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FAIRNESS OPINION

*ACQUISITION OF THE HOME NETWORKS BUSINESS FROM
COMMScope HOLDING COMPANY INC.
AND REINVESTMENT BY COMMScope HOLDING COMPANY INC.
IN THE CAPITAL OF VANTIVA SA BY SUBSCRIBING FOR A RESERVED
CAPITAL INCREASE, PAID UP BY OFFSETTING A RECEIVABLE*

23 November 2023

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GLOSSARY

Term	Definition
Adj./Ajust.	Adjusted
Approx.	Approximately
BP	Business Plan
BS	Balance Sheet
CapEx	Capital Expenditure
cf.	Confer
CH	Connected Home segment of Vantiva
CIT	Corporate income tax
COGS	Costs of goods sold
CommScope	CommScope Inc., selling company of HN
DCF	Discounted Cash Flows
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization
EBT	Earnings Before Tax
FCF	Free Cash Flow
Financial Model	Company financial projections excel file(s)
FYXXA	Fiscal Year 20XX
FYXXE	FYXX Estimated
FYXXF	Forecast 20XX
Group or Group Vantiva	Vantiva SA and subsidiaries
H1/H2 XXA	Half-yearly financial statements (1st half or 2nd half)
HN	Home Network segment of CommScope Inc.
IT	Information Technology
k€, m€, mds€	Thousands of euros, Millions of euros, Billions of euros
KPI	Key Performance Indicator
kUSD, mUSD, mdsUSD	Thousands of US dollars, Millions of US dollars, Billions of US dollars
Mgmt.	Management
N/A ; N/C	Not Applicable; Not Communicated
PAT	Profit After Tax
Pro-Forma	Under the same conditions as at the date of Acquisition
Q1/Q2/Q3/Q4 XXA	Quarterly financial statements (1st to 4th quarter)
R&D	Research & development
SCS	Supply Chain Solutions
TCS	Technicolor Creative Studios
Vantiva	Vantiva SA
var.	Variation
YoY	Year on year, year to year

1 INTRODUCTION

1.1 BACKGROUND

RSM France (“**RSM**”) was appointed on 12 September 2023 on a voluntary basis by decision of the Board of Directors of Vantiva SA (“**Vantiva**”) as an independent expert in connection with the proposed issue of Vantiva ordinary shares as part of a capital increase at Vantiva with the cancellation of preferred subscription rights reserved for CommScope Holding Company, Inc. (“**CommScope**” or the “**Seller**”), to represent 25% of Vantiva shares on a fully diluted basis (the “**Reserved Capital Increase**”).

The aforementioned securities issue is to be carried out as part of the proposed acquisition by Vantiva of the “Home Networks” (“**HN**”) business line of CommScope (the “**Acquisition**”).

The reserved capital increase would be paid up by offsetting the receivable corresponding to the proceeds of the sale by CommScope of its Home Networks division.

In accordance with Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017, Vantiva filed a draft prospectus containing its universal registration document for the 2022 financial year and related amendment, a securities memorandum relating to the securities issued, and a summary (the “**Draft Prospectus**”) with the French financial market authority, Autorité des Marchés Financiers (“**AMF**”), for publication once approved by the AMF and before the Combined General Meeting of Vantiva shareholders convened on 19 December 2023 to grant the Vantiva Board of Directors the powers to decide on a reserved capital increase with cancellation of the preferred subscription rights of the shareholders.

The independent appraisal assignment entrusted to RSM involves assessing, from the point of view of fairness, the acquisition value of HN as it is acquired from CommScope and giving an opinion, in light of this value, on the terms of the reinvestment by the Seller in the capital of Vantiva, with regard to the methods for determining the subscription price and the valuation of Vantiva established in the context of the Acquisition.

Under the terms of the draft securities memorandum, (i) the acquisition value of HN was contractually estimated at €88m by the parties and (ii) the latter have already agreed that CommScope would receive on completion of the Acquisition:

- In subscribing for the reserved capital increase using the proceeds of the sale of HN, a total number of newly issued Vantiva shares representing 25% of Vantiva’s capital on a fully diluted basis;
- Based on the synergies that are expected to be created between the Seller and Vantiva after the integration of HN into Vantiva’s Connected Home division, a maximum cumulative earn-out of USD100m contingent on Vantiva achieving (on a like-for-like basis) EBITDA equal to or greater than €400m in any given financial year during the five years following the first financial year-end after the conclusion of the Acquisition. The annual payment of this earn-out may not exceed USD50m.

1.2 REGULATORY FRAMEWORK APPLICABLE TO RSM’S ASSIGNMENT

This independent expert report (the “**Report**”), containing in its conclusion an opinion of fairness, is prepared on a voluntary basis in accordance with the provisions of Article 262-1 of the AMF General Regulation and implementing instruction no. 2006-08 on independence, itself supplemented by AMF Recommendation no. 2006-15 on independent expertise.

Our assignment therefore constitutes a voluntary appointment of an independent expert by the Board of Directors of Vantiva SA.

Following our appointment as an independent expert by the Board of Directors on 12 September 2023, Vantiva sent us an engagement letter dated 25 September 2023 setting out the regulatory basis for our appointment. This engagement letter is included in [Appendix 1](#).

1.3 INDEPENDENCE OF RSM FRANCE

RSM France is independent of the stakeholders in the Acquisition, more specifically Vantiva and its shareholders and CommScope and its shareholders, and of their respective financial and legal advisers (the “Advisers”) (together, the “Companies and persons concerned by the acquisition”).

RSM France and its partners and employees, Benoît Coustaux (Partner), Etienne Geffray (Senior Manager), Selyan Lonqueux (Analyst) and Quentin Chau (Analyst), who are involved in the assignment, do not represent any conflict of interest as referred to in Article 1 of Instruction 2006-08 of 25 July 2006 as amended on 10 February 2020, pursuant to Title VI of Book II of the AMF General Regulation.

More specifically, RSM France and its partners and employees involved in the assignment:

- Have no legal or capital ties to the companies or persons concerned by the Acquisition which may affect their independence;
- Have not advised any of the companies or persons concerned by the Acquisition or any entities controlled by these companies or persons, within the meaning of Article L233-3 of the French Commercial Code, during the last eighteen months;
- Have not carried out any valuation on behalf of the companies and persons concerned by the Acquisition, in particular Vantiva and CommScope, over the last eighteen months;
- Have no interest in the success of the Acquisition, nor any claim or debt on any of the companies or persons concerned by the Acquisition or on any entity controlled by the persons concerned by the Acquisition.

RSM France therefore certifies that to the best of its knowledge it has no past, present or future links with the companies and persons concerned by the Acquisition that are likely to affect its independence and objectivity of judgement during the performance of the assignment described in this letter.

Moreover, we have all of the necessary human and material resources to carry out the assignment.

1.4 DUE DILIGENCE CARRIED OUT

Given the nature of the Acquisition which involves the acquisition of HN by Vantiva from CommScope and the reinvestment by the Seller of all proceeds from the sale in Vantiva as part of a reserved capital increase, our work involved an overall assessment of the Acquisition and a valuation of (i) Vantiva and (ii) the scope of HN.

We performed the necessary due diligence to draw conclusions on the fairness of:

- the acquisition value of HN in the context of its acquisition from CommScope;
- given this value, the terms of the reinvestment by the Seller in the capital of Vantiva, with regard to the methods for determining the subscription price and the valuation of Vantiva established as part of the Acquisition.

In this context, the work schedule implemented for the assignment is set out in [Appendix 2](#).

The documentation used to support our work is provided in [Appendix 3](#).

Our work consisted of:

- holding meetings on various occasions with senior managers, operational managers and the Advisers to understand the context of the transaction and the related business outlook and financial forecasts;
- obtaining a detailed understanding of the proposed Acquisition and the related legal and financial procedures and specific contexts;
- obtaining an understanding of the business models of Vantiva and HN;
- using public and regulated information concerning Vantiva and HN;
- reviewing the work carried out by the Advisers for the purposes of the Acquisition;
- consulting our sector documentation as well as extracts from our financial databases relating to the activities carried out by the Group and HN in their competitive environment;
- taking note of the financial due diligence reports on the scope of HN;
- reviewing the financial performances of Vantiva and HN;
- reading the reports of the analysts who cover the Vantiva share and using the resulting medium-term consensus;
- analysing the liquidity and historical share prices weighted by the volumes of the Vantiva share over a long period and Vantiva events and press releases to interpret the share's evolution;
- examining the contribution of the operating segments to the Group's activity, profitability and balance sheet structure, in particular with reference to the universal registration document and the 2022 financial report;
- reviewing in conjunction with our contacts the medium-term budget and forecast data for Vantiva and HN, and comparing these projections with historical financial performance and market forecasts;
- carrying out a multi-criteria evaluation of Vantiva and HN.

1.5 LIMITS

This Report does not address the merits of the decision taken by Vantiva and CommScope to carry out the transaction and does not constitute a recommendation for or against the transaction or any other matter to the relevant parties or to any shareholder of the groups concerned.

To carry out our assignment, we used the documents and information provided to us by Vantiva, CommScope and their Advisers, without assuming any responsibility for validating these documents and information. In accordance with the practice of independent expertise, we have not audited the historical and forecast data used, but are responsible solely for verifying the reasonableness and consistency thereof.

2 PRESENTATION OF THE ACQUISITION

2.1 COMPANIES INVOLVED IN THE ACQUISITION

2.1.1 Presentation of the buyer, Vantiva

Vantiva SA is a French public limited company (société anonyme) with share capital of €3,554,271.61 divided into 355,427 161¹ fully paid-up shares with a par value of €0.01 each, all of the same class, registered in the Paris Trade and Companies Register under number 333 773 174 (hereinafter “**Vantiva**”).

Its registered office is located at 10 boulevard de Grenelle, 75015 Paris. Vantiva’s shares are admitted for trading on the Euronext Paris market (ticker: VANTI.PA).

The Vantiva Group operates two main business activities:

- “Connected Home” (“**CH**”): design, manufacture, distribution and supply chain management for home automation product ranges such as home terminals (modems, routers, WIFI amplifiers, etc.) and digital video solutions (video set-top boxes, etc.).
- “Supply Chain Solutions” (“**SCS**”): replication, packaging and distribution of CDs, DVDs, Blu-ray for video, video games and music.

In FY22A, the CH division made consolidated revenue of €2.1bn (76% of Vantiva's consolidated revenue) and the SCS division made consolidated revenue of €655m (24%).

The table below shows a breakdown of Vantiva’s shareholding structure as at 11 October 2023.

Vantiva's shareholders as of 11 October 2023			
	Shares (#)	Equity share	Voting rights (%)
Angelo Gordon & Co.LP.	79,671,524	22.42%	22.42%
Briarwood Chase Management LLC	52,422,323	14.75%	14.75%
Bpifrance Participations SA	38,437,497	10.81%	10.81%
Autres actionnaires	184,895,817	52.02%	52.02%
Total	355,427,161	100.00%	100.00%

Source: Informations Vantiva & Euroclear Nasdaq

2.1.2 Presentation of the seller, CommScope, and the target company, the HN division

CommScope Holding Company, Inc. is a US company registered in Delaware (United States of America), having its registered office at 1100 CommScope Place, SE Hickory, North Carolina 28602, United States of America.

CommScope’s shares are admitted for trading on the NASDAQ (ticker: COMM.O).

CommScope operates five main business activities²: Connectivity and Cable Solutions, Outdoor Wireless Networks, Networking, Intelligent Cellular and Security Solutions, Access Network Solutions and Home Networks.

The Home Networks (“HN”) division designs, manufactures and distributes equipment offering residential connectivity solutions and video set-top boxes.

In FY22E, HN made revenue of USD1.7bn, representing approximately 18% of CommScope’s consolidated revenue.

¹ Source: Vantiva - Information on the total number of voting rights and shares as at 11 October 2023.

² According to the classification adopted by CommScope and presented in its 2022 annual report.

2.2 TERMS OF THE ACQUISITION

2.2.1 Objectives and expected synergies

The transaction involves the acquisition by Vantiva of the HN division of CommScope. HN would be integrated into Vantiva's CH division.

The Acquisition would benefit Vantiva by enabling it to significantly strengthen its CH division by³:

- achieving critical mass to generate economies of scale by optimising the distribution of engineering costs and reducing the structure of overheads, with the aim of increasing the profitability of the new group structure;
- substantially increasing its customer portfolio;
- strengthening and expanding its presence in key geographies;
- giving it access to a comprehensive innovation portfolio and increased capacity for innovation through the combination of best practices from both companies;
- enabling it to deal with increased competition from Asian competitors and the wider availability of products which jeopardises the profitability of the business in the long term.

The deal is expected to generate over €100m in full-year synergies (pre-tax) from 2026, mainly through cost optimisation and improved operational efficiency.

2.2.2 Terms and conditions

On 2 October 2023, Vantiva and CommScope signed a sale agreement under which CommScope undertook to sell to Vantiva the entire share capital and voting rights of the various companies and various assets and liabilities that together make up the HN division of CommScope.

An acquisition agreement, subject to conditions precedent, setting out the terms and price of the Acquisition (the "**Acquisition Price**") is being concluded by Vantiva and CommScope (the "**Acquisition Agreement**"), the signature of which is planned for 6 December 2023.⁴

In accordance with the terms of the Acquisition Agreement, subject to the related conditions precedent (set out below) being satisfied, the entire proceeds from the Acquisition will be reinvested by CommScope in Vantiva through one or more capital increases reserved for it and carried out under the conditions described below.

The Acquisition Agreement provides that CommScope will subscribe, by way of a debt set-off, for new ordinary shares in the Company to represent 25% of the capital of Vantiva on a fully diluted basis (the "**New Shares**") under the conditions set out in an investment agreement to be signed on 6 December 2023 (the "**Reinvestment Agreement**"), which is presented in section 1.2.2 of the Amendment (the "**Reinvestment**").

The reserved capital increase will be carried out subject to the delegation of the necessary powers to the Board of Directors by the Combined General Meeting scheduled for 19 December 2023 and will take place on one or more occasions after the Completion Date (as this term is defined in the Draft Prospectus).

The Acquisition and the reserved capital increase shall remain subject to (i) the satisfaction or cancellation of the conditions precedent provided for in the Acquisition Agreement (which include in particular authorisation for the Acquisition by the regulatory authorities governing mergers, and are presented in section 1 ("Presentation of the Acquisition transaction") of the Amendment and (ii) the approval of the reserved capital increase by the Combined General Meeting scheduled for 19 December 2023.

³ Based on the press release of 3 October 2023 and the Draft Prospectus.

⁴ Subject to the exercise of the sale agreement, which shall be carried out subject to the completion of the information and consultation procedure provided for in Articles L. 2312-8 et seq. of the French Labour Code.

The Acquisition Price was set at €88m according to the Group press release dated 10 November 2023.

Following the reserved capital increase, CommScope would therefore hold 25% of Vantiva's capital on a fully diluted basis.

The Acquisition Agreement also provides for the payment of a maximum cumulative earn-out of USD100m contingent on Vantiva achieving (on a like-for-like basis) EBITDA equal to or greater than €400m in any given financial year during the five years following the first financial year-end closure after the conclusion of the Acquisition. The annual payment of this earn-out may not exceed USD50m.

2.3 MAIN CONDITIONS FOR COMPLETION OF THE ACQUISITION

The Acquisition Agreement stipulates the conditions precedent that must be met before the acquisition can be made (the "**Conditions Precedent**"). These Conditions Precedent are as follows:

- there must be no prohibition of or limitation on the completion of the Acquisition by any governmental authority or competent court;
- the Acquisition is authorised by the relevant competition authorities in South Africa, Poland, Colombia and Canada;
- the Acquisition is authorised by the regulatory authorities governing the control of foreign investments in France and the United Kingdom;
- approval by the extraordinary general meeting of Vantiva shareholders of the issue of new Vantiva shares for CommScope following completion of the Acquisition (by delegation of powers to the Board of Directors) and the appointment of a person named by CommScope to the Vantiva Board of Directors;
- there is no inaccuracy in the representations and warranties made by CommScope and Vantiva under the Acquisition Agreement on the Closing Date⁵, unless such inaccuracy has no material adverse effect;
- there is no material breach, on the Closing Date, of the obligations of CommScope and Vantiva stipulated in the Acquisition Agreement;
- there is no material adverse event, as that term is defined in the Acquisition Agreement, affecting [HN] or Vantiva;
- the signature of the acquisition documentation listed in the Acquisition Agreement; and
- the completion of restructuring⁶ in the main jurisdictions⁷, i.e. all countries in which the activities of the Business are conducted, other than Colombia, Poland, Singapore, Austria, Canada, Ireland, Japan, Germany, Argentina, Spain, Chile and the United Arab Emirates (the "Main Jurisdictions"), it being understood that the restructuring operations provided for in the Acquisition Agreement in countries other than the Main Jurisdictions may occur after completion of the Acquisition.

