group's perspective, Northern Data is confident that the Bitcoin price will stabilize and future demand will exceed supply as adoption continues to increase.

### Opportunities created by utilizing stranded and unused energy from typically (renewable) power producers (Segment: Mining)

There are incentives for renewable energy facilities to produce their maximum capacity to deliver electricity in accordance with their contractual agreements even when the demand is not there. Furthermore, areas exist where power is in abundance due to changes in demand or general grid congestion and it is impossible for power producers to shut off power. In both cases, this oversupply of electricity can lead to low or sometimes negative electricity prices. With the steep (and required) growth in renewables, this imbalance is becoming more prevalent worldwide but also presents an increasing problem worldwide.

The characteristics of Bitcoin mining, such as the ability to consume power in remote areas, close to any form of power generation, and the ability to quickly change power consumption during periods of excess supply and/or low market demand provide strong incentives to build up additional renewable energy capacity.<sup>17</sup> It is becoming apparent that existing and new (renewable) power producers could use Bitcoin mining as a way to enhance financial returns. This creates additional opportunities for growth in renewable energy in areas where there remains an imbalance between supply and demand of power.

Due to the energy contracts entered into and Northern Data's ability to increase production at short notice, there are opportunities for Northern Data to benefit from low and sometimes negative electricity prices.

<sup>12</sup> <https://coinmarketcap.com>

<sup>13</sup> <https://www.statista.com>

<sup>14</sup> Bitcoin December 2022: Is the Bear Market finally losing steam? (watcher.guru)

<sup>15</sup> Top 5 Cryptocurrency Trends (2023 & 2024) (explodingtopics.com)

<sup>16</sup> <https://coinmarketcap.com/de/currencies/bitcoin/>

<sup>17</sup> <https://advisory.kpmg.us/articles/2023/bitcoin-role-esg-imperative.html>

### **Opportunities due to increased demand for digitalization and cloud-based solutions**

#### **(Segment: Hardware & Other)**

In addition to the crypto trend, demand for digitalization and cloud-based solutions continues to rise. In the IT service market, cloud contracts could soon represent the segment with the highest revenue. Although the percentage of companies using cloud services has surged from 48 percent five years ago to 84 percent today, there is still plenty of growth left to come.<sup>18</sup> The growing demand in the general industry, driven by structural megatrends such as digitalization, leveraging significant catch-up potential in web presence and an ongoing shift from on-premise to cloud environments, creates an opportunity for Northern Data to quickly and successfully establish its Cloud Solutions segment (Hardware & Other) in the market and to benefit from growth opportunities. The Cloud Solutions segment will offer and expand its Generative AI Infrastructure as a Service (IaaS), as well as move up the ML & AI services and software stack to offer its customers an additional level of service to complement the IaaS.

#### **Opportunities due to a general focus on sustainability**

Sustainability is a key focus area for Northern Data. It is important for companies to adapt to the global economic and environmental situation in a sustainable manner within the context of preserving and conserving natural resources. Northern Data develops and operates its data centers with the highest interest in doing business sustainably and is investing in energy-efficient technologies, such as advanced liquid cooling systems and renewable energy sources linked to its infrastructure. This focus creates an opportunity for Northern Data to differentiate itself from competitors as this agenda evolves.

#### **Opportunities from diversification of data center locations (Segment: Hardware & Other)**

The strategic transition from a mega-site to a multi-site approach allows Northern Data to develop and build data centers in different countries in collaboration with local suppliers and staff. This creates a range of opportunities and can reduce the risk of downtime due to local disaster or infrastructure issues. It allows Northern Data to expand into new markets and can reduce the latency and improve the user experience for customers in different regions. Additionally, it helps to optimize operational costs in certain regions, to reduce the lock-in to one site and the corresponding regulations and to diversify risk.

## **Risk report**

As described above, the Management Board of the Northern Data Group is responsible for establishing and maintaining an appropriate RMS. The risks identified were reported to the Management Board.

All known, material strategic, operational and compliance risks are presented below in the order of their probability of occurrence. The risks identified below relate to all segments or, where indicated, to specific segments of Northern Data.

Compared to the 2021 Opportunity and Risk Report, the following changes can be noted:

#### **Switch from proof-of-work to the proof-of-stake algorithm – Risk classification: substantial**

##### **(Segment: Mining)**

The possible risk from the Ethereum network switch from proof-of-work to the proof-of-stake algorithm occurred on September 15, 2022, after which the GPU servers are no longer usable for Ethereum mining. Northern Data is converting parts of the GPU servers for the provision of cloud computing business applications and is alternatively considering the sale of equipment. Since a part of the GPU servers, which belong to the reportable segment "Mining", is no longer usable for Ethereum mining, these were impaired by EUR 64,592 thousand (previous year: EUR 173 thousand). The recoverable amount is based on value in use. As a result of the complete impairment, the book value of these assets is zero at the end of the year.

18 <https://www.hso.co.uk/blog/cloud/17-reasons-cloud-computing-is-growing-like-crazy>

Northern Data does not expect this switch to happen for Bitcoin mining, as proof-of-work is part of the fundamental design belief and security proposition of the network.

**War in Ukraine – Risk classification: moderate**

Significant external events in fiscal year 2022 were the Russian war in Ukraine and the associated increase in energy prices, as well as the generally still high inflation. The Northern Data Group does not actively pursue any business activities in the countries involved in the war. Ukraine, Russia, and Belarus are not target countries for Northern Data companies and there are no locations in the aforementioned countries. Against this backdrop, the war only had an indirect impact on the Group’s business performance or financial condition, due to the increase in electricity prices at the Swedish and Norwegian sites. As a result, Northern Data had to curtail production in its cryptocurrency mining business.

**Strategic risks**

**Risks from continued cryptocurrency market turmoil – Risk classification: substantial (Segment: Mining)**

With asset prices down considerably and investors fleeing, the cryptocurrency market turned into a bear market in the third quarter of 2022. The market has already experienced a similar bear market three times, each lasting longer than 20 months and resulting in a decline in the Bitcoin price of more than 70 percent from its peak. The current bear market was fueled by the collapse of the Terra ecosystem, the collapse of FTX, massive user withdrawals, and significant fear, uncertainty, and doubt.<sup>19</sup> By the end of December 2022, the price of Bitcoin had declined by 75 percent from the all-time high of 2021, which also impacted the Mining segment and led to a significant decline in revenues. If the Bitcoin price falls too much and with it the rewards for the hash power produced, it may at some point no longer be profitable to run the business.

**Risks from the next Bitcoin halving – Risk classification: substantial (Segment: Mining)**

The Bitcoin halving takes place roughly every four years and is expected in April 2024. At the halving, block rewards for Bitcoin mining are halved, which means that revenue from mining immediately decreases by 50 percent (ceteris paribus). This decline in revenue is typically partially offset when the least efficient miners need to shut down, and the proportional reward for existing (more profitable) miners is thereby increased again. It is uncertain how long such a period of lower revenue will last before market participants shut down and it could mean that profitability will also remain low for Northern Data. Buying efficient miners and/or having access to low cost of power will lead to a stronger competitive position throughout any future halving.

**Risks from the provision of computing power for cryptocurrency mining as a business activity – Risk classification: substantial (Segment: Mining)**

In connection with the provision of computing power for cryptocurrency mining in the Mining segment, the Group is subject to the high volatility of the price of the cryptocurrencies generated as well as the mining profitability. Cryptocurrency prices are unpredictable and are determined by supply and demand.

Crypto prices declined sharply in 2022<sup>20</sup>, often more than 75 percent. Global stock markets have also dropped, the decline was the worst for American stock indices since 2008: Tech stocks fell even more than 30 percent in 2022, whereas the overall market dropped by 20 percent<sup>21</sup>.

As the profitability of the cryptocurrency mining business consists of one’s own cost base, the cryptocur-

19 Top 5 Cryptocurrency Trends (2023 & 2024) (explodingtopics.com)

20 <https://www.cnn.com/2022/12/23/bitcoin-lost-over-60-percent-of-its-value-in-2022.html>

21 <https://www.forbes.com/sites/qai/2023/01/19/why-were-tech-stocks-down-in-2022-and-how-long-will-the-slump-last/?sh=2697d2c87f16>

rency exchange rate and other components such as the degree of mining difficulty (the “Difficulty”) and the market share of the global hash rate, the lower cryptocurrency exchange rate (compared to the end of the fiscal year) resulted in a reduction in mining profitability, and consequently a reduction in revenues. A further decline in cryptocurrency prices could adversely affect the Group’s liquidity position.

The main cost driver of cryptocurrency mining is the electricity cost. If electricity prices rise in areas where Northern Data is exposed to spot prices (varying), this poses a risk for revenue as the company has to curtail the mining activities. In scenarios where the Company has a fixed power price on the other hand (or hedged) and the profitability of mining drops, there is the risk that Northern Data needs to operate at a loss.

The Group decided to sell its entire cryptocurrency holdings in fiscal year 2022, to sell the rewards generated in cryptocurrency on a daily basis starting at the end of May 2022, as well as to receive remuneration for the provision of computing power partly in FIAT currencies with the objective of avoiding or keeping cryptocurrency risk low and ensuring the Company’s liquidity. In addition, an adverse effect on liquidity was compensated for by reducing investment spending in 2022. However, investment activities resumed in 2023 given improved liquidity obtained through financing agreements concluded – refer to note 5.12.

**Risks from non-effective growth – Risk classification: moderate**

Northern Data aims to expand its market position and achieve profitable growth through sustainable, powerful, and sovereign cloud solutions in Europe in line with deployment of the expansion strategy over the next 3 years and beyond. The Group is currently developing various sites and expanding its operational capacities. The development of new sites places a heavy burden on Northern Data’s management, operational, and financial systems. As a result, processes, structures, and any type of organization must be readjusted and expanded regularly. Possible adjustments or changes to Northern Data’s growth strategy could have a corresponding impact on the business and financial results if management, operational, and financial systems are not optimally aligned.

**Operational risks**

**Cyber and information security risks – Risk classification: substantial**

An increase in cybercrime can be seen around the world and the rapid evolution of technology and the increasing reliance on digital systems have introduced new cyber security challenges for organizations. The functional security of the Company’s internal network and systems is an extremely important foundation for Northern Data Group’s business. In the event of a cyber-attack, Northern Data could suffer reputational damage, operational disruptions, the loss of intellectual property and the loss of some or all its digital assets. For this reason, Northern Data goes to great lengths to protect its own information technology as well as the security in its data centers. The Group is aware of the risks posed by the increasing professionalization of computer crime. To counter these risks, the Group’s measures include, but are not limited to, state-of-the-art security systems, regular software updates, multi-factor authentication, employee training, constant review of systems and robust data encryption.



**Risks from technical progress – Risk classification: substantial**

Market developments, technology trends and new scientific findings can also pose risks if they are recognized too late. New technical developments on the part of competitors could lead to a reduction in Northern Data's competitiveness. Likewise, the emergence of strong new competitors or of new business models that were not previously recognized or not recognized in time are possible. In order not to miss new technical developments and trends, Northern Data works closely with partners such as NVIDIA to gain access to the latest technologies and products to keep up with the times.

**Electricity price and availability risk – Risk classification: moderate (Segment: Mining)**

A secure and cost-effective power supply is of great importance to Northern Data's business. For Mining, the trends in and development of electricity prices in the markets the Company operates in and sometimes unexpected volatility have a direct impact on profitability. A way to manage fluctuations in electricity prices, is to enter into hedging contracts or longer-term fixed price contracts with the electricity providers.

Secondly, unexpected events out of Northern Data's control that lead to interruption in the energy supply to the data centers have a direct impact on the computing performance. For Mining the impact is less than for Cloud, due to the absence of customers with potential uptime guarantees, and due to lower requirements for power reliability. These situations occur when technical failures or outages occur at power suppliers which negatively affect power generation. In this context, administrative decisions, such as stricter environmental regulations or levies related to energy supply, could also have a negative impact. Direct damage to the data centers, due to severe weather conditions, for example, could also cause outages. However, the availability risk is to be minimized by selecting sites with good infrastructure, reliable sources of power or grids, and predefined conditions (in terms of power and network capacities).

**Risk that Northern Data will not be able to gain a sufficient number of customers in the short term – Risk classification: significant (Segment: Hardware & Other)**

Due to the highly competitive market segment, there is a risk that Northern Data will not be able to gain a sufficient number of customers in the short term to generate stable revenues and achieve the targeted rapid growth in the Cloud Solutions segment (Hardware & Other). This could be due to the fact that established competitors already have a broad customer base and long-standing business relationships, which could make it difficult to convince potential customers of the benefits of the new Cloud Solutions. Northern Data is countering this risk by entering into strategic partnerships with NVIDIA to jointly drive demand for new cloud-based Generative AI offerings. Northern Data has already achieved the Elite Partner status with NVIDIA in 2023 and has been classified as a Cloud Service Provider in 2022, which creates additional synergy effects and strengthens its market position.

**Risk from shortage of skilled workers in the Cloud team – Risk classification: moderate (Segment: Hardware & Other)**

There is a risk that certain positions (which require special knowledge or experience) cannot be filled with the optimal expertise and that Northern Data will not be able to rapidly scale the sales and customer support functions in the Cloud Solutions segment (Hardware & Other) to provide the necessary internal capacity to achieve and sustain the targeted growth. To counteract this risk, Northern Data is investing more in recruiting activities.

**Risks from the loss of technical know-how – Risk classification: low**

Highly skilled and well-trained employees form the basis for the economic success of the Northern Data Group. In addition to the successful recruitment of qualified personnel, personnel development, and the

long-term retention of top performers within the Group are strategically important. If the Group fails to develop and retain executives and employees with specialist or technological knowledge, there is a risk that the Northern Data Group may not be able to effectively conduct its business and achieve its growth targets within the business segments. The concentrated accumulation of strategic knowledge and skills have a considerable impact on the performance of the Group if well-qualified employees are no longer available.

The Group counters this risk by continuously developing employee and management competencies. In 2022, a coaching program was offered that focuses on the further development of talent and leadership competencies.

Northern Data also benchmarks the salaries to ensure that the Company is offering competitive packages to retain staff and has rolled out a performance management toolkit to observe, monitor and improve performance across the business to ensure that staff have the appropriate opportunities to develop in their careers. Team structures are regularly reviewed to avoid silos and potential buildup of IP with specific individuals. In addition, new software is implemented to better understand the organizational charts and areas where extra support is needed.

## Compliance Risks

### **Risk from laws and regulations abroad – Risk classification: significant**

Due to its activities abroad, the Group is also exposed to potential political risks and legal uncertainties in these countries. On the one hand, this relates to risks due to a lack of political security and acceptance of business locations, and on the other hand, a further situation of uncertainty arises from the actions of national governments and central banks in view of cryptocurrencies. To counteract counterparty risks, Northern Data seeks to limit its growth strategy to locations that are in politically stable regions and countries. It also relies on long-term, consistent contract partners with whom Northern Data maintains a long-term relationship.

### **Legal risks – Risk classification: low**

Please refer to the comments in section 5.9 “Other matters” in the Notes to the Consolidated Financial Statements.

## Financial Risks

### **Liquidity risks – Risk classification: significant**

Liquidity risk refers to the risk that Northern Data will not be able to meet its financial obligations. In the event that Northern Data does not generate sufficient free cash flow, the Group would be dependent on further equity and/or debt financing to meet its funding requirements. Should it be unable to obtain sufficient external financing, this could have an adverse material effect on the Group’s assets, financial condition, and earnings position. As part of the listing of its shares on the Open Market of the Munich Stock Exchange, Northern Data is also exposed to valuation by the capital market. In this respect, Northern Data may be restricted in its business model with regard to the financing that can be obtained via the capital markets. In order to prevent insolvency or sustained damage to its image, Northern Data’s business model is geared towards generating continuous cash inflows that can grow or accumulate on an ongoing basis or be used as a basis for growth investments.

Operational liquidity management is coordinated at the level of the parent company and is carried out in cooperation with its subsidiaries worldwide. Within the scope of economic possibilities, cryptocurrency holdings are liquidated on a daily basis in order to ensure liquidity and to be able to carry out planned investments. In addition to annual forecast planning, ongoing liquidity planning is carried out on a weekly

basis with the aim of ensuring that the Northern Data Group can access sufficient reserves of liquid funds at any time. In this way, fluctuations in working capital due to falling cryptocurrency rates as well as rising electricity prices could be managed in fiscal year 2022, balanced with cost management activities such as curtailments as directed by the operations management team. In essence, Northern Data is able to manage the direct cost basis associated with cryptocurrency mining efficiently in times where mining profitability is at lower levels or less favorable Bitcoin price changes are experienced. Northern Data did not have any financing agreements as of the end of fiscal year 2022.

The Company has planned and started extensive investments in the cloud computing, data center infrastructure and Bitcoin mining segments. The investments are to be financed to a large extent by taking out a shareholder loan, some of which has already been drawn down in 2023 and a further part is to be drawn down in 2024. The shareholder loan provides for a number of financial conditions (“covenants”) to be complied with at various times. The fulfilment of the covenants is contingent on the achievement of the key growth assumptions associated with the investments, particularly in the area of cloud computing. Since cloud computing, as a relatively new area, has so far only generated a relatively small amount of revenue, this assumption is associated with significant uncertainties; for example, it may not be possible to conclude customer contracts to the planned extent and generate profitable revenues from them. In the event of non-performance of the financial covenants, the lender would be entitled to terminate the loan and reclaim the funds disbursed from the loan. In such a case, under the current conditions, the company would not be able to repay the loan amount directly, unless, for example, other debt or equity financing could be realized or parts of the acquired hardware could be sold to third parties.

#### **Currency risks – Risk classification: low**

Some companies within the Northern Data Group are located outside the eurozone. The Group is subject to exposure on the translation of the net assets of foreign currency subsidiaries into its reporting currency, the Euro. Northern Data is exposed to risks associated with changes in foreign exchange rates when entering transactions with international counterparties that result in future cash flows being denominated in foreign currencies or in currencies other than the Group’s functional currency. The Group’s primary balance sheet translation exposures are to the US Dollar, Canadian Dollar, Norwegian Krone, Swiss Franc, Swedish Krone, and Pound Sterling. To mitigate currency risk, Northern Data’s contracts are structured so that the receivables due from Northern Data are denominated in the same currency as the payment obligations to be met by the Group. Within the Group, transactions, including intra-Group financing and investments, are primarily denominated in Euros and US Dollars in order to limit the risk of currency fluctuations.

A hypothetical change in the US Dollar exchange rate as of the balance sheet date by +/-5 percent would result in a theoretical change in the Group’s forecast EBITDA for 2023 of EUR 524 thousand, with the exchange rate fluctuation having a hypothetical impact on revenue of EUR 1,920 thousand.

### **Changed assessment of risks after the end of the reporting period**

#### **Funding requirements – Risk classification: significant (Segment: Mining and Hardware & Other)**

Due to the need to seize attractive opportunities when they arise, Northern Data may enter into binding contracts and incur obligations for new projects before securing the necessary financing to implement them. In this situation, the Group is at risk of defaulting on obligations under those contracts and potentially missing out on growth opportunities if the financing in a timely manner cannot be secured.

#### **Implementation of the growth strategy – Risk classification: moderate (Segment: Hardware & Other)**

With the conclusion of the investment agreement in July 2023, an important milestone was reached in the implementation of the ambitious growth strategy for the Cloud Solutions segment. This investment makes

it possible to acquire the latest generation of GPU hardware for a purchase price of EUR 400 million and significantly increase the computing power of this business unit without using own liquid funds that further strengthens the Group's liquidity situation. The trust placed in the Cloud Solutions segment also strengthens Northern Data's strategy in developing and rapidly scaling the cloud business and enables to use own financial resources for other planned projects.

At present the transaction has not fully closed, please refer to note 5.12 Events after the reporting date.

In addition, it also entails the risk that Northern Data will not be able to execute the agreed transactions swiftly and that the Group will not be able to use the funds and assets it will acquire efficiently and effectively. However, mitigating actions can be taken by the Group to utilize the hardware via lease agreements in that scenario.

The Company does not see any risk with respect to anticipated demand for the use of such hardware, given the general rise in requirements for larger compute capacity associated with the increase in generative AI activity including Large Language Models (LLMs).

**Interest rate risks – Risk classification: low**

Interest rate risk refers to the risk that fair values or future interest payments on current and future financial liabilities will fluctuate because of changes in market interest rates. As of December 31, 2022, the Group was not exposed to any interest rate risk. With the planned investments in the Cryptocurrency Mining and Cloud Solutions segments, which will start in 2023, the Group is dependent on financing from third parties and interest rate risks may arise in the future.

**Overall assessment by the Management Board**

The previous sections have reported on the main opportunities and the main individual risks. The overall risk situation of the Group is composed of the individual risks of all risk categories of the subsidiaries and the main divisions and the segments.

Despite the existence of these risks, Northern Data Groups's liquidity planning for the forecast period assumes a balanced liquidity position and the continuation of the Company's activities. However, this assumes the occurrence of a number of assumptions underlying the Company's liquidity planning.

As the Company continues to generate a significant portion of its revenue from Bitcoin mining, the Company is dependent on the development of the Bitcoin price and the associated development of mining profitability. This includes risks from the expected halving, which could result in a decline in mining revenues, profitability and cash flows.

In addition, the Company has planned and started extensive investments in the cloud computing, data center infrastructure and Bitcoin mining segments. The investments are to be financed to a large extent by taking out a shareholder loan, some of which has already been drawn down in 2023 and a further part is to be drawn down in 2024. The shareholder loan provides for a number of financial conditions ("covenants") to be complied with at various times. The fulfilment of the covenants is contingent on the achievement of the key growth assumptions associated with the investments, particularly in the area of cloud computing. Since cloud computing, as a relatively new area, has so far only generated a relatively small amount of revenue, this assumption is associated with significant uncertainties; for example, it may not be possible to conclude customer contracts to the planned extent and generate profitable revenues from them. In the event of non-performance of the financial covenants, the lender would be entitled to terminate the loan and reclaim the funds disbursed from the loan. In such a case, under the current conditions, the Company would not be able to repay the loan amount directly, unless, for example, other debt or equity financing could be realized or parts of the acquired hardware could be sold to third parties.

These events and circumstances show that there is a material uncertainty that may raise significant doubts about the continuation of the Company's activities and that it poses a risk to the Company's continued existence.

Although such uncertainty exists in principle, the Management Board assumes a balanced liquidity position and the continuation of the Company's activities in view of the liquidity planning, taking into account all opportunities and risks and using existing management instruments such as postponement or cancellation of investments, cost reduction, sale of hardware as well as additional equity or debt financing.

**Statement on the effectiveness of the governance systems by the Management Board<sup>22</sup>**

Based on findings from external and internal assessments, we make continuous improvements to our ICS, RMS and Compliance Management Systems.

**Forecast and future development**

**Overall economic development**

According to the International Monetary Fund (IMF)<sup>23</sup>, there is a forecasted decline in global growth from an estimated 3.5 percent in 2022 to 3.0 percent in both 2023 and 2024. The ongoing increase in central bank policy rates aimed at combating inflation continues to exert pressure on economic activity. Projections indicate a decrease in global headline inflation from 8.7 percent in 2022 to 6.8 percent in 2023 and 5.2 percent in 2024. Core inflation is expected to decline at a more gradual pace, and there have been upward revisions in inflation forecasts for 2024.

The risk of sustained or increased inflation remains, particularly in the event of additional shocks, such as an escalation of the conflict in Ukraine or extreme weather-related events. These scenarios could prompt more restrictive monetary policies. Additionally, as markets adapt to further tightening of central bank policies, there is a potential for the resumption of turbulence in the financial sector. China's economic recovery might slow down, partly due to unresolved real estate issues, leading to negative cross-border spillovers. There is also a concern that sovereign debt distress could extend to a broader group of economies.

On a positive note, there is a possibility that inflation could decrease more rapidly than anticipated, reducing the necessity for stringent monetary policies. Domestic demand may also prove to be more resilient once again.

**Northern Data Group forecast**

To illustrate the depth and breadth of its business model, Northern Data began to simplify the organization of its business structure into three independent, global business units in fiscal year 2022.

The alignment of business activities continued after the end of the reporting period with the introduction of divisional brands, and thus the Group will be managed according to three segments assigned to its core business areas from January 1, 2023:

- › Peak Mining: Contribution to the Bitcoin network, with industry-leading efficiency in Bitcoin mining operations and energy consumption
- › Taiga Cloud: European regional provider of Generative AI cloud services
- › Ardent Data Centers: Provider of data center environments purpose-built with liquid cooling technology

<sup>22</sup> These disclosures are not included in the substantive audit of the management report by the auditor.

<sup>23</sup> World Economic Outlook Update, July 2023: Near-Term Resilience, Persistent Challenges (imf.org)

The divisional business model is intended to open up opportunities to further maximize efficiency and drive forward the simplification, standardization, and shared use of support functions. To this end, the management teams and the leadership within the divisions have been significantly strengthened by high-caliber executives with experience at well-known market leaders in their respective fields.

The forecast includes all of the Group’s confirmed investments at the time of preparing the report and takes into account the associated opportunities and risks.