The Acquisition Agreement provides that all the Conditions Precedent must be fulfilled by 2 October 2024 at the latest (this deadline may be extended, in particular in the event of ongoing legal proceedings by one of the parties to enforce performance by the other party of their obligations). Vantiva and CommScope may jointly agree to waive one or more of the Conditions Precedent, and each party may individually decide to waive any of the Conditions Precedent stipulated for its sole benefit.

The Acquisition Agreement also provides that Vantiva must pay CommScope a termination fee of five million US dollars (USD5,000,000) in the event that the extraordinary general meeting of Vantiva shareholders does not (i) approve the issue of new Vantiva shares for CommScope following completion of the Acquisition (by delegation of powers to the Board of Directors) and/or (ii) appoint a person named by CommScope to the Vantiva Board of Directors.

⁵ According to the Acquisition Agreement, following the satisfaction or cancellation of all the conditions precedent referred to in the Acquisition Agreement.

⁶ According to the Acquisition Agreement, the internal restructuring (the "Reorganisation") of the CommScope group in order to transfer to Vantiva the assets and liabilities of CommScope related to [HN] as part of the Acquisition.

⁷ As this term is defined in the Acquisition Agreement.

3 PRESENTATION OF VANTIVA

3.1 DESCRIPTION OF ACTIVITIES

Vantiva SA is the holding company of the Vantiva Group, an international media and entertainment company with two main operating divisions, CH and SCS.

The CH (Connected Home) division carries out design, manufacturing and distribution/supply chain management for two product categories: (i) domestic terminals and (ii) digital video solutions.

The domestic terminal products (broadband gateways) consist of a range of terminals offered to network operators that organise high-speed internet access for individual customers on fixed and mobile networks: modems, high-speed gateways, Wi-Fi repeaters, integrated hybrid access devices, routers, etc. These products are strictly designed for cable, telecom and mobile operators or cable companies on the US market (i.e. B2B) which make them available to their customers.

The digital video solutions (video set-top boxes) consist of a range of video products that connect to television and convert cable, satellite and digital signals and internet data into television signals so that video content can be viewed on television: IP decoders, terrestrial decoders, hybrid decoders and media servers. These products are also designed for operators (satellite, cable, telecom and mobile).

Vantiva's CH customers are mainly international network and television operators (such as Bouygues Telecom, Vodafone, Telecom Italia, América Móvil, Orange, etc.).

The CH products are manufactured and assembled by outsourced electronic manufacturers under the supervision of Vantiva.

In FY22A, the CH division made consolidated revenue of €2.1bn (76% of Vantiva's consolidated revenue) and adjusted EBITDA margin⁸ of 6.3%⁹.

The SCS (Supply Chain Solutions) division is responsible for (i) the design (mastering), replication and packaging of CDs, DVDs, Blu-ray for videos, video games and music and (ii) the management of supply for these products and non-disc related products.

The supply solutions cover warehousing, distribution, transportation management and related services offered to the SCS Division's industrial customers.

This division is in the process of diversifying to include (i) the vinyl industry; (ii) non-media customers by offering comprehensive supply chain solutions for their products; and (iii) non-disc related products such as the production of microfluidic devices for medical diagnostics.

Vantiva's SCS customers currently mainly comprise entertainment production and distribution studios, such as Warner Bros., Disney, Universal, Sony and Paramount.

In FY22A, the SCS Division made consolidated revenue of €655m (24% of Vantiva's consolidated revenue) and adjusted EBITDA margin of 8.5%.

⁸ Adjusted EBITDA is a performance indicator monitored by Vantiva and reported in its publications. It excludes asset impairment charges, restructuring costs, other income and expenses, costs of using cloud computing capacity, depreciation expenses, and the impact of provisions for risks, guarantees and litigation.

⁹ Source: Vantiva's 2022 Universal Registration Document.

The Group also has a division entitled **Corporate & Other** for other ongoing activities and central functions not allocated to CH or SCS, i.e.:

- central functions such as the management of the Group's head office, human resources, IT, finance, marketing and communication, legal and real estate affairs which cannot be strictly assigned to any specific unit in one of the two operational segments;
- operations carried out on behalf of Technicolor Creative Studios as part of a shared services centre called "Global Business Services".

The financial performance of this division is negligible in the Group's consolidated financial statements: in FY22A reported revenue was €1m and adjusted EBITDA was €(31m).

3.2 HISTORY OF VANTIVA'S DEVELOPMENT

Vantiva was created from the spin-off in 2022 of the former Technicolor group into two activities, visual effects which is now Technicolor Creative Studios, a company floated on 27 September 2022¹⁰ and in which Vantiva held a 7.5% stake as of the date of this Report (hereinafter "**TCS**" referring to Technicolor Creative Studios and/or the visual effects activities formerly owned by Technicolor) and the CH and SCS activities retained by Technicolor, which took on the name Vantiva (not including TCS).

The Technicolor Group was itself the successor of the Thomson Group which specialised in electricity generation and distribution equipment, and then consumer electronics and professional military equipment.

The milestones in Vantiva's development are summarised below, starting with the creation of La Compagnie Française Thomson-Houston (CFTH) in 1893, and indicating the key stages in the development of the CH, SCS and TCS businesses:

CH Division:

- **1893:** Compagnie Française Thomson-Houston (CFTH) was created in Paris. It operated in France using the patents of Thomson-Houston Electric Corporation in the field of electricity generation and transmission.
- **1966:** CFTH changed name to Thomson-Brandt following its merger with Hotchkiss-Brandt.
- **1967-68:** Thomson-Brandt merged all of its professional electronics businesses with Compagnie générale de la télégraphie sans fil (CSF). The new entity was called Thomson-CSF. Thomson-Brandt then focused solely on consumer electronics (TVs, household appliances under the Brandt and Thomson brand names).
- **1976:** Thomson-CSF took over control of the telephone companies Ericsson and Le Matériel Téléphonique (LMT).
- **1982:** Thomson-Brandt and Thomson-CSF were nationalised by the French government due to financial difficulties, and were then merged in 1983 under the name Thomson SA. The Group was then organised into two business units:

SCS and TCS Divisions:

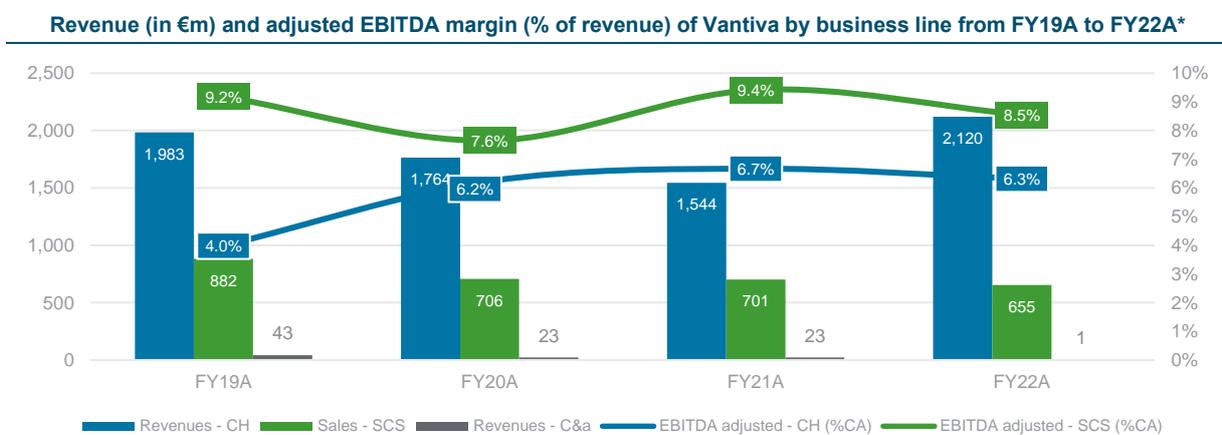
- **1915:** Technicolor Corporation was founded by Herbert Kalmus and Daniel Frost Comstock, inventors of a cinematic technology that helped to bring Hollywood into the modern era with colour and continuous improvements until the recent advent of digital special effects.
- **1977:** Nimbus Records, which later joined the Technicolor group, made its first vinyl records. Vantiva started pressing again at its Guadalajara plant in 2022.
- **1984:** Nimbus made the first compact disc in the UK using the Nimbus Halliday laser mastering system.
- **1988:** Acquisition of Technicolor by Carlton Communications to expand its video cassette duplication services in North America.
- **1994:** Technicolor produced its first CD in a new Californian factory.
- **1996:** Technicolor and Nimbus merged their businesses to adopt the new DVD technology. The companies sought a single partner to manufacture, package and distribute DVDs. By combining their people,

¹⁰ Ticker: TCHCS

- Consumer (household appliances, televisions, etc.). This unit became Thomson Consumer Electronic Company in 1987, Thomson Multimedia in 1995, then Thomson in 2002;
- Thomson CSF: Electronics for professional military purposes.
- **1987:** Creation of Thomson Consumer Electronics following the acquisition of the consumer electronics divisions of GE, RCA and ProScan by Thomson-CSF.
- **1995:** At the initiative of the French government, the consumer electronics activities were separated from the defence activities at Thomson Multimedia and Thomson-CSF before their privatisation in 1999 following which Thomson-CSF became Thales in 2000.
- **2000:** Thomson acquired Technicolor from Carlton Communications.
- **2004:** Thomson created a joint venture (TTE) with Chinese company TCL, giving TCL all manufacturing activities for RCA and Thomson products for television and DVD, and making TCL the world leader in television manufacturing (Thomson retained control of the brands and licensed them to TTE).
- **2009:** Thomson divested the PRN and Grass Valley sub-businesses to focus on services and was renamed Technicolor.
- **2015:** Technicolor acquired the TV set-top box and cable modem businesses from Cisco Systems.
- **2017:** Technicolor bought the set-top box divisions from Pioneer and LG. Technicolor Precision BioDevices was established with the Microfluidics Innovation Centre base in Camarillo, CA.
- **2018:** In July, Technicolor completed the sale of its patent licensing business to InterDigital and, in February 2019, received a firm offer from the same company for its research and innovation business.
- **2022:** Technicolor spun off its visual effects business into Technicolor Creative Studios and was renamed Vantiva. It also announced the sale of its trademark licensing business to third parties in the first half of 2022 in order to focus more on its core businesses.
- systems and talent, this new company was a step ahead of the competition.
- **2001:** Technicolor manufactured the first Microsoft Xbox commercial disks for the new gaming system. Technicolor also created the first Xbox360 disc in 2005 and the first Xbox One disc in 2013.
- **2002:** The Technicolor sites in Mexico and Poland added on CD and DVD replication, providing a global footprint for Thomson.
- **2006:** Technicolor produced the world's first commercial HD DVD discs, followed by the world's first Blu-Ray in 2007, Blu-Ray 3D in 2010 and Blu-Ray UHD in 2016.
- **2011:** Technicolor Home Entertainment Services produced and shipped 1.3 billion discs per year worldwide. The Memphis plant processed more than 900 million discs a year.
- **2015:** Technicolor acquired the North American optical disc manufacturing and distribution assets of Cinram Group, Inc.

3.3 KEY FIGURES FOR VANTIVA

The chart below illustrates the change in revenue and adjusted EBITDA of Vantiva's (i) CH and SCS activities and (ii) Corporate & Other division from FY19A to FY22A¹¹ as presented in the Group's universal registration documents.



Source: Universal registration documents of Vantiva from 2020 to 2022
 * Excluding TCS

Vantiva is now ranked in the top five in the global market for CH products and in the main regional economic zones, as detailed in Section 6.

¹¹ The chart does not show the revenue and adjusted EBITDA generated by the TCS business before the spin-off in 2022.

4 PRESENTATION OF HOME NETWORKS

4.1 DESCRIPTION OF ACTIVITIES

HN (Home Networks) is one of the five divisions of CommScope, organised around the design, manufacture and distribution of two types of products: broadband products and video products.

The **broadband products** include devices that provide home connectivity on a service provider's network, such as modems, phone and data gateways which incorporate routing and Wi-Fi capabilities.

The **video products** include set top boxes that support cable, satellite and IPTV content delivery, digital video recorders, high definition set top boxes and hybrid set top boxes.

CommScope has operated the HN business since the acquisition of Arris International PLC on 4 April 2019.

Similar to Vantiva:

- These products are strictly designed for cable, telecom and mobile operators or for cable companies which make them available to their customers depending on their specific needs.
- The manufacture and assembly of HN products is carried out by outsourced electronic product manufacturers under the supervision of CommScope.

4.2 BACKGROUND TO THE DEVELOPMENT OF THE HOME NETWORKS SCOPE

HN came about as a result of the consolidation within CommScope of the various domestic terminal and video solutions manufacturing activities launched and acquired by the Arris group before it was acquired itself in 2019 by CommScope.

Arris International was a telecommunications equipment manufacturer that provided cable operators with high-speed data, video and telephony systems. It offered wireless modems and routers, set-top boxes and wireless and wired connectivity products allowing service providers to offer high-speed voice, video and data services to residential and non-residential subscribers.

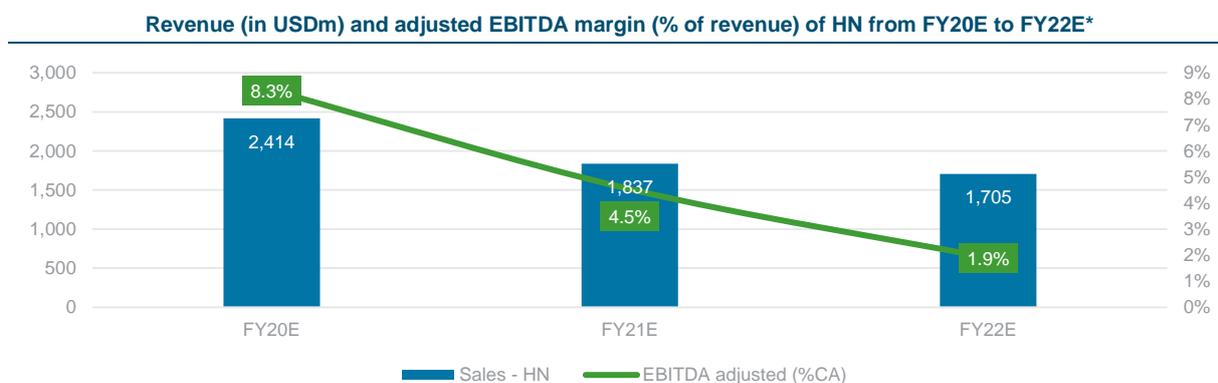
The milestones in the development of Arris International are summarised below, starting with the creation of Arris Interactive in 1995:

- **1995:** Creation of Arris Interactive from a joint venture between Nortel Networks and Antec Corp. Nortel Networks was a provider of hardware, software and services for operator telecommunications networks and company computer networks in more than 150 countries. Antec Corp. specialised in the manufacture of computer components.
- **2002:** Arris finalised the acquisition of the assets of Cadant Inc., a designer and manufacturer of cable modem termination systems, significantly strengthening its terminal operations.
- **2011:** Arris broadened its multimedia expertise by acquiring BigBand Networks, a company specialised in the sale of multimedia technologies to multi-system cable television operators.
- **2013:** Arris took the giant leap of acquiring Motorola Mobility's Home division from Google, venturing into the production of set-top boxes and mobile devices, and expanding its presence in the set-top box market.
- **2016:** The Arris group acquired UK set-top box manufacturer Pace plc, strengthening its overall market position.
- **2017:** The Arris group acquired Broadcom Inc.'s Ruckus Wireless unit. This enabled it to integrate wired and wireless networking solutions into its portfolio, including switches, Wi-Fi and CBRS access points, and advanced software such as cloud management, security and AI and ML analytics, making it a premier player in the home networking sector.

- **2019:** Acquisition of Arris International by CommScope. The merger combined the strengths of two major telecom players, broadening their range of products and services and strengthening their position in the global network infrastructure market.

4.3 KEY FIGURES FOR HOME NETWORKS

The chart below shows the change in HN's revenue and adjusted EBITDA from FY20E to FY22E¹².



Source: financial due diligence reports

HN is currently ranked in the top five worldwide in its market, and in the main regional economic zones, as detailed in Section 6.

¹² These figures are derived from the carved-out accounting and analytical data prepared by CommScope with the support of consulting firms and summarised in the financial due diligence reports. The adjusted EBITDA presented corresponds to the normalised standalone EBITDA of HN (exclusion of items deemed non-recurring and inclusion of centralised costs related to a spin-off configuration with CommScope).

5 DESCRIPTION OF THE PRODUCTS OFFERED BY CONNECTED HOME AND HOME NETWORKS

5.1 DEFINITION

A telecommunication is defined¹³ as the remote transmission of information using electronic tools. This information can be of several types: sound, voice, image or alphanumeric data.

A telecommunication link depends on three components:

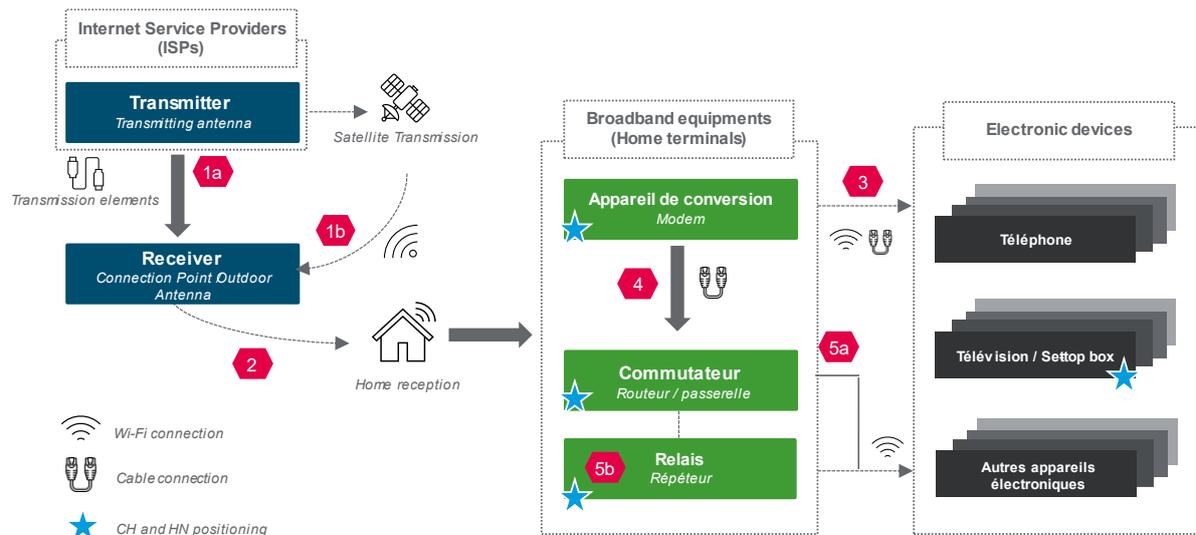
- A transmitter: apparatus used to convert information into a signal (electrical, optical or radio-electrical);
- A transmission medium: element ensuring connection between a transmitter and a receiver (telephone wire, optical fibre, etc.);
- A receiver: apparatus used to convert the signal (electrical, optical or radio-electrical) into information.

A relay may also be used if the transmitter is not strong enough to propagate a signal to the receiver.

The transformation of analogue or digital information into a signal and then into retrievable information requires several processing operations:

- During transmission, the information can be compressed, then must be coded to be modulated;
- Upon receipt, the signal must be demodulated, decoded, corrected for any errors or noises and decompressed.

The diagram below is a simplified illustration of the role of the various telecommunications equipment and the positioning of CH and HN products in the sector:



Source: RSM analyses, Xerfi

In **1a** and **1b**, a signal is transmitted from wired (coaxial cable, optical fibre or telephone line) or wireless (from an antenna, in which case it is received by a satellite dish located on the roof of the housing unit, this transmission is provided by a radio beam) transmission media.

In **2**, the signal is received and transmitted to a modem located at the place of use (home, office). The modem converts the received signal to digital so that it can be recognised by electronic devices.

In **3** and **4**, the signal converted into information by the modem is transmitted to the router in order to be broadcast to the various electronic devices concerned via cable or Wi-Fi. For a landline telephone, voice; for television, an image; or for a computer, data giving access to the internet.

¹³ Source: Xerfi, La fabrication d'équipements de télécommunication (the manufacture of telecommunications equipment), September 2023.

Electronic devices can receive the appropriate signals (a) by connecting directly to the router via Wi-Fi. If the information is incorrectly received by the devices, a repeater or "relay" (b) is requested to amplify the network switch allowing access at a greater distance.

CH and HN products are equipment for receiving and converting signals, and for transmitting information received at home. As such, they constitute a set of electronic equipment that ensure data transmission in various household devices.

5.2 DESCRIPTION OF THE TYPICAL PROCESS FOR MANUFACTURING DOMESTIC TERMINALS AND VIDEO EQUIPMENT

The manufacturing cycle of a domestic terminal is between 6 and 18 months (depending on the complexity of the terminal), from selection of the manufacturer after a call for tenders to the introduction of the product on the market. The cycle follows the six steps summarised below:

1. In the most general case, an operator publishes a call for tenders or a request for quotations for a product that it wishes to obtain.
2. Terminal manufacturers formulate a proposal, which includes, among other things, the envisaged technologies, the suggested product design, the integrated software and the estimated price of the product. This step is generally based on an initial generic product base on which the manufacturer research and development teams work before submitting their tender, taking into account their assessment of future market needs, which are influenced by changes in technological innovation, the maturity of the customer markets and their own knowledge of operators.
3. Once the manufacturer has been selected by the operator, the product specification phase takes place which involves adapting the product to the final expectations (design of the hardware, the software, integration and compatibility tests with the operator's network).
4. After validation of the terminal, the manufacturer prepares the industrialisation phase in conjunction with the contractual manufacturers: installation of production lines, preparation of the terminal moulds, and supply of the equipment and components specified by the manufacturer from specific suppliers. This phase can take six to eight weeks before the start of production.
5. Manufacturing is carried out by contractual manufacturers (such as Foxconn, Pegatron, etc.) under the supervision of the manufacturer. Each product is tested according to specific sequences.
6. The products are then transported directly to the operator or the end customer and are monitored by the manufacturer.

5.3 KEY ISSUES AND RISKS

The key factors that differentiate manufacturers and therefore are decisive in their success or failure are summarised below, with a distinction between two types of factors: those related to the technology used and those related to the supply chain.

5.3.1 Technology-related factors

Home terminals provide high-speed connectivity and the dissemination of information converted into a signal in the home. When responding to customer requests, manufacturers position themselves according to their own assessment of the technologies likely to emerge or supersede other technologies in the medium or long term.

As mentioned above, based on this assessment and thus the technology defined by them, they prepare generic products that will form the basis of future terminals that manufacturers will offer to their own customers. Upstream of their positioning, manufacturers bear the risk of incorrect anticipation of successful technologies.

The technologies integrated into terminals have evolved considerably over the last two decades due to innovation in both transmission media (fibre, coaxial, etc.) and languages (standards) used to convert signals received by these media.

Each transmission medium is defined by its own technology, mainly xDSL, cable and fibre optic for wired transmission, and Wi-Fi technology for wireless transmission.

Innovation has mainly brought significantly increased broadband speed rates for each cycle. Beyond speed, each technology also has advantages or disadvantages versus others, for example:

- The existence of a developed infrastructure, e.g. fibre optic cable did not have a significant buried wire network compared with co-axial cables or copper cables of old telephone lines (also variable depending on the country);
- Some technologies involve bandwidth sharing.

The table below summarises the different areas of innovation in recent years by technology and download/upload speed¹⁴:

Transmission method	Technology	Standard	Year of launch of standard	Download	Upload
Wireless	Wifi 5	802.11ac	2013	3.5 Gb/s	3.5 Gb/s
Wireless	Wifi 6	802.11ax	2019	9.6 Gb/s	9.6 Gb/s
Wireless	Wifi 7	802.11be	2024	46 Gb/s	46 Gb/s
Wired	Copper lines (old telephone line) xDSL	ADSL	1990's	1 to 15 Mb/s	0.5 to 1 Mb/s
Wired	Copper lines (old telephone line) xDSL	VDSL	2000's	1 to 50 Mb/s	Max. 50 Mb/s
Wired	Coaxial cables (old TV cables)	DOCSIS 1.0	1997	40 Mb/s	10 Mb/s
Wired	Coaxial cables (old TV cables)	DOCSIS 2.0	2001	40 Mb/s	30 Mb/s
Wired	Coaxial cables (old TV cables)	DOCSIS 3.0	2006	1 Gb/s	200 Mb/s
Wired	Coaxial cables (old TV cables)	DOCSIS 4.0	2017	10 Gb/s	6 Gb/s
Wired	Fibre optic	GPON	2000	2.5 Gb/s	1.2 Gb/s
Wired	Fibre optic	10G-EPON	2019	10 Gb/s	1 Gb/s
Wired	Fibre optic	XGS-PON	2020's	10 Gb/s	10 Gb/s

Source: RSM analyses, meetings with Vantiva

Wi-Fi technology is used by modems and routers to transmit data wirelessly. Based on the IEEE 802.11 set of standards, there are several versions of Wi-Fi:

- Wi-Fi 5, released in 2013 under the 802.11ac standard, allows a maximum data speed of 3.5 Gb/s;
- Wi-Fi 6, released in 2019 under the 802.11ax standard, allows a maximum data speed of 9.6 Gb/s;
- Wi-Fi 7, expected to be released in 2024 under the 802.11be standard, will allow a maximum data speed of 46 Gb/s.

xDSL transmits signals using the old telephone copper lines.

ADSL and VDSL are the most popular technologies (asymmetric variants), differing mainly in terms of performance, where:

- ADSL offers average download speed of 1 to 15 Mb/s, and an average upload speed of 0.5 Mb/s to 1 Mb/s.
- With the same infrastructure, VDSL operates in much higher frequencies with an average download speed of 1 to 50 Mbs/s and an upload speed that can reach 50 Mb/s via lines of less than 300 metres.

¹⁴ Signal transmission is measured in Mb/s, which defines the data transfer speed per second through the different transmission media. One Mb/s corresponds to 1 million bits of data, a download speed of 10 Mb/s means that 50 million bits of data is downloaded in one second.

DSL technology is not as fast as cable or fibre optic but it does not require bandwidth sharing and each user has their own dedicated connection, which means that their data speed is not affected during peak usage.

Furthermore, as this is the oldest technology and the vast majority of cities have a large number of telephone lines, it covers more ground and is therefore more accessible.

This technology is in the process of disappearing: in France, Orange has initiated the dismantling of its copper network, which will be completely dismantled by 2030 according to a plan announced by the group in February 2022.

Cable technology enables very high-speed internet connection between a transmitter and a cable modem. It is provided by cable TV providers from an already established infrastructure network of coaxial cables (old TV networks), which ensures the routing of signals over large geographical areas.

Coaxial cable is composed of a copper central conductor covered by a protective metal layer and surrounded by a copper or aluminium shield to minimise any interference effect.

Data speeds via cable depend on three factors:

- The quality of the operator's network, which can vary;
- The traffic load; and
- The cable modem and assigned DOCSIS standard, which defines the rules and protocols for interfaces, communication and configuration for data transmission and internet access systems via coaxial cable. DOCSIS 4.0 standard, the most recent (2017, in the process of being deployed), allows a download speed of 10 Gb/s, i.e. ten times higher than DOCSIS 3.0 standard (1 Gb/s) and 250 times higher than the DOCSIS 2.0.

Fibre optic technology enables very high-speed internet connection between a transmitter and a fibre modem. Signals are transmitted through glass or plastic optical fibre which transmits light, and is less vulnerable to interference. Fibre optic architecture is based on a PON network. Fibre optic networks use a multipoint circuit.

There are a large number of standards requiring the use of different wavelengths:

- GPON or Gigabit-capable Passive Optical Network, which appeared in the 2000s, is the most widespread technology, and is marketed by Orange, SFR, Bouygues Telecom and Free. GPON uses the same structure as PON but shares bandwidth between 64 users, pooled at a download speed of 2.5 Gb/s and an upload speed of 1.2 Gb/s.
- 10G-EPON or XG-EPON is based on Ethernet Passive Optical Network technology, which was launched in 2019 by Free. 10G-EPON shares bandwidth between 32 users, pooled at a download speed of 10 Gb/s and an upload speed of 1 Gb/s.
- XGS-PON where "X" represents the number 10 and "S" refers to symmetrical, allows bandwidth to be shared between 64 users with download and upload speeds of 10 Gb/s. It was launched by SFR and is expected to be offered by Orange and Bouygues Telecom shortly.

Generally speaking, fibre is the most advanced technology, offering the highest data transmission speeds and with an expanding network in European countries. On the other hand, this also means that the least developed countries do not necessarily have the technological conditions to benefit from it.

As an illustration:

- The market share gained by Vantiva in Europe and the United States over the last decade has been helped by the Group's decision to favour coaxial technology when targeting cable operators (particularly in the United States).
- One of Vantiva's main French competitors, Sagemcom, has seen significant growth in its activity over the last ten years or so after focusing on the development of terminals using fibre optic technology, to the point of becoming a global leader today.

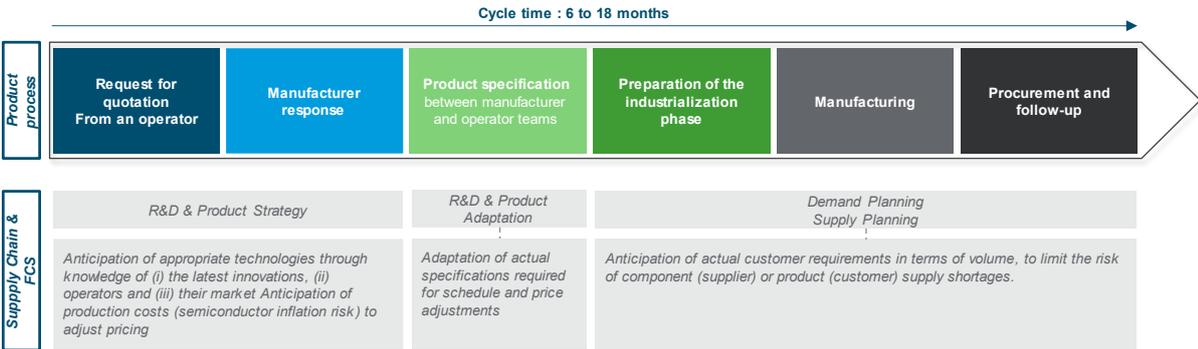
5.3.2 Supply chain factors

There are several supply chain factors:

- *R&D & product strategy*: Anticipating customer needs according to the networks they operate and their geographic markets to precisely meet their expectations: it is possible to adapt the proposed technology to the customer's needs according to the infrastructures (transmission media) operated or existing in the target market (e.g. cable operators vs. telephone company).
- *R&D & product adaptation*: Anticipating customer needs according to the actual specific requirements of the customer in the terminal sought during the upstream phase. The targeting of specific requirements through close interaction between the manufacturer and the operator's technical teams makes it possible to (i) reduce the time taken to design and manufacture the terminal, and (ii) reduce the price of the terminal by excluding optional components.
- *Demand & supply planning*: Anticipating customer needs in terms of volumes through knowledge of their markets (and end consumers) in order to:
 - o Manage the volumes of terminals to be manufactured in the short/medium term and thus (i) avoid a disruption in supply caused by procurement and manufacturing lead times (approx. 12 months) and (ii) anticipate component needs in order to avoid a disruption in the supply of components and anticipate related inflation risks;
 - o Organise procurement between manufacturer and requester.