**Peak Mining:**

In January 2023 the business started with a deployed Exahash (EH) capacity of 2.0 EH and plans to increase its deployed capacity up to 3.8 EH by the end of the year. Forecast assumptions for 2023 consider the latest development in the global market and are planned with a conservative mining profitability in the range between EUR 0.05 to EUR 0.07 per Terahash and conservative electricity prices at the previous year’s level when prices had risen sharply in connection with the uncertain situation of the Ukraine conflict. The expected uptime is around 70–80 percent, especially due to lower uptime in the summer months where curtailment activities were considered.

Northern Data does not expect further risks for the Mining business given the already conservative assumptions for mining profitability, electricity prices and uptime.

Also refer to the respective explanations in the Risk Report.

In the first quarter of 2023, a hosting contract with a customer was terminated and subsequently restructured into a self-mining arrangement with an additional capacity of 28 MW or 0.8 EH.

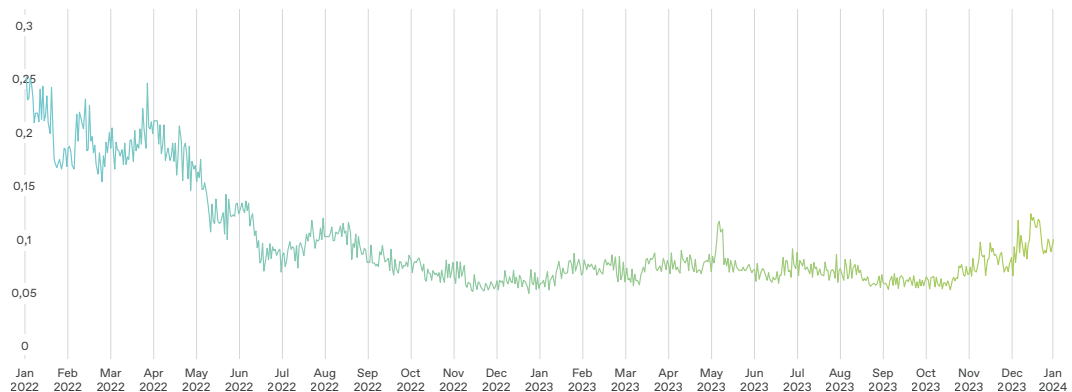
The existing operations in North Dakota will be converted from air cooled to liquid cooled mining at the end of the fiscal year 2023 and will increase the hash rate capacity by 0.6 EH, at the beginning of 2024.

The existing contract with a major supplier of mining hardware was renegotiated in 2023 and will help to further increase the available hash rate using the latest generation of mining hardware in order to be prepared for the next cycle with the upcoming halving event in 2024.

Management decided to discontinue pursuing the previously planned activities in Oklahoma.

For the financial year 2023 management expects revenues for the segment Peak Mining between EUR 56,000 thousand and EUR 61,000 thousand and an adjusted EBITDA between EUR –8,000 thousand und EUR –2,000 thousand.

**Bitcoin mining profitability (in USD) – January 22 – December 23**



**Taiga Cloud:**

The cloud computing business will make its first significant contribution to revenue in 2023 with the 2,480 A100 GPUs already installed and parts of the A6000 GPUs previously used for Ethereum mining.

Revenue is expected to increase steadily throughout the year, especially after an Infiniband upgrade of the A100 GPUs, which will further expand the scope of these GPUs and can be used for ChatGPT, among other things.

After the upgrade at the end of Q3 2023, Northern Data plans to ramp up the utilization to around 80 percent at prices between EUR 1.60 and EUR 2.00 per GPU hour and sell the capacity mainly as reserved capacity.

In 2023, the Group has decided to make further large investments for the Taiga Cloud business and is targeting a further expansion of the available latest generation NVIDIA H100 GPUs, realized through a capital increase in kind at Group level, as well as further debt financing (refer to section 5.12 Events after the reporting date).

These investments will materialize for the first time in 2024, subject to a planned ramp-up starting at the end of 2023.

For fiscal year 2023 management expects revenues for the segment Taiga Cloud between EUR 11,000 thousand and EUR 14,000 thousand and an adjusted EBITDA between EUR -3,000 thousand and EUR 2,000 thousand.

**Ardent Data Centers:**

The Ardent Data Centers division is focused on the buildout of high standard datacenter and to provide colocation services. They provide colocation services in the existing datacenter in Boden (Sweden) where they predominantly serve the other Group segments Taiga Cloud and Peak Mining, as well as a few external customers.

In 2023, Ardent is preparing for further expansion and is in various due diligence processes for potential acquisitions to build out more data centers, contributing more significantly to external revenue generation from fiscal year 2025 onwards.

For fiscal year 2023 management expects revenues for the segment Ardent Data Centers between EUR 14,000 thousand and EUR 18,000 thousand and an adjusted EBITDA between EUR -6,000 thousand and EUR -1,000 thousand.

Central functions such as Legal, Finance, Investor Relations and Strategy are located at Group level and support all three divisions.

## Overall statement on the expected development of the Group

Northern Data Group expects forecasted Revenues of EUR 65 million to EUR 75 million for the fiscal year 2023.

Adjusted EBITDA<sup>24</sup> of Northern Data Group is expected to be in a range of EUR –20 million to EUR –5 million forecasted for fiscal year 2023.

Frankfurt/Main, March 21, 2024



**Aroosh Thillainathan**

Chairman of the Management Board

<sup>24</sup> Adjusted EBITDA corresponds to EBITDA adjusted for certain non-cash and non-recurring other items, which currently include (i) trading losses/gains from cryptocurrency, (ii) stock option plan expense, (iii) lawsuits (including Whinstone and BaFin), (iv) systems implementation, (v) executive severance payments, (vi) impairment of receivables related to third party bankruptcy and (vii) write-down of assets not commissioned.





GROUP  
FINANCIAL  
STATEMENTS

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# Group Financial Statements

## Consolidated Statement of Comprehensive Income for the year ended 31 December

EUR '000, unless stated otherwise	Notes	2022	2021
Sales revenues	3.1	193,287	189,860
Other operating income	3.2	56,181	302,961
<b>Total income</b>		<b>249,468</b>	<b>492,821</b>
Cost of materials	3.3	-98,864	-76,319
Personnel expenses	3.4	-49,898	-19,169
Other operating expenses	3.5	-158,823	-77,275
<b>Operating profit before depreciation and amortization – EBITDA</b>		<b>-58,117</b>	<b>320,058</b>
Depreciation, amortization and impairment	4.1; 4.2; 4.3	-207,234	-65,932
<b>Operating result – EBIT</b>		<b>-265,351</b>	<b>254,126</b>
Financial income	3.6	99	89,765
Financial expenses	3.6	-3,166	-7,170
<b>Financial result</b>		<b>-3,067</b>	<b>82,595</b>
<b>Earnings before income taxes – EBT</b>		<b>-268,418</b>	<b>336,721</b>
Income taxes	3.7	2,643	-49,562
<b>(Loss)/ Profit for the year</b>		<b>-265,775</b>	<b>287,159</b>
of which attributable to shareholders of Northern Data AG		-265,775	287,159
<b>Other comprehensive income</b>			
Fair value gain on equity investments designated at FVOCI	5.2	7,666	-
<b>Items that will not be reclassified to profit or loss in the future</b>		<b>7,666</b>	<b>-</b>
Currency translation		-10,275	5,831
<b>Items that may be reclassified to profit or loss in the future</b>		<b>-10,275</b>	<b>5,831</b>
<b>Other comprehensive income</b>		<b>-2,609</b>	<b>5,831</b>
<b>Total comprehensive income</b>		<b>-268,384</b>	<b>292,990</b>
of which attributable to shareholders of Northern Data		-268,384	292,990
<b>Earnings per share</b>	<b>3.8</b>		
Undiluted (in EUR)		-11.16	16.27
Diluted (in EUR)		-11.16	12.06

The Consolidated Statement of Comprehensive Income shown above should be read in conjunction with the notes below.

## Consolidated Statement of Financial Position as at 31 December

ASSETS in EUR '000	Notes	2022	2021
<b>Non-current assets</b>		<b>323,535</b>	<b>460,675</b>
Goodwill	4.1	13,376	20,099
Other intangible assets	4.1	1,766	65,538
Property, plant and equipment	4.2	282,745	354,573
Right-of-use assets	4.3	10,191	8,908
Shares in other companies	5.2; 5.4.1	9,851	1,449
Other assets	4.5	2,541	1,708
Deferred tax assets	3.7	3,065	8,400
<b>Current assets</b>		<b>127,051</b>	<b>338,093</b>
Inventories	4.4	7,200	4,689
Trade receivables	3.1.2; 5.2	2,908	5,254
Receivables from companies in which an equity investment is held	5.4.1	–	76
Contract assets	3.1.2	–	2,684
Income tax receivables	3.7	5,122	1,310
Other assets	4.5	71,942	102,483
Cash and cash equivalents	5.2	39,879	221,597
<b>Total assets</b>		<b>450,586</b>	<b>798,768</b>

EQUITY AND LIABILITIES in EUR '000	Notes	2022	2021
<b>Equity</b>	<b>4.6</b>	<b>359,407</b>	<b>612,269</b>
Subscribed capital		23,816	23,816
Capital reserve		419,392	402,552
Fair value reserve of financial assets at FVOCI		7,666	-
Currency translation differences		-10,780	-505
Retained earnings		-80,687	186,406
<b>Non-current liabilities</b>		<b>10,077</b>	<b>18,283</b>
Lease liabilities	4.3; 4.8	7,872	7,049
Contract liabilities	3.1.1; 2	-	270
Provisions	4.7	5	2,478
Deferred tax liabilities	3.7	2,200	8,133
Other liabilities	4.9	-	353
<b>Current liabilities</b>		<b>81,102</b>	<b>168,216</b>
Financial liabilities	4.8	-	76,891
Liabilities to companies in which an equity investment is held	5.4.1	-	18
Lease liabilities	4.3; 4.8	2,783	1,997
Trade payables	4.8	35,829	20,410
Contract liabilities	3.1.2	222	20,793
Income tax liabilities	3.7	27,992	33,584
Provisions	4.7	1,919	2,027
Other liabilities	4.9	12,357	12,496
<b>Total liabilities and shareholders' equity</b>		<b>450,586</b>	<b>798,768</b>

The Consolidated Statement of Financial Position shown above should be read in conjunction with the notes below.

## Consolidated Statement of Changes in Equity for the year ended 31 December

EUR '000	Notes	Subscribed capital	Capital reserve	Contributions made to implement the resolved capital increase	Fair value reserve of financial assets at FVOCI	Currency translation differences	Retained earnings	Total
<b>Balance on 01/01/2021</b>		14,640	216,504	52,470	-	-6,336	-100,753	176,525
<b>Profit for the year</b>		-	-	-	-	-	287,159	287,159
Currency translation		-	-	-	-	5,831	-	5,831
<b>Other comprehensive income</b>		-	-	-	-	5,831	-	5,831
<b>Total comprehensive income</b>		-	-	-	-	5,831	287,159	292,990
Issuance of ordinary shares		1,464	109,581	-52,470	-	-	-	58,575
Issuance of ordinary shares in connection with business combinations	5.2	338	32,227	-	-	-	-	32,565
Issuance of ordinary shares in connection with other transactions with shareholders		7,372	462,807	-	-	-	-	470,179
Treatment of the difference amount between Decentric and Bitfield		-	-419,586	-	-	-	-	-419,586
Servicing of the convertible bond	5.2	2	720	-	-	-	-	722
Deduction of direct transaction costs	4.6.2	-	-5,058	-	-	-	-	-5,058
Share-based remuneration	5.5	-	5,357	-	-	-	-	5,357
<b>Transactions with shareholders</b>		9,176	186,048	-52,470	-	-	-	142,754
<b>Balance on 12/31/2021</b>		23,816	402,552	-	-	-505	186,406	612,269
<b>Balance on 01/01/2022</b>		23,816	402,552	-	-	-505	186,406	612,269
<b>Loss for the year</b>		-	-	-	-	-	-265,775	-265,775
Currency translation		-	-	-	-	-10,275	-	-10,275
Fair value gain on equity investments designated at FVOCI	5.2	-	-	-	7,666	-	-	7,666
<b>Other comprehensive income</b>		-	-	-	7,666	-10,275	-	-2,609
<b>Total comprehensive income</b>		-	-	-	7,666	-10,275	-265,775	-268,384
Share-based remuneration	5.5	-	16,840	-	-	-	-	16,840
Disposal of Groupe Kelvin Emtec Inc.		-	-	-	-	-	-1,318	-1,318
<b>Transactions with shareholders</b>		-	16,840	-	-	-	-1,318	15,522
<b>Balance on 12/31/2022</b>		23,816	419,392	-	7,666	-10,780	-80,687	359,407

## Consolidated Statement of Cash Flows for the year ended 31 December

EUR '000	Notes	2022	2021
<b>Consolidated net income</b>		<b>-265,775</b>	<b>287,159</b>
Depreciation and amortization of non-current assets	4.2	207,234	65,932
Increase/decrease in provisions	4.7	-1,467	435
Other non-cash expenses/income	3.2; 3.5	28,467	-154,086
Increase/decrease in inventories, trade receivables and other assets not attributable to investing or financing activities		42,355	-121,996
Increase/decrease in trade payables and other liabilities not attributable to investing or financing activities		-15,155	109,392
Cryptocurrency received for providing computing services		-114,873	-87,507
Cryptocurrency sold		127,036	27,145
Gains/losses on disposal of non-current assets		-117	-441
Financial expenses/financial income	3.6	3,067	-82,595
Income tax expense/income	3.7	-3,501	45,726
Income tax payments/refunds		-6,311	-1,098
<b>Cash flow from operating activities</b>		<b>960</b>	<b>88,066</b>
Payments made for investments in intangible assets	4.1	-539	-528
Proceeds from disposals of property, plant and equipment		6,547	520
Payments made for investments in property, plant and equipment	4.2	-100,151	-200,334
Proceeds from disposals of financial assets		-	328,007
Cash outflows for investments in financial assets	5.2	-1,173	-1
Proceeds from additions to the scope of consolidation		-	34,613
Cash outflows for additions/cash inflows from disposals to the scope of consolidation		-	-35,689
Interest received	3.6	99	30
<b>Cash flow from investing activities</b>		<b>-95,217</b>	<b>126,618</b>
Proceeds from contributions to equity by shareholders of the parent company (cash capital increases)	4.6.2	-	58,575
Disbursements in connection with capital measures	4.6.2	-	-5,058
Outflows from the redemption of bonds and financial loans and liabilities from leasing agreements	4.3; 4.8	-3,187	-27,866
Cash outflows for the repayment of financial liabilities to shareholders of the parent company	4.8	-76,561	-89,930
Interest paid	3.5; 3.6	-3,166	-4,754
<b>Cash flow from financing activities</b>		<b>-82,914</b>	<b>-69,033</b>
<b>Cash-effective change in cash and cash equivalents</b>		<b>-177,171</b>	<b>145,651</b>
Currency-related change in cash and cash equivalents		-4,547	2,085
<b>Cash and cash equivalents at the beginning of the period</b>		<b>221,597</b>	<b>73,861</b>
<b>Cash and cash equivalents at the end of the period</b>		<b>39,879</b>	<b>221,597</b>

For additional information see 5.1 of the accompanying Notes to the Consolidated Statement of Cash Flows.



NOTES TO THE  
GROUP  
FINANCIAL  
STATEMENTS

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# Notes to the Group Financial Statements

## 1 Information about the Company and basics of the preparation of the Financial Statements

### 1.1 Reporting company

Northern Data AG (hereinafter also referred to as the “Company”) is a listed stock corporation with its registered office in Frankfurt/Main, Germany. The business address is: An der Welle 3, 60322 Frankfurt/Main. Northern Data AG is registered with the Local Court of Frankfurt/Main (HRB 106 465).

Northern Data AG as the parent Company together with its direct and indirect subsidiaries forms the Northern Data Group (hereinafter also referred to as “Northern Data” or “Group”). Northern Data develops and operates global infrastructure solutions in the field of High-Performance Computing (HPC). The focus here is on the mining of cryptocurrencies, the provision of hosting services and the necessary hardware, as well as the expansion of both stationary and mobile data centers for the future development of an HPC business field.

The shares of Northern Data AG are traded on the Open Market of the Frankfurt Stock Exchange and the Munich Stock Exchange (m:access).

Until 2020, Northern Data AG was primarily in the mining hardware business and began building stationary and mobile data centers. With the acquisitions of Decentric Europe B. V., Amsterdam, Netherlands; Bitfield N. V., Amsterdam, Netherlands; Hydro66 Svenska AB, Boden, Sweden; and North Georgia Data LLC, Commerce, Georgia, USA, which were carried out in fiscal year 2021, the business model was shifted to providing computing power for cryptocurrency mining, with the goal of being able to serve the HPC business model in the future.

In 2022 the Cloud Solutions business has been developed and expanded and started to generate revenues. In terms of revenues, the Cryptocurrency Mining business unit represented the main activity for the Group in the reporting year. The Groupe Kelvin Emtech Inc. including its subsidiaries has been disposed on December 31, 2022.

### 1.2 Basic principles of the preparation of the financial statements

Northern Data AG prepares its Consolidated Financial Statements in accordance with International Financial Reporting Standards (IFRS) and the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC) as adopted by the European Union. In addition, the application of commercial law provisions pursuant to section 315e (1) of the German Commercial Code (HGB) is made in these financial statements.

The financial statements of the companies included in the Group are based on uniform accounting policies in accordance with IFRS. The fiscal year of all companies included in the Group corresponds to the calendar year.



A distinction is made in the Consolidated Statement of Financial Position between current and non-current assets and liabilities. The Consolidated Statement of Comprehensive Income has been prepared using the nature of expense method. The Consolidated Financial Statements are prepared on the basis of historical cost, with the following exceptions:

- › Derivative financial instruments, liabilities for cash-settled share-based payments, and financial assets whose cash flows do not consist solely of principal or interest payments are measured at fair value.
- › Monetary assets and liabilities denominated in foreign currencies are translated at closing rates.
- › The revaluation model is used for non-current assets in cryptocurrencies.
- › Current assets denominated in cryptocurrencies are measured at fair market value.

The Consolidated Financial Statements are prepared in Euro (EUR), which is the reporting currency. Unless stated otherwise, all figures are presented in EUR thousand. The tables and figures presented can contain differences due to rounding.

Northern Data Software GmbH and ND CS (Services) GmbH have made use of the exemption provision pursuant to section 264 (3) of HGB for the fiscal year 2022.

## 1.3 Principles of consolidation

### 1.3.1 Scope of consolidation

Subsidiaries are entities that are directly or indirectly controlled by Northern Data AG. Control exists only when Northern Data AG is exposed, or has rights, to variable returns from its involvement with an investee and has the ability to affect those returns through its power over the investee.

In accordance with the principles of full consolidation, the Consolidated Financial Statements of Northern Data AG include all domestic and foreign subsidiaries over which Northern Data AG exercises direct or indirect control and which are not of minor significance.

Number	2022	2021
<b>Northern Data AG and fully consolidated subsidiaries</b>		
Domestic	3	2
Abroad	21	24
<b>Non-consolidated subsidiaries</b>		
Domestic	–	–
Abroad	7	5
<b>Total</b>	<b>31</b>	<b>31</b>

The non-consolidated subsidiaries have not been included in the scope of consolidation for reasons of materiality. A complete list of shareholdings can be found in Note 5.11 “List of shareholdings of Northern Data AG pursuant to Section 313 (2) no. 1 to 4 HGB”.

### 1.3.2 Consolidation methods

Companies newly acquired during the fiscal year are included in the Consolidated Financial Statements from the date on which control is transferred in accordance with IFRS 10 and are fully consolidated using the purchase method. Subsidiaries are deconsolidated from the date on which control is lost.

Capital consolidation is performed by offsetting the carrying amounts of the investments against the Group's share in the equity of the subsidiaries. In the case of business combinations, initial consolidation is performed in accordance with IFRS 3 using the purchase method by offsetting the acquisition cost against the fair values of the identifiable assets acquired and liabilities and contingent liabilities assumed at the date of acquisition. Goodwill is recognized if the acquisition cost of the investment exceeds the proportionate share of the acquired revalued equity. If this is a negative goodwill of a debt nature, the purchase price calculation and allocation are to be reassessed. If this has been correctly accounted for, any remaining negative goodwill is recognized in other operating income in the year of acquisition.

Intra-Group transactions are eliminated. Receivables and liabilities between consolidated companies are offset against each other. Intercompany profits and losses are eliminated and intercompany income is offset against the corresponding expenses.

In the course of transactions in which shareholders of Northern Data contribute shares of third parties in exchange for equity instruments of Northern Data, the transaction is not accounted for in accordance with IFRS 3. In the course of initial consolidation, the net assets acquired are recognized at fair value and added to equity as a contribution. The difference between the fair value of the equity instruments issued and the fair value of the net assets acquired is not recognized.

### 1.3.3 Currency translation

The financial statements of subsidiaries in countries outside the euro area are translated using the functional currency concept. For the subsidiaries, the functional currency is based on the primary environment in which they operate. In the Group, the functional currency of all companies corresponds to the respective local currency. The reporting currency of the Consolidated Financial Statements is the Euro (EUR).

Transactions in foreign currencies are translated at the relevant foreign exchange rates at the time of the transaction. In subsequent periods, monetary assets and liabilities are measured at the closing rate and translation differences are recognized in profit or loss. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. In addition, non-monetary items measured at fair value in a foreign currency are translated at the exchange rate prevailing at the date of the fair value measurement.

The financial statements of foreign subsidiaries whose functional currency is not the Euro are translated into the Group currency, the Euro, using the modified closing rate method. For simplification purposes, items of the Statement of Comprehensive Income are translated at the average exchange rate for the year. Equity is translated at historical rates, asset and liability items at the closing rate on the reporting date. All differences resulting from the translation of financial statements prepared in foreign currencies are recognized in other comprehensive income.

The Euro exchange rates on which the currency translation is based are shown below:

	2022	2021
Closing rate EUR/USD	1.0666	1.1326
Average rate EUR/USD	1.0539	1.1827
Average rate EUR/USD rate since date of first-time consolidation (North Georgia Data LLC)	-	1.1570
Average rate EUR/USD since date of initial consolidation (Decentric Europe B.V.)	-	1.5510
Average rate EUR/USD since date of initial consolidation (Bitfield Group)	-	1.1397
Closing rate EUR/CAD	1.4440	1.4393
Average rate EUR/CAD	1.3703	1.4826
Closing rate EUR/GBP	0.8869	0.8403
Average rate EUR/GBP	0.8526	-
Average rate EUR/GBP since date of initial consolidation (Hydro Group)	-	0.8554
Closing rate EUR/NOK	10.5138	9.9888
Average rate EUR/NOK	10.1015	10.1633
Closing rate EUR/SEK	11.1218	-
Average rate EUR/SEK	10.6274	-
Closing rate EUR/CHF	0.9847	-
Average rate EUR/CHF	1.0052	-

#### 1.4 Valuation premise of a going concern

The preparation of the consolidated financial statements requires an assessment of the premise of going concern. The Management Board has reviewed the forecasts for a period of at least twelve months from the date of approval of the consolidated financial statements. In doing so, the Management Board has taken into account the possible effects of the Ukraine war as well as a possible adverse development of the Bitcoin price, especially in connection with the expected halving of the reward for Bitcoin mining (“halving”) from the second quarter of 2024. In addition, the Management Board has taken into account risks arising from the planned expansion of business and the associated debt financing through shareholder loans.

Despite the existence of these risks, Northern Data Group’s liquidity planning for the forecast period assumes a balanced liquidity position and the continuation of the Company’s activities. However, this assumes the occurrence of a number of assumptions underlying the Company’s liquidity planning.

As the Company continues to generate a significant portion of its revenue from Bitcoin mining, the Company is dependent on the development of the Bitcoin price and the associated development of mining profitability. This includes risks from the expected halving, which could result in a decline in mining revenues, profitability and cash flows.

In addition, the Company has planned and started extensive investments in the cloud computing, data center infrastructure and Bitcoin mining segments. The investments are to be financed to a large extent by taking out a shareholder loan, some of which has already been drawn down in 2023 and a further part is to be drawn down in 2024. The shareholder loan provides for a number of financial conditions (“covenants”)

to be complied with at various times. The fulfilment of the covenants is contingent on the achievement of the key growth assumptions associated with the investments, particularly in the area of cloud computing. Since cloud computing, as a relatively new area, has so far only generated a relatively small amount of revenue, this assumption is associated with significant uncertainties; for example, it may not be possible to conclude customer contracts to the planned extent and generate profitable revenues from them. In the event of non-performance of the financial covenants, the lender would be entitled to terminate the loan and reclaim the funds disbursed from the loan. In such a case, under the current conditions, the Company would not be able to repay the loan amount directly, unless, for example, other debt or equity financing could be realized or parts of the acquired hardware could be sold to third parties.

These events and circumstances show that there is a material uncertainty that may raise significant doubts about the continuation of the Company's activities and that it poses a risk to the Company's continued existence.

Although such uncertainty exists in principle, the Management Board assumes a balanced liquidity position and the continuation of the Company's activities in view of the liquidity planning, taking into account all opportunities and risks and using existing management instruments such as postponement or cancellation of investments, cost reduction, sale of hardware as well as additional equity or debt financing.

## 1.5 IFRS standards applied

### **Standards, interpretations and amendments whose application was mandatory for the first time in the past fiscal year and whose application will be mandatory in future reporting periods**

The following new or amended accounting standards already adopted by the IASB have not been taken into account in the Consolidated Financial Statements for fiscal year 2022 where there was no obligation to apply them yet, with the exception of the standards whose application is mandatory as of January 1, 2022. Some of the effects of these new or amended accounting standards on the financial statements are still being examined.

Standards/ Interpretations	Title	Mandatory date of application according to the EU as of fiscal years beginning on or after:	Impact
IFRS 1, IFRS 9, IFRS 16 and IAS 41	Annual Improvements 2018–2020 (Issued May 14, 2020)	Jan. 1, 2022	No significant effects
IFRS 3, IAS 16, IAS 37	Amendments to IFRS 3 “Business Combinations”; IAS 16 “Property, Plant and Equipment”; IAS 37 “Provisions, Contingent Liabilities and Contingent Assets” (All issued May 14, 2020)	Jan. 1, 2022	No significant effects
IAS 1, Practice Statement 2	Amendments to IAS 1 “Presentation of Financial Statements” and IFRS Practice Statement 2: Disclosure of Accounting policies (issued on February 12, 2021)	Jan. 1, 2023	No significant effects are expected
IAS 8	Amendments to IAS 8 “Accounting Policies, Changes in Accounting Estimates and Errors” – Definition of Accounting Estimates (issued February 12, 2021)	Jan. 1, 2023	No significant effects are expected
IAS 12	Amendments to IAS 12 “Income Taxes” regarding “Deferred Tax related to Assets and Liabilities arising from a Single Transaction” (issued on May 7, 2021)	Jan. 1, 2023	No significant effects are expected
IFRS 17	Insurance Contracts (issued on May 18, 2017); including Amendments to IFRS 17 (issued on June 25, 2020)	Jan. 1, 2023	No relevance
IFRS 17	Amendments to IFRS 17 regarding the initial application of IFRS 17 and IFRS 9 – comparative information (issued on December 9, 2021)	Jan. 1, 2023	No relevance
IAS 12	Amendments to IAS 12 “Income taxes” regarding International Tax Reform – Pillar Two Model Rules (issued May 23, 2023)	Immediately and Jan. 1, 2023	No relevance
IFRS 16	Amendments to IFRS 16 “Leases” regarding “Lease Liability in a Sale and Leaseback” (issued on September 22, 2022)	Jan. 1, 2024	No significant effects are expected
IAS 1	Amendments to IAS 1 “Presentation of Financial Statements” <ul style="list-style-type: none"> <li>• Classification of Liabilities as Current or Non-current Date (issued on January 23, 2020);</li> <li>• Classification of Liabilities as Current or Non-current – Deferral of Effective Date (issued on July 15, 2020); and</li> <li>• Non-current Liabilities with Covenants (issued on October 31, 2022)</li> </ul>	Jan. 1, 2024	No significant effects are expected
IAS 7, IFRS 7	Amendments to IAS 7 „Statement of Cash Flows“ and IFRS 7 „Financial Instruments” – “Disclosures: Supplier Finance Arrangements“ (issued on May 25, 2023)	EU endorsement pending	No significant effects are expected
IAS 21	Amendments to IAS 21 “The effects of changes in foreign exchange rates” regarding “Lack of Exchangeability” (issued on August 15, 2023)	EU endorsement pending	No significant effects are expected

Status as at January 12, 2024, according to EFRAG Endorsement Status Report

## 1.6 Discretionary decisions and estimation uncertainties

Discretionary decisions must be taken into account in two respects when preparing the Consolidated Financial Statements. In addition to the need to interpret indeterminate terms and rules, Management is required to make (forward-looking) assumptions and estimates that can have an impact on the asset, financial and earnings position. Estimation uncertainties also arise from forward-looking company planning.

### 1.6.1 Property, plant and equipment and intangible assets (excluding goodwill)

In estimating the useful lives of assets, judgment is required on the part of the Group's management. In making this assessment, Northern Data takes the experience already gained from comparable assets as well as from current and future technological changes into account, among other information.

Northern Data assesses on each reporting date whether there is any indication that a non-financial asset might be impaired. If any such indication exists, or when annual impairment testing for an asset is necessary, Northern Data makes an estimate of the asset's recoverable amount. The recoverable amount is determined for each individual asset, unless an asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. If the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount, the asset is impaired and written down to its recoverable amount.

To determine the value in use, the expected future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In order to determine the fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is applied. This is based on valuation multiples, stock market prices of exchange-traded shares in companies or other available fair value indicators.

As at December 31, 2022, Northern Data has already installed several GPU clusters:

› AMD MI50      › AMD RX5700      › NVIDIA A100      › NVIDIA A6000

Until the switch from proof-of-work to proof-of-stake, AMD MI50, RX5700 and NVIDIA A6000 were used for Ethereum mining. NVIDIA A100 and, after moving to proof-of-stake, the A6000 are also used for Cloud Services. Compared to the MI50 and NVIDIA A100, the RX5700 and A6000 GPUs are lower cost but slightly slower products.

The carrying amount of the A100 and A6000 recognized as of December 31, 2022, is also covered in a scenario in which the hardware would be realized through sale to third parties, as the hardware could also be used by third parties due to the portfolio of GPUs described. In such a case, the fair value less costs of disposal would exceed the carrying amounts recognized as of December 31, 2022. Against this background, the Company does not see any risk of a potential impairment of these GPU servers.

After the switch from proof-of-work to proof-of-stake occurred in September 2022, Management had not yet determined an alternative use case as at December 31, 2022, as they were still assessing the different options for such with the MI50 and RX5700 GPUs for cloud computing or for mining cryptocurrencies other than Ethereum. This led to the impairment of these assets to a book value of zero.

As at December 31, 2022, the Company determined that the recoverable amount (fair value less costs to sell) of the remaining GPUs (besides AMD MI50 and RX5700) was higher than their carrying amount.

Impairment losses are recognized in profit or loss. This does not apply to assets that have previously been revalued, provided that the increases in value resulting from the revaluation have been recognized in other comprehensive income. For these, the impairment loss is also recognized in other comprehensive income up to the amount of the previous revaluation.

### 1.6.2 Leasing

Discretionary decisions were made in assessing whether to extend current leases. Economic and operational factors were taken into account in the assessment of probability.

### 1.6.3 Revenue recognition

#### 1.6.3.1 Provision of computing power for mining cryptocurrencies

The Group operates several data centers to provide computing power directly to a crypto mining pool or to sell them independently to third parties. Discretionary decisions are required when assessing whether contracts with third parties are within the scope of IFRS 15. In particular, Northern Data considers whether the contract was negotiated with economic substance. In determining the consideration Northern Data expects to receive for the transfer of promised products or services from a customer, the Company exercises judgment. This includes estimates of the amount of consideration to be received. In some cases, the Company has the discretion to determine whether the consideration is cash (FIAT currency) or non-cash (cryptocurrency). In the case of non-cash computing services, significant judgments are present on the part of Northern Data's management, particularly with respect to the inclusion of trading platforms (Coinbase and Binance) or web-based lists (CoinMarketCap) for cryptocurrency exchange rates and the selection of the cut-off date. Any subsequent exchange rate losses or increases are not recognized in revenue but in other operating expenses or income in profit or loss. Furthermore, contracts for the provision of computing power very rarely include significant financing components.

#### 1.6.3.2 Engineering, hosting and cloud computing

It is possible for several IFRS 15 contracts to be concluded with the same customer. The Group treats these contracts as one contract for accounting purposes if the contracts are entered into at the same time or with a small-time interval and are economically interrelated. Judgments are required in assessing whether different contracts are related. Consideration is given to whether a single economic purpose has been negotiated, whether the consideration for one contract is contingent on the performance of the other contract, or whether some or all of the products in the contracts represent a single performance obligation.

Products and services are normally classified as separate performance obligations. The portion of the contract price allocated to them is recognized separately. However, the determination of whether a product or service is considered a separate performance obligation requires the use of judgment. Particularly in the case of engineering and hosting activities, judgment is required to assess whether these services are significantly interdependent. As a rule, engineering services relate to fundamental conceptual designs, while hosting involves simple operation and maintenance measures.

#### 1.6.3.3 Basic discretionary decisions

Northern Data exercises judgment in determining the timing of fair value measurements for non-cash consideration.

Discretion is used in assessing whether revenue from the products and services (hosting and provision of computing services) is to be recognized over time or at a point in time. In particular, it is taken into account whether the customer already has control and derives economic benefits from the product or service while it is being provided. At Northern Data, this applies in particular to hosting and engineering services.

In determining the timing, the Group applies a simplification principle (right to invoice), as monthly invoicing is performed and the Group is therefore entitled to the hours worked. Revenue is therefore recognized in the amount that the Company is entitled to invoice.

Judgments and estimates related to revenue recognition can have an impact on the timing and amount of revenue to be recognized.

#### 1.6.4 Purchase price allocation

For the purchase price allocation in the context of business combinations, assumptions must be made regarding the recognition and measurement of assets and liabilities. The determination of the fair value of the assets acquired and liabilities assumed at the time of acquisition, as well as the useful lives of the intangible assets and property, plant and equipment acquired, involves assumptions. The valuation of intangible assets is based to a large extent on projected cash flows and discount rates. Actual cash flows can differ significantly from the cash flows used in determining fair values, which can result in different values and impairment losses. At the time of preparation, it can be assumed that there is no significant risk with regard to estimation uncertainties or discretionary decisions that a material change in the carrying amounts will occur in the next reporting period. Any discretionary judgments and estimates in connection with business combinations relate to the previous year. There were no business combinations within the meaning of IFRS 3 in the current reporting period.

#### 1.6.5 Impairment of goodwill

In accordance with the accounting policy set out below, goodwill is tested for impairment at least once a year and additionally if there are indications of possible impairment. Goodwill is initially allocated to a cash-generating unit and tested for impairment on the basis of forward-looking assumptions. Details are provided in Notes 1.8.5 "Goodwill" and 4.1 "Goodwill and other intangible assets".

#### 1.6.6 Financial instruments

Information on the respective judgments and estimation uncertainties can be found in the Notes to the Consolidated Financial Statements under 1.8.3.2 "IFRS 13 Fair value – Valuation techniques and significant unobservable inputs", 1.8.3.3 "Impairment" and 5.2 "Disclosures on financial instruments".

#### 1.6.7 Deferred tax assets

Deferred tax assets are recognized for all unused tax loss carryforwards to the extent that it is probable that future taxable profit will be available against which the loss carryforwards can be utilized. In determining the carrying amount of deferred tax assets, significant judgment is required by the Management Board with respect to the expected timing and amount of future taxable income.

Further details are presented in Note 3.7 "Income taxes".

#### 1.6.8 Relationships with related companies and persons

Discretionary decisions were made in the identification of related party relationships, in particular in the determination of significant influence between Northern Data and other companies.

### 1.7 Implications of Covid-19 and the war in Ukraine

#### 1.7.1 Impact on management's judgments and estimates

Discretionary decisions and estimates (see Note 1.6 "Discretionary decisions and estimation uncertainties") can have an impact on the measurement and disclosure of assets and liabilities as well as on the income and expenses recognized for the reporting period. Due to the global impact of the Covid-19 pandemic and the ongoing war in Ukraine, these management judgments and estimates remain subject to uncertainty.

The Covid-19 global pandemic was unprecedented and unpredictable; its impact resulted in significant national and global economic disruption, which adversely affected the global economy. The pandemic had a major impact on supply chains, among other areas. Northern Data works mainly with Asian companies who specialize in the production of Whatsminer and GPU-based servers. In order to avoid bottlenecks in the delivery of hardware, the main inventory of hardware was gradually built up and put into operation since 2020.



In addition, varying degrees of inflation were experienced, resulting in part from various supply chain disruptions, increased shipping, and transportation costs, and increased raw material and labor costs, as well as other disruptions resulting from the continuing Covid-19 pandemic and general global economic conditions. This inflationary impact on the Group's cost structure has contributed to adjustments in operations, ability to obtain materials and retain talent, despite a continued focus on reducing the Group's costs where possible.

Based on Management's current assessment, however, it did not have a material impact on the Group's long-term development, operations, or liquidity due to the worldwide spread of Covid-19, other than the potential impact of Covid-19 on global logistics. Management notes that the impact of Covid-19 has significantly decreased in 2023 as compared to 2022, noting that the World Health Organization declared an end to Covid-19 global pandemic in May 2023.

Furthermore, significant external events in the fiscal year 2022 were the Russian war in Ukraine and the associated increase in energy prices, as well as the persistently elevated inflation levels. The Northern Data Group does not actively pursue any business activities in the countries involved in the war. Ukraine, Russia, and Belarus are not target countries for Northern Data companies and there are no locations in the aforementioned countries. Against this backdrop, the war only had an indirect impact on the Group's business performance or financial condition, due to the increase in electricity prices at the Swedish and Norwegian sites. Through long-term electricity price contracts and hedging, the Group was able to partially compensate for the increased costs. However, the management elected to permanently stop operating a site in Norway, where it bought electricity at a spot price, due to lack of profitability. All relevant assets at the site were analyzed for impairment and none was noted, as the assets were used at other sites.

The energy-intensive provision of computing power in the context of cryptomining or in the HPC sector is essentially carried out in the data centers in Norway, Sweden, and North America. The Scandinavian data centers are powered using local hydropower as a regenerative energy source. Nonetheless, the shortage of energy is leading to rising prices. For detailed information on this, please refer to the Risk and Opportunity Report and the Forecast Report.

The actual amounts can differ from management's judgments and estimates. Changes in these judgments and estimates could have a material impact on the Consolidated Financial Statements. In the process of continually updating management's judgments and estimates, all available information regarding expected economic developments and governmental actions has been considered. This information was also included in the evaluation of the recoverability and collectability of assets and receivables.

The Group has made the underlying estimates and assumptions based on the knowledge and best information available at the time. An end and the associated economic as well as geopolitical consequences are currently difficult to forecast or estimate due to the current initial situation. It is therefore difficult to estimate the extent of the impact on the asset, financial and earnings position.

### 1.7.2 General effects on the 2022 Consolidated Financial Statements

Overall, the impact of the Covid-19 pandemic and the war in Ukraine on the Northern Data Group's Consolidated Financial Statements is insignificant.

## 1.8 Accounting and valuation principles

The main accounting and valuation principles are presented below.

### 1.8.1 Business combinations

Business combinations are accounted for using the purchase method at the date of transfer of control. Under this method, the assets, liabilities and contingent liabilities of the acquired Company, identified in

accordance with the provisions of IFRS 3, are measured at fair value at the acquisition date and compared with the cost of the consideration transferred. Any goodwill is determined by the excess of the cost of the acquisition over the fair value of the identifiable assets acquired and liabilities assumed.

Goodwill is tested for impairment at least once a year and subject to an additional test if there are indications of potential impairment. Any impairment loss is recognized as an expense. The impairment test is performed in accordance with IAS 36.

Acquisition-related costs are expensed as incurred, with the exception of transaction costs in connection with the issue of new shares.

In the course of transactions in which shareholders of Northern Data contribute shares of third parties in exchange for equity instruments of Northern Data, the transaction is not accounted for in accordance with IFRS 3. In the course of initial consolidation, the net assets acquired are recognized at fair value and added to equity as a contribution. The difference between the fair value of the equity instruments issued and the fair value of the net assets acquired is not recognized.

### 1.8.2 Business transactions in foreign currency

Transactions in foreign currencies are translated into the respective functional currency of the Group companies at the spot rate on the date of the transaction. Non-monetary assets and liabilities measured at fair value in a foreign currency are translated at the exchange rate that applies on the date the fair value was determined on. Non-monetary items measured at historical cost in a foreign currency are translated using the exchange rate on the date of the transaction. Currency translation differences are generally recognized in profit or loss for the period and reported within financing expenses.

### 1.8.3 Financial instruments

A financial instrument is a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

#### 1.8.3.1 Notes on interest income and interest expense

The interest income and expense from all interest-bearing assets and liabilities are recognized as interest income and expense using the effective interest rate method. The effective interest rate (EIR) is a method of calculating the amortized cost and of allocating the interest income or expense over the relevant period using the contractual future cash flows. Fees that are considered to be integral to the effective interest rate, direct and incremental transaction costs and all other premiums or discounts are taken into account.

#### 1.8.3.2 IFRS 13 Fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an arm's length transaction at the measurement date.

The financial instruments carried at fair value have been categorized under the three levels of the IFRS fair value hierarchy as follows:

**Level 1:** Quoted prices (unadjusted) in active markets for identical assets and liabilities.

**Level 2:** Financial instruments valued with valuation techniques using observable market data and financial instruments where the fair value can be determined by reference to similar instruments trading in active markets, or where a technique is used to derive the valuation but where all inputs to that technique are observable market data.

**Level 3:** Valuation parameters for assets or liabilities that are not based on observable market data.

If, in determining the fair value of an asset or liability, input parameters are used that can be assigned to different levels of the fair value hierarchy, the fair value measurement is assigned in its entirety to the level of the fair value hierarchy that corresponds to the lowest input parameter that is significant to the determined fair value as a whole.

The fair value of a financial instrument in active markets is determined based on quoted prices where these represent prices used in regular and current transactions. The fair value of a financial instrument also takes into account credit risk (asset side the counterparty risk and on the liability side the own credit risk).

Where quoted prices do not exist in an active market, Northern Data uses valuation techniques that maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

The valuation techniques used incorporate all factors that market participants would consider in pricing such a transaction.

Northern Data records reclassifications between the different levels of the fair value hierarchy at the end of the reporting period in which the change occurred.

At the end of the reporting period, a review is carried out to determine whether reclassifications between assessment hierarchies need to be made. In the reporting year, there were no reclassifications between the measurement hierarchies.

In determining fair value, Northern Data considers factors such as bid and ask spreads. If an asset or liability measured at fair value has a bid price and an ask price, Northern Data measures assets or long positions at the bid price and liabilities or short positions at the ask price.

In most cases, the fair value at the acquisition date corresponds to the transaction price or the acquisition cost. If Northern Data determines that the fair value at initial recognition differs from the transaction price, Northern Data measures that financial instruments at fair value at initial recognition.

If the difference identified is a gain, it is recognized in profit or loss on a systematic basis only to the extent that it arises from changes in factors that market participants would consider in pricing the liability, or over the expected life of the transaction. If the difference calculated represents a loss, it is recognized when it is probable that a loss has been incurred and the loss can be reliably estimated.

**Valuation techniques and significant unobservable inputs**

As no comparable values are available for the financial assets and financial liabilities to be measured at fair value and thus fair values have to be determined using modelling techniques, valuation techniques such as the Discounted Cash Flow (DCF) method and Net Asset Value (NAV) model which take into account current market conditions for credit, interest rate, liquidity and other risks, are used.

The table below shows the valuation techniques used in determining Level 2 and Level 3 fair values and the significant unobservable inputs used.

<b>Industry standard modelling techniques</b>	<b>Input factors Level 2</b>	<b>Input factors Level 3</b>
<ul style="list-style-type: none"> <li>• DCF models</li> <li>• NAV model</li> <li>• Forward market standard model</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated future cash flows</li> <li>• Market interest rates</li> <li>• Currency rates</li> <li>• Share prices</li> <li>• Energy forward price</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated future cash flows</li> <li>• Asset and liability prices</li> </ul>

Parameters, quoted parameter inputs and price data are obtained from third-party sources, including stock exchanges. The sources for the input parameters used are reviewed and assessed to ensure the quality of the fair value to be determined. Where possible, the results are compared with actual transactions in the market to ensure that the model valuations are calibrated against market prices. If no verification can be made due to a lack of observable data, the estimated fair value is assessed for reasonableness using appropriate procedures.

The determination of fair values of financial instruments is subject to judgment and estimation uncertainty. Where available, Northern Data determines the fair value of financial assets and financial liabilities based on quoted prices in an active market for them. If no market values are available for the measurement of financial assets and financial liabilities, the fair values are determined using valuation models. Estimates, assumptions, and modelling techniques in the valuation of financial instruments for which there are no market prices or market observable comparative parameters are to be made. In addition, parameters are based on the appropriate exercise of judgment by management, particularly with regard to the appropriate selection and application of parameters.

The use of valuation techniques or models requires management to make assumptions and estimates, the extent of which depends on the level of transparency regarding the financial instruments and their markets, and the complexity of those assets and liabilities. If management decisions are required to a significant extent for value determinations, these are identified and documented. As part of the validation of the models and valuations used, subjectivity and estimation issues are assessed in particular. Valuations that are to be assigned to Level 1 generally do not take management estimates into account. In Level 2, or in the case of valuations using standard industry models and input parameters that are observable in active markets, the consideration of management estimates is rather limited. In Level 3, non-observable input parameters, including historical data, are also used in the context of measurement using standard industry models, which means that management estimates are incorporated to a greater extent. Generally, there is no trading activity for the financial assets and financial liabilities whose fair values are to be disclosed, so significant management judgment is involved in determining fair value. If Northern Data is able to access valuation results from multiple valuation techniques, management chooses the estimate within the range that best reflects fair value. In addition, valuation adjustments may be required by management to determine fair value. Valuation adjustments are part of the valuation process. The choice of model, the assumptions and methods used, and the input parameters are based on expert estimates.

For more information on the assumptions used in determining fair values, see Note 5.2 “Disclosures on financial instruments”.

### 1.8.3.3 Impairment

For financial assets measured at amortized cost, the expected credit loss (ECL) model is used to determine impairment losses in accordance with IFRS 9.

Expected credit loss is equal to the gross carrying amount, multiplied by the probability of default and a factor reflecting the loss given default less collateral. Expected credit losses are the probability-weighted estimates of credit losses. The determination of the loss allowances represents a forward-looking assessment of future credit losses. The expected credit loss is to be discounted using the effective interest rate of the financial asset.

The determination of the loss allowances and the impairment losses is subject to discretionary decisions and estimation uncertainties. Estimation uncertainties arise in connection with the recognition of provisions for risks when expected direct and indirect effects. Climate and environmental risks can have an impact on credit risk and risk provisioning. However, none have been identified.

In accordance with IFRS 9, the risk provisioning requirement is determined in three different stages.

**Stage 1:** Northern Data recognizes a credit loss allowance at an amount equal to 12-month expected credit losses for financial assets, assuming that credit risk has not increased significantly after initial recognition.

**Stage 2:** If there is a significant increase in the default risk at the measurement date, the loss allowances must be recognized for the remaining term of the receivable (lifetime expected credit loss).

The expected loss is a probability-weighted estimate of credit losses. Interest income is recognized on the basis of the gross carrying amount.

**Stage 3:** If there are objective indications of impairment, financial assets are to be allocated to Stage 3. The calculation of the loss allowances is based on the lifetime expected credit loss. Interest income is recognized on the basis of the gross carrying amount less the loss allowances.

If financial assets are credit-impaired, interest revenue is calculated by applying the effective interest rate to the amortized cost amount (gross carrying amount of a financial asset after adjusting for any impairment allowance).

The determination of whether the credit risk of a financial asset has increased significantly since initial recognition is based on both quantitative and qualitative information and analyses, which are based on Northern Data's past experience and sound judgment, including forward-looking information. Significant weight is given to the past due status of a receivable. A significant increase in credit risk and therefore in default risk is assumed if the internally determined probability of default based on company-specific ratings has deteriorated since initial recognition.

If there is objective evidence of an actual default, the transfer is made to Level 3. If external rating information is available, the expected credit loss is determined on the basis of this data. Otherwise, Northern Data determines the default rates on the basis of historical default rates, taking into account forward-looking information on economic developments. Indicators that a financial asset is credit-impaired and therefore in Stage 3 are significant financial difficulties experienced by customers, a breach of contract, such as a default or past due status of more than 90 days and the likelihood that customers will enter bankruptcy or other reorganization proceedings.

Northern Data considers a financial asset to be in default if it is unlikely that the debtor will be able to pay its credit obligation in full to Northern Data without Northern Data having to resort to measures such as liquidation of collateral. This is mainly the case if the debtor is more than 180 days overdue.

The impairment of trade receivables is determined using an allowance matrix. Impairment is determined by reference to the past due date, based on a rating and taking into account macroeconomic factors and forward-looking information.

The gross carrying amount of a financial asset is written off when Northern Data does not have a reasonable expectation that all or a portion of the financial asset will be recoverable. Northern Data writes off the gross carrying amount when the financial asset is past due, based on past experience in realizing such assets. Northern Data makes an individual assessment of the timing and amount of the write-off based on whether there is a reasonable expectation of recovery. Northern Data does not expect a significant recovery of the amount written off.

Further supplementary disclosures regarding risk provisioning and counterparty risk are presented in Note 5.3.1 "Credit risk".

**Classification and measurement**

Financial assets and liabilities are classified and measured based on Northern Data’s business model and the nature of the cash flows (known as Solely Payments of Principal and Interest or “SPPI”).