Anticipation is key at this stage as orders are placed around twelve months in advance and there is a risk of disruptions in the supply of essential parts such as semiconductors, particularly since the Covid-19 pandemic. Also, the equipment requires a number of specific components and a missing part means equipment cannot be assembled or sold and therefore a delay along the entire value chain.

The diagram below summarises the supply chain factors for each step of the manufacturing process:



6 ENVIRONMENT AND TRENDS OF THE HOME TERMINALS AND DIGITAL SET-TOP BOXES MARKET

6.1 INTERNATIONAL TRENDS

The global connected home market was estimated to be worth \$13.3 billion in 2022 and is projected at \$15.9 billion in 2025¹⁵, based on a CAGR of 6%. This market is divided into two segments: broadband products (domestic terminals) and video products (set-top boxes).

The addressable international market for broadband products grew by 15% between 2020 and 2022. This increase can be explained in particular by (i) increasing demand from developing countries and (ii) a recovery in the market following the global shortage of components in 2018, the Covid-19 pandemic which led to an increased need for home automation equipment during lockdown periods, and the semiconductor crisis which led to supply difficulties in 2020 and 2021 and a deferral of terminal deliveries to 2022.

Up to 2025, market growth is expected to be supported by a volume effect mainly from developing countries and an innovation effect caused by newer technologies replacing existing equipment.

The addressable market for video products decreased by (23)% worldwide between 2020 and 2022. This was mainly due to two factors:

- The phenomenon of cord cutting, i.e. the growing tendency of consumers (North American in particular) to favour streaming or OTT services over television subscriptions (cable and telecom operator offers), which automatically generated a fall in demand for video terminals; and
- The development of smart TVs, which now include set-top boxes or access to streaming services by default.

By 2025, this market is expected to be stable given the combined effects of:

- Sluggish demand associated with the effects of cord cutting and smart TVs, as mentioned above;
- Natural replacement cycles of set-top boxes among individual customers; and
- Growing demand from emerging markets, presented as markets of opportunity for these products (e.g. Eastern European countries).

6.2 TRENDS BY ECONOMIC REGION

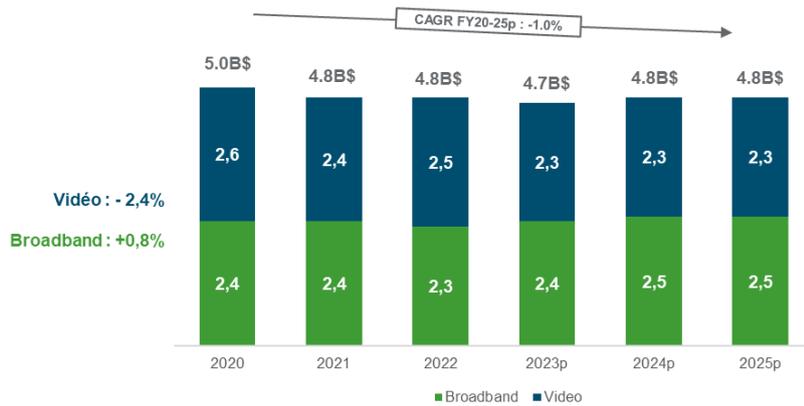
Trends in the connected home market vary according to economic region, mainly due to the level of home automation equipment and wired infrastructure and the options for internet access for users in the medium to long term.

In the EMEA region and mainly in Europe, the market trend followed a linear decline between 2020 and 2025 due to the combined effects of the following:

- Low volumes due to (i) the mature nature of these markets, in which users are already equipped with well-established technologies and (ii) longer device renewal cycles due to the extended lifecycle of terminals;
- A limited or even negative price effect following the semiconductor crisis, which caused supply price inflation after 2020 that was passed on by manufacturers to operators.

¹⁵ The figures and analyses presented in this section are taken from presentations provided by Vantiva, our interviews with the Group's product and market specialists, and BCG and Dell'Oro studies.

Connected home market trends in EMEA

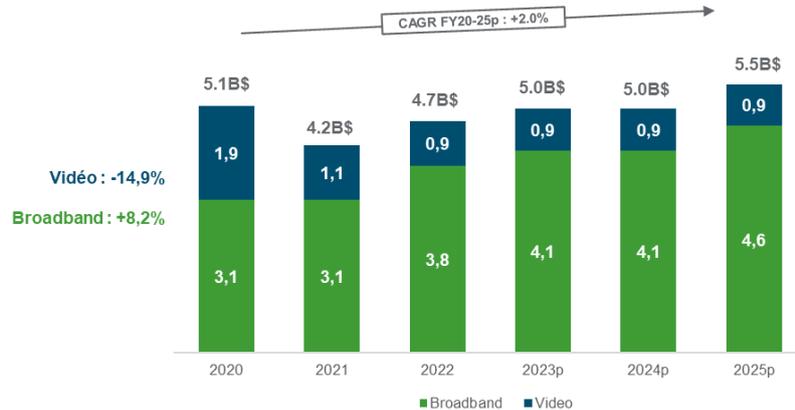


Source: Vantiva studies

In North America, the market is expected to grow by 2% (CAGR) in the period 2020-2025, mainly due to the renewal of broadband infrastructures.

- In broadband, the NAM market is projected to show growth of 8.2% (CAGR) between 2020 and 2025 due to a volume effect coupled with an innovation effect explained by the transformation of the US network, currently dominated by cable technology, as part of which the existing copper network is being dismantled in favour of the adoption of fixed 4G/5G wireless devices and fibre optic through the insertion of HFC networks (fibre and coaxial mix).
- In video, the market is projected to decline by (14.9%) (CAGR) between 2020 and 2025, mainly due to the aforementioned phenomenon of cord cutting, which is expected to cause a fall in demand for video terminals.

Connected home market trends in NAM



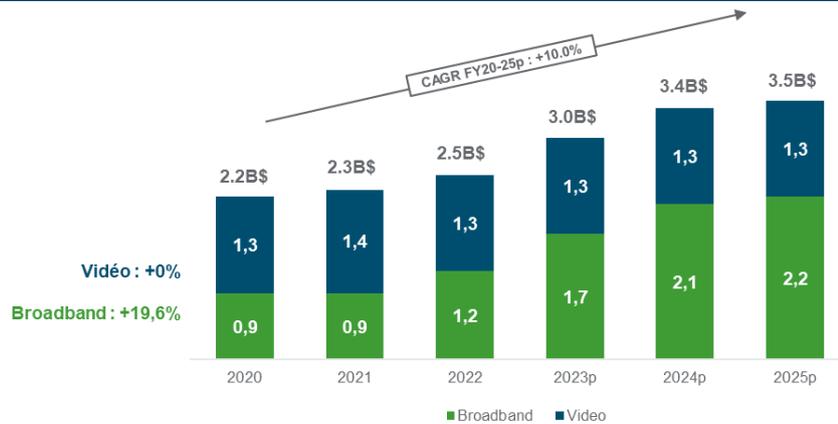
Source: Vantiva studies

In APAC, the market is expected to grow by 10% (CAGR) in the period 2020-2025, supported by (i) a volume effect linked to a need for equipment by users and (ii) a technological innovation effect due to the growth of fibre optic.

- In broadband, the market is expected to show average annual growth in the period 2020 to 2025 of 19.6%, supported by the growth of fibre optic worldwide thanks to more affordable prices for optical fibre and lasers. FWA technology is also expected to be in high demand due to the ease of connection it provides in rural and suburban areas.

- In video, zero growth is projected due to an already equipped market and direct access via smart TVs and related technologies.

Connected home market trends in APAC

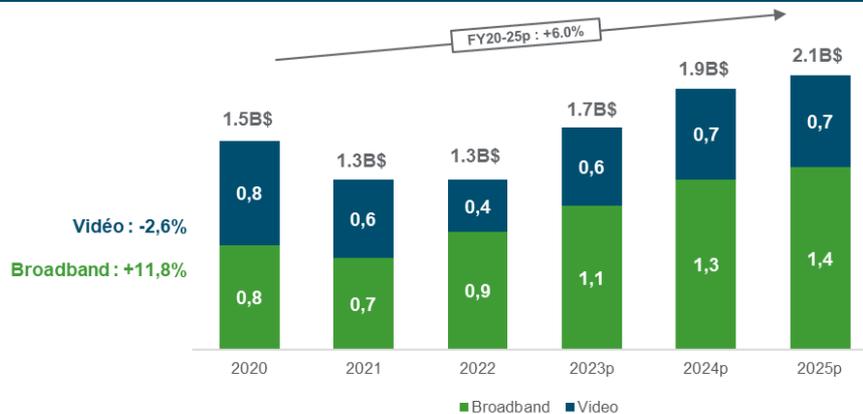


Source: Vantiva studies

In LATAM, the market is expected to grow by 6% (CAGR) in the period 2020-2025:

- The broadband market is expected to show average annual growth of 11.8% in the period 2020-2025, driven by an innovation effect and a need for home automation equipment.
- The video market is projected to decline by an average annual rate of (2.6)% between 2020 and 2025. Between 2020 and 2022, the region suffered from a sharp economic downturn following the Covid-19 pandemic after 2022, a significant recovery is expected.

Connected home market trends in LATAM



Source: Vantiva studies

6.3 MAIN DRIVERS OF GROWTH ON THE CONNECTED HOME PRODUCTS MARKET

Over the last two decades, the key fundamentals that have supported the growth of the global connected home products market have been:

- A volume effect linked to the growth in global internet traffic due to the increase in users worldwide;
- A “quality” effect linked to the transformation of usage causing a change in users’ home connectivity needs (particularly in terms of speed and bandwidth);
- A technological/innovation effect, closely linked to the "quality" effect due to the need to increase speeds and bandwidth, offering the possibility of regularly replacing old equipment with newer equipment incorporating the latest standards compatible with the latest technologies.

The volume effect supporting the growth of the connected home products market is directly correlated with internet access worldwide. The chart below shows the change in the number of internet users worldwide, expressed in billions and as a percentage of the global population:

Change in the number of internet users worldwide from 2005 to 2022
(in billions and as a percentage of world population)



Source: ITU, *Measuring Digital Development (Facts and figures 2022)*

Traffic intensified steadily between 2005 and 2022, with nearly 5.2 billion people having access to the internet in 2022, representing around 70% of the world’s population and a five-fold increase in volume in fifteen years.

Behind this growth and distribution some differences exist between economic zones:

- The share of the population with internet access is largest in Europe and North America, at between 80% and 90%.
- It is between 60% and 70% for Asia-Pacific countries and for Arab states.
- It is lowest in African countries, at around 40%.

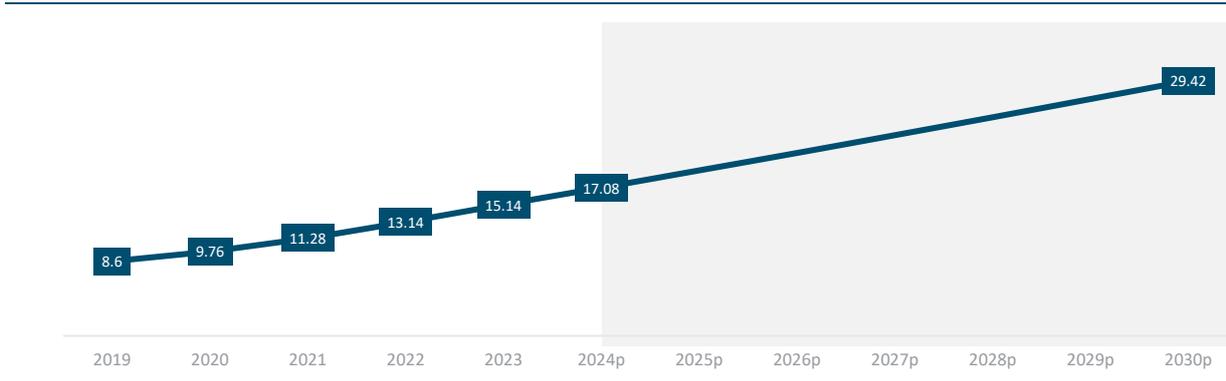
In the long term, the number of users is expected to continue growing under the effect of (i) a gradual increase in access to the internet for populations in developing countries and (ii) the rise in the global population.

The "quality" effect linked to the transformation of usage can be explained by the change in methods of use causing a massive increase in (i) connectivity needs and (ii) data volumes transmitted, thus increasing bandwidth needs generated by:

- The widespread adoption of remote working, particularly since the Covid-19 pandemic (2020);
- The increase in volumes transmitted in connection with (i) the quality of the information broadcast (HD technology, etc.) and the proliferation of devices connected in the home, as users no longer only connect a computer to their network but also other products such as smartphones, smart TVs and IoT products.

The chart below shows the change in the number of connected and IoT devices worldwide between 2019 and 2030:

Change in the number of connected and IoT devices worldwide between 2019 and 2030 (projected)
(in billions)



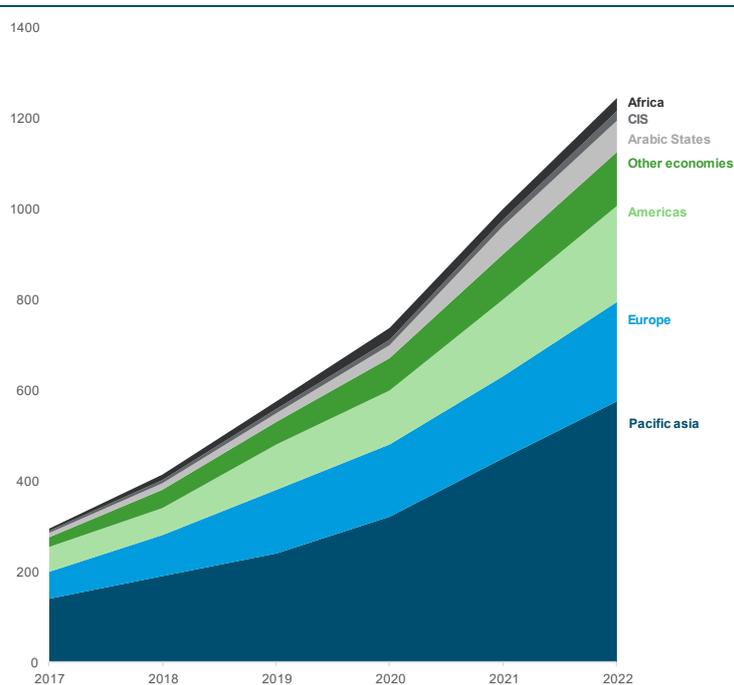
Source: Statista, Number of internet of Things (IoT) connected devices worldwide

The number of machine-to-machine (M2M) and IoT (Internet of Things) connected devices worldwide has continued to grow in line with the increase in the number of users. Estimated at 8.6 billion devices worldwide in 2019, today there are nearly 15.1 billion devices, i.e. growth of 75.6% over the period, with an expected figure of 29.4 billion devices in 2030, i.e. expected growth of 94.7%.

Between 2019 and 2024, the average annual growth in the number of connected devices is 15%, i.e. nearly twice as high as the growth in the connected population.

The chart below also shows the evolution of bandwidth usage worldwide since 2017:

Change in bandwidth usage worldwide between 2017 and 2022, by region
(in Tbit/s)



Source: ITU, Measuring Digital Development (Facts and figures 2022)

Bandwidth consumption has been growing since 2017. This growth has accelerated significantly since 2020, in all regions. This sudden acceleration must be seen in the context of the Covid-19 pandemic, which caused a sudden increase in the need for home equipment.