The following table provides an overview of the basic measurement categories and their abbreviations:

Measurement category of IFRS 9	Abbreviation
At amortized cost	AC
At fair value through profit or loss	FVPL
At fair value through other comprehensive income	FVOCI

**Financial assets**

Financial assets measured at amortized cost include:

- › Trade receivables
- › Receivables from affiliated companies
- › Other receivables and assets
- › Cash and cash equivalents

Northern Data makes an assessment of the objectives of the business model in which the financial asset is held at an overall business level, as this best reflects the way in which the business is managed, and information is provided to management. The information to be considered includes the management’s stated strategy for realizing the contractual cash flows, how results are evaluated at the overall business level and reported to group management and the risks that affect the results of the business model and how those risks are managed.

The contractual cash flows must fulfil the SPPI criterion and be consistent with a basic lending arrangement. The “principal amount” is the fair value of the financial asset at initial recognition. The interest is defined as a charge for the time value of money and for the default risk associated with the principal outstanding over a period of time, as well as for other basic credit risks, liquidity risks, costs (e.g. administrative costs), and a profit margin.

Financial assets held with the objective to collect contractual cash flows (business model: Hold to Collect) are classified and subsequently measured at amortized cost.

Financial assets classified as at amortized cost are subsequently measured at amortized cost using the effective interest method (see Notes 1.8.3.2 “IFRS 13 Fair value”; 3.6 “Financial result”; 5.2 “Disclosures on financial instruments”). Initial measurement is at fair value (see Notes 1.8.3.2 “IFRS 13 Fair value”; 3.6 “Financial result”; 5.2 “Disclosures on financial instruments”). Amortized cost is reduced by impairment losses and repayments. Interest income, foreign exchange gains and losses, and impairment losses are recognized in profit or loss. A gain or loss on derecognition is recognized in profit or loss.

Financial assets held with the objective of both collecting contractual cash flows as well as selling financial assets (business model: Hold to Collect and Sell) are recorded as financial assets at fair value through other comprehensive income on the Group’s Consolidated Statement of Financial Position. Foreign exchange gains and losses and impairment losses are recognized in profit or loss. Other net gains or losses are recognized in other comprehensive income. Upon derecognition, accumulated other comprehensive income is reclassified to profit or loss. Interest income is calculated using the effective interest method and is also recognized in the Statement of Comprehensive Income.

An equity investment that is neither held for trading nor contingent consideration recognized by an acquirer in a business combination to which IFRS 3 applies is classified as at fair value through other comprehensive income (excluding recycling). Dividends are recognized as income in the Statement of Comprehensive Income unless the dividend clearly represents coverage of part of the costs of the investment. Other net gains or losses are recognized in other comprehensive income (OCI), with no reclassification to profit or loss. All financial assets not classified at AC or at FVOCI are therefore financial assets classified at FVPL and are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in other operating expenses in the Statement of Comprehensive Income.

Upon initial recognition, Northern Data may irrevocably elect to designate financial assets that otherwise qualify for measurement at AC or at FVOCI classified as at FVPL if doing so results in the elimination or significant reduction of accounting mismatches that would otherwise occur (fair value option).

Financial assets are not reclassified after initial recognition unless Northern Data changes its business model for managing the financial assets. In this case, all financial assets affected by the change are reclassified on the first day of the reporting period. When financial assets are reclassified, a prospective adjustment is made from the date of reclassification. Previously recognized gains, losses (including impairment losses or income), or interest, are not adjusted.

### Financial liabilities

Financial liabilities measured at amortized cost include:

- › Trade payables
- › Liabilities to affiliated companies

Northern Data measures financial liabilities – with the exception of liabilities for which the fair value option has been exercised – at amortized cost using the effective interest method (Note 3.6 “Financial result” and 5.2 “Disclosures on financial instruments”). Interest expense and foreign currency translation differences are recognized in the Statement of Comprehensive Income. Gains or losses on derecognition are also recognized in the Statement of Comprehensive Income.

Contracts for differences as energy price derivatives are within the scope of IFRS 9 and are classified as at fair value through profit or loss.

### Recognition and derecognition

A regular way purchase or sale of financial assets shall be recognized or derecognized either at the trade date or at the settlement date. Northern Data applies the trade date accounting method.

Northern Data derecognizes a financial asset when its contractual rights to receive cash flows from the financial asset expire or it transfers its rights to receive contractual cash flows in a transaction in which either substantially all the risks and rewards of ownership of the financial asset are transferred or Northern Data no longer retains substantially all risks and rewards of ownership of the financial asset while not retaining control of the asset.

Northern Data derecognizes a financial liability when the contractual obligations are discharged, canceled, or expire. When a financial liability is derecognized, the difference between the carrying amount of the liability extinguished and the consideration paid is recognized in profit or loss.

When the contractual terms of financial assets or financial liabilities are renegotiated or modified and the modification does not result in derecognition, a gain or loss is recognized in profit or loss for the difference between the original contractual cash flows and the modified cash flows discounted at the original effective interest rate. Significant modifications result in the derecognition of the recognized original agreement and the recognition of a new financial asset or a new financial liability in accordance with the renegotiated contractual terms.

Financial assets and liabilities are offset, and their net amount recognized in the Consolidated Statement of Financial Position only when there is a legal right to do so and an intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

#### 1.8.4 Intangible assets (excluding goodwill)

Intangible assets (excluding goodwill) are generally carried at amortized cost less straight-line amortization (except for assets with indefinite useful lives) and impairment losses.

Cryptocurrencies held long-term by the Northern Data Group are accounted for using the revaluation method measured at fair value by reference to an existing active market. Initial measurement is at acquisition or production cost. These are recognized at the time of acquisition, i.e., trading on the respective trading platform. The average of the closing prices of Coinmarketcap, Coinbase and Binance on the date of addition is applied. After initial recognition, cryptocurrencies held on a long-term basis are carried forward at the revaluation amount. Valuation in subsequent periods is performed using the first-in, first-out method. If a revaluation results in an increase in the carrying amount, the increase in value is recognized in the revaluation reserve in equity. If a revaluation leads to a decrease in the carrying amount, the impairment loss is recognized in other operating expenses. A decrease is recognized directly in other comprehensive income to the extent that it does not exceed the credit balance in the revaluation reserve. Cryptocurrencies are subject to an indefinite useful life due to their characteristics.

Up to December 31, 2021, cryptocurrencies held for the short term were reported under other assets and were measured using the cost model. Initial and subsequent measurement was based on the average of the closing prices of established crypto trading platforms. The valuation was performed using the first-in, first-out method.

In 2022, any remaining balances from cryptocurrencies were reclassified to Other Assets due to a change in the business model from long-term holding to exclusively holding to selling cryptocurrencies. Initial measurement of all cryptocurrencies is done based on daily market rate when obtaining crypto as remuneration for hash power. The subsequent measurement is performed using the first-in, first-out method. At the balance sheet date cryptocurrencies were measured at fair value to closing spot rate.

Internally generated intangible assets are capitalized if the criteria (technical feasibility, intention to complete, ability to use and sell, etc.) set out in IAS 38.57 are cumulatively met. If the criteria are not met, they are recognized as an expense.

The economic useful lives, residual carrying amounts and amortization methods of intangible assets are reviewed at least at each reporting date. The expected useful lives are as follows:

Asset	Useful life
Customer base	7–15 years
Paid acquired licenses and other rights	3–10 years
Similar rights and assets	3–10 years

If expectations differ from previous estimates, the corresponding changes are recognized as changes in accounting estimates in accordance with IAS 8.

Gains or losses on the disposal of intangible assets are determined as the difference between the proceeds on disposal and the carrying amount of the intangible assets and are recognized in the Statement of Comprehensive Income under “Other operating income” in the case of a gain or under “Other operating expenses” in the case of a loss.



**1.8.5 Goodwill**

Goodwill is tested for impairment annually or whenever events or changes in circumstances indicate that it may be impaired by comparing the carrying amount of the cash-generating unit or units with their recoverable amount. The recoverable amount is the higher of an asset’s fair value less costs of disposal and its value in use. The Group generally determines the fair value less costs of disposal for this purpose.

If the carrying amount exceeds the recoverable amount, the asset is impaired and must be written down to the recoverable amount. If the fair value less costs of disposal is higher than the carrying amount, it is not necessary to calculate the value in use; the asset is then not impaired. An appropriate valuation method is used to determine the fair value less costs of disposal. This is based on discounted cash flow valuation models or the market data available (input factors) for the fair value. A subsequent reversal of an impairment loss recognized for goodwill due to the discontinuation of the reasons for the impairment loss is not permitted. Goodwill is recognized in the functional currency and translated at the closing rate.

**1.8.6 Property, plant and equipment**

Property, plant, and equipment are measured at amortized cost less straight-line depreciation and impairment losses, if any. Assets under construction are stated at cost, net of accumulated impairment losses, if any. Prepayments made for fixed assets are disclosed under assets under construction and are stated at cost. Cost includes costs directly attributable to the acquisition as well as borrowing costs if the recognition criteria are met. Subsequent costs are recognized in the carrying amount of the item of property, plant and equipment when the costs are incurred if it is probable that future economic benefits associated with the item will flow to the entity and the cost of the item can be measured reliably.

Repair and maintenance expenses are expensed as incurred. Plots of land and buildings are recognized separately. Land has an indefinite useful life and is not depreciated.

<b>Asset</b>	<b>Useful life</b>
Buildings & data centers	7–25 years
Servers, accessories and other operating equipment	3 years
Office and other business equipment	3–5 years

The depreciable amount of property, plant and equipment is determined after deducting the estimated residual value. The estimated residual values and useful lives are reviewed at each reporting date and adjusted if necessary. Property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the asset may be impaired. An impairment loss is recognized in the amount by which the estimated residual value exceeds the recoverable amount. If necessary, the remaining useful life is adjusted accordingly.

If the reasons for a previously recognized impairment loss no longer apply, the impairment loss is reversed through profit or loss, with the reversal not exceeding the carrying amount that would have been determined had no impairment loss been recognized in prior periods.

Gains or losses on the disposal of property, plant and equipment are determined as the difference between the proceeds on disposal and the carrying amount of the item and are recognized in the Statement of Comprehensive Income under “Other operating income” in the case of a gain or under “Other operating expenses” in the case of a loss.

### 1.8.7 Cash and cash equivalents

Cash and cash equivalents comprise bank accounts as well as all near-cash assets with a remaining term of less than three months at the time of acquisition. Cash and cash equivalents are measured at amortized cost.

### 1.8.8 Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories (with the exception of advance payments received) is generally based on the first-in, first-out method. Net realizable value is determined as the estimated selling price of inventories less estimated costs to sell.

### 1.8.9 Provisions

Provisions are recognized when the Group has a present obligation as a result of a past event and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. The amount of the provision is the best estimate of the settlement amount of the present obligation at the reporting date. Expected reimbursements from third parties are not netted but recognized as a separate asset if realization is virtually certain. If the effect of the time value of money is material, the provision is discounted at the pre-tax market rate of interest with matching maturities. Subsequent interest accretion is recognized as a financing expense.

### 1.8.10 Contingent liabilities and unrecognized contractual obligations

Contingent liabilities and unrecognized contractual obligations based on present obligations are not recognized as liabilities in the Consolidated Financial Statements until utilization is probable.

However, in the context of a business combination, contingent liabilities are recognized in accordance with IFRS 3 if their fair value can be reliably measured.

### 1.8.11 Equity

Transaction costs relating to the issue of equity instruments are treated as a deduction from equity, taking the tax effects into account. The inflows received after deduction of directly attributable transaction costs are added to the share capital (nominal value) and the capital reserve.

### 1.8.12 Income taxes

Tax expense comprises current and deferred taxes. Current and deferred taxes are recognized in profit or loss, except to the extent that they relate to a business combination or to an item recognized directly in equity or in other comprehensive income.

The Group has determined that interest and penalties on income taxes, including uncertain tax items, do not meet the definition of income taxes and are therefore accounted for in accordance with IAS 37.

#### 1.8.12.1 Current taxes

Current taxes are the expected tax payable or receivable on the taxable income or tax loss for the fiscal year, based on tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. The amount of the expected tax liability or tax receivable reflects the best estimate, taking tax uncertainties, if there are any, into account. Current tax liabilities also include any tax liabilities arising as a result of the determination of dividends.

Current tax assets and liabilities are offset only under certain conditions.

### 1.8.12.2 Deferred taxes

Deferred taxes are recognized in respect of temporary differences between the carrying amounts of assets and liabilities for Group accounting purposes and the amounts used for tax purposes. Deferred taxes are not recognized for:

- › Temporary differences arising on initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting profit nor taxable profit.
- › Temporary differences associated with investments in subsidiaries, associates and jointly controlled entities, provided that the Group is able to control the timing of the reversal of the temporary differences and it is probable that they will not reverse in the foreseeable future.
- › Taxable temporary differences on initial recognition of goodwill.

A deferred tax asset is recognized for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is probable that future taxable profit will be available against which they can be utilized. Future taxable profits are determined based on the reversal of taxable temporary differences. If the amount is not sufficient to fully capitalize deferred tax assets, future taxable profits – taking the reversal of temporary differences into account – are determined on the basis of the subsidiaries' individual business plans. 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 realized; reversals are made when the probability of future taxable profits improves.

Unrecognized deferred tax assets are reassessed at each reporting date and are recognized to the extent that it is probable that future taxable profit will allow them to be recovered. Deferred tax is measured at the tax rates that are expected to apply to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date. Deferred taxes reflect any uncertainty in income taxes. The measurement of deferred taxes reflects the tax consequences that would follow from the manner in which the Group expects to recover the carrying amounts of its assets or settle its liabilities at the reporting date. Deferred tax assets and deferred tax liabilities are offset if certain conditions are met.

### 1.8.13 Leasing

Northern Data assesses at contract inception whether the contract is, or contains, a lease in accordance with IFRS 16. IFRS 16 defines a lease as a contract that gives the right to control the use of an identified asset for a specified period of time in exchange for payment of a consideration. A lease conveys the right to control the use of an identified asset provided that the lessee has the right to obtain substantially all of the economic benefits from use of the identified asset throughout the period of use (for example, by having the exclusive right to use the asset during that period) and to direct the use of the identified asset during the period of use.

As a lessee, the rights and obligations arising from all leases must be recognized in the Consolidated Statement of Financial Position as rights of use and lease liabilities. The lease liability is measured at the present value of the future lease payments at the time the lease is granted. These include fixed payments less any lease incentives to be received, variable lease payments linked to an index or (interest) rate, amounts expected to be paid by Northern Data under residual value guarantees, the exercise price of a purchase option if Northern Data is reasonably certain to exercise that option, and lease termination penalties if the lease term indicates that the lessee will exercise the termination option. The lease payments are discounted at the respective interest rate underlying the lease agreement. If this interest rate cannot be readily determined, Northern Data uses the incremental borrowing rate. Generally, Northern Data applies a marginal borrowing rate for discounting purposes, adjusted for country-specific risk, contract currency risk and the contract term. The right-of-use asset is measured at cost. The cost of the right-of-use asset comprises the

amount of the initial measurement of the lease liability plus lease payments made at or before the date of origination plus initial direct costs and any asset retirement obligations, and less lease incentives received.

After the provision date, the lease payments are divided into principal and interest payments. The lease liability is subsequently measured by increasing the carrying amount by the interest cost of the lease liability using the effective interest rate and reducing the carrying amount by the lease payments made. The carrying amount of the lease liability is remeasured if there is a reassessment or modification of the lease (including a change in the assessment of whether it is probable that an option to renew or terminate the lease will be exercised). Subsequently, the right-of-use asset is measured at cost less accumulated depreciation and impairment losses and adjusted for certain revaluations of the lease liability. Generally, the right-of-use asset is amortized on a straight-line basis over the shorter of the lease term or the useful life of the leased asset.

The Group exercises the option not to apply the recognition and measurement requirements of IFRS 16 for leases where the underlying asset is of low value (up to EUR 5,000). Furthermore, use is made of the relief to classify leases with a term of less than 12 months as short-term leases. Both lease payments for assets of low value and short-term leases are recognized as expenses. The Group does not make use of the option under IFRS 16.15 to account for lease and non-lease components uniformly in accordance with IFRS 16.

Lease expenses comprise depreciation expense on right-of-use assets and interest expense on lease liabilities.

As the lessor, leased products (operating leases) are measured at cost. Initial direct costs incurred in negotiating and concluding an operating lease, if applicable, are added to the carrying amount of the leased asset and depreciated together with it to its residual value over the term of the lease. In determining the term of a lease, extension periods are taken into account in addition to the non-cancellable basic term, provided that the exercise of the underlying extension options is deemed to be sufficiently certain.

**1.8.14 Revenue recognition**

The following table provides information on the nature and timing of performance obligations from contracts with customers, including significant payment terms, and the related revenue recognition policies.

Sales class	Type and time of fulfilment of the performance obligation, including the main payment terms	Revenue recognition method
Provision of computing power for mining cryptocurrencies	The customer obtains control over the computing power at the exact moment he calls it up at. Invoices are issued at monthly intervals and must be paid within 10-20 days.	Revenue is recognized over a certain period of time. This depends on the respective contract structure. In the case of contracts under which the customer is guaranteed continuous provision of computing services the Company makes use of the simplification rule and recognizes revenue upon invoicing for the respective performance period.  For all other contracts that do not result in a "stand-ready obligation", revenue is recognized at a certain point in time, namely when the cryptocurrency is credited to the wallet, as all performance obligations have thus been fulfilled using closing price per each day.
Hosting	The customer acquires the power of disposal continuously. Invoices are issued at monthly intervals and must be paid within 10-20 days.	Revenue is recognized over a certain period of time. Remuneration is based on hourly rates and the Company therefore makes use of the simplification rule and recognizes revenue upon invoicing.

Hardware sales	Customers obtain control over hardware products when the goods are shipped from the Group's warehouse. At this point, invoices are issued and sales are recognized. Invoices are generally payable within 10–30 days.	Revenue for hardware products is recognized when the goods are shipped from the Group's warehouse or the manufacturer's warehouse.
Engineering	Invoices for consulting and construction are issued on a monthly basis and are generally payable within 60 days.	Revenue is recognized over a period of time. The stage of completion, according to which revenue is recognized, is determined on the basis of an appraisal of the work performed. Remuneration is based on hourly rates and the Company therefore makes use of the simplification rule and recognizes revenue with invoicing.
Cloud computing	<p>The customer obtains control over the cloud computing capacity based on the contract structure with the Company for either reserved or on-demand capacity.</p> <p>For reserved capacity contracts, the performance obligation is fulfilled when the server capacity becomes available to the customer at the commencement of the contract. Invoices are issued at monthly intervals and must be paid within 10–20 days.</p> <p>For on-demand capacity contracts, the customer obtains control over the capacity at the exact moment he calls it up at and to the extent of the server capacity that he uses. Invoices are issued at monthly intervals and must be paid within 10–20 days.</p>	Revenue is recognized over a period of time based on the contracted period. Remuneration is based on hourly rates and the Company therefore makes use of the simplification rule and recognizes revenue upon invoicing. For on-demand capacity revenue is determined based on actual capacity utilized. For reserved capacity contracts revenue is determined based on pre-agreed prices for capacity utilized over the contracted period.

A contract liability is recognized when the customer makes payment or payment becomes due before Northern Data transfers the respective goods or services to the customer and Northern Data has an unconditional right to receive specified consideration before transferring the goods or service to the customer. Contract liabilities are recognized as revenue when Northern Data satisfies its obligations under the contract or when control of the related goods or services is transferred to the customer.

A contract asset is recognized when Northern Data has recognized revenue for the performance of a contractual obligation before the customer has made a payment or, regardless of when due, before the conditions for an invoice to be issued and a contract asset to be recognized have been met.

Supplementary explanations can be found in Note 3.1 "Sales revenues".

### 1.8.15 Financial income and financial expenses

The Company's financial income and financial expenses comprise:

- › Measurements of financial assets and liabilities
- › Interest income and expense

### 1.8.16 Earnings per share

Earnings per share are calculated as the Group's profit after tax attributable to the equity holders of the parent company divided by the weighted average number of ordinary shares outstanding during the reporting period.

Diluted earnings per share are based on the assumption of the exercise of other contracts for the issue of ordinary shares such as stock options and the servicing of the convertible bond in shares.

### **1.8.17 Share-based payments**

Under equity-settled share-based payment transactions, the fair value on the date share-based payment arrangements is granted to employees is recognized as an expense with a corresponding increase in equity over the period in which the employees become unconditionally entitled to the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the relevant service conditions and non-market performance conditions are expected to be satisfied, so that the final amount recognized as an expense is based on the number of awards that satisfy the relevant service conditions and non-market performance conditions at the end of the vesting period. For share-based payment awards with non-vesting conditions, the fair value is determined at the grant date taking these conditions into account. No adjustment is to be made for differences between expected and actual outcomes.

## 2 Business combinations

### Disposal of Groupe Kelvin Emtech Inc.

Under the agreement dated December 30, 2022, Northern Data sold its Canadian subsidiary the Groupe Kelvin Emtech Inc., Québec, Canada, which consisted of Groupe Kelvin Emtech Inc., which is the sole shareholder of Kelvin Emtech Inc., KE Technologies Inc., CEDTECH Construction Inc. and Le Groupe Berman Inc., to Ouellette Holdco. The sales price amounting to EUR 460 thousand which was not paid cash but entitles Northern Data AG and its affiliates to receive further engineering services provided by the Groupe Kelvin Emtech Inc. in the respective amount. This results in a deconsolidation loss of EUR -4,323 thousand for the Group, which is reported under other operating expenses.

### Business combinations in prior year 2021

#### Merger with Northern Data Services (UK) Ltd. (Hydro66 UK Ltd.)

Based on the agreement dated February 23, 2021, Northern Data AG acquired all shares in Hydro66 UK Ltd., London, United Kingdom, and thus gained control over the Company and its subsidiaries. The acquisition took place effective March 9, 2021, through the issuance of 338,273 treasury shares and a cash payment of EUR 1,752 thousand, which corresponds to an equivalent value of EUR 34,317 thousand based on the share price on the acquisition date. As part of the acquisition of Hydro66 UK Ltd., Northern Data AG also obtained control over the direct subsidiaries of Hydro66 UK Ltd., Hydro66 Property Services AB, Hydro66 Svenska AB and Hydro66 Services AB (all based in Boden, Sweden). As a result of the shareholders' resolution of July 5, 2021, Hydro66 UK Ltd. was renamed Northern Data Services (UK) Ltd.

Hydro Group operates an HPC data center in Boden, Sweden. It installs and operates infrastructure for various HPC applications such as crypto mining, artificial intelligence, blockchain or big data analytics.

The strategic goal of Northern Data with the Hydro Group merger is to develop suitable locations in regions with favorable climatic conditions, as well as access to renewable energy sources.

The following overview shows the consideration transferred as part of the acquisition of Hydro Group and the values of the assets identified and liabilities assumed as of the acquisition date:

<b>in EUR '000</b>	
<b>Consideration</b>	
Shares issued	32,565
Cash component	1,752
<b>Total consideration</b>	<b>34,317</b>
<b>Fair value of the identified assets acquired and liabilities assumed on the acquisition date</b>	
Trademark	849
Other intangible assets	101
Property, plant and equipment	10,456
Rights of use from leases	1,350
Other non-current assets	1,526
Cash and cash equivalents	370
Other current assets	942
Provisions	-1,996
Trade payables	-367
Contract liabilities, deferred income	-1,309
Financial liabilities	-2,071
Other liabilities	-42
Deferred taxes from PPA	-263
<b>Total identified net assets</b>	<b>9,546</b>
Goodwill	24,771
<b>Total</b>	<b>34,317</b>

The acquired trade receivables comprise gross amounts of contractual receivables of EUR 84 thousand. On the acquisition date, none of these receivables were assessed as probably uncollectible.

The goodwill is attributable in particular to the location advantages, skills and know-how of the employees and the synergies expected from the integration of the acquired companies into the business of the Northern Data Group as a result of the acquisition.

Between the acquisition date and December 31, 2021, the acquired company and its subsidiaries contributed consolidated revenues totaling EUR 3,244 thousand and consolidated earnings of EUR -12,651 thousand to the Group's results. If the acquisition had already taken place on January 1, 2021, consolidated revenues of EUR 4,316 thousand and consolidated earnings before taxes of EUR -12,224 thousand would have been recognized in the Group's Statement of Comprehensive Income.

The Group incurred costs of EUR 623 thousand for legal advice and due diligence in connection with the business combination. These costs are included in other operating expenses.



**Disposal of Whinstone US, Inc.**

Under the agreement dated April 8, 2021, Northern Data sold its U.S. subsidiary Whinstone US, Inc., Rockdale, Texas, which operates the high-performance data center at the Rockdale/Texas site, to the U.S.-based company Riot Blockchain Inc., Castle Rock, Colorado, effective May 26, 2021. The sale price consists of a cash payment in the amount of EUR 43,271 thousand and an additional 11.8 million common shares of Riot Blockchain Inc., Castle Rock, Colorado. Based on the share price of Riot Blockchain Inc. of USD 27.64, the total value of the shares on the transaction date corresponded to EUR 266,486 thousand. The total value of the consideration received, including future reimbursement by the electricity supplier, amounts to EUR 358,681 thousand. This results in a deconsolidation gain of EUR 159,451 thousand for the Group, which is reported under other operating income.

**Merger with North Georgia Data LLC**

Northern Data US Holdings, Inc., a subsidiary of Northern Data AG, acquired 100 percent of the shares in North Georgia Data LLC, Maysville, USA, on July 30, 2021, and thus gained control over the company.

North Georgia Data LLC owns and operates a high-performance data center on its own property in Maysville, Georgia, USA. The company uses the internally generated computing power for mining cryptocurrency. In addition, the company installs, operates and maintains the internal miners. At the time of the transaction, the data center of North Georgia Data LLC had a capacity of 7.5 MW.

The merger with North Georgia Data LLC took place as part of Northern Data AG’s expansion course in the North American region. The strategic objective of the merger was the possibility of expanding capacity with the company’s own mobile data centers at the Georgia location, as well as further potential capacity expansion through the acquisition of neighboring properties.

The merger with North Georgia Data LLC was effected by a cash payment of EUR 6,490 thousand.

The following overview summarizes the consideration transferred as part of the business combination and the values of the assets identified and liabilities assumed as of the acquisition date:

<b>in EUR '000</b>	
<b>Consideration</b>	
Cash payment	6,490
<b>Total consideration</b>	<b>6,490</b>
<b>Fair value of the identified assets acquired and liabilities assumed on the acquisition date</b>	
Property, plant and equipment	761
Other assets	18
Cash and cash equivalents	2
Other liabilities	-1
Deferred taxes from PPA	326
<b>Total identified net assets</b>	<b>1,106</b>
Goodwill	5,384
<b>Total</b>	<b>6,490</b>

No portion of the goodwill recognized is expected to be deductible for tax purposes. See Note 4.1 “Goodwill and other intangible assets” for changes in goodwill resulting from the acquisition of the company.

The acquired trade receivables comprise gross amounts of contractual receivables of EUR 16 thousand, none of which were assessed as probably uncollectible as of the acquisition date.

Goodwill is attributable to the advantages of North Georgia Data LLC in terms of the availability of data center capacity, which can be used to meet its own demand for capacity, the possibility of expanding this capacity and the reliable energy supply at the site.

Between the acquisition date and December 31, 2021, the acquired company contributed consolidated revenues of EUR 314 thousand and consolidated earnings of EUR –509 thousand to the Group’s results. If the acquisition had already taken place on January 1, 2021, consolidated revenues of EUR 1,173 thousand and consolidated earnings before taxes of EUR –640 thousand would have been recognized in the Group’s Statement of Comprehensive Income.

**Merger with Decentric Europe B. V.**

Based on the agreement dated August 12, 2021, Northern Data AG acquired all shares in Decentric Europe B. V., Amsterdam, Netherlands, (“Decentric”) and thus gained control over the company. The transaction includes a cash component, which was offset against previously existing liabilities of Northern Data and then deferred by Block.one as a related party in the form of a loan in the total amount of EUR 191,076 thousand. The loan is repayable within 12 months after closing. Furthermore, 2,306,294 shares in Northern Data AG were issued by way of a capital increase through contributions in kind with the exclusion of shareholders’ subscription rights. At a market value of EUR 74 per share, this corresponded to an amount of EUR 170,668 thousand at the time the agreement was concluded. The capital increase was resolved on August 12, 2021.

Decentric specializes in the provision of computing power by means of GPU hardware, which had previously been supplied to Decentric by Northern Data in fiscal year 2020 as well as during fiscal year 2021 and was gradually put into operation. Decentric was already able to generate revenues from the provision of computing power for the mining of cryptocurrencies by the transaction date. A final contract for the operation of Decentric’s hardware by Northern Data was not concluded, contrary to the original intention. In the third quarter of 2021, the company was finally acquired with the goal of entering the mining business and being able to participate in the overall profits from the provision of computing power. In particular, as part of the acquisition, Northern Data became the legal owner of more than 24,000 server systems previously supplied by Northern Data to Decentric, which serve to strategically build up the Northern Data Group’s fixed assets in the area of high-performance servers. As a result of the Decentric acquisition, there was no revenue recognition on the part of Northern Data from the supply of mining hardware and the operation of the hardware in fiscal years 2020 and 2021. As the payments made by Decentric were not recognized under a contract within the meaning of IFRS 15, they were recognized as other liabilities until the transaction date.

Due to the aforementioned points, the acquisition of Decentric is not considered a business combination within the meaning of IFRS 3. Rather, it is an acquisition transaction with shareholders that includes, among other items, the issuance of treasury shares. As a result, after offsetting the payments previously made by Decentric and recognizing these as liabilities by the Group, in particular with the cash component of the transaction, the remaining difference is deducted from the equity of the Northern Data Group (EUR 165,718 thousand).

The Group incurred costs of EUR 1,292 thousand for legal advice and due diligence in connection with the business combination. These costs are included in other operating expenses.

### Merger with Bitfield N. V.

With the signing of the contract on September 26, 2021, it was agreed that Northern Data AG would acquire 100 percent of the shares in Bitfield N. V., Amsterdam, Netherlands, from Block.one as a related company. Already at the signing of the contract, 86.6 percent of the shareholders of Bitfield N. V. declared the acquisition of Northern Data shares in exchange for an exchange ratio and a fixed foreign currency rate determined at the signing of the contract. With the acquisition of the 88.6 percent of the shares in Bitfield N. V., Northern Data gained control effective October 20, 2021. Under the terms of the agreement dated September 26, 2021, the same exchange ratios and foreign currency exchange rate were determined for the remaining minority interest as for the shares in Bitfield already received. Northern Data had thus recognized the option to acquire the remaining minority interest as an equity instrument at the inception of the agreement. The remaining minority interests were converted on December 5, 2021, thus completing the 100 percent acquisition of Bitfield N. V. Thus, Northern Data has acquired the entirety of the shares by the end of 2021, increasing its equity interest to 100 percent. The transaction takes the form of a capital increase against contributions in kind in return for the issue of a total of 5,065,545 shares in Northern Data AG, which corresponds to an equivalent value of EUR 302,742 thousand based on the share price specified in the share purchase and contribution agreement. Advance payments already made have been deducted. As part of the acquisition of Bitfield N. V., Northern Data AG also obtained control over the direct subsidiaries of Bitfield N. V.: 1277963 B. C. Ltd, Vancouver, Canada, and Minondo Ltd., Gibraltar, Gibraltar (“Bitfield” or “Bitfield Group”).

Bitfield specializes in providing computing power by means of ASIC miners for the mining of Bitcoin, which had previously been delivered to Bitfield by Northern Data in fiscal year 2020 as well as in the course of fiscal year 2021 and successively put into operation. Bitfield was already able to generate revenues from the provision of computing power for the mining of Bitcoin by the transaction date. Bitfield Group was acquired in the third quarter of 2021 with the goal of entering the mining business and participating in the overall profits from the provision of computing power. In particular, as part of the acquisition, Northern Data became the legal owner of more than 6,600 server systems previously supplied by Northern Data to Bitfield, which serve to strategically build up the Northern Data Group’s fixed assets in the area of high-performance servers. As a result of the acquisition of Bitfield, there was no recognition of revenue from the supply of mining hardware and the provision of other services, in particular the operation of the hardware, in fiscal years 2020 and 2021. As the payments made by Bitfield were not recognized under a contract as defined by IFRS 15, they were recognized as other liabilities until the transaction date.

Due to the aforementioned points, the acquisition of Bitfield is not considered a business combination within the meaning of IFRS 3. Rather, it is an acquisition transaction with shareholders that exclusively involves the issuance of treasury shares. As a result, after offsetting the payments previously made by Bitfield and recognized as liabilities by the Group, the remaining difference is deducted from the equity of the Northern Data Group (EUR 253,869 thousand).

The Group incurred costs of EUR 1,323 thousand for legal advice and due diligence in connection with the business combination in 2021. These costs are included in other operating expenses.

## 3 Notes to the Statement of Comprehensive Income

### 3.1 Sales revenues

The Group currently generates the majority of its sales revenue from the mining of crypto assets and hardware sales. In the fiscal year, the Company was able to generate significant income and cash inflows from this. In fiscal year 2022 cloud computing also contributed for the first time to sales revenues.

The following section provides comprehensive and supplementary information on customer contracts. In particular, this includes explanations of how the Northern Data Group recognizes revenue and information on the allocation of revenue to trade receivables and, where applicable, customer-related obligations.

Sales revenues were generated from Europe (predominantly from Germany) and the U.S. mainly from the provision of computing power for mining cryptocurrencies, hardware sales, hosting and colocation services. Cloud computing revenues are currently only derived from Germany. In addition, revenues were generated from the consulting and engineering business in Canada.

#### Breakdown of sales revenue

The following table shows the breakdown of sales by main geographical markets:

in EUR '000	2022	2021
Germany	109,551	97,923
Europe (excluding Germany)	42,439	36,871
North America	41,297	55,066
<b>Total</b>	<b>193,287</b>	<b>189,860</b>

The following table shows the breakdown of sales by sales class. A reconciliation to the reportable segments is provided in Note 5.7 "Segment reporting".

in EUR '000	2022	2021
<b>Segment Mining Total</b>	<b>155,165</b>	<b>110,657</b>
Provision of computing power for mining cryptocurrencies	155,165	110,657
<b>Segment Hardware &amp; Other Total</b>	<b>38,122</b>	<b>79,203</b>
Hardware sales	25,544	52,113
Hosting and colocation	5,955	12,512
Engineering	5,022	14,330
Cloud computing	1,593	-
Other	8	248
<b>Total</b>	<b>193,287</b>	<b>189,860</b>

In 2022, with the exception of “Provision of computing power for mining cryptocurrencies” the revenue classes were allocated to the “Hardware & Other” segment. The revenue classes presented show external revenues only. Supplementary disclosures can be found in Note 5.7 “Segment reporting”.

**3.1.1 Outstanding performance obligations**

The portion of the transaction price of a customer contract that is allocated to performance obligations still outstanding represents the revenue from the contract that has not yet been recognized. Both the amounts recognized as contract liabilities and the amounts contractually agreed but not yet due are included here.

As permitted by IFRS 15, no information is provided on the remaining performance obligations as of December 31, 2022, or December 31, 2021, that have an expected original maturity of one year or less. None of these performance obligations exceeds a maturity of twelve months.

**3.1.2 Contract assets and contract liabilities**

The following table provides information on receivables and contract liabilities arising from contracts with customers:

in EUR ‘000	2022	2021
Receivables included in trade receivables	2,908	5,254
Contract assets	0	2,684
Contract liabilities	222	21,063

Trade receivables exclusively comprise receivables from customers for services rendered up to the respective reporting date.

Contract liabilities both for 2022 and 2021 relate to advance payments received from customers for future engineering services and hosting services that will be realized in the subsequent accounting period (the following month). None of the contract liabilities are exceeding a twelve-months period. The revenue recognized in the reporting period that was included in the contract liability balance at the beginning of the period amounted to EUR 20,841 thousand (previous year: EUR 622 thousand).

The allowance for losses on financial assets is presented in detail in Note 5.3.1 “Credit risk” in the Notes to the Consolidated Financial Statements.

Hosting services and the supply of hardware were undertaken by Decentric Europe B.V. (hereinafter “Decentric”) and Bitfield N.V. (formerly Bitfield AG, Hofheim am Taunus) (hereinafter “Bitfield”) over the course of 2021. Northern Data acquired the aforementioned companies in fiscal year 2021.

### 3.2 Other operating income

Other operating income breaks down as follows:

in EUR '000	2022	2021
Currency translation	38,608	27,379
Refunds from other taxes	10,357	-
Reversal of provisions and accrued liabilities	1,151	-
Exchange rate differences on cryptocurrencies	2,248	10,444
Refunds of legal costs	1,213	-
Sale of assets	117	-
Deconsolidation of subsidiaries	-	159,451
Refunds from electricity contracts	-	104,453
Government grants	-	145
Other	2,487	1,089
<b>Total</b>	<b>56,181</b>	<b>302,961</b>

Income from refunds from other taxes in the reporting period mainly includes reclaimable energy taxes (EUR 10,200 thousand). Income from reversal of provision and accrued liabilities includes indirect taxes not owed. Refund of legal costs relate to costs associated with prior year business acquisitions.

### 3.3 Cost of materials

Cost of materials in the amount of EUR 98,864 thousand (previous year: EUR 76,319 thousand) in fiscal year 2022 mainly resulted from the purchase of electricity for data centers, procurement of hardware and other operating expenses for mining and hashing. The increase in cost of materials compared to the previous year is mainly due to the ongoing change in the business model, impacts of higher inflation and additional business activities in Germany and abroad.

### 3.4 Personnel expenses and number of employees

Personnel expenses break down as follows:

in EUR '000	2022	2021
Wages and salaries	26,282	10,965
<i>thereof pension plans</i>	698	308
Social security contributions	2,191	1,713
<i>thereof pension plans</i>	784	290
Share-based payments	16,840	5,356
Other profit and profit sharing	444	55
Benefits on the occasion of termination of employment	4,051	975
Benefits after termination of employment	0	89
Other	90	16
<b>Total</b>	<b>49,898</b>	<b>19,169</b>

The average number of employees breaks down as follows:

<b>Number of employees</b>	<b>2022</b>	<b>2021</b>
Salaried	209	144
<i>thereof senior executives</i>	5	6

The average number of employees in the previous year and in the fiscal year was distributed among the regions as follows:

<b>2022</b>	<b>Germany</b>	<b>Other countries in Europe</b>	<b>North America</b>
as of March 31	88	35	64
as of June 30	98	36	74
as of September 30	103	41	79
as of December 31	104	37	78
<b>Average number</b>	<b>98</b>	<b>37</b>	<b>74</b>

<b>2021</b>	<b>Germany</b>	<b>Other countries in Europe</b>	<b>North America</b>
as of March 31	45	12	121
as of June 30	54	21	26
as of September 30	64	29	42
as of December 31	72	32	58
<b>Average number</b>	<b>59</b>	<b>23</b>	<b>62</b>

The average number of employees in the Group of the fiscal year was 209 of which five are senior executives. Please refer to Note 5.5 "Share-based payments" for expenses and further information on share-based payments and to Note 5.6 "Employee benefits" for company pension plans.

### 3.5 Other operating expenses

Other operating expenses are composed as follows:

in EUR '000	2022	2021
Losses from the sale of cryptocurrencies	42,010	3,885
Legal and consulting fees	24,025	26,244
Impairment of other receivables	29,122	21,840
Loss on the disposal of tangible and intangible assets	12,182	–
Valuation of cryptocurrencies	4,622	1,282
Allowance for bad debts	3,205	–
Travel and representation expenses	3,162	1,094
Advertising costs	2,559	1,139
Incidental costs from rent and lease, other occupancy costs	2,320	932
Write-off of loans	2,078	–
Recruiting and HR expenses	1,544	–
Third-party work	986	1,372
Expenses from currency translation	24,792	8,354
Shipping costs and outgoing freight	128	2,269
Other	6,088	8,864
<b>Total</b>	<b>158,823</b>	<b>77,275</b>

Other operating expenses classified as “Other” in the reporting period include general admin expenses for office and computer supplies in particular.

### 3.6 Financial result

in EUR '000	2022	2021
<b>Financial income, net</b>	<b>99</b>	<b>89,765</b>
thereof interest and similar income	99	55
thereof due to the sale of the subsidiary: disposals from financial liabilities measured at FVPL – electricity supply contract classified as derivative	–	28,109
thereof gains on disposal of current financial assets	–	61,521
thereof repayment of convertible bond	–	80
<b>Financial expenses, net</b>	<b>-3,166</b>	<b>-7,170</b>
thereof interest and similar expenses	-2,824	-4,884
thereof repayment of a financial liability classified as FVPL	–	-2,075
thereof interest expense from leases	-340	-181
thereof allowance for losses on financial assets	-2	-30
<b>Financial result</b>	<b>-3,067</b>	<b>82,595</b>



Interest and similar expenses mainly result from two short-term shareholder loans and the interest repaid on these. One shareholder loan was repaid in fiscal year 2021 and thus completely redeemed. The other one was repaid in August 2022.

The prior-year result from financial instruments in the FVPL category included only valuation gains and losses on disposal (Energy contracts of the divested subsidiary to be recognized as financial derivatives and a convertible bond issued classified as FVPL).

Expenses and income are presented on a net basis.

Financial risks and possible impairments resulting from the financial result are explained in Note 5.3 “Disclosures on financial risks and risk provisioning”.

### 3.7 Income taxes

Income taxes include current taxes paid or owed by the consolidated companies as well as deferred taxes.

in EUR '000	2022	2021
Current tax (expense)/income on profits for the period	-2,200	-41,933
Current tax (expense)/income from previous years	5,701	-
<b>Total current tax (expense)/income</b>	<b>3,501</b>	<b>-41,933</b>
Deferred tax (expense)/income due to temporary differences	-1,477	-6,764
Deferred tax (expense)/income due to tax loss carryforwards	619	-865
<b>Total deferred tax (expense)/income</b>	<b>-858</b>	<b>-7,629</b>
<b>Total</b>	<b>2,643</b>	<b>-49,562</b>

The deferred tax expense due to temporary differences in fiscal year 2022 is mainly attributable to matters relating to non-current assets. The deferred tax income reported due to tax loss carryforwards of EUR 619 thousand primarily includes interest expenses to affiliated companies that were not fully deductible in the fiscal year 2022 but can be carried forward and deducted in future periods. The nominal tax rate applicable to Northern Data AG was 31.9 percent in the fiscal year (previous year: 31.9 percent).

The following overview presents the reasons for the difference between the expected and the reported tax expense in the Group:

	2022	2021
Tax rate of the parent company in percent	31.9	31.9
<b>in EUR '000</b>		
Consolidated (loss)/profit before income taxes	-268,418	336,721
<b>= Expected tax (expense)/income</b>	<b>85,692</b>	<b>-129,978</b>
Deviating tax rates of the subsidiaries	-2,133	13,703
Tax-exempt income	57	79,726
Non-deductible expenses	-3,766	-712
Additions from trade tax	-	-162
Change in tax rates	-	-3
Permanent differences	-	-1,710
Change in valuation of deferred tax assets	-6	-
Taxes relating to previous years	5,700	-
Effect from temporary differences and losses for which no deferred taxes were recognized	-125,807	-40,792
Effect of the change in temporary differences and losses and utilization of tax loss carryforwards	43,114	28,450
Other effects	-208	1,915
<b>Total income taxes</b>	<b>2,643</b>	<b>-49,562</b>

The tax liabilities reported in the Consolidated Statement of Financial Position result from the income taxes of the companies included in the Consolidated Financial Statements for fiscal year 2022 and partly for the previous year. The companies are subject to the respective tax laws of their countries. When assessing tax assets and tax liabilities, the interpretation of tax legislation may be subject to uncertainties, and a divergent view of the respective tax authority cannot be ruled out. Changes in assumptions about the correct interpretation of tax regulations are reflected in the recognition of uncertain income tax assets and liabilities. Uncertain income tax items are recognized at the most probable value.

Deferred taxes were recognized on temporary differences between the carrying amounts in the IFRS balance sheets of the Group companies, including disclosed hidden reserves, and the tax balance sheets, as well as on tax loss carryforwards that are expected to be utilized. Deferred tax assets and liabilities are measured using tax rates that are expected to apply to the period when the asset is realized, or the liability is settled. The tax rates and tax regulations used are those that are enacted or substantively enacted on the reporting date.

IFRIC 23 clarifies how the recognition and measurement requirements set out in IAS 12 should be applied when there is uncertainty about income tax treatments and includes current and deferred tax assets or liabilities. In accordance with IFRIC 23, uncertain tax treatments may be accounted for separately or together with one or more other uncertain tax treatments. The method that is better suited to predicting the resolution of the uncertainty must be selected. When making the assessment, it must be assumed that a tax authority will examine all amounts that it is authorized to examine and that it has all relevant information for the examination. If it is considered unlikely that the tax authority will accept an uncertain tax treatment, either the most likely amount or the expected value should be applied to each uncertain tax treatment to account for the effect of the uncertainty, depending on which method is more appropriate for predicting the resolution of the uncertainty.

The companies of the Group are subject to income tax in a large number of countries worldwide. When assessing global income tax assets and liabilities, the interpretation of tax regulations in particular can be subject to uncertainty. Differences in the views of the respective tax authorities regarding the correct interpretation of tax standards cannot be ruled out. Changes in assumptions regarding the correct interpretation of tax standards, for example due to changes in case law, are included in the recognition of uncertain income tax assets and liabilities in the corresponding financial year.

The total amount of tax loss carryforwards amounts to EUR 209,416 thousand (of which EUR 146,255 thousand for corporation tax and other comparable foreign taxes and EUR 63,161 thousand for trade tax). Deferred tax assets on tax loss carryforwards were only capitalized if, on the basis of planning, it is considered probable that future taxable income will be available to offset these losses. No deferred tax assets are recognized for corporation tax and trade tax loss carryforwards of EUR 205,977 thousand.

No deferred tax assets were recognized on temporary differences in the amount of EUR 272,734 thousand. Deferred tax liabilities relating to temporary differences with shares in subsidiaries (so-called "outside basis differences") are not recognized, as the company holding the investment can control the timing of the reversal and a reversal is not expected in the foreseeable future.

In respect of the surplus of deferred tax assets in the amount of EUR 3,065 thousand, some of the group entities recognized such surplus of deferred tax assets despite ending the period on a loss position. These companies are operating on Cost Plus basis and expect to recognize sufficient taxable income in future periods that will exceed the recognized deferred tax assets in the amount of 3,065 thousand.

Deferred tax assets are based on the following temporary differences and tax loss carryforwards:

in EUR '000	2022	2021
Intangible assets	-	-
Property, plant and equipment	2,912	8,259
Rights of use from leasing agreements	-	-
Trade receivables/due from affiliated companies	-	-
Inventories	-	17
Other assets	632	-
Cash and cash equivalents (mainly currency translation)	475	21
Trade payables/due to affiliated companies	1,810	806
Financial liabilities	-	1,059
Lease liabilities	1,495	-
Provisions	-	14
Other accruals	8,774	140
Tax loss carryforwards and tax credits	595	2
<b>Total</b>	<b>16,693</b>	<b>10,318</b>
Netting (per consolidation unit)	-13,628	-1,917
Recognition of deferred tax assets not exceeding the amount of deferred tax liabilities	-	-
(per consolidation unit)	-	-
<b>Balance sheet item</b>	<b>3,065</b>	<b>8,401</b>

Deferred tax assets on property, plant and equipment are recognized at the level of the Consolidated Financial Statements due to the different accounting assessment.

Deferred tax liabilities result from the following temporary differences:

in EUR '000	2022	2021
Intangible assets	151	1,136
Property, plant and equipment	4,788	675
Inventories	–	1
Trade receivables and payables	9,888	926
Cash and cash equivalents (mainly currency translation)	268	4,360
Transaction costs from capital procurement measures	–	2,525
Trade payables/due to affiliated companies	7	–
Financial liabilities (loans)	–	–
Other accruals	656	427
Other assets	70	–
<b>Total</b>	<b>15,828</b>	<b>10,050</b>
Netting (per consolidation unit)	–13,628	–1,917
<b>Balance sheet item</b>	<b>2,200</b>	<b>8,133</b>

Deferred tax liabilities mainly result from currency translation.

The income and expenses from deferred taxes recognized in profit or loss in the fiscal year relate to the following temporary differences and tax loss carryforwards:

in EUR '000	2022	2021
Intangible assets	72	1,393
Property, plant and equipment	–10,125	20,695
Rights of use from leasing agreements	–	–97
Inventories	1	16
Trade receivables/due from affiliated companies	–8,962	–4,597
Other assets	1,046	–312
Cash and cash equivalents	4,798	–4,508
Transaction costs from capital procurement measures	2,545	–1,615
Trade payables/due to affiliated companies	996	878
Financial liabilities (loans)	–	–2,614
Contract liabilities, deferred revenue	1,465	–25,712
Provisions	5	14
Other accruals	6,683	–441
Tax loss carryforwards and tax credits	619	–4,692
<b>Total (gross amount)</b>	<b>–857</b>	<b>–21,591</b>
Recognition of deferred tax assets not exceeding the amount of deferred tax liabilities (per consolidation unit)	–	13,962
<b>Total deferred tax expense/income</b>	<b>–857</b>	<b>–7,629</b>

### 3.8 Earnings per share

The following table shows the calculation of undiluted and diluted earnings per ordinary share attributable to shareholders of the parent company:

		2022	2021
Profit attributable to shareholders of the parent company	in EUR '000	-265,775	287,159
<b>Weighted average number of shares for the calculation of earnings per share</b>			
Undiluted	Number	23,815,514	17,652,871
Diluted	Number	23,815,514	23,815,514
<b>Earnings per share</b>			
Undiluted	EUR	-11.16	16.27
Diluted	EUR	-11.16	12.06

## 4 Notes to the Statement of Financial Position

### 4.1 Goodwill and other intangible assets

in EUR '000	Goodwill	Customer base	Paid acquired licenses and other rights	Similar rights and assets	Crypto currencies	Total
<b>Acquisition and production costs</b>						
<b>Balance on 01/01/2022</b>	<b>31,163</b>	<b>3,551</b>	<b>4,494</b>	<b>163</b>	<b>66,948</b>	<b>106,319</b>
Disposals from the scope of consolidation	-1,008	-3,710	-1,082	6	-	-5,794
Additions	-	-	539	-	-	539
Disposals	-	-	-2,310	-116	-20	-2,446
Reclassifications	-	-	-	-	-66,582	-66,582
Net translation differences	-	159	-8	-14	-346	-209
<b>Balance on 12/31/2022</b>	<b>30,155</b>	<b>-</b>	<b>1,633</b>	<b>39</b>	<b>-</b>	<b>31,827</b>
<b>Accumulated depreciation and impairments</b>						
<b>Balance on 01/01/2022</b>	<b>11,065</b>	<b>382</b>	<b>1,591</b>	<b>116</b>	<b>7,529</b>	<b>20,683</b>
Disposals from the scope of consolidation	-	-382	-327	-	-	-709
Additions (scheduled amortization)	-	-	816	35	-	851
Additions impairments	5,714	-	-	-	29,050	34,764
Additions impairments from revaluation	-	-	-	-	-	-
Disposals	-	-	-2,187	-116	-19	-2,322
Reclassifications	-	-	-	-	-36,570	-36,570
Net translation differences	-	-	-20	-2	10	-12
<b>Balance on 12/31/2022</b>	<b>16,779</b>	<b>-</b>	<b>-127</b>	<b>33</b>	<b>-</b>	<b>16,685</b>
<b>Carrying amounts</b>						
<b>Balance on 12/31/2021</b>	<b>20,098</b>	<b>3,169</b>	<b>2,903</b>	<b>47</b>	<b>59,419</b>	<b>85,636</b>
<b>Balance on 12/31/2022</b>	<b>13,376</b>	<b>-</b>	<b>1,760</b>	<b>6</b>	<b>-</b>	<b>15,142</b>

Cryptocurrencies of Northern Data Group held for the long term are accounted for using the revaluation model. The reporting date for the revaluation is December 31, 2022. The carrying amount of the revalued cryptocurrencies is EUR 0 thousand (previous year: EUR 59,419 thousand). The useful life of cryptocurrencies reported under intangible assets for fiscal year 2021 can be considered unlimited due to their characteristics.