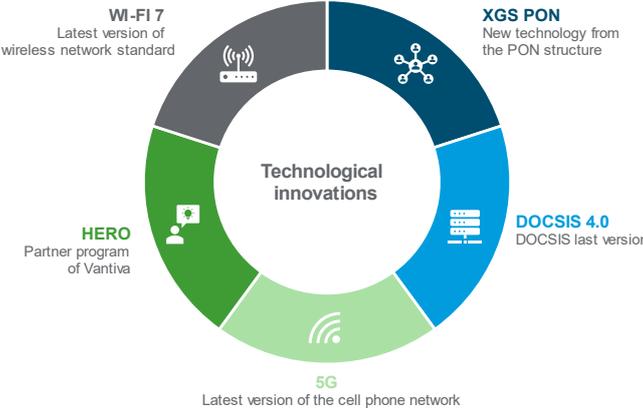
These effects continue today due to the continuation of remote working and the development of new instruments such as the cloud and streaming, which require higher speeds.

This chart also highlights the disparity in growth between economic zones. Over the last five years, the average growth rate internationally has been 33%, the leader being Asia Pacific at nearly 550 Tbit/s followed by Europe at 150 Tbit/s.

The technological/innovation effect is supporting global growth due, on the one hand, to an increase in bandwidth speed and size requirements to meet the increase in home connectivity and, on the other hand, the possibility of regularly replacing old equipment with newer equipment incorporating the latest standards compatible with the latest technologies.

As noted above, the data transfer technologies and standards using transmission media have evolved significantly over the last 20 years, with speeds having increased by more than 200 times since the early 2000s.

Main innovations structuring the market



Source: RSM analyses, Vantiva

New technologies are still emerging, such as 5G FWA, an alternative solution for capturing Wi-Fi from an FTTx network. Operator-activated 5G FWA makes it possible to reach remote households and offer speeds similar to those of fibre optic. This market is all the more important for meeting demand for bandwidth in emerging countries as ease of access for rural and suburban areas is very much in demand for providing connectivity in many households in a more cost-effective manner. According to estimates, FWA connections are expected to reach 160 million by 2025, i.e. around 570 million people with access to a wireless broadband connection (source: mobile services).

Growth in fibre optic is gaining ground across the global market. Developing countries benefit directly from this new technology because optical fibre and lasers have become more affordable. At the same time, highly developed markets such as the United States, which is mainly dominated by cable, are seeing a dismantling of copper lines, leaving them with only two options: i) the deployment of fibre optic allowing the insertion of hybrid fibre coaxial networks and ii) the adoption of fixed 4G/5G wireless access networks.

6.4 MAIN MARKET PLAYERS

6.4.1 Overview of existing players

Manufacturers of broadband and video terminals can be divided into two main categories: pure players and OEM conglomerates.

Pure players are generally international groups whose main activity is the manufacture of broadband or video terminals.

They are directly comparable with Vantiva or CommScope's HN activity. They generally operate in several international markets but are primarily notable for their main markets and the growth prospects they offer in the long term given national needs (e.g. Asia vs. North America). In addition to Vantiva, this category includes:

- **Sagemcom**: a French company with significant market share in North America, EMEA and LATAM – its revenue is estimated at €2.5bn¹⁶. Sagemcom is one of the main competitors of CH and HN and is a world leader.
- **Arcadyan Technology Corp**: a Taiwanese company with significant market share in EMEA. Its revenue is estimated at €1.4bn in FY22. Arcadyan is among the top five players in the world.
- **Sercomm Corp**: a Taiwanese company with significant market share in APAC, and consolidated revenue of €2bn.
- **Humax Co Ltd**: a South Korean company with significant market share in North America and EMEA and estimated revenue of €511m.
- **Kaon Group Co Ltd**: a South Korean company with significant market share in APAC and LATAM. Its revenue is estimated at approximately €453m.
- **Hitron Technologies Inc**: a Taiwanese company with significant market share in North America and estimated revenue of €376m.

OEM conglomerates include multinationals operating in various telecommunication sector activities and whose terminal manufacturing activities are generally modest in comparison to their other activities.

These players are direct competitors in all pure player markets. This category notably includes:

- **CommScope**: its HN business is now among the top five CH product players in the world.
- **ZTE Corp**: a group based in China specialised primarily in the design, development, production, distribution and installation of a range of information and communication technology (ICT) systems, equipment and terminals. ZTE has a strong presence in the LATAM and APAC markets.
- **Huawei Technologies Co., Ltd**: a China-based group that has historically specialised in providing telecommunication networks to operators: hardware, software and services for operators' telecommunications networks and corporate IT networks. The group has since diversified more generally into ICT. The group operates in Asia and EMEA.
- **Nokia Oyj**: a Finnish group operating in the network and internet protocol (IP) infrastructure, software and related services markets. It has a notable presence in North America.

¹⁶ Source: Epsilon Research. As the capital of Sagemcom is private, its financial information is not published regularly.

The tables below summarise the key information identified for these two categories of players:

Pure players:

General presentation				Business segments		Geographical areas				
Logo	Company name	Headquarter	Size (€m)	Broadband / Video	Others	America	EMEA	APAC	LATAM	Others
	Arcadyan	Taiwan	1 441	63%	37%	39%	38%	22%	0%	0%
	Hitron	Taiwan	376	100%	0%	66%	10%	24%	0%	0%
	Humax	South Korea	511	73%	27%	14%	39%	38%	9%	0%
	Kaon	South Korea	453	100%	0%	22%	6%	66%	0%	6%
	Sagemcom	France	2 467	n.c	n.c	n.c	n.c	n.c	n.c	n.c
	Sercomm	Taiwan	1 973	100%	0%	65%	20%	14%	0%	0%
	SDMC	China	n.c	n.c	n.c	n.c	n.c	n.c	n.c	n.c
	Vantiva	France	2 776	76%	24%	55%	21%	9%	15%	0%

Source: RSM analyses, annual reports, Vantiva study, Refinitiv

OEM conglomerates:

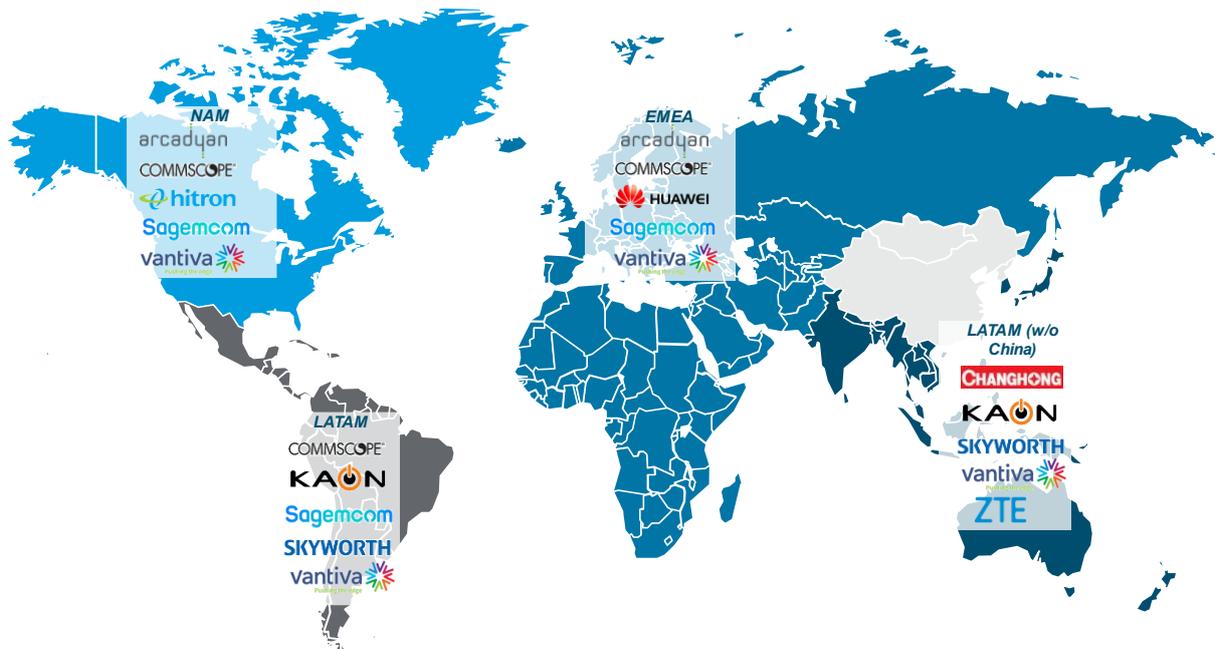
General presentation				Business segments		Geographical areas				
Logo	Company name	Headquarter	Size (€m)	Broadband / Video	Others	America	EMEA	APAC	LATAM	Others
	CommScope	USA	8 623	18%	82%	62%	17%	9%	7%	5%
	Dasan	South Korea	60	39%	61%	0%	0%	99%	0%	1%
	Ericsson	Sweden	24 379	n.c	n.c	35%	55% (EMEA, APAC & LATAM)			10%
	Huawei	China	86 100	n.c	n.c	5%	23%	7%	0%	64%
	Nokia	Finland	24 911	36%	64%	34%	35%	16%	5%	10%
	ZTE	China	16 657	n.c	n.c	19% (America & EMEA)		12%	0%	69%

Source: RSM analyses, annual reports, Vantiva study, Refinitiv

6.4.2 Ranking of operators worldwide

Vantiva and HN are among the top five global players in the CH products market, alongside SagemCom (world leader), Arcadyan and Skyworth.

Both Vantiva and CommScope's HN activity are among the five main players in the main regional economic zones: North America (NAM), Europe, Middle East and Africa (EMEA), Latin America and the Caribbean (LATAM) and Asia Pacific (excluding China) (APAC), as shown in the chart below (with the exception of the APAC region for CommScope).



Source: Vantiva analyses, Dell'Oro 4Q22, companies and Omdia STB 4Q22, BB 4Q22 reports
The groups are presented in alphabetical order

7 OVERVIEW OF THE CD, DVD AND BLU-RAY SECTOR

7.1 DEFINITION – MULTIMEDIA PRODUCTS SECTOR

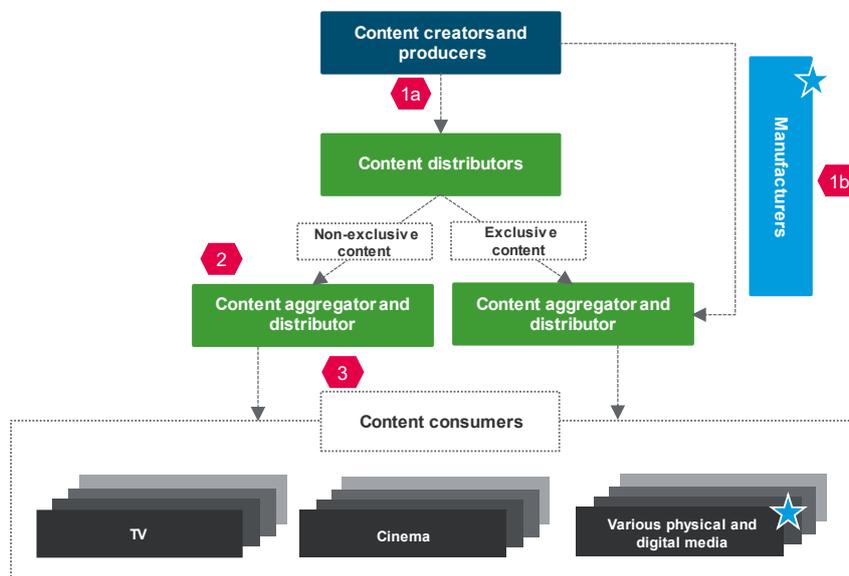
7.1.1 Multimedia products segment (DVD department)

A multimedia product is used to simultaneously store and operate image and sound. It can be physical or digital in nature.

Multimedia products are used by the mass entertainment industry and cover several segments:

- The music industry: the production of artistic works obtained using an industrial reproduction process;
- The film and audiovisual industry: the production of audiovisual products including films, videos, TV and radio programmes;
- The video games industry: the development of entertainment products.

The diagram below provides a simplified illustration of the role of the various players in the entertainment industry and the positioning of SCS products in the sector:



★ SCS Positioning

Source: RSM analyses, Xerfi

In **1**, content is created by producers (record companies and film studios) and is then **(a)** received by players specialising in the introduction of works on the market (marketing and other phases). Content producers **(b)** place orders, in advance of their physical sales, with a media manufacturer.

In **2**, content of an exclusive or non-exclusive nature is received by an aggregator. The aggregator distributes the content to a multitude of actors: TV channel publishers, radio station publishers, physical retailers of CDs, vinyl, DVDs and Blu-Ray, concert hall and cinema operators.¹⁷

In **3**, the content distributed by aggregators is made available to consumers through multiple connection points: television, cinema or the various physical or digital media.

¹⁷ Source: Xerfi, L'industrie mondiale du divertissement (The global entertainment sector), September 2021

7.1.2 Organisation of the business line

The manufacturing cycle of a physical product starts with the selection of the manufacturer through a call for tenders and runs until the product is returned to the warehouse. The cycle follows the six steps summarised below:

1. In the case of a forthcoming film release, a producer publishes a call for tenders or a specific order for a product that they wish to manufacture.
2. Physical media manufacturers replicate the product in bulk in their factories.
3. After manufacture of the product, the manufacturer prepares the packaging phase: insert into cover, installation of special editions, insertion of discount coupons.
4. The packaged products are requisitioned by the distribution centres, which then distribute them to aggregators.
5. The aggregators store unsold products and manage returns in the manufacturer's warehouses. The products are cleaned for reuse and redistribution in future operations.

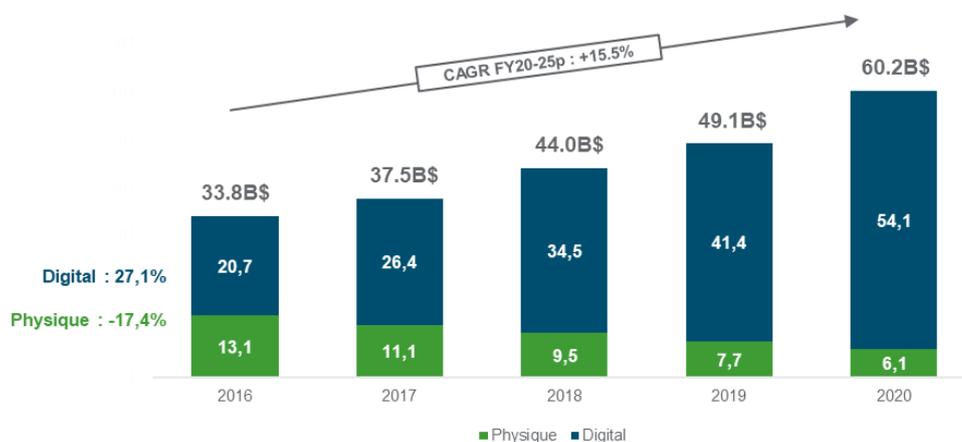
7.2 KEY RISKS

The key risks that affect manufacturers and are thus decisive in their success or failure are:

- The democratisation of bandwidth and internet access to a larger number of users;
- The development of new connected devices that favour the consumption of digital content.

7.3 TRENDS

Global multimedia product market trends



Sources: RSM analyses, Xerfi¹⁸

The global multimedia market was estimated to be worth **\$60.2 billion in 2022**, having increased steadily since 2016 at a CAGR of 15%. This market is divided into two segments: digital media (purchased in digital format, video on demand, subscription to a streaming or pay TV service) and physical products (CDs, DVDs, Blu-ray and vinyl).

¹⁸ Source: Xerfi, L'industrie mondiale du divertissement (The global entertainment sector), September 2021

Between 2016 and 2020, the international digital media market rose by 161%, while the physical products market fell by 53%. These changes are mainly attributable to a transformation of the entertainment industry in favour of digital offerings that benefited from a technology effect and a Covid-19 effect:

- A trend towards dematerialisation, whereby new video and audio technologies became available on platforms through which consumers could access a multitude of content and use it without necessarily owning it;
- The implementation of travel restrictions and the suspension of out-of-home entertainment activities due to the health crisis accelerated digital consumption practices.

In the medium term, the market expects these trends to stabilise under the combined effect of:

- Growing demand for digital media with the entry of major players such as Walt Disney Company (*Disney+*), WarnerMedia (*HBO Max*) and Comcast (*Peacock*), enriching the digital offering;
- Growing demand from emerging countries for cinematographic and audiovisual content, including both physical and digital media;
- Resilient demand for physical products due to: (i) consumers wishing to own DVD or Blu-Ray copies so that they are not affected by the expiry of subscription or broadcasting rights and (ii) artists wishing to retain their prestige through the sale of vinyl which also helps to boost their profits.

7.4 MAIN PLAYERS IN THE PHYSICAL MEDIA MANUFACTURING MARKET

Physical media manufacturers are usually multinationals operating across different physical media activities and whose DVD, CD and Blue-Ray manufacturing activities are generally modest in comparison to their other activities.

The following Vantiva competitors operate in several international markets:

- **Sony:** a Japan-based group specialised in the manufacture of electronics, telephony, IT, video games, music and cinema. Its subsidiary, DADC, specialises in the manufacture of CDs, DVDs and Blu-Ray and currently has a market share of 30% in Europe, making the group the second largest physical media player in Europe.
- **Bertelsmann:** a Germany-based group that operates primarily in the media sector but is also present in the tertiary and educational sectors. Its subsidiary, Sonopress, specialises in the replication of CDs and DVDs and currently has a market share of 30% in Europe, making the group the third largest physical media player in Europe.

Vantiva is a leading manufacturer of physical media products, with a strong presence in North America and Europe.

8 HISTORICAL FINANCIAL PERFORMANCE OF VANTIVA

Basis of analysis: The presentation of Vantiva's historical financial performance was prepared based on (i) the registration documents published by the Group during the 12-month financial years FY20A to FY22A, (ii) the H1 FY23E data published by the Group (six-month figures) and (iii) our interviews with the finance department.

As specified in this Report, in FY22A the Group spun off its TCS activity, which meant that the FY22A results were not directly comparable with the FY21A results.

In the historical income statement section, we present a consolidated analysis followed by an analysis for both CH and SCS.

The Group EBITDA analyses refer to adjusted EBITDA solely as defined by management in its registration documents.

Vantiva prepares its consolidated financial statements in accordance with IFRS.

8.1 HISTORICAL CONSOLIDATED INCOME STATEMENT OF THE GROUP

Consolidated PL - Vantiva in €m	FY19A	FY20A	FY21A	FY22A	6m YTD23E	CAGR FY19-FY22 FY19-FY23	
Connected homes	1,983	1,764	1,544	2,120	807	2%	(5%)
SCS	882	706	701	655	231	(9%)	(15%)
Sales CH + SCS	2,865	2,470	2,245	2,775	1,038	(1%)	(8%)
Production services - TCS	893	513	629	-	-	(100%)	(100%)
Corporate & other	43	23	23	1	-	(71%)	(100%)
Sales other segments	936	536	652	1	-	(90%)	(100%)
Groupe Sales	3,801	3,006	2,897	2,776	1,038	(10%)	(14%)
COGS	(3,375)	(2,725)	(2,494)	(2,469)	(918)	(10%)	(14%)
Gross margin	426	281	403	307	120	(10%)	(13%)
Other purchases and charges	(323)	(283)	(262)	(205)	(101)	(14%)	(29%)
R&D expenses	(114)	(94)	(85)	(89)	(36)	(8%)	(28%)
Operating expenses	(437)	(377)	(347)	(294)	(136)	(12%)	(29%)
Other operating expenses	(109)	(167)	(28)	(25)	(135)	(39%)	(7%)
EBIT (audited)	(120)	(263)	28	(12)	(151)	(54%)	(17%)
EBIT - EBITDA passage components	447	424	224	159	-	(29%)	(100%)
EBITDA on current business	327	161	252	147	(151)	(23%)	(198%)
(-) Litigations and other	(2)	6	15	13	-	(287%)	(100%)
EBITDA adjusted Vantiva	325	167	267	160	(151)	(21%)	(197%)
Financial income	(84)	77	(126)	(177)	(55)	28%	(189%)
Non-recurring income	(1)	-	-	(311)	(25)	578%	n.a.
EBT	(205)	(186)	(98)	(500)	(231)	35%	7%
CIT	(3)	(5)	(24)	(30)	3	115%	(184%)
Income after CIT	(208)	(191)	(122)	(530)	(228)	37%	6%
Gains/(losses) on discontinued operations	(22)	(15)	(19)	680	(2)	(414%)	(51%)
Net income/Résultat net	(230)	(206)	(141)	150	(230)	(187%)	4%
KPIs							
Sales Groupe ch YoY	n.a.	(20.9%)	(3.6%)	(4.2%)	(62.6%)		
Sales CH + SCS ch. YoY	n.a.	(13.8%)	(9.1%)	23.6%	(62.6%)		
Gross margin (%sales)	11.2%	9.3%	13.9%	11.1%	11.6%		
EBIT (%sales)	(3.2%)	(8.7%)	1.0%	(0.4%)	(14.5%)		
EBITDA adjusted Vantiva (%sales)	8.6%	5.6%	9.2%	5.8%	(14.5%)		
Net income (%CA)	(6.1%)	(6.9%)	(4.9%)	5.4%	(22.1%)		

Source: Vantiva Annual Reports / Vantiva Pro-Forma FY23 Reporting / RSM Analysis

Revenue

In FY19A - FY22A, Group revenue fell by €(1)bn, from €3.8bn to €2.8bn (CAGR of (10)%), for two reasons:

- The spin-off of the TCS business in 2022: this business generated revenue of €0.9bn in FY19A;
- The decrease in revenue in the SCS division of approximately €(0.2)bn, in the context of the fall in demand on the DVD and CD market.

The revenue of the CH division amounted to €2.1bn in FY22A, up 2% (CAGR) on FY19A, mainly due to the effect in FY22A of the processing of orders that had accumulated since FY20A and that had been postponed due to the semiconductor crisis and supply disruptions.

Gross margin

Vantiva's COGS ("cost of goods sold"), all activities combined, mainly comprises the following direct production costs:

- The cost of having the CH division products (modems, routers, WIFI amplifiers, set-top boxes, etc.) manufactured by Vantiva's contractual manufacturers. These costs include labour and some of the standard components acquired by the contractual manufacturers and approved by the Group.
- The acquisition costs of certain critical components (in particular chipsets) that the Group pays directly for the purposes of quality control and price control and to anticipate the risks of supply disruption.

Changes in raw material prices, which depend mainly on supply conditions, economic conditions and the level of competition, have a direct impact on Vantiva's production costs and gross margin.

- The costs of logistics and transportation of raw materials and finished products.
- Production costs related to the SCS activity, mainly the cost of manufacturing and replicating physical media at the Group's production sites.

Vantiva's historical consolidated gross margin fluctuates between approximately 9.3% and 13.9% of revenue.

In FY20A, the deterioration in the margin to 9.35% was mainly due to the fall in the margin on the SCS division, the Covid-19 pandemic which led to a deterioration in raw material purchase prices, the shortage of semiconductors and chipsets, and transportation conditions which caused significant inflation in transport costs.

In FY21A and FY22A, the TCS division saw a return of its margin to historical levels and this together with better negotiation of transport and raw material prices by the Group led to an improvement in the gross margin.

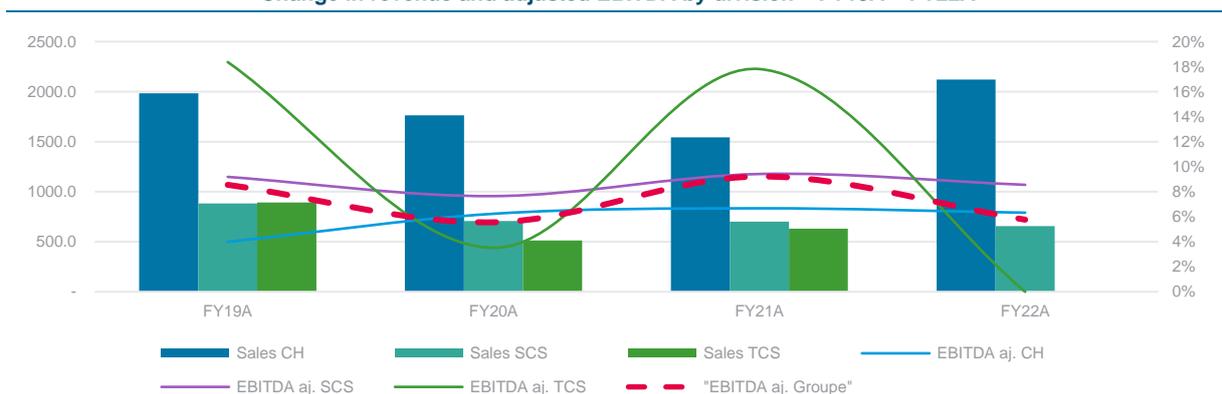
EBITDA and EBIT

As an illustration, we present below the historical adjusted EBITDA and EBIT contributions by division (excluding the Corporate & Other division):

P&L - Vantiva - Sales and EBITDA adj. Per segment in €m	Connected Home				SCS				TCS			
	FY19A	FY20A	FY21A	FY22A	FY19A	FY20A	FY21A	FY22A	FY19A	FY20A	FY21A	FY22A
Sales	1,983	1,764	1,544	2,120	882	706	701	655	893	513	629	-
EBITDA adjusted	79	110	103	134	81	54	66	56	164	18	112	-
EBITDA (%CA)	4%	6%	7%	6%	9%	8%	9%	9%	18%	4%	18%	n.a.
EBIT	(24)	(21)	11	34	(94)	(111)	-	(3)	3	(103)	27	-
EBIT (%CA)	(1%)	(1%)	1%	2%	(11%)	(16%)	0%	(0%)	0%	(20%)	4%	n.a.

Source: Document d'enregistrements universel Vantiva

Change in revenue and adjusted EBITDA by division – FY19A – FY22A



Source: Vantiva's 2022 Universal Registration Document

Vantiva's EBITDA margin fluctuated between 8.6% in FY19A and 5.8% in FY22A. These fluctuations are explained below.

Between FY19A and FY20A, the Group's EBITDA was negatively impacted by the poor performance of the TCS division in the context of the Covid-19 pandemic, which caused shutdowns of the activities of Vantiva's production clients. Over this period, this division's revenue fell from €893m to €513m and its EBITDA margin from 18.4% to 3.5%.

The deterioration in EBITDA of the SCS activity over this period was partially offset by an improvement in performance for the CH division of more than 2pp, following a reorganisation plan initiated by the Group in 2018 which notably led to better operational management of the supply chain.

Between FY20A and FY21A, the increase in EBITDA to 9.2% of revenue was mainly attributable to a recovery in activity within the TCS scope, enabling it to generate a margin of 17.8%. The increase in the Group margin vs. FY19A can be attributed to the benefits reaped in the second consecutive year of the reorganisation plan for CH.

In FY22A, the fresh decline in EBITDA margin to 5.8% was mainly due to the spin-off of TCS.

Group EBIT was historically negative. The transitional management items considered between adjusted EBITDA and Group EBIT mainly comprise the following:

- Restructuring expenses, which concerned the three divisions from FY19A. The SCS division firstly, due to the need to reorganise this activity in the context of a decrease in its market, and the other divisions, including CH, in the context of the reorganisation plan implemented until 2020;
- Impairment of intangible assets (particularly goodwill) mainly on the SCS division due to the structural decrease in the market; and
- Depreciation and amortisation of other assets used in the operating cycles of each division.

Since FY21A, EBIT margin has been almost at breakeven due to the reduction in restructuring costs incurred by the Group on its divisions.

The EBIT margin of the CH business has been positive since FY21A, thanks to (i) the completion of the reorganisation plan which had led to non-recurring costs and (ii) the positive effects of this plan on productivity.

Net income

The Group recorded net losses between FY19A and FY21A of between €(140)m and €(230)m. They were mainly attributable to interest expenses on loans on top of the operating losses (EBIT) generated by the Group.

In FY22A, a profit of €150m was recorded mainly due to the gains recognised in connection with the spin-off of TCS.

8.1.1 Historical income statement of the CH division

P&L - Vantiva - CH in €m	FY19A	FY20A	FY21A	FY22A	6m YTD23E	CAGR FY19-FY22
Sales	1,983	1,764	1,544	2,120	807	2%
Operating expenses	(1,904)	(1,654)	(1,441)	(1,986)	(751)	1%
EBITDA adjusted	79	110	103	134	56	19%
EBIT Vantiva adjustments	5	(37)	(7)	(9)	-	(222%)
Intangible amortization	(36)	(24)	(21)	(24)	-	(13%)
D&A	(72)	(70)	(64)	(67)	-	(2%)
EBIT	(24)	(21)	11	34	56	(212%)
KPIs						
Sales ch YoY (%)	n.a.	(11.04%)	(12.47%)	37.31%	(23.87%)	
EBITDA adjusted (%sales)	3.98%	6.24%	6.67%	6.32%	6.94%	
EBIT (%sales)	(1.21%)	(1.19%)	0.71%	1.60%	6.94%	

Source: Document d'enregistrements universel Vantiva

The revenue of the CH division grew at an average annual rate of 2% between FY19A and FY22A, from €1.9bn to €2.1bn. The trend over the period can be split into two phases:

- Between FY19A to FY21A, revenue fell by €(0.4)bn to €1.5bn mainly due to the global shortage of components (semiconductor crisis) and the massive disruption of supply markets in the context of the Covid-19 pandemic, which caused difficulty in meeting order books. This decline came even though customer orders in 2021 were higher than those recorded by the Group in 2020.

- Between FY21A and FY22A, the division's revenue increased by €0.6bn (+37%) to €2.1bn due to three factors:
 - o (i) the impact of an improvement in supply conditions, which enabled a catch-up on the backlog of orders that had not been met in 2021;
 - o (ii) a product mix effect which meant growth was driven by products on high-speed technologies. This growth in value offset the more general decline in volumes from Asia-Pacific countries;
 - o (iii) a price effect from the passing on of additional procurement costs (particularly components) to customer invoices.

The EBITDA margins of CH were up overall during the period under consideration, from around 4% in FY19A to 6.3% in FY22A, with a significant increase in FY20A to 6.2% of revenue before stabilising for a period.

This increase in profitability is mainly due to the results of the *Dolphin* project introduced by the Group between 2018 and 2020, which consisted of overhauling the CH offering, in particular in the following areas:

- Implementation of a “platform approach” for the Group’s broadband products, developed on a generic basis in-house, before being adapted for customers;
- Concentration of sales efforts on certain key customers, selected in particular for the technological innovation they sought;
- Implementation of an internal tool for rigorous management of the supply chain in real time, enabling the Group to optimise production control and planning by anticipating customer volumes to be produced on a weekly or daily basis;
- Adaptation of a more effective purchasing policy enabling the Group to benefit from a volume effect on supply prices.

This project led to a reduction in operating expenses of around (40)% at constant volumes and also resulted in better negotiation of raw material purchase prices.

For YTD23E, the CH division is mainly impacted by a fall in operator orders following the massive wave of orders since the Covid-19 pandemic and accumulated inventories which were partly sold in FY22A. This results in a projected fall in revenue of (10)% vs. H1 2022.

8.1.2 Historical income statement of the SCS division

P&L - Vantiva - SCS en m€	FY19A	FY20A	FY21A	FY22A	6m YTD23E	CAGR FY19-FY22
Sales	882	706	701	655	231	(9%)
Operating expenses	(801)	(652)	(635)	(599)	(224)	(9%)
EBITDA adjusted	81	54	66	56	7	(12%)
<i>EBIT Vantiva adjustments</i>	(78)	(105)	(20)	(19)	-	(38%)
Intangible amortization	(10)	(8)	(9)	(7)	-	(11%)
D&A	(87)	(52)	(37)	(33)	-	(28%)
EBIT	(94)	(111)	-	(3)	7	(68%)
KPIs						
Sales ch YoY (%)	n.a.	(19.95%)	(0.71%)	(6.56%)	(29.47%)	
EBITDA adjusted (%sales)	9.18%	7.65%	9.42%	8.55%	3.03%	
EBIT (%sales)	(10.66%)	(15.72%)	0.00%	(0.46%)	3.03%	

Source: Document d'enregistrements universel Vantiva

SCS revenue saw an average year-on-year fall in CAGR of (9)% between FY19A and FY22A in the context of a general decline in demand on the physical media market, which was exacerbated in FY20A by the Covid-19 pandemic when consumers moved more towards online consumption.