Due to a change in the business model of Northern Data, in 2022 the cryptocurrencies were sold completely and are not held for long term anymore. Any remaining balances of cryptocurrencies not yet sold are reclassified to Other Assets.

#### 4.1.1 Impairment Test

Intangible assets mainly comprise goodwill and customer bases acquired during the acquisitions of North Georgia Data LLC, US, Hydro66, Svenska AB (in 2021) and Kelvin Emtech Group (in 2020). The goodwill of Kelvin Emtech Group has been disposed with the sale of the Kelvin Emtech Group in 2022. Details on the acquisitions and sales of the companies can be found in Note 2 “Business combinations”. The determination of the cash-generating units (CGU) is generally based on the locations of the data centers. This results in the following CGUs with the designation “Sweden – Mining” and “Sweden – HPC”.

Goodwill is not amortized but rather tested for impairment at least once a year in accordance with IAS 36 based on fair value less costs of disposal. The corresponding cash-generating unit is tested for impairment in the same way as described in Note 1.8.3.3 “Impairment”. The value in use was determined as the recoverable amount.

Goodwill with the initial amount of EUR 24,771 thousand for the acquisition of Hydro66 UK Ltd. in 2021 was allocated 46 percent to the CGU “Sweden – Mining” and the remainder to the CGU “Sweden – HPC”. The goodwill from the acquisition of Kelvin Emtech Group was allocated 100 percent to the respective CGUs.

The following table shows the allocation of the carrying amounts for goodwill as of December 31, 2022, and 2021 after impairment:

in EUR '000	Goodwill as of	
	12/31/2022	12/31/2021
CGU Sweden – Mining	-	5,714
CGU Sweden – HPC	13,376	13,376
CGU Canada – Kelvin Emtech	-	1,008
<b>Total</b>	<b>13,376</b>	<b>20,098</b>

Pursuant to the assessment of management, there are no alternative scenarios that result in further impairment.

##### 4.1.1.1 Sweden – Mining

A WACC of 17.4 percent (pre-tax 21.9 percent) was calculated for the Sweden – Mining CGU. The discount rate is based on a risk-free rate of 2.0 percent and a market risk premium of 6.5 percent. Furthermore, a beta factor derived from a peer group, a credit spread, and a typified capital structure are taken into account.

The impairment test is based on the current planning status of Northern Data. The planning covers the years 2023 to 2027. The detailed planning period for 2023 is subject to the Company’s planning approved by management and released by the Supervisory Board; the detailed planning for 2023 to 2027 is based on the multi-year planning approved by the Management Board.

Only the investments in miners already committed to in fiscal year 2022 and the miner portfolio at the end of 2022 were included in the impairment test. Due to the market development in mining, no perpetual annuity was considered for the purpose of the impairment test and thus no reinvestment in miners after the year 2027 was assumed. A terminal growth rate of zero percent is assumed. Even after considering the replacement of miners in 2024 and the mining profitability based on market average, the carrying amount of the CGU exceeded the recoverable amount. Taking a conservative approach on the mining profitability assumption, Northern Data has assumed a mining profitability rate that is aligned to the average profitability seen in the financial year 2022.

The recoverable amount as of December 31, 2022, EUR 23,090 thousand (previous year: EUR 32,425 thousand) is determined on the basis of a value in use using cash flow forecasts.

On the basis of the impairment test in accordance with IAS 36, the goodwill for the CGU “Sweden – Mining” was impaired by EUR 5,714 thousand (previous year: EUR 5,681 thousand) as of the reporting date December 31, 2022. The impairment loss is recognized under “Depreciation, amortization and impairment” in the Statement of Comprehensive Income.

#### 4.1.1.2 Sweden – HPC

A WACC of 10.1 percent (pre-tax 12.7 percent) was calculated for the “Sweden – HPC” CGU. The discount rate is based on a risk-free rate of 2.0 percent and a market risk premium of 6.5 percent. Furthermore, a beta factor derived from a peer group, a credit spread and a typified capital structure are taken into account.

The impairment test is based on the current planning status of Northern Data. The planning covers the years 2023 to 2027. The detailed planning period for 2023 is subject to the Company’s planning approved by management and released by the Supervisory Board; the detailed planning for 2023 to 2027 is based on the multi-year planning approved by the Management Board.

Only the investments in GPUs already paid in fiscal year 2022 and the GPUs portfolio at the end of 2022 were included in the impairment test. Sustainable reinvestments based on annuities were taken into account to determine the “terminal value”. A terminal growth rate of two percent is assumed. Furthermore, management assumes that revenues will increase as result of selling higher GPU capacity (50 to 80 percent) at a market related rate to customers, thus contributing to increased EBITDA and cash flows.

The recoverable amount as of December 31, 2022, EUR 156,068 thousand (previous year: EUR 131,751 thousand) is determined on the basis of a value in use using cash flow forecasts.

On the basis of the impairment test in accordance with IAS 36, there was no impairment of the goodwill for the CGU “Sweden-HPC” as of December 31, 2022 and December 31, 2021, respectively.



## 4.2 Property, plant and equipment

in EUR '000	Plots of land and buildings	Data centers: servers, accessories, operating equipment	Office and other business equipment	Advance payments made and assets under construction	Total
<b>Acquisition and production costs</b>					
<b>Balance on 01/01/2022</b>	<b>24,792</b>	<b>200,967</b>	<b>2,483</b>	<b>162,679</b>	<b>390,921</b>
Disposals from the scope of consolidation	-	-	-360	-	-360
Additions	36,060	54,995	1,210	4,179	96,444
Disposals	-512	-4,564	-40	-9,196	-14,312
Reclassifications	32,038	45,048	-	-77,086	-
Net translation differences	-1,648	4,154	305	5,020	7,831
<b>Balance on 12/31/2022</b>	<b>90,730</b>	<b>300,600</b>	<b>3,598</b>	<b>85,596</b>	<b>480,524</b>
<b>Accumulated depreciation and impairments</b>					
<b>Balance on 01/01/2022</b>	<b>1,661</b>	<b>34,439</b>	<b>248</b>	<b>-</b>	<b>36,348</b>
Additions (scheduled depreciation)	7,207	83,503	608	-	91,318
Impairment	-	76,705	-	-	76,705
Disposals from the scope of consolidation	-	-	-253	-	-253
Disposals	-512	-4,313	-40	-	-4,865
Net translation differences	-734	-819	79	-	-1,474
<b>Balance on 12/31/2022</b>	<b>7,622</b>	<b>189,515</b>	<b>642</b>	<b>-</b>	<b>197,779</b>
<b>Carrying amounts</b>					
<b>Balance on 01/01/2021</b>	<b>10,021</b>	<b>31,088</b>	<b>1,809</b>	<b>191,284</b>	<b>234,201</b>
<b>Balance on 12/31/2021</b>	<b>23,131</b>	<b>166,528</b>	<b>2,235</b>	<b>162,679</b>	<b>354,573</b>
<b>Balance on 12/31/2022</b>	<b>83,108</b>	<b>111,085</b>	<b>2,956</b>	<b>85,596</b>	<b>282,745</b>

### 4.2.1 Disposals of property, plant and equipment

In fiscal year 2022, the Group sold equipment with a total net carrying amount of EUR 251 thousand (previous year: EUR 578 thousand) for a cash consideration of EUR 368 thousand. The net gains on these disposals were recognized as part of other operating income in the statement of profit or loss.

### 4.2.2 Impairment of fixed assets

The impairment of property, plant and equipment results from the Ethereum network switch from the proof-of-work to the proof-of-stake algorithm, which occurred on September 15, 2022. Since a part of the GPU servers, which belong to the reportable segment Mining, is no longer usable for Ethereum mining, these were impaired by EUR 64,592 thousand (previous year: EUR 173 thousand). As Northern Data did not expect cashflows on the basis of the value in use calculation, it was not necessary to determine a discount rate. The recoverable amount is based on value in use. As a result of the complete impairment, the book value of these assets is zero at the end of the year. Further impairment losses totaling EUR 12,113 thousand (previous year: EUR 0 thousand) relate to ASIC miners, whose carrying amount was written down to fair market value.

## 4.3 Leases

### 4.3.1 Leases as lessee

The current leases mainly relate to the rental of office space and other operating and office equipment. The term of the leases is typically at least two years with an option to extend. The lease agreements can generally be renewed at the end of the lease term. Lease payments are renegotiated at irregular intervals to reflect market developments in an agile manner.

Northern Data leases various smaller office premises with contractual terms of less than one year. Northern Data has decided not to recognize either rights of use or lease liabilities for these leases. Expenses for short-term leases amounted to EUR 356 thousand in fiscal year 2022 (previous year: EUR 214 thousand). Expenses for low-value lease liabilities amounted to EUR 6 thousand (previous year: EUR 113 thousand).

#### 4.3.1.1 Rights of use from leasing agreements

in EUR '000	Plots of land and buildings	Operating equipment	Total
<b>Acquisition and production costs</b>			
<b>Balance on 01/01/2022</b>	<b>5,728</b>	<b>4,791</b>	<b>10,519</b>
Additions to the scope of consolidation	-	-	-
Disposals from the scope of consolidation	-340	-	-340
Additions	2,597	2,494	5,091
Net translation differences	-117	11	-106
<b>Balance on 12/31/2022</b>	<b>7,868</b>	<b>7,296</b>	<b>15,164</b>
<b>Accumulated depreciation and impairments</b>			
<b>Balance on 01/01/2022</b>	<b>206</b>	<b>1,405</b>	<b>1,611</b>
Disposals from the scope of consolidation	-221	-	-221
Additions (scheduled depreciation)	1,438	2,158	3,596
Disposals	-	-	-
Translation differences	-30	17	-13
<b>Balance on 12/31/2022</b>	<b>1,393</b>	<b>3,580</b>	<b>4,973</b>
<b>Carrying amounts</b>			
<b>Balance on 01/01/2021</b>	<b>37</b>	<b>12,913</b>	<b>12,950</b>
<b>Balance on 12/31/2021</b>	<b>5,522</b>	<b>3,386</b>	<b>8,908</b>
<b>Balance on 12/31/2022</b>	<b>6,475</b>	<b>3,716</b>	<b>10,191</b>

#### 4.3.1.2 Amounts recognized in the Statement of Comprehensive Income.

In EUR '000	2022	2021
Interest expenses	340	181
Expenses for short-term leases	356	214
Expenses for low-value leases	6	113
Expenses for variable lease payments not included in the measurement of lease liabilities	471	-

#### 4.3.1.3 Amounts recognized in the cash flow statement

in EUR '000	2022	2021
Total cash outflows for leases	4,818	1,744

#### 4.3.1.4 Extension options

Some real estate leases contain renewal options that are exercisable by the Company up to one year prior to the expiration of the non-cancellable lease term. The renewal options are exercisable only by the Company and not by the lessor. The Group assesses on the commitment date whether the exercise of renewal options is reasonably certain. The Group reassesses whether the exercise of a renewal option is reasonably certain upon the occurrence of a significant event or a significant change in circumstances that the event or change is within its control. Currently, no renewal options have been determined by the Company to be reasonably certain.

Information on the remaining terms of the lease liabilities is provided in the table in Note 4.8 "Financial liabilities".

#### 4.3.2 Leases as lessor

In fiscal year 2022, the Northern Data Group does not provide servers to customers under operating leases. In the previous year, income generated from leasing agreements amounted to EUR 2,573 thousand.

### 4.4 Inventories

Inventories of EUR 7,200 thousand (previous year: EUR 4,689 thousand) relate to hardware inventories for sale. In 2022, EUR 220 thousand (previous year: EUR 108 thousand) was recognized as an expense for inventories carried at net realizable value. This is recognized in cost of materials (see Note 3.3 "Cost of materials").

## 4.5 Other assets

The following are reported as other assets in the Consolidated Statement of Financial Position:

in EUR '000	12/31/2022	12/31/2021
<b>Financial assets non-current</b>		
Deposits	1,369	1,707
Other receivables	1,172	1
<b>Total</b>	<b>2,541</b>	<b>1,708</b>
<b>Total non-current</b>	<b>2,541</b>	<b>1,708</b>
<b>Financial assets current</b>		
Advance payments	3,056	8,187
Deposits	2,217	980
Loans to employees	30	5
Creditors with debit balances	–	302
Other receivables	35,840	53,776
<b>Total</b>	<b>41,143</b>	<b>63,250</b>
<b>Non-financial assets current</b>		
Taxes that are not income taxes	30,557	20,176
Short-term held cryptocurrencies	242	18,799
Other current assets	–	259
<b>Total</b>	<b>30,799</b>	<b>39,234</b>
<b>Total current</b>	<b>71,942</b>	<b>102,484</b>

The security deposits relate primarily to agreements with electricity suppliers and long-term rental agreements. Advance payments in financial assets (current) are mainly prepaid expenses. Other receivables mainly consist of receivables from energy tax refunds. Taxes other than income taxes relate to sales taxes.

## 4.6 Equity

### 4.6.1 Principles and objectives of capital management

The main objective of the Northern Data Group with regard to capital management is to ensure a solid capital and liquidity base for the Group's operating activities and sustainable growth. In this context, shareholder confidence and return expectations are also to be safeguarded and stakeholder interests are taken into account.

As a young and growing group of companies, Northern Data monitors capital using the equity ratio and the ratio of EBITDA to equity (return on equity). There is no externally defined target for the ratio of equity to debt.

In order to meet growth targets and secure the capital and liquidity base, capital increases and the issue of new shares are carried out as part of mergers with other companies. In addition, procurement transactions are pre-financed by means of advance payments from customers as part of operating activities by means of appropriate contractual arrangements. In order to enable balanced equity and debt financing in the future, the Group is considering concluding financing agreements with various credit institutions.

No dividends were paid. There are therefore no tax consequences. The key figures used to monitor capital are as follows:

	12/31/2022	12/31/2021
<b>Equity ratio (percent)</b>	<b>79.8</b>	<b>76.3</b>
	<b>2022</b>	<b>2021</b>
<b>Return on equity (percent)<sup>21</sup></b>	<b>-16.2</b>	<b>53.4</b>

#### 4.6.2 Notes to equity

The subscribed capital amounts to EUR 23,815,514 as of the reporting date (previous year: EUR 23,815,514) and is divided into 23,815,514 ordinary shares with a nominal value of EUR 1 per share.

Using part of the Authorized Capital 2020/II resolved by the Annual General Meeting on November 10, 2020, and entered in the commercial register on December 8, 2020, a capital increase against cash contributions of EUR 900,000 was initiated in December 2020 and completed in January 2021. It was filed with the Local Court of Frankfurt/Main on December 23, 2020, and entered in the commercial register on January 6, 2021. The gross proceeds from the capital increase already received in December 2020 amounted to approximately EUR 52,470 thousand. The amount was reported in equity as of December 31, 2020, under the item "Contributions made to implement the resolved capital increase". Upon entry in the commercial register on January 6, 2021, a transfer was made to subscribed capital, and the remaining amount of EUR 51,570 thousand was transferred to the capital reserve.

Based on the conditional increase of the share capital resolved on August 30, 2019, as amended by the resolution of the Annual General Meeting on December 30, 2019 (Conditional Capital 2019/I), subscription shares with a nominal value of EUR 1,750 were issued in January 2021 in connection with the servicing of the convertible bond. As a result, the share capital of Northern Data AG increased to EUR 15,541,434. The difference between the nominal value of the shares issued and the value of the convertible bond attributable to them (total EUR 12 thousand) was transferred to the capital reserve.

As part of the merger with Northern Data Services (UK) Ltd. (Hydro66 UK Ltd.), a non-cash capital increase was carried out in March 2021. Based on the authorization granted by the Annual General Meeting on November 10, 2020, the share capital was increased by EUR 338,273 to EUR 15,879,707 by issuing 338,273 no-par value bearer shares, each with a notional share of EUR 1.00 in the share capital. The shareholders of Hydro66 UK Ltd. were admitted to subscribe against contribution of their respective shares in Hydro66 UK Ltd. The capital increase was completed in the first quarter of 2021 in the full amount of EUR 338,273 against contributions in kind. The contributions in kind were made by transferring all shares to Northern Data AG with entry in the commercial register on March 9, 2021. The difference between the fair value (stock market price) at the time of the transaction and the nominal value of the shares issued (totaling EUR 32,227 thousand) was transferred to the capital reserve.

Making partial use of the Authorized Capital 2020/II resolved by the Annual General Meeting on November 10, 2020, and entered in the commercial register on December 8, 2020, a capital increase against a cash contribution of EUR 563,968 to EUR 16,443,675 was implemented in April 2021. The gross proceeds from the capital increase amounted to approximately EUR 58,575 thousand. The amount exceeding the nominal value of the issued shares (totaling EUR 58,011 thousand) was transferred to the capital reserve in 2021.

<sup>21</sup> Return on equity is defined as the ratio of EBITDA to shareholders' equity.

A capital increase against contributions in kind was carried out in August 2021 as part of the merger with Decentric Europe B. V. By making partial use of the Authorized Capital 2021 resolved by the Annual General Meeting on April 28, 2021, and entered in the commercial register on July 26, 2021, a capital increase against contributions in kind of EUR 2,306,294 to EUR 18,749,969 was carried out in August 2021 by issuing 2,306,294 no-par value bearer shares, each with a notional interest in the share capital of EUR 1.00. The shareholder of Decentric Europe B. V., Block.one, was admitted to subscribe in return for the contribution of its shares in Decentric Europe B. V. The contribution in kind was made by transferring all shares to Northern Data AG with entry in the commercial register on September 14, 2021. The difference between the fair value (stock market price) at the time of the transaction and the nominal value of the shares issued (totaling EUR 165,131 thousand) was transferred to the capital reserve. In the course of the accounting for the acquisition of Decentric Europe B. V., the additional paid-in capital was reduced by EUR 165,718 thousand (see Note 2 “Business combinations”).

As part of the merger with Bitfield N. V., two capital increases against contributions in kind were carried out in the period from October to December 2021. Making partial use of the Authorized Capital 2021 resolved by the Annual General Meeting on April 28, 2021, and entered in the commercial register on July 26, 2021, a capital increase against contributions in kind of EUR 4,490,142 to EUR 23,240,111 was carried out on October 19, 2021, by issuing 4,490,142 no-par value bearer shares, each with a notional share in the share capital of EUR 1.00. The shareholders of Bitfield N. V., among others Block.one, were admitted to subscribe in return for the contribution of their shares in Bitfield N. V. The contributions in kind were made by transferring all shares to Northern Data AG with entry in the commercial register on November 2, 2021. Furthermore, a share capital increase of EUR 575,403 to EUR 23,815,514 was carried out on December 6, 2021, using part of the Authorized Capital 2021 resolved by the Annual General Meeting on April 28, 2021, and entered in the commercial register on July 26, 2021, by issuing 575,403 no-par value bearer shares, each with a notional interest in the share capital of EUR 1.00. The shareholders of Bitfield N. V. were admitted to subscribe against contribution of their shares in Bitfield N. V. The contributions in kind were made by transferring all shares to Northern Data AG with entry in the commercial register on December 15, 2021. The difference between the fair value (stock market price) at the time of the transaction and the nominal value of the shares issued (totaling EUR 297,677 thousand) arising from the aforementioned capital increases was transferred to the capital reserve. In the course of the accounting of the transaction, the additional paid-in capital was reduced by EUR 253,869 thousand (see Note 2 “Business combinations”).

Cumulative effects from the valuation of the convertible bond are also recognized in equity in 2021 (see Note 5.2 “Disclosures on financial instruments”). Transaction costs incurred in connection with the capital procurement measures were deducted directly from additional paid-in capital.

The translation differences resulted from the translation of the Financial Statements of Group companies not based in the eurozone.

## 4.7 Provisions

in EUR '000	Balance on 01/01/2022	Addition	Consumption	Reversal	Accumulation/ discounting	Change in the scope of consolidation	Balance on 12/31/2022
Financial statements and audit	949	1,297	-834	-57	-	-	1,355
Retention requirements	5	-	-	-	-	-	5
Tax provisions	3,551	64	-2,473	-1,078	-	-	64
Other	-	500	-	-	-	-	500
<b>Total</b>	<b>4,505</b>	<b>1,861</b>	<b>-3,307</b>	<b>-1,135</b>	<b>-</b>	<b>-</b>	<b>1,924</b>

## 4.8 Financial liabilities

Contractual maturities:		< 1 year	1-5 years	> 5 years	12/31/2022
in EUR '000					
Trade payables		35,829	-	-	35,829
Loan liabilities		-	-	-	-
Lease liabilities		2,783	7,849	23	10,655
<b>Total</b>		<b>38,612</b>	<b>7,849</b>	<b>23</b>	<b>46,484</b>

Contractual maturities:		< 1 year	1-5 years	>5 years	12/31/2021
in EUR '000					
Trade payables		20,410	-	-	20,410
Loan liabilities		76,891	-	-	76,891
Lease liabilities		1,997	5,446	1,603	9,046
<b>Total</b>		<b>99,298</b>	<b>5,446</b>	<b>1,603</b>	<b>106,347</b>

The liabilities shown in the preceding table, which are not traded on an active market, are valued using the method described in Note 1.8.3 "Financial instruments" in the Notes to the Consolidated Financial Statements.

The shareholder loan was paid back in the lead up to August 2022 (EUR 76,891 thousand). The lease liabilities mainly stem from rental and lease agreements.

## 4.9 Other liabilities

in EUR '000	12/31/2022	12/31/2021
<b>Current other liabilities</b>		
Accrued liabilities	4,076	4,535
Employee related liabilities	5,846	-
Liabilities from sales tax	2,432	1,903
Deposits	-	5,030
Miscellaneous other liabilities	3	1,029
<b>Total other current liabilities</b>	<b>12,357</b>	<b>12,497</b>
<b>Non-current other liabilities</b>		
Deposits	-	353
<b>Total other non-current liabilities</b>	<b>-</b>	<b>353</b>

Other current liabilities to third parties include mainly personnel liabilities as well as liabilities from other taxes.



## 5 Other explanatory notes

### 5.1 Notes to the Consolidated Statement of Cash Flows

The Consolidated Statement of Cash Flows shows how cash and cash equivalents have changed during the fiscal year. In accordance with IAS 7 "Statements of Cash Flows", a distinction is made between changes in cash and cash equivalents resulting from operating, investing and financing activities.

The changes in liabilities from financing activities in fiscal year 2022 are as follows:

in EUR '000	Balance on 01/01/2022	Cash- effective	Non-cash-effective				Balance on 12/31/2022
		Other cash flows for financing	Change in the scope of consolidation	Change in fair value	Exchange rate changes	Other	
Loan liabilities	76,891	-76,561	-84	-	-246	-	-
Lease liabilities	9,046	-3,187	-178	-	-	4,974	10,655
Other financial liabilities	-	-	-	-	-	-	-
<b>Total</b>	<b>85,937</b>	<b>-79,748</b>	<b>-262</b>	<b>-</b>	<b>-246</b>	<b>4,974</b>	<b>10,655</b>

The changes in liabilities from financing activities in fiscal year 2021 are as follows:

in EUR thousand	Balance on 01/01/2021	Cash- effective	Non-cash-effective				Balance on 12/31/2021
		Other cash flows for financing	Change in the scope of consolidation	Change in fair value	Exchange rate changes	Other	
Loan liabilities	27,565	-120,658	164,410	4,934	466	174	76,891
Lease liabilities	14,771	-1,810	-12,858	-	2	8,941	9,046
Convertible bond	176	-82	-	-80	-	-14	-
Derivatives from electricity contracts	16,925	-	10,716	-28,118	477	-	-
Other financial liabilities	1	-	-	-	-	-1	-
<b>Total</b>	<b>59,438</b>	<b>-122,550</b>	<b>162,268</b>	<b>-23,264</b>	<b>945</b>	<b>9,100</b>	<b>85,937</b>

## 5.2 Disclosures on financial instruments

The table below shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy.