In FY21A, the division held up better with revenue remaining almost stable as the Group managed to offset the fall in volumes of multimedia products by an increase in the new activities launched as part of its diversification project.

In FY22A, the (6.6)% fall in revenue can be explained, in addition to the structural decline in the physical media activity, by a drop in orders from one of its key customers. This decrease was partially offset by new activities and by the start of production of vinyl records.

The EBITDA margin of the SCS division fluctuated between around 8% and 9.5% over the period under review. The trends from year to year can be explained by a mix effect:

- The general decrease in orders which impacted fixed costs;
- Cost reduction plans initiated by the Group;
- The first margin contributions from the vinyl business.

In YTD23E, the SCS division is impacted by a further drop in demand. Management expects the contribution of profits from the new activities and new cost savings measures launched during the financial year to start showing results in the second half of FY23.

8.2 HISTORICAL BALANCE SHEET

Consolidated BS - Vantiva in €m	31-déc.-19	31-déc.-20	31-déc.-21	31-déc.-22	30-juin-23
Intangible assets	1,768	1,399	1,425	838	685
Tangible assets	191	140	162	98	100
Financial assets	53	79	85	111	84
Fixed assets	2,012	1,618	1,672	1,047	869
Inventory	243	195	335	452	335
Trade receivables	507	425	359	343	225
Trade payables	(825)	(710)	(671)	(855)	(516)
Other operating WCR components	42	18	5	(3)	12
Operating WCR	(33)	(72)	28	(63)	56
other WCR components	(260)	(118)	(166)	(105)	(150)
WCR	(293)	(189)	(138)	(168)	(94)
Deferred taxes	25	30	30	16	25
Cash and equivalents	65	330	196	167	39
Provisions for pensions and other benefits	(375)	(358)	(295)	(224)	(217)
Borrowings	(987)	(964)	(1,042)	(364)	(407)
Debt on acquisition of fixed assets	(25)	(18)	(34)	(35)	n.a.
Rent payable	(311)	(178)	(193)	(67)	(71)
Net cash (debt)	(1,635)	(1,188)	(1,369)	(523)	(655)
Other provisions	(74)	(100)	(61)	(52)	(62)
Shareholder's equity	2	100	161	257	139
KPIs					
WCR (Days of sales)	28	23	17	22	33
WCR (%Sales)	(7.72%)	(6.30%)	(4.77%)	(6.05%)	(9.04%)

Source: Vantiva Annual Reports / Vantiva Pro-Forma FY23 Reporting / RSM Analysis

Fixed assets

The Group's fixed assets were recognised at €1bn at end-December 2022 and €0.9bn at end-June 2023. They mainly consist of the following:

- (i) intangible assets (78% of the item at end-June 23) resulting from the Group's historical acquisitions of companies and activities. These assets primarily include goodwill (approximately 55%, the majority coming from acquisitions in the CH division), trademarks, patents and customer portfolios;
- (ii) tangible assets, consisting of the Group's R&D and manufacturing sites for its SCS and CH divisions;
- (iii) financial assets, made up of the Group's holdings in various structures, including TCS, and €57m in pledged cash.

The decrease in assets between December 2021 and June 2023 is explained by (i) the spin-off of the TCS business (including brand and customer portfolios) and (ii) impairment recognised by the Group on its SCS division in the context of the decline in the physical media market.

Working capital requirement

The Group has a structural working capital surplus, established as at 30 June 2023 at between 20 and 30 days of revenue at the end of the reporting period.

Historical operating WCR is negligible, averaging €(17m), and showing slight variations from one year to the next. The activity is not impacted by any seasonal effect based on our knowledge of the quarterly WCR levels.

The SCS division has positive and relatively stable operating WCR of between 3% and 4% of LTM revenue.

In the CH business, operating WCR ranged between (6)% and 3% over the period from December 2020 to June 2023. These variations are mainly due to increases in inventories, which are visible in the Group's consolidated financial statements (average increase of approximately 45% per year, approximately 20% of revenue in FY22 vs. 11% of annual revenue in FY20). At the same time, trade payables accumulated over the period under consideration (FY20-FY22) at an average increase of approximately 13% per year.

The exceptional increase in inventories over the period is explained by difficulties in disposing of inventory due to reduced demand on the Eurasian markets during the period of the Covid-19 pandemic, supply difficulties in certain components causing a suspension of assembly of finished products, and inventory accumulation at customers at the end of 2022. In parallel, trade payables accumulated in line with the accumulation of unsold inventories.

These abnormal trends began to normalise in 2023, with a gradual disposal of accumulated inventories and, mechanically, an unwinding of trade payables in the first half of FY23.

Net cash (debt) position

Historically, Vantiva's financial statements show a net debt position consisting mainly of (i) loans taken out mainly to finance historical business acquisitions and (ii) provisions for retirement benefits.

The net debt position decreased from €(1.4)bn at end-December 2021 to €(0.5)bn at end-June 2023, mainly due to the sale of the TCS business, which included a net debt position of €(622)m.

9 HISTORICAL FINANCIAL PERFORMANCE OF HOME NETWORKS

9.1 FINANCIAL PERFORMANCE IN THE PERIOD FY20E – FY22E

Comment on the basis of analysis of the historical FY20E to FY22E data:

The HN scope consists of companies and isolated assets and liabilities held globally by the CommScope group since the acquisition of Arris.

Historical income statement data (up to EBITDA) of the HN scope for FY20E, FY21E and FY22E have been prepared as part of the carved-out accounting and analytical work for the spin-off of the activity. This work was carried out with support from consulting firms appointed by the parties and was presented, in particular, in financial due diligence reports prepared by these firms.

CommScope's management had carried out initial carve-out work, which resulted in reported EBITDA of between USD(20)m and USD(152)m depending on the financial year.

The adjusted EBITDA data presented below – the basis of our analyses – correspond to EBITDA for HN on a standalone basis. The main items adjusted in relation to the EBITDA deferred by CommScope's management are as follows:

- Integration of products and service lines included in the proposed transaction but initially not fully reported by CommScope's management;
- Exclusion of non-recurring or non-operating income and expenses, largely consisting of restructuring and integration expenses incurred by CommScope following the acquisition of Arris;
- Scope adjustments, by estimating the direct standalone structural costs that the HN division would have to bear after the spin-off.

This adjustment work was carried out as part of a financial due diligence assignment by a financial consulting firm commissioned by CommScope. It was then reviewed by a second financial consulting firm commissioned by Vantiva.

We have not been provided with a full historical balance sheet of HN, so our presentation of historical financial performance focuses on the income statements and the WCR items carved out for December 2021, December 2022 and end-June 2023.

Our analyses of the working capital requirement of the HN scope are based on an analysis under acquisition conditions, i.e. including the statement of WCR under the conditions under which it is acquired. In this regard, we have restated USD150m of surplus inventories not acquired by Vantiva according to the agreements established between the parties. This inventory surplus consists of equipment and components accumulated over the period FY20-FY22 following supply difficulties.

CommScope prepares its consolidated financial statements in accordance with US generally accepted accounting principles (US GAAP). HN's "carved-out" accounts are presented according to the same reference framework.

PL - Home Networks - post-ajust. FDD en mUSD	FY20E	FY21E	FY22E	6m YTD23E	CAGR FY20-22
Broadband sales	1,172	914	903		(12.19%)
Video sales	1,045	773	669		(20.01%)
Retail	121	92	70		(24.03%)
Software & services	76	71	63		(9.23%)
Royalty revenue adj.	-	(14)	-		n.a.
Sales	2,414	1,837	1,705		(15.96%)
Sales as reported by mgmt	2,360	1,837	1,703	667	n.a.
Operating expenses	(2,213)	(1,754)	(1,673)	-	(13.06%)
EBITDA FDD adjusted	201	83	32		(59.85%)
EBITDA reported mgmt (FI)	(152)	(91)	(20)	(6)	n.a.
Intangible amortization	(104)	(104)	(104)	-	0.12%
D&A	(35)	(23)	(17)	-	(31.21%)
EBIT	62	(43)	(88)	(6)	n.a.
KPIs					
Sales ch YoY (%)	n.a.	(23.91%)	(7.19%)	n.a.	
EBITDA adjusted (%sales)	8.34%	4.53%	1.90%	n.a.	
EBIT (%sales)	2.58%	(2.35%)	(5.18%)	n.a.	

Source: Carve-out HN / PwC Due Diligence Report / 8A Red Flag Report / RSM Analysis

Revenue

HN's revenue fell by approximately (16)% in FY20E – FY22E, mainly due to a widespread decline in video products and a one-off decline in FY21 in broadband products:

- The fall in revenue from broadband products in FY21E was mainly due to a volume effect related to (i) supply disruptions that affected all manufacturers in this sector during the Covid-19 pandemic and (ii) loss in market share by the division.
- The fall in revenue from video products in FY21E and FY22E was mainly the result of cord cutting, an underlying trend particularly notable in the North American markets which has caused a steady decline in demand for set-top boxes over the last number of years.

EBITDA and EBIT

Adjusted EBITDA reached 1.9% of revenue in FY22E, a decrease of approximately (6.5)pp vs. FY20A (8.3% of revenue). This deterioration in HN's profitability came from two factors:

- The fall in revenue over the period, which caused a negative jaws effect due to the division's fixed costs;
- A product mix effect due to a decrease in the share of higher-margin products in the division's revenue.

The transitional items between EBITDA and EBIT mainly consist of impairment of intangible assets.

9.2 FY23 FINANCIAL PERFORMANCE

The 2023 financial performance presented below is based on the financial statements reported by CommScope in its investor communications.

H1 FY23E - Home Networks en mUSD	H1 FY22E	H1 FY23E	CAGR 22-23
Sales	920	667	(28%)
EBITDA reported management	36	(6)	(117%)
KPIs			
Sales ch YoY (%)	n.a.	(27.50%)	
EBITDA reported (%sales)	3.93%	(0.94%)	

Source: CommScope Press release

In H1 FY23E, HN's revenue fell by (28)% vs. H1 FY22E due to a general decline in the global market for broadband products after the inventories accumulated since 2020, impacting all players in the sector.

H1 FY23E EBITDA reported by Management is presented at USD(6)m, aggravated by the fall in revenue.

The financial performance communicated by CommScope for the third quarter of 2023 shows EBITDA of USD3m and revenue in line with the trend observed in H1.

Q3 FY23E - Home Networks en mUSD	Q3 FY22E	Q3 FY23E	CAGR 22-23
Sales	391	249	(36%)
EBITDA reported management	(5)	3	(158%)
KPIs			
Sales ch YoY (%)	n.a.	(36.28%)	
EBITDA reported (%sales)	(1.35%)	1.24%	

Source: CommScope Press release

9.3 BREAKDOWN OF WORKING CAPITAL REQUIREMENT

WCR Carved-out - Home Networks en \$m	Q4 FY21	Q1 FY22	Q2 FY22	Q3 FY22	Q4 FY22	Q1 FY23	Q2 FY23
Operating receivables	303	307	298	248	298		263
Other receivables	63	54	49	119	29		10
Inventory [excl. non purchased inventory]	120	131	131	134	166		149
Current operating assets	487	492	478	501	493		422
Trade payables	(434)	(445)	(397)	(313)	(325)		(296)
Royalty liabilities	(25)	(30)	(30)	(22)	(20)		n.a.
Guarantee liabilities	(30)	(28)	(24)	(22)	(21)		n.a.
Subcontracting liabilities	(7)	(9)	(13)	(16)	(13)		(11)
Current operating payables	(497)	(511)	(463)	(372)	(380)		(307)
Operating WCR	(10)	(20)	15	129	114		116
Other non current assets	49	45	49	71	39		23
Other non current assets	49	45	49	71	39		23
Other non current payables	(70)	(68)	(77)	(136)	(143)		(157)
Other non current payables	(70)	(68)	(77)	(136)	(143)		(157)
Non operating WCR	(21)	(23)	(28)	(64)	(104)		(134)
WCR	(31)	(42)	(13)	65	10		(18)

Source: HN carved-out NWC / PwC & 8A FDD reports / RSM Analysis

KPIs							
Sales - quarterly	477	496	424	391	392	334	334
CA LTM	1,849	1,844	1,811	1,788	1,703	1,541	1,451
WCR (day of sales)	6	8	3	13	2	-	5
WCR as a % of LTM sales							
Carved-out WCR	(1.7%)	(2.3%)	(0.7%)	3.6%	0.6%	n.a.	(1.3%)

Under normative conditions (including the USD150m in inventories), the carved-out HN scope shows a structural working capital requirement until the end of June 2023 of 20 to 40 days of revenue.

After excluding unacquired inventories, operating WCR stands at between 2 and 13 days of revenue until the end of June 2023, stabilising over the period Q3 FY22 to Q2 FY23 at between (1)% and (4)% of rolling LTM revenue. We note an increase in inventories expressed by weight of revenue over the observed period (from 6.5% of LTM revenue at 31 December 2021 to 10.3% of LTM revenue at 30 June 2023). This increase is explained by the same trends as those observed in Vantiva's financial statements, i.e. in the context of supply difficulties and the selling of products on the Eurasian markets.

Other operating WCR items remained stable, with trade receivables fluctuating between 16% and 18% of LTM revenue, and trade payables representing on average 20% of LTM revenue over the observed periods.

10 SWOT ANALYSES

10.1 SWOT ANALYSIS OF THE CH AND HN DIVISIONS

Broadband and set top box	Opportunities	Threats
	<ul style="list-style-type: none"> The addressed market is growing worldwide, driven by the steady increase in the number of Internet users worldwide. The LATAM and APAC markets are expected to grow by 6% to 10% in the medium term, driven by the development of their economies. The need for HD connectivity at home is growing, due to telecommuting and the proliferation of connected objects. The continuing evolution of signal transfer technologies and standards is enabling manufacturers to position themselves in "new" markets with strong growth potential, such as: (i) Fixed Wireless (USA in particular) (ii) fiber (deployment underway in many countries). The regular renewal of connected terminals, linked to subscribers' change of operator (on average every 3 years), guarantees a level of revenues acquired over the long term. High barriers to entry due to the need for customer knowledge, limiting the risk of new entrants. 	<ul style="list-style-type: none"> The EMEA (especially Europe) and NAM markets have reached a significant level of equipment, leading to sluggish growth in demand for broadband products over the medium term. A manufacturer's positioning on an unsuitable or outdated technology can lead to significant losses in market share. Vantiva's management anticipates that technological progress will remain stable, limiting the contribution of innovation to market growth. The development of smart TVs and cord cutting is significantly reducing demand for video solutions. European and North American manufacturers are facing intense competition from Asian manufacturers, which is likely to impact their returns. Manufacturers are exposed to price volatility on the components they use, and to shortages of these same components (particularly since the Covid-19 pandemic), which are likely to constrain their deliveries and margins.
Home Networks	Strengths	Weaknesses
	<ul style="list-style-type: none"> HN is the third largest international player in broadband and video set-top boxes. HN has recognized expertise in innovation and is positioned in the latest technologies. The division has close relationships with many North American operators and telcos. 	<ul style="list-style-type: none"> The division has been losing significant market share for several years, due to its exposure to set-top boxes. HN is exposed to the slowing European and NAM markets, and has a weak presence in APAC, one of the most dynamic economic zones in the broadband market.
Connected Home	Strengths	Weaknesses
	<ul style="list-style-type: none"> Vantiva via CH is the second largest international player in broadband and video set-top boxes. The Group is heir to a strong international brand, enabling it to position itself in all the world's economic zones, including APAC. CH benefits from a close relationship with cable operators, giving it a leading position on DOCSIS. CH is able to position itself in key fiber and 5G FWA technologies. Vantiva's recognized mastery of its supply chain and customer relations enables it to (i) react quickly to delivery deadlines and volumes by anticipating customer needs, and (ii) control production costs by forging close links with its main suppliers and manufacturers. 	<ul style="list-style-type: none"> The Group has not established itself as a leading player in fiber technologies (a position occupied by Sagemcom). Vantiva is exposed to the European and NAM markets, where growth is slowing down due to the rate of HD equipment adoption.

10.2 SWOT ANALYSIS OF VANTIVA'S SCS DIVISION

Market	Opportunities	Threats
	<ul style="list-style-type: none"> The procurement and supply chain management market is growing as a result of increased trade and e-commerce. The vinyl market has been recovering strongly for several years. Very low competitive intensity in physical media activities. 	<ul style="list-style-type: none"> The market for physical media is shrinking, driven by online media consumption / the development of digital media. Potential high IoT competitive intensity.

Supply Chain Solutions	Strengths	Weaknesses
	<ul style="list-style-type: none"> SCS has positioned itself as the international leader in physical media replication, ahead of major groups such as Sony. Vantiva's privileged contractual relationships with prime contractors in the entertainment sector enable it to secure market share in a shrinking market. Business benefits from the upturn in the vinyl marketThe Group has launched a diversification plan to capitalize on its supply chain expertise. 	<ul style="list-style-type: none"> SCS's core business is in a declining market.

11 VALUATION OF HOME NETWORKS

We used a multi-criteria valuation approach for the HN division, the characteristics and basic assumptions of which are set out below:

- The basic valuation data;
- The valuation methods ruled out;
- The valuation methods selected;
- A sum-up of the valuation of the HN division.

11.1 BASIC VALUATION DATA

Accounting framework

CommScope prepares its consolidated financial statements in accordance with US generally accepted accounting principles (US GAAP).

CommScope's consolidated and annual financial statements both close on 31 December of each calendar year. The most recent consolidated financial statements certified by the statutory auditors concern the financial year ended 31 December 2022.

Our valuation assessments are based on the FY20, FY21, FY22 and YTD23 income statements (as at 30 June 2023) as carved out by the management of CommScope with the assistance of a consulting firm in the context of the financial due diligence performed for the purposes of the carve-out operation. As stated earlier in the Report, the HN division was reorganised by CommScope in 2022 before which the activities of this division had not been clearly identified in the Group's consolidated financial statements, since CommScope's acquisition of Arris.

The management of Vantiva and CommScope also provided us with the carve-out balance sheet of the HN business at 30 June 2023, adjusted by the management of Vantiva in accordance with IFRS.

Valuation date

HN is valued as at 31 December 2023.

The carve-out income statements and half-year position of HN as at 30 June 2023 are used as a reference for the historical financial data used for the valuation of HN. The WCR as at 30 June 2023 serves as the reference date for the estimation of projected changes in WCR.

The calculation of discount rates is dated 4 October 2023.

Financial forecasts

The financial forecasts used are those communicated to us by d'Angelin & Co.

To carry out the assignment entrusted to us, we worked on the basis of standalone financial forecasts, i.e. not taking into account the effects of the integration of the HN scope into Vantiva, or any share of the synergies that HN could benefit from as part of its integration into the Group.

Exchange rate

The financial statements of CommScope and the Home Networks scope are prepared in US dollars. In this context, we opted to carry out the valuation in the same currency. We then converted the valuations calculated in US dollars into euros in order to express our opinion on the acquisition price of HN, which itself is expressed in euros.

The exchange rate applied in the conversion is the EUR/USD spot rate on 6 November 2023 of 1.07 (*source: Refinitiv Eikon*).

Net cash (debt) position

The transaction is being carried out on a debt free/cash free basis. However, in our work, we have taken into account items that impact the enterprise value, the receipt or disbursement of which are not included in EBITDA (or in future cash flows).

They mainly concern, depending on the method used (i) provisions for risks recognised on the balance sheet at 30 June 2023, (ii) IFRS16 lease liabilities and (iii) projected cash disbursements (related to investments in reorganisation and employee profit-sharing). Details of the restatements by valuation method are provided under each valuation approach.

11.2 VALUATION METHODS RULED OUT

We ruled out the following valuation methods for HN:

Net asset value (NAV) method

This method involves estimating the value based on a net asset value adjusted for the individual revaluation of identifiable assets and liabilities on the balance sheet that carry unrealised capital gains or losses.

This method is particularly suitable for valuing companies that hold assets or liabilities with their own recognised market values or that can be valued independently (such as real estate companies that hold real estate, or holding companies that hold interests in various activities and various assets on the balance sheet).

This method was not used as all of the assets held are used for HN's operations and their value is directly integrated into the valuation methods that we have selected, and presented below.

Reference to net book value

This method involves estimating the value of a company's equity on the basis of the value of the net assets.

The net book value is not a usual valuation criterion, in particular because it does not take into account future earnings or losses.

Dividend discount model (DDM)

This method involves estimating the value of the division based on the discounted value of future dividend payments.

It examines the target's dividend pay-out policy.

This method was not used because our work is based on a carved-out division of CommScope for which defining a theoretical dividend policy would not be relevant.

Peer comparison method

This method involves estimating the value of the division based on the valuation multiples observed for comparable companies that were recently acquired and for which the financial data of the transaction have been published.

This method was not used due to (i) the lack of information provided on the financial terms of the transactions identified and (ii) the context in which they occurred.

We identified the following three transactions on targets deemed to be pure players comparable to HN:

Sagemcom – July 2023: transfer of Sagemcom Group interests held by Charterhouse Capital Partners LLP to a new continuation fund through a new pool of limited partners in July 2023.

Sagemcom's offers and markets are perfectly comparable to the HN activity and Vantiva's CH business. It is one of the pure players presented in this Report and is ranked the global leader.

According to information published in the press, this transaction would have been carried out on a basis of around €1 billion¹⁹.

We have excluded this reference for the following reasons:

- The price provided is approximate;
- The financial terms of this transaction (in particular the net financial debt) were not disclosed, so it is not possible to obtain a reliable estimate of the enterprise value;
- Sagemcom does not publish its financial statements, so it is not possible to obtain a reliable estimate of the implied valuation multiples.

Sagemcom – April 2019: reorganisation of SagemCom and entry of co-investors.

According to the information we obtained²⁰, this transaction concerned a minority share of the capital (28.1%), based on a 100% valuation of SagemCom of around €700m and an estimated enterprise value of €823m. The estimated implied multiples on this transaction would be 4.9x 2018 group EBITDA and 8x 2019 group EBITDA.

We have excluded this reference for the following reasons:

- The financial terms of this transaction were not fully confirmed by Epsilon Research;
- The implied EBITDA multiples calculated are at variance;
- In 2019, SagemCom was growing strongly on foot of its success in the fibre market in Europe and other global economic zones, and the financial performances and forecasts used to negotiate the price of this transaction are potentially not comparable to those of HN today.

Cisco Connected Device – 2015: acquisition of Cisco Connected Device by Vantiva.

This activity is now fully integrated into Vantiva's CH division.

According to information provided by Vantiva's management, the Cisco Connected Device division was acquired by Vantiva based on an enterprise value of USD522m and an implied multiple of between 7x and 9x 2016 or 2017 EBITDA of that scope.

We excluded this reference as this transaction took place while Vantiva was seeking to acquire market share in North America and Asia Pacific to boost the international expansion of the CH division. The price paid by Vantiva was therefore in a particular context and was likely to incorporate significant synergies and return expectations in these markets, which means the resulting multiples would potentially be too high if applied in our case on a standalone basis.

We have not identified any other relevant transaction involving pure players in the HN business.

¹⁹ Source: Epsilon Research

²⁰ Source: Epsilon Research

Stock valuation method

Reference to the stock valuation involves estimating the value of a company based on the share prices observable over defined periods.

CommScope operates five activity divisions and the HN business represents approximately 18% of CommScope's consolidated revenue, so the group's share price is not representative of the HN division's value.

11.3 VALUATION METHODS USED

We used the following methods to estimate the value of HN:

- Primarily, the discounted cash flow (DCF) method;
- For cross-checking purposes, we used an EBITDA multiple comparison, derived from a panel of comparable listed companies.

The parameters specific to each of these methods are presented in the specific sections below.

11.3.1 Valuation of Home Networks using a DCF method

11.3.1.1 *Presentation of the methodology*

This method involves calculating the intrinsic value of a company by discounting the expected financial flows as per its business plan at a rate that reflects the profitability requirement of the market.

In valuing a going concern for an indefinite period, the calculation of the terminal value, calculated beyond the explicit period of the forecast plan, is based on estimated normative free cash flow and a long-term growth rate (perpetual growth rate).

Our work was based on free cash flow projections calculated from FY24F based on the business plan.

11.3.1.2 *Presentation of the key assumptions of the provisional business plan for the Home Networks scope*

The standalone business plan provided to us by d'Angelin & Co. was prepared for the period FY23F-FY27F, including the key parameters and assumptions presented below.

Management parameters

Revenue is forecast to fall by an average annual rate of (8)% between FY23F and FY27F, the bulk of the decline occurring in FY23F and then stabilisation in FY25F – FY27F.

These forecasts are consistent with (i) the market forecasts for broadband and video products, for which we have identified average annual growth rates between 2020 and 2025 of (1)% and 2% respectively in EMEA and North America (see Section 6) and (ii) the historical revenue trend of HN as impacted by (i) loss of market share (due in particular to competition from Vantiva in DOCSIS technologies) and (ii) a loss of revenue from set-top box products.

More specifically, the projected fall in revenue in FY23F should be seen in light of the inventories cleared by market manufacturers after the Covid-19 pandemic in a context of increased user needs and, at the same time, delivery delays until 2022 due to the shortage of components. This trend is confirmed by the results provided by the CommScope group.

The normative EBITDA margin projected from FY25F is slightly higher than the EBITDA margin of the HN scope in FY22E but lower than the EBITDA margin levels in FY20E and FY21E.

The investment plan (CAPEX) for the Home Networks scope shows stable investments representing an average of (0.75)% of revenue, it being specified that historically a significant proportion of HN's investments is recognised directly in operating expenses (some research and development costs are not capitalised).

The business plan also takes into account:

- an internal restructuring plan, not related to the transaction, representing approximately (1.8)% of annual revenue over the first three years of the explicit period of the business plan (FY23F-FY25F);
- Retirement benefit disbursements representing approximately (0.9)% of annual revenue over the explicit horizon of the BP;
- A remuneration plan representing approximately (0.2)% of annual revenue over the explicit horizon of the BP.

RSM parameters

The projected cash flows take into account:

- A change in WCR estimated based on a normative WCR level over the explicit horizon of the BP calculated based on the carved-out WCR as at 30 June 2023, as a percentage of revenue generated over the previous twelve rolling months (a rate of (1.25)% of revenue, consistent with the quarterly WCR levels observed since Q4 FY21). This normative rate projects a negative, almost zero change in WCR in the first year valued in the BP (FY24), representing approximately (0.1)% of total revenue for the year. Note that this level of WCR was subject to a normative restatement by the parties within the framework of the Acquisition, leading them to exclude USD150m in component inventories from the acquired HN scope.
- Corporation tax calculated based on EBIT taxed at a US rate of 22.98% calculated as shown below:

Tax rate - North Carolina	2023
Federal tax	21.00%
North Carolina State Corporate Income Tax	2.50%
Reduced Federal CIT	20.48%
BEAT Tax (n.a.)	0.00%
North Carolina State Corporate Income Tax	2.50%
US Tax Rate - RSM	22.98%

Source: Taxfoundation.org / Bloomberg Tax / RSM Analysis

- A terminal value that was estimated by applying the Gordon-Shapiro formula. The normative flow was determined based on the following assumptions and parameters:
 - o A perpetual growth rate of 1%, symptomatic of the loss of momentum and saturation of the sector, but nevertheless incorporating the long-term impact of inflation rates on supply costs and selling prices; the perpetual growth rate is applied to FY27F revenue (at the end of the explicit period of the business plan);
 - o A normative EBITDA margin equal to that projected at the end of the explicit period;
 - o The level of CAPEX and D&A is equal, with CAPEX in FY27F impacted by the perpetual growth rate;
 - o The retirement benefits and remuneration plan are calculated based on the same assumptions as those used for the explicit period of the business plan;
 - o The change in WCR is virtually zero, impacted only by the perpetual growth rate.

11.3.1.3 Presentation of the discount rate

The discount rate used to value the Home Networks scope was calculated at 12.34% based on the weighted average cost of capital (WACC), taking into account US economic conditions. It is adjusted for (i) a country risk premium, calculated based on the risk premiums of the economic zones in which HN operates, weighted by the weight of revenue in each zone, and (ii) the inflation differential in the economic zones in which it operates.

Details of the WACC calculation are presented below.

Discount Rate - WACC - HN scope		4-oct.-23
Cost of equity		
Risk-free rate		5.46%
Beta (unlevered)		0.94
Market gearing		17.85%
Beta (levered)		1.07
Market risk premium		4.19%
Cost of equity		9.95%
Country risk premium		1.85%
Adj. Cost of equity		11.80%
Cost of debt		
Federal funds rate		5.33%
Default spread		7.71%
Tax rate		22.98%
Adj. Cost of debt		10.04%
Weight of debt		15.15%
Weight of equity		84.85%
Inflation adj.		0.81%
WACC		12.34%

Source : Refinitiv Eikon / FRBNY / IMF / Damodaran / RSM Analysis

The key parameters used to calculate the WACC for the HN scope are as follows:

- The risk-free rate corresponds to the average rate per year of US Treasury bonds with a maturity of 12 months;
- The sector beta is the median deleveraged 5-year beta calculated using a panel of comparable listed companies, presented below;
- The gearing applied to the calculation of the cost of capital corresponds to a market gearing level derived from a panel of comparable listed companies, presented below.

Beta peer sample	Pure player	Unlevered beta	Gearing
Pure players			
Arcadyan Technology Corp	✓	1.04	0.00%
Sercomm Corp	✓	0.77	7.22%
Skyworth Group Ltd		0.79	28.48%
Humax Co Ltd	✓	0.85	65.54%
Hitron	✓	1.19	0.00%
Kaon Group Co Ltd	✓	1.03	34.96%
Multi-sectoral companies			
Telefonaktiebolaget LM Ericsson		0.77	0.00%
Nokia Oyj		1.14	0.00%
Dinglong Culture Co Ltd		0.81	0.09%
Comba Telecom Systems Holdings Ltd		0.94	1.70%
Cisco Systems Inc		0.69	0.00%
Wistron NeWep Corp		0.78	14.37%
Harmonic Inc.		0.72	20.08%
ZTE		0.68	4.93%
Dasan Networks		1.14	20.57%
Pure players			
Median		0.94	17.85%
Mean		0.94	22.70%
Multi-sectoral companies			
Median		0.78	1.70%
Mean		0.85	6.86%

Source: Refinitiv Eikon / RSM Analysis

The panel of companies formed to estimate the deleveraged beta and market gearing includes (i) pure players, and (ii) for information purposes only, conglomerate OEMs in the telecom sector. The beta of 0.94 for HN corresponds to the median beta of the pure players, which is slightly higher than the betas observable for the equipment manufacturers, in line with the larger portfolio of activities for the latter.

- The market risk premium corresponds to an average of the one-year risk premium forecasts for the US market;
- The country risk premium corresponds to an average of the credit default spread weighted by HN's revenue in each economic zone in which it operates. The calculation of the country risk premium is presented below;

Country Risk Premium - Home Networks	FY22 Sales in m€	% of Total Sales	CRP
Sales-generating economic zones			
EMEA	392	25.26%	3.60%
Rest of Americas	181	11.68%	7.10%
Asia	72	4.64%	2.30%
Canada	239	15.43%	0.00%
USA	667	43.00%	0.00%
Weighted country risk premium	1,552	100.00%	1.85%

Source: Damodaran / Commscope FY22 Financial Results / RSM Analysis

- The cost of debt is calculated using the Federal Funds Rate, plus the default spread on bonds of B-rated companies (Moody's rating, representative of the outlook for intrinsic debt);
- The financing structure is derived from market debt levels, based on market gearing observed for the panel of comparable companies;
- The inflation adjustment is calculated based on the IMF's inflation forecast differential for 2028 (long-term) between the economic zones in which the