In EUR '000	Valuation category according to IFRS 9	Carrying amount as of 12/31/2022	AC	FVOCI	FVPL	Total carrying amount as of 12/31/2022	Fair value as of 12/31/2022	Level within the fair value hierarchy
<b>Financial Assets</b>								
Cash and cash equivalents	AC	39,879	39,879	-	-	<b>39,879</b>	n/a	-
Trade receivables	AC	2,908	2,908	-	-	<b>2,908</b>	n/a	-
<b>Total</b>	<b>AC</b>	<b>42,787</b>	<b>42,787</b>	-	-	<b>42,787</b>	-	-
Shares in other companies	FVOCI	9,851	-	9,851	-	<b>9,851</b>	9,851	3
<b>Financial liabilities</b>								
Trade payables	AC	35,829	35,829	-	-	<b>35,829</b>	n/a	-

All trade receivables amounting to EUR 2,908 thousand (previous year: EUR 5,254 thousand) are in stage 2 of the expected credit loss model. In fiscal year 2022, EUR 3,205 thousand of uncollectible receivables were written off.

At December 31, 2022, the allowance for debt bad amounted to EUR 2,307. There was no change in the level within the fair value hierarchy in 2022.

The table below shows the positions for the fiscal year 2021:

in EUR '000	Valuation category according to IFRS 9	Carrying amount as of 12/31/2021	AC	FVOCI	FVPL	Total carrying amount as of 12/31/2021	Fair value as of 12/31/2021	Level within the fair value hierarchy
<b>Financial assets</b>								
Cash and cash equivalents	AC	221,597	221,597	-	-	<b>221,597</b>	n/a	-
Trade receivables	AC	5,254	5,254	-	-	<b>5,254</b>	n/a	-
<b>Total</b>	<b>AC</b>	<b>226,851</b>	<b>226,851</b>	-	-	<b>226,851</b>	-	-
Shares in other companies	FVOCI	1,450	-	1,450	-	<b>1,450</b>	1,450	3
<b>Financial liabilities</b>								
Trade payables	AC	20,410	20,410	-	-	<b>20,410</b>	n/a	-
Shareholder loan	AC	76,891	76,891	-	-	<b>76,891</b>	n/a	2

Cash and cash equivalents, trade receivables, and other current financial assets and liabilities are predominantly short-term. Therefore, their carrying amounts at the reporting date approximate their fair values.

### Equity investments designated as FVOCI

Northern Data has designated a corporate investment as equity investments valued at FVOCI because they represent investments that Northern Data intends to hold for strategic purposes over the long-term. Northern Data bought a sufficient stake in a company to ensure to have access to technologies which this company develops.

The investment reported with a value of EUR 1,442 thousand in the previous year has a fair value and thus a carrying amount of EUR 9,108 thousand as of December 31, 2022. There were no dividend payments in the reporting year or the previous year. For the fair value measurement as of December 31, 2022, the net-asset value (NAV) approach was used. The FVOCI classified equity instrument is in level 3 of the IFRS fair value hierarchy.

For the fair values of the equity investments, a deemed possible change in one of the significant unobservable inputs, with all other inputs held constant, would have the following effects. The sensitivity analysis focuses on the quantitative influence of each balance sheet position on the development of the NAV. The influence of increases and decreases in each balance sheet position was simulated in steps of 5 percent in a value spectrum of 80 percent to 120 percent. As a result of the analysis the most dominant positions of the Consolidated Statement of Financial Position had the biggest influence on the NAV, more specific P&E and cash and cash equivalents. The simulated variations of +/-20 percent indicated a change of EUR +/- 23 thousand (14.1 percent) of the NAV in P&E and a EUR +/-10 thousand (6.4 percent) change of the NAV from the variation of cash and cash equivalents.

## 5.3 Disclosures on financial risk and risk provisioning

Northern Data is exposed to a number of different financial risks, the risks and the management of the risks are explained in the Management Report as credit risk, market price risk and liquidity risk. Risk management is performed by the Group Finance department. The Group Finance department identifies, assesses, and hedges risks in close cooperation with the Group's operating units. Changes in the risk situation are responded to with appropriate measures. The aim of risk management is to reduce financial risks through planned measures (see also Chapter "Opportunity, Risk and Forecast Report" in the Group Management Report).

### 5.3.1 Credit risk

Credit risk is the possibility of a loss happening due to a borrower's failure to repay a loan or to satisfy contractual obligations. In addition, the credit risk, known as default risk, is a way to measure the potential for losses that stem from a lender's ability to repay their loans.

Credit risk is managed at Group level also taking into account the country risk. Credit risks arise from cash and cash equivalents, financial assets, trade receivables, and other receivables. Credit risks are systematically recorded, analyzed, and managed at the respective subsidiary, using both internal and external sources of information (for further details, please refer to Note 1.8.3.3 "Impairment").

As Northern Data's business model is based on a selected customer base, the risk and therefore a significant default on receivables is considered to be low. To the extent that default risks are identifiable, they are countered by active receivables management and credit checks of customers.

Northern Data's default risk is mainly influenced by the individual characteristics of each customer. Risk Management, in cooperation with receivables management, has implemented that new customers are first analyzed individually with regard to their creditworthiness before Northern Data offers standardized or essentially individual delivery and payment terms. This analysis includes external ratings, where available, information from credit agencies, and industry information. In particular, contractual and statutory termination rights are also taken into account when forecasting the exposure over the entire term of the financial asset.

Credit risks are measured and managed using the general expected credit loss model (for further details, please refer to Note 1.8.3.3 “Impairment”). At December 31, 2022, the Group finance department determined an allowance for debt bad amounting to EUR 2,307 in accordance with IFRS 9 expected credit loss model.

Cash and cash equivalents are receivables due on demand or in the short term from banks domiciled in Germany, the USA and Canada. Northern Data generally selects banks with an investment grade rating. Due to the short-term nature of the receivables from banks with investment grade ratings, Northern Data makes use of the low credit risk exception. Assets that have an investment grade rating are always assigned to level 1.

Default risk mainly arises from trade receivables. Northern Data limits its risk of default on trade receivables by setting a maximum payment term of one month. Northern Data does not require collateral for trade and other receivables.

Northern Data Group’s risk management also takes into account the factors that may affect the default risk of a portfolio of customers, including the default risk of the industries, countries, and regions in which the customers operate.

For the purpose of monitoring default risk, customers are divided into groups with regard to their creditworthiness. In principle, a geographical distinction is made due to the small number of customers. Northern Data monitors the economic conditions in the USA, Canada, and Europe. The industry, age structure, and occurrence and duration of payment problems are also taken into account.

Due to the generally short terms of the receivables and financial assets, a risk assessment is carried out over the entire life of the receivables. The expected credit losses mainly result from receivables management. Compliance with payment targets and overdue payments is monitored. Expected credit losses over the term are expected credit losses resulting from all possible default events during the expected life of the financial instrument. This requires significant judgment regarding the extent to which expected credit losses are affected by changes in economic factors. This assessment is determined on the basis of weighted probabilities. Assumptions about future developments and, in particular, macroeconomic aspects are taken into account in the assessment.

The risk provision for financial assets in the reporting period 2022 was recognized in the amount of EUR 2 thousand (see Note 3.6 “Financial result”).

For information on concentration risks, see chapter “Opportunity, Risk and Forecast Report” of the Group Management Report.

Northern Data’s maximum credit exposure is equal to the carrying amount of assets subject to credit risk. The maximum default risk was reflected by the carrying amounts of the financial assets recognized in the Consolidated Statement of Financial Position. There was no collateral or other credit enhancements that would reduce the default risk arising from financial assets.

### 5.3.2 Market risks

#### 5.3.2.1 Currency risk

Currency risk (exchange rate risk) refers to the potential for gains or losses resulting from the fluctuations between various currencies.

The Group is exposed to currency risks that are only of minor significance. Sales are mainly generated in US Dollars. Translation risks from the conversion of assets and liabilities of foreign subsidiaries into the reporting currency are generally not hedged.

Due to the group-wide cash management, intercompany receivables and payables are denominated in Euros. As a result, those subsidiaries of Northern Data whose functional currency is not the Euro may incur effects in the Statement of Comprehensive Income from currency-related exchange rate fluctuations.

**Currency sensitivity**

For information on concentration risks, see chapter “Opportunity, Risk and Forecast Report” of the Group Management Report. Further information on currency risks can be found in the “Financial risks” and “Currency risks” sections of the Group Management Report.

**5.3.2.2 Interest rate risk**

Interest rate risk is the possibility of a loss that could result from a change in interest rates. In case the rate increases, the value of assets will decline. Rising interest rates result in rising income with regard to variable-interest assets and rising expenses with regard to variable-interest liabilities. In the event of falling interest rates, this has the opposite effect on the annual result of Northern Data.

**5.3.2.3 Electricity price risk**

The commodity price risk to Northern Data stems from unexpected increases in energy prices, which can reduce Northern Data’s profit margin and make budgeting difficult. Electricity price change risk is the risk to which the Group is exposed due to higher or lower electricity prices on the market. Electricity price risk is generally monitored centrally by finance and contract management. In fiscal year 2022, this risk was generally assessed as moderate due to existing contracts.

Northern Data enters into short-term contracts exclusively to hedge (economic hedge) risks arising from electricity supply contracts with variable electricity prices. In fiscal year 2022, EUR 920 thousand in expenses from energy contracts were offset by income from contracts for differences. In addition Northern Data has a currency risk in relation to contract for differences.

The Group’s sensitivity to changes in energy prices is as follows:

in EUR '000	FY 2023	FY 2024
<b>Impact electricity</b>		
5 percent price increase	1.776	3.976
5 percent price decrease	-1.776	-3.976

For further information on energy price risk, see the “War in Ukraine” and “Electricity price and availability risk” sections of the Group Management Report.

**5.3.3 Liquidity risk**

Liquidity risk is the risk that the Group may not be able to meet its financial obligations as contractually required by delivering cash or another financial asset.

The Group’s objective in managing liquidity is to ensure that, as far as possible, sufficient cash is always available to meet payment obligations as they fall due under both normal and stressed conditions without incurring unacceptable losses or damage to the Group’s reputation.

In the event that Northern Data does not generate sufficient free cash flow, the Group would be dependent on further equity and/or debt financing to meet its funding requirements. Should Northern Data be unable to obtain sufficient external financing, this could have an adverse material effect on the Group’s assets,

financial condition, and earnings position. As part of the listing of its shares on the Open Market of the Munich Stock Exchange, Northern Data is also exposed to valuation by the capital market. In this respect, Northern Data may be restricted in its business model with regard to the financing that can be obtained via the capital markets. In order to prevent insolvency or sustained damage to its image, Northern Data's business model is geared towards generating continuous cash inflows that can grow or accumulate on an ongoing basis or be used as a basis for growth investments.

Operational liquidity management is coordinated at the level of the parent company and is carried out in cooperation with the subsidiaries worldwide. Within the scope of economic possibilities, cryptocurrency holdings are liquidated on a daily basis in order to ensure liquidity and to be able to carry out planned investments. In addition to annual forecast planning, ongoing liquidity planning is carried out on a weekly basis with the aim of ensuring that the Northern Data Group can access sufficient reserves of liquid funds at any time. In this way, fluctuations in working capital due to falling cryptocurrency rates as well as rising electricity prices could be managed in fiscal year 2022.

Northern Data does not have any external financing as of the end of fiscal year 2022.

Liquidity risks are monitored and managed centrally for the whole Group by Northern Data's operational cash management. The risk of any liquidity shortage is monitored by means of periodic liquidity planning and monthly cash flow analyses.

#### Composition and remaining maturities

in EUR '000	< 1 year	1–5 years	> 5 years	12/31/2022
<b>Contractual maturities</b>				
Trade payables	35,829	–	–	35,829
Loan liabilities	0	–	–	0
Lease liabilities	2,783	7,849	23	10,655
<b>Total</b>	<b>38,612</b>	<b>7,849</b>	<b>23</b>	<b>46,484</b>

in EUR '000	< 1 year	1–5 years	> 5 years	12/31/2021
<b>Contractual maturities</b>				
Trade payables	20,410	–	–	20,410
Loan liabilities	76,891	–	–	76,891
Lease liabilities	1,997	5,446	1,603	9,046
<b>Total</b>	<b>99,298</b>	<b>5,446</b>	<b>1,603</b>	<b>106,347</b>

With the repayment and expiry of the shareholder loan, the Company's main source of financing and thus liquidity is equity.

Security deposits are receivables that serve as collateral and at the same time as advance payments for the purchase of energy. A higher demand for energy and a higher need for price hedging transactions for energy deliveries may lead to an expansion of the cash collateral to be provided.

For information on concentration risks, see chapter "Opportunity, Risk and Forecast Report" of the Group Management Report. Further information on liquidity risks can be found in the "Financial Risks" and "Liquidity Risks" sections of the Group Management Report.

## 5.4 Business transactions with related parties

Related parties as defined by IAS 24 are natural persons or entities that can be influenced by Northern Data that can exert an influence on Northern Data or that are under the influence of another party related to Northern Data.

### 5.4.1 Related companies

As at the reporting date and throughout the past fiscal year, no party was able to exercise a controlling interest over Northern Data AG. In the previous year a significant influence could have been exercised by the Block.one Group. In 2022 no party exercised significant influence over Northern Data AG.

Intercompany transactions and balances are eliminated on consolidation and therefore are not disclosed.

Besides Block.one Group, related parties are non-consolidated subsidiaries. Northern Data maintains relationships with some of its non-consolidated subsidiaries in the ordinary course of doing business. Transactions with such Group companies are disclosed below. The transactions relate to calls on cash and cash equivalents or settlements under the Group's internal credit facility agreements.

In EUR '000	12/31/2022	12/31/2021
<b>Receivables</b>		
Northern eCloud ehf. DRÖG	–	76
<b>Total</b>	<b>–</b>	<b>76</b>

in EUR '000	12/31/2022	12/31/2021
<b>Liabilities</b>		
Northern Data Real Estate II AS	–	18
<b>Total</b>	<b>–</b>	<b>18</b>

The open balances at the end of the reporting period are unsecured and settled by cash payment or netting of receivables and payables.

In December 2020, Northern Data AG concluded hardware supply and service agreements with the companies Decentric and Bitfield.

Decentric was a wholly owned subsidiary of the Block.one Group. As of the reporting date December 31, 2020, Bitfield was 27.1 percent held by the Block.one Group, 13.0 percent by Apeiron Investment Group Limited, which belongs to Christian Angermayer, and 2.9 percent held directly by Marco Beckmann and 12.9 percent by Beckmann Capital GmbH, with its registered office in Hofheim am Taunus, which belongs to Marco Beckmann. As of December 31, 2020, Christian Angermayer and Marco Beckmann held 16.7 percent and 19.9 percent, respectively, of the Northern Data Group through Apeiron Investment Group Limited and Cryptology Asset Group P.L.C. and BlackMars Capital GmbH, with its registered office in Hofheim am Taunus, and Singularity Capital AG, with its registered office in Hofheim am Taunus. Northern Data AG had transactions with Apeiron Investment Group Limited in 2022 relating to investor introductions, investor conferences, promotion and participation fees totaling EUR 840 thousand.

The companies Bitfield and Decentric were acquired by Northern Data AG in the third quarter of 2021. Reference is made to the explanations in Note 2 "Business combinations", according to which the trans-

actions were carried out, among other things, in the form of a capital increase through contributions in kind against the issue of shares in Northern Data AG.

In the course of the acquisition of Decentric Europe B.V. (see Note 2 “Business combinations”), Block.one issued a shareholder loan in the amount of USD 130 million, which was repaid by Northern Data by the third quarter of 2022. As of December 31, 2021, the remaining debt amounted to EUR 76,891 thousand (see Note 4.8 “Financial liabilities”).

There are no guarantees for receivables from and payables to related companies. There were no valuation allowances on receivables from related companies.

#### 5.4.2 Related persons

Related parties are those persons who have significant influence over the financial and operating policies of Northern Data, including their close family members. These include the members of the Management Board and Supervisory Board of Northern Data.

##### 5.4.2.1 Management Board

During the past fiscal year, Northern Data’s Management Board included the following individuals:

- › Aroosh Thillainathan, Chief Executive Officer, Frankfurt/Main.
- › Dr. Mathias Dähn, Chief Financial Officer, Frankfurt/Main; until February 28, 2022.
- › Stefan Sickenberger, Chief Operating Officer, Frankfurt/Main; until October 31, 2022.

The members of the Management Board held the following internal Group mandates:

- › Aroosh Thillainathan, Chief Executive Officer, Whinstone US. Inc., Rockdale Texas, until the deconsolidation of the company.
- › Aroosh Thillainathan, Managing Director, Northern Data Software GmbH, Frankfurt/Main.
- › Aroosh Thillainathan, Managing Director, ND (Services) GmbH, Frankfurt/Main.
- › Aroosh Thillainathan, Managing Director, Northern Data (CH) AG, Zug.
- › Aroosh Thillainathan, President/Secretary/Director, Northern Data US Inc., Reston, Virginia.
- › Aroosh Thillainathan, Chief Executive Officer (CEO)/Secretary, Northern Data US Holdings Inc., Reston, Virginia.
- › Aroosh Thillainathan, President, Northern Data Alberta Ltd., Calgary, Alberta.
- › Aroosh Thillainathan, President, Northern Data CA Ltd., Montreal, Quebec.
- › Aroosh Thillainathan, President, Northern Data Quebec Ltd., Montreal, Quebec.
- › Dr. Mathias Dähn, Managing Director, Northern Data Software GmbH, Frankfurt/Main; until Feb. 21, 2022.
- › Stefan Sickenberger, Managing Director, Northern Data Software GmbH, Frankfurt/Main; until Nov. 4, 2022.
- › Stefan Sickenberger, Managing Director, ND (Services) GmbH, Frankfurt/Main, until November 8, 2022.
- › Stefan Sickenberger, Executive Vice President and Chief Operating Officer (COO), Northern Data US Holdings Inc., Reston, Virginia, from February 28, 2022 until October 31, 2022.
- › Stefan Sickenberger, Managing Director, Northern Data NL BV, Eindhoven; until October 31, 2022.
- › Stefan Sickenberger, Managing Director, Northern Data NOR AS, Notodden; until October 31, 2022.
- › Stefan Sickenberger, Managing Director, Northern Data Real Estate 1 AG, Notodden; until October 31, 2022.
- › Stefan Sickenberger, Managing Director, Hydro66 Property Services AB, Boden; until October 31, 2022.
- › Stefan Sickenberger, Managing Director, Hydro66 Svenska AB, Boden; until October 31, 2022.
- › Stefan Sickenberger, Managing Director, Hydro66 Services AB, Boden; until October 31, 2022.



The total compensation of the Management Board is as follows:

in EUR '000	2022	2021
Short-term benefits (emoluments)	7,359	2,181
Share-based payment	12,442	2,945
<b>Total</b>	<b>19,801</b>	<b>5,126</b>

Additional disclosures on share-based payment programs in the context of Management Board remuneration:

in thousand options	
<b>Number of shares 12/31/2021</b>	<b>815</b>
<b>Exercisable shares 12/31/2021</b>	–
Average remaining waiting period	3 years
Issued in 2022	629
Exercised in 2022	–
Expired in 2022	–
<b>Number of shares 12/31/2022</b>	<b>1,444</b>
<b>Exercisable shares 12/31/2022</b>	–
Average remaining waiting period	2 years

#### 5.4.2.2 Supervisory Board

Name	Profession practiced	Member since	Appointed until/step-ped down on	Further mandates in 2022 (during the term of office)
Dr. Bernd Hartmann	Managing Director	07/25/2014	2024	Shareholder and Managing Director of Roskos & Meier OHG Member of the board of Trustees of the Hans and Charlotte Krull Foundation Chairman of the board of Frankfurt Intern e.V. Member of the Board of Marketingclub Berlin
Dr. Tom Oliver Schorling	Independent Lawyer	11/10/2020	2024	Deputy Chairman of the Supervisory Board of Exaloan AG, Frankfurt/Main Chief Executive Officer of Dioscure Therapeutics SE, Bonn
Hermann-Josef Lamberti	Entrepreneur	11/10/2020	Until January 17, 2023	Member of the Board of Trustees of the Frankfurt Institute for Advanced Studies (FIAS)

The remuneration of the Supervisory Board in the past fiscal year amounted to EUR 270 thousand (previous year: EUR 270 thousand). In addition to reimbursement of their expenses, each regular member of the Company's Supervisory Board receives fixed annual compensation of EUR 60 thousand. The Chairman of the Supervisory Board receives fixed annual compensation of EUR 120 thousand and his deputy EUR 90 thousand.

### 5.4.3 Director's Dealings

Pursuant to Art. 19 (1) of the Market Abuse Regulation (Regulation (EU) No. 596/2014), the members of the Management Board and Supervisory Board as well as certain relatives must immediately disclose all sales and purchases of Northern Data shares and other rights related thereto if the threshold of EUR 20,000 is exceeded within the calendar year.

The following table shows a list of the transactions published in fiscal year 2022:

Notifiable	Communication from	Date of Transaction	Type of business	Price in Euro (aggregated)	Volume in EUR thousand (aggregated)
Dr. Tom Oliver Schorling	11/17/2022	11/16/2022	Purchase	9.15	27

The following table shows a list of the transactions published in fiscal year 2021:

Notifiable	Communication from	Date of Transaction	Type of business	Price in Euro (aggregated)	Volume in EUR '000 (aggregated)
Dr. Tom Oliver Schorling	11/12/2021	11/09/2021	Purchase	77.33	155
Hermann-Josef Lamberti	12/08/2021	12/06/2021	Acquisition of shares in the context of a capital increase with contributions in kind in execution of an agreement under the law of obligations dated November 4, 2021, by CHInvest-Property185 AG	69.39	854
Stefan Sickenberger	12/08/2021	12/06/2021	Acquisition of shares in the context of a capital increase with contributions in kind in execution of an agreement under the law of obligations dated November 15, 2021, by Sickenberger Holding UG (haftungsbeschränkt)	69.39	221
Dr. Tom Oliver Schorling	12/08/2021	12/06/2021	Acquisition of shares in the context of a capital increase with contributions in kind in execution of an agreement under the law of obligations dated November 12, 2021, by Liebling Kronberg Capital GmbH	69.39	301

## 5.5 Share-based payments

### 5.5.1 Description of the share-based payment agreement

On December 30, 2019 (amendments made on October 1, 2020), the management board of Northern Data AG has resolved, with the consent of the annual general meeting the Stock Option Program 2020 ("SOP 2020"). On April 28, 2021, Stock Option Program 2021 ("SOP 2021") was initiated whereas Stock Option Program 2021/II ("SOP 2021/II") was approved on December 20, 2021. These stock option plans are settled in equity instruments. The resulting expense is shown in the personnel expenses item, and the liability increases the capital reserves.

Under the stock option programs, members of the Management Board and employees of the Company as well as members of the management bodies and employees of affiliated companies are entitled to acquire shares in Northern Data AG. In this context, the holders of exercisable options have the right, under certain conditions, to acquire shares at the strike price (corresponds to the unweighted arithmetic mean of the prices determined in the closing auction in XETRA® trading or a comparable successor system or successor price during the last ten stock market trading days prior to the date on which the option is granted).

All options are to be settled by physical delivery of the shares. However, the Company is entitled, at its own discretion, to settle the option by granting a cash settlement. The cash settlement to be granted is calculated as the difference between the strike price and the unweighted arithmetic mean of the prices of the shares of Northern Data AG determined in the closing auction in XETRA® trading or a comparable successor system or successor price during the last ten stock market trading days prior to exercise of the option.

In fiscal years 2020 to 2022, a total of 2,383,948 stock options were issued to members of the Management Board and employees of the Company as well as members of the management bodies and employees of affiliated companies. The options, with the exception of those that have lapsed in the meantime, can be exercised for the first time after the expiry of a holding period of four years from the respective issue date. Furthermore, the terms and conditions of exercise stipulate that option holders may only exercise the options if the option holder remains in principle with the Company for more than three years (vesting period) and the compound annual growth rate (CAGR) of the Group's sales in the reference period is at least 25 percent.

### 5.5.2 Determination of fair values

The fair values of the SOP 2020, the SOP 2021 and the SOP 2021/II were determined using the Black-Scholes formula. Service and non-market performance conditions associated with the transactions were not considered in determining fair value.

The parameters used in determining the fair values at the grant date of the SOP 2020 include, in particular:

- › the share price on the respective grant date (average share price: EUR 50.92), the price also corresponds to the average exercise price of the options
- › expected volatility: 54.6 percent, based on 180-day volatility from an appropriate peer group, as Northern Data had very high non-representative volatility due to its business performance in fiscal year 2020
- › expected term: 4.0 years (weighted average)
- › expected dividends: 0.0 percent of share price
- › risk-free interest rate: -0.5 percent

The parameters used in determining the fair values at the grant date of the SOP 2021 include, in particular:

- › the share price on the respective grant date (average share price: EUR 59.44), the price also corresponds to the average exercise price of the options
- › expected volatility depending on grant date between 42.5 and 94.4 percent, based on 180-day volatility of the Northern Data share
- › expected term: 4.3 years (weighted average)
- › expected dividends: 0.0 percent of share price
- › risk-free interest rate: -0.5 percent

The parameters used in determining the fair values at the grant date of the SOP 2021/II include, in particular:

- › the share price on the respective grant date (average share price: EUR 48.87), the price also corresponds to the average exercise price of the options
- › expected volatility depending on grant date between 94.25 and 95.5 percent, based on 180-day volatility of the Northern Data share
- › expected term: 4.0 years (weighted average)
- › expected dividends: 0.0 percent of share price
- › risk-free interest rate depending on grant date: -0.5 percent (March 2022) and 0.83 percent (May 2022)

The expected term of the instruments is based in each case on the general behavior of the option holders. The first opportunity to exercise the options is four years after the grant date. The option holder subsequently has the right to exercise the options over a period of five years. For the purpose of assessing the value of the options, it is assumed that the option holders will exercise the right to subscribe to the shares immediately after four years.

### 5.5.3 Reconciliation of outstanding stock options

The number of stock options under the SOP 2020, SOP 2021 and the SOP 2021/II developed as follows:

in thousand options	2022
<b>Outstanding as of January 1, 2022</b>	<b>1,429</b>
Expired during the year	-100
Exercised during the year	-
Committed during the year	828
<b>Outstanding as of December 31, 2022</b>	<b>2,157</b>
<b>Exercisable as of December 31, 2022</b>	<b>-</b>

in thousand options	2021
<b>Outstanding as of January 1, 2021</b>	<b>629</b>
Expired during the year	-127
Exercised during the year	-
Committed during the year	927
<b>Outstanding as of December 31, 2021</b>	<b>1,429</b>
<b>Exercisable as of December 31, 2021</b>	<b>-</b>

### 5.5.4 Expenses recognized in profit or loss

Expenses of EUR 16,840 thousand (previous year: EUR 5,356 thousand) were recognized in personnel expenses in fiscal year 2022 in connection with the share-based payment agreement.

## 5.6 Employee benefits

The Group operates company pension plans in the form of defined contribution plans.

Defined contribution plans take the form of retirement, disability and surviving dependents' benefits, the amount of which is based on length of service and salary. The employer's contributions to the statutory pension insurance to be paid in Germany are to be regarded as such defined contribution plans. In the Group, payments to defined contribution plans relate predominantly to contributions to the statutory pension insurance scheme in Germany. In the reporting period, expenses in connection with defined contribution plans amounted to EUR 1,482 thousand (previous year: EUR 598 thousand).

## 5.7 Segment reporting

In accordance with IFRS 8, operating segments are defined on the basis of the Group's internal management and reporting. The organisational and reporting structure of the Northern Data Group is based on management by business unit. Based on the reporting system it has established, the Management Board, as the chief operating decision maker, assesses the performance of the various segments and the allocation of resources. The segmentation is as follows:

### 5.7.1 Mining

The Mining business unit comprises mainly the mining of cryptocurrencies, owning them as well as the provision of computing power for crypto mining.

### 5.7.2 Hardware & Other

The Hardware & Other business unit comprises all the Group's stationary and mobile data center operations, including their acquisition or planning, construction or conversion, and operation. In addition, the Group's contracting, support, and operations for cloud solutions is included in this business unit.

The accounting policies of the segments are the same as those applied for external financial reporting. For details, please refer to Note 1.8 "Accounting and valuation principles". The most important financial targets and performance indicators for the Northern Data Group are revenue and EBITDA. Transactions between the segments take place to an insignificant extent.

Information regarding the results of each reportable segment is presented below:

in EUR '000	Reportable segments			Other companies and Group functions	Consolidation	Group after consolidation
	Mining	Hardware & Other	Total			
<b>Revenues</b>	<b>155,165</b>	<b>315,767</b>	<b>470,932</b>	<b>39,075</b>	<b>-316,720</b>	<b>193,287</b>
thereof external sales	155,165	38,122	193,287	-	-	193,287
thereof intercompany sales	-	277,645	277,645	39,075	-316,720	-
<b>EBITDA</b>	<b>-103,260</b>	<b>70,222</b>	<b>-33,038</b>	<b>-32,898</b>	<b>7,819</b>	<b>-58,117</b>
Depreciation, amortization and impairment	-158,712	-31,002	-189,715	-2,724	-14,795	-207,234
thereof impairments	-98,141	-2,472	-100,613	-	-10,856	-111,469
<b>EBIT</b>	<b>-261,972</b>	<b>39,220</b>	<b>-222,753</b>	<b>-35,622</b>	<b>-6,976</b>	<b>-265,351</b>

The eliminated sales of the segments generated with other segments that are also consolidated can be seen in the reconciliation column to sales.

The amounts in the reconciliation column to Group EBIT include the effects of consolidation adjustments recognized in profit or loss, in which income and expenses at two partners do not offset each other in the same amount or the same period.

In the following, information is provided at company level in accordance with IFRS 8.31 et seq.

The Northern Data Group's external sales break down by geographical region (location of the companies included) as follows:

In EUR '000	2022	2021
Domestic	109,551	97,923
Abroad	83,736	91,937
thereof USA	37,616	50,929
<b>Total</b>	<b>193,287</b>	<b>189,860</b>

The carrying amounts of non-current assets break down as follows:

In EUR '000	12/31/2022	12/31/2021
Domestic	112,769	125,379
Abroad	197,851	292,863
thereof Netherlands	12,080	185,915
thereof Canada	33,775	52,551
thereof Norway	22,965	24,068
thereof Sweden	17,182	17,519
thereof UK	1,745	–
thereof USA	110,104	12,810
<b>Total</b>	<b>310,620</b>	<b>418,242</b>

For the presentation of information on geographical regions, sales, and non-current assets are stated according to the location of the respective Northern Data company. Non-current assets by region comprise non-current assets less deferred tax assets, shares in other companies, and other financial assets. Due to the exchange of services within the Group, sales are in some cases recognized differently from the geographical location of the non-current assets.

Revenues from two customers in the Mining segment account for approximately EUR 113,510 thousand (previous year: EUR 132,652 thousand) of the Group's total revenues.

## 5.8 Other financial obligations

As of the reporting date, other financial obligations amounted to EUR 308 thousand (previous year: EUR 254,588 thousand). The financial obligations in 2022 comprised low-value and short-term rental and lease agreements with a remaining term of up to one year amounting to EUR 139 thousand (previous year: EUR 354 thousand) and a remaining term of one to five years amounting to EUR 169 thousand (previous year: EUR 972 thousand). For 2021 other financial obligations included, in particular, short-term purchase commitments arising from hardware contracts. For financial obligations arising from rental and lease agreements, reference is also made to Note 4.8 "Financial liabilities".

## 5.9 Other matters

### BaFin investigation

The Frankfurt/Main public prosecutor’s office examined a suspicious activity report filed by the German Federal Financial Supervisory Authority (BaFin) on February 10, 2021, for alleged market manipulation. After reviewing the report and the Company’s statement, the public prosecutor’s office discontinued the preliminary investigation on November 26, 2021, due to a lack of initial suspicion of criminal conduct.

In a letter dated November 26, 2021, BaFin issued a further statement in which it reiterated its allegations and stated that it had identified “indications of further market manipulation”. The public prosecutor’s office has again examined this new submission, without affirming any initial suspicion to date. It is up to the public prosecutor’s office to decide whether investigations are to be commenced or whether the statement is also to be dismissed.

The management of the Company is of the opinion that the aforementioned facts do not give rise to any initial suspicion of criminal conduct and that, moreover, there is no sufficient likelihood of sanctions being imposed. Accordingly, no provision has been recognized in respect of these matters as of December 31, 2022, and December 31, 2021, respectively. The investigation (“Vorermittlungsverfahren”) by the public prosecutor’s office was officially closed June 7, 2023.

### Riot/Whinstone purchase price adjustment

In 2021, Northern Data sold the Whinstone site to Riot Blockchain. In connection with the preparation of closing accounts, the parties disagreed on the proper implementation of the purchase price adjustment mechanism. Consequently, Riot filed a lawsuit against Northern Data.

Northern Data and Riot entered into a settlement agreement under which they jointly dismissed their initial litigation in the Delaware Court of Chancery. The parties agreed that their disputes regarding the purchase price adjustment process would be resolved by an accounting expert, as contemplated by the parties’ Stock Purchase Agreement.

On June 9, 2023, the independent accountant rendered an opinion regarding the purchase price adjustment in favor of Riot, entitling Riot to most of the funds held in escrow that were already paid by Riot at the time of the initial sale of Whinstone, meaning that no additional cash outflows were made by Northern Data upon judgment.

Northern Data filed a second Delaware litigation (petition for an order vacating certain determinations of the independent accountant) that is currently in process over what Northern Data believes are errors in the purchase price adjustment decision by the independent accountant. Oral arguments regarding Riot’s motion to dismiss were held in February 2024, a decision thereon is pending.

## 5.10 Fees and services of the auditor

Pursuant to Section 315e (1) of the German Commercial Code (HGB) in conjunction with Section 314 (1) No. 9 HGB, the following fees and services for the auditor of the Consolidated Financial Statements are to be disclosed as follows:

in EUR ‘000	2022	2021
Final audit	600	430
<b>Total</b>	<b>600</b>	<b>430</b>

The fee for audit services provided by KPMG AG Wirtschaftsprüfungsgesellschaft related to the audit of the Consolidated Financial Statements and the annual financial statements of the Company, as well as various audits of the annual financial statements of its subsidiaries.



## 5.11 List of shareholdings of Northern Data AG pursuant to Sec. 313 (2) no. 1 to 4 of the German Commercial Code (HGB)

Subsidiary	Seat	Share in percent	Full conso- lidation (V) Participa- tion (B)	Equity EUR	Result EUR
			12/31/2022	12/31/2022	12/31/2022
Northern Data CA Ltd.	Ontario (Canada)	100	V	-4,325,339	-2,843,347
Northern Data NL BV	Eygelshoven (Netherlands)	100	V	-690,411	-681,314
Northern Data NOR AS	Notodden (Norway)	100	V	2,709,508	-2,350,279
ND Real Estate 1 AS	Notodden (Norway)	100	V	-47,088	-77,656
ND Real Estate 2 AS	Notodden (Norway)	100	V	19,597	10,617
Northern Data Software GmbH*	Frankfurt/Main (Germany)	100	V	24,177,191	24,152,191
Northern Data Hosted Mining LLC	Delaware (USA)	100	V	-2,719,136	-2,751,963
Northern Data US Procurement LLC	Delaware (USA)	100	V	13,200,367	-652,873
Northern Data US, Inc.	Delaware (USA)	100	V	12,686,319	-161,140
Northern Data NY, LLC	Delaware (USA)	100	V	-2,594,169	-5,092,100
Northern Data ND, LLC	Delaware (USA)	100	V	-122,997	-220,388
Northern Data PA, LLC	Delaware (USA)	100	V	-4,645,068	-2,877,213
North Georgia Data, LLC	Georgia (USA)	100	V	3,230,564	566,260
Northern Data Services Limited	London (Great Britain)	100	V	13,977,590	-1,121,434
Hydro66 Svenska AB	Boden (Sweden)	100	V	6,280,461	59,486
Hydro66 Services AB	Boden (Sweden)	100	V	101,817	-163
Decentric Europe B.V.	Amsterdam (Netherlands)	100	V	121,176,049	-60,556,335
Bitfield N.V.	Amsterdam (Netherlands)	100	V	44,038,771	2,019,241
1277963 B.C. Ltd.	Vancouver (Canada)	100	V	18,528,541	-17,965,503
Minondo Ltd.	Gibraltar (Gibraltar)	100	V	-587,934	-15,576,159
Northern Data Quebec Ltd.	Calgary (Canada)	100	V	-138,045	-100,414
Northern Data (CH) AG	Zug (Switzerland)	100	V	-56,589	-154,922
ND CS (Services) GmbH	Frankfurt/Main (Germany)	100	V	-16,435,918	-16,463,418
Lancium Technologies Corp.	Houston (USA)	7.01	B	153,048,003	8,876,920
Northern eCloud ehf. DRÖG	Reykjavik (Iceland)	100	B	-102	-46
Northern Data NE, LLC**	Delaware (USA)	100	B	-	-
Northern Data OK LLC**	Delaware (USA)	100	B	-	-
Northern Data Mining Holdco LLC USA	Delaware (USA)	100	B	13,845,452	-
Northern Data DCI Holdco LLC USA**	Delaware (USA)	100	B	-	-
Northern Data Pods, LLC**	Delaware (USA)	100	B	-	-
Hydro66 Property Services AB***	Boden (Sweden)	100	B	-	-

\* The companies have made use of the exemption provision pursuant to Section 264 (3) of the German Commercial Code (HGB) for the fiscal year 2022 and have submitted the declarations required for this purpose in the electronic company register for publication.

\*\* No data, as company in formation.

\*\*\* Immaterial.

## 5.12 Events after the reporting date

On April 12, 2023, Northern Data increased the Company's share capital from EUR 23,815,514 by EUR 2,381,551 to EUR 26,197,065 by issuing 2,381,551 new par-value bearer shares. On June 25, 2023, Northern Data increased the Company's share capital from EUR 26,197,065 by EUR 2,619,706 to EUR 28,816,771 by issuing 2,619,706 new par-value bearer shares. Each share was issued with a notional interest in the Company's share capital of EUR 1.00, carrying full dividend rights as from January 1, 2022, against cash contributions, making partial use of the existing authorised capital and excluding the statutory subscription right of the Company's shareholders. The respective 10 percent share capital increases resulted in net proceeds of EUR 32.3 million and EUR 48.0 million.

On December 1, 2023, the Group Company Northern Data US Mining Holdco, LLC ("Peak Mining") acquired 100 percent of the shares in 1102 McKinzie LLC, a 300 MW mining data center site in Corpus Christi, Texas, USA, for an aggregate purchase price of USD 13,600 thousand. For not fulfilling the definition of a business, the acquisition of 1102 McKinzie LLC is not considered a business combination within the meaning of IFRS 3. Currently, the first phase of a buildout that will deliver 100 MW of mining capacity, which will ramp up from Q1 2024, is underway. Recently purchased MicroBT liquid-cooling hardware by Peak Mining with an investment volume of USD 150,000 thousand will be deployed at the site in Q1 2024. Peak Mining has already secured an option for an additional USD 150,000 thousand of MicroBT mining hardware for the further expansion of the location to its full 300 MW potential.

Effective on December 22, 2023, the Northern Data AG acquired 48.07 percent of the shares in Damoon Ltd., Dundalk (Ireland) ("Damoon") against issuing 10,478,826 new shares in Northern Data AG to the seller. With issuance on December 12, 2023, further 21.85 percent of the shares in Damoon were acquired against the issuance of a mandatory convertible bond in the nominal amount of EUR 87,402 thousand in denominations of EUR 1 at an interest rate of 0.5 percent. Upon conclusion of these first two acquisition steps, Northern Data AG was granted a unilateral option, exercisable until December 31, 2024, to acquire the remaining 30.08 percent of shares in Damoon. These were acquired against issuing 6,556,949 new shares in Northern Data AG, becoming effective on January 3, 2024. With completion of the third step, Northern Data AG will hold 100 percent ownership in Damoon Limited (and Damoon Norway AS). Damoon is engaged in the provision of GPU hardware. For not fulfilling the definition of a business, the acquisition of Damoon is not considered a business combination within the meaning of IFRS 3. Northern Data invested EUR 730,000 thousand through partnerships with GIGABYTE and HPE. Northern Data's cloud business, which operates as Taiga Cloud since 2023, acquired 20 NVIDIA H100 GPU Pods, at a purchase price of EUR 400,000 thousand, with deliveries expected in the next 9 months. On November 29, 2023, Taiga Cloud announced an additional investment of EUR 330,000 thousand with Hewlett Packard Enterprise (HPE), for the supply of HPE Cray XD supercomputers, equipped with the aforementioned NVIDIA H100 GPU Tensor Core GPUs.

Tether Holdings Limited, Tortola, British Virgin Islands ("Tether"), holds 100 percent of the shares in Zettahash Inc., Tortola, British Virgin Islands ("Zettahash"). Zettahash acquired 2,619,706 shares in Northern Data AG as a result of a cash capital increase from the Authorized Capital 2023/I under simplified exclusion of shareholders' subscription rights, entered in the commercial register on July 6, 2023. Tether subsequently informed the Company that it had thus exceeded the shareholding threshold of 20 percent in the Company (20.43 percent). As a result of the issue of shares in the Company from Contingent Capital 2023/I following the conversion of convertible bonds by third parties, Tether's indirect shareholding in the Company to the Company's knowledge initially fell to 19.84 percent on October 24, 2023 and then further to 18.58 percent on October 25, 2023, thus falling below the participation threshold of 20 percent again. As part of the increase in the Company's share capital to EUR 42,177,231 using Authorized Capital 2023/I, entered in the commercial register on December 22, 2023, Zettahash acquired a further 10,478,826 shares in

the Company in return for the contribution of a stake in its subsidiary Damoon, and part of a loan receivable due to it from Damoon. As at December 31, 2023, Tether thus indirectly held around 38.81 percent of the Company's share capital to the Company's knowledge. Tether therefore also informed the Company in January 2024 that it indirectly held more than 25 percent of the Company's share capital. Zettahash acquired a further 6,556,949 shares as part of the increase in the Company's share capital to EUR 48,734,180 from Authorized Capital 2023/II entered in the commercial register on January 3, 2024 in return for the contribution of further shares in Damoon and a further portion of the loan receivable due to it from Damoon. As a result, Tether's indirect shareholding in the Company increased to 47.04 percent to the Company's knowledge. By converting convertible bonds in the amount of EUR 87,402,000, Zettahash acquired a further 4,763,051 shares in the Company on February 2, 2024. To the Company's knowledge, Tether, whose controlling shareholder is Giancarlo Devasini, has indirectly held more than 50 percent (51.75 percent) of the Company's share capital since this date. Tether therefore also notified the Company in February 2024 that it holds more than 50 percent of the Company's share capital.

Due to the capital measures, the number of shares as at December 31, 2023 increased by 18,361,717 shares to 42,177,231 shares (previous year: 23,815,514 shares). This results in a dilution effect for the existing shareholders of Northern Data AG by 43.53 percent at this date.

### 5.13 Release date of publication

The Consolidated Financial Statements were approved for publication and forwarded to the Supervisory Board by the Management Board on March 21, 2024. The Supervisory Board approved the Consolidated Financial Statements that same day.

### 5.14 Assurance of the legal representatives

To the best of our knowledge, and in accordance with the applicable reporting principles, the Consolidated Financial Statements give a true and fair view of the assets, liabilities, financial and earnings position of the Group, and the Group Management Report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Frankfurt/Main, March 21, 2024



**Aroosh Thillainathan**  
Chairman of the Management Board

# Independent Auditor's Report

## To Northern Data AG, Frankfurt am Main

### Opinions

We have audited the consolidated financial statements of Northern Data AG, Frankfurt am Main and its subsidiaries (the Group), which comprise the Consolidated Statement of Financial Position as at 31 December 2022, and the Consolidated Statement of Comprehensive Income, Consolidated Statement of Changes in Equity and Consolidated Statement of Cash Flows for the financial year from 1 January to 31 December 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Northern Data AG for the financial year from 1 January to 31 December 2022. In accordance with German legal requirements, we have not audited the content of those components of the group management report specified in the "Other Information" section of our auditor's report.

In our opinion, on the basis of the knowledge obtained in the audit,

- › the accompanying consolidated financial statements comply, in all material respects, with the requirements of German commercial law and give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2022 and of its financial performance for the financial year from 1 January to 31 December 2022, in accordance with German Legally Required Accounting Principles, and
- › the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of those components of the group management report specified in the "Other Information" section of the auditor's report.

Pursuant to Section 322 (3) sentence 1 HGB [Handelsgesetzbuch: German Commercial Code], we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and the group management report.

### Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the German Generally Accepted Standards of Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

## Material Uncertainty about the Group's Ability to Continue as a Going Concern

We refer to Section "1.4 Valuation premise of a going concern" in the notes to the consolidated financial statements as well as to the disclosures under Section "Opportunity, Risk and Forecast Report" of the group management report, in which management describes that Northern Data expects a balanced liquidity position in its liquidity planning for the forecast period. However, this is contingent on the occurrence of a series of assumptions on which the Group's liquidity planning is based. As the Company continues to generate a significant portion of its revenue from Bitcoin mining, the Company is dependent on the development of the Bitcoin price and the associated development of mining profitability. This includes risks from the expected halving, which could result in a decline in mining revenues, profitability and cash flows. In addition, the company has planned and started extensive investments in the cloud computing, data center infrastructure and Bitcoin mining segments. The investments are to be financed to a large extent by taking out a shareholder loan, some of which has already been drawn down in 2023 and a further part is to be drawn down in 2024. The shareholder loan provides for a number of financial conditions ("covenants") to be complied with at various times. The fulfilment of the covenants is contingent on the achievement of the key growth assumptions associated with the investments, particularly in the area of cloud computing. Since cloud computing, as a relatively new area, has so far only generated a relatively small amount of revenue, this assumption is associated with significant uncertainties; for example, it may not be possible to conclude customer contracts to the planned extent and generate profitable revenues from them. In the event of non-performance of the financial covenants, the lender would be entitled to terminate the loan and reclaim the funds disbursed from the loan. In such a case, under the current conditions, the Company would not be able to repay the loan amount directly, unless, for example, other debt or equity financing could be realized or parts of the acquired hardware could be sold to third parties. As presented in Section "1.4 Valuation premise of a going concern" in the notes to the consolidated financial statements and in Section "Opportunity, Risk and Forecast Report" in the group management report, these events and circumstances indicate uncertainty that could cast significant doubt on the Group's ability to continue its business activities and which represent a going-concern risk within the meaning of Section 322 (2) sentence 3 HGB. Our opinions have not been modified with respect to this matter.

## Other Information

Management respectively the Supervisory Board are responsible for the other information. The other information comprises the following components of the management report, whose content was not audited:

- › information extraneous to management reports and marked as unaudited.

The other information also includes the annual report. The other information does not include the consolidated financial statements, the group management report information audited for content and our auditor's report thereon.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- › is materially inconsistent with the consolidated financial statements, with the group management report information audited for content or our knowledge obtained in the audit, or
- › otherwise appears to be materially misstated.

## **Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report**

Management is responsible for the preparation of consolidated financial statements that comply, in all material respects, with the requirements of German commercial law and that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with German Legally Required Accounting Principles. In addition, management is responsible for such internal control as they, in accordance with German Legally Required Accounting Principles, have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, provided no actual or legal circumstances conflict therewith.

Furthermore, management is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

## **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- › Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- › Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- › Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.
- › Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- › Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with German Legally Required Accounting Principles.
- › Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
- › Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- › Perform audit procedures on the prospective information presented by management in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance 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.

Frankfurt am Main, 21 March 2024

KPMG AG  
Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

**Rackwitz**  
Wirtschaftsprüfer  
[German Public Auditor]

**Forstreuter**  
Wirtschaftsprüfer  
[German Public Auditor]



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Design and production: Northern Data AG

#### **Disclaimer**

This report contains forward-looking statements that do not describe past or present facts. It includes assumptions and expectations based on current plans, estimates and forecasts as well as information available to Northern Data AG at the time of completion of this report and these are not to be understood as guarantees of the future developments and results contained therein. Rather, they depend on a variety of factors and are subject to various risks and uncertainties (in particular those described in the section “Report on Opportunities, Risks and Forecast Report”) and are based on assumptions that may not prove to be accurate. It is possible that actual developments and results may differ from the forward-looking statements made in this report. Northern Data AG does not undertake any obligation to update the forward-looking statements contained in this report beyond what is required by law. If Northern Data AG updates one or more forward-looking statements, it cannot be concluded that the affected or other forward-looking statements will be updated on an ongoing basis.

In addition to the measures prepared in accordance with IFRS, Northern Data presents alternative performance measures, e.g. EBITDA, adjusted EBITDA, EBIT, adjusted EBIT, which are not part of the financial reporting framework. These measures are intended to supplement, but not replace, the disclosures prepared in accordance with IFRS. Alternative performance measures are not subject to IFRS or other generally accepted accounting principles. Other companies may use different definitions of these terms.

The figures in this report have been rounded in accordance with standard commercial practice. This may mean that individual amounts do not add up exactly to the totals shown.

#### **Gender-neutral language**

For reasons of better readability, gender-neutral differentiation is largely dispensed with in this report. In the interests of equal treatment, the corresponding terms apply to all genders. The abbreviated form of language does not imply any judgment.

#### **Translation**

The 2022 Annual Report is a publication of Northern Data AG and is also available in English. In case of doubt, the German version takes precedence.

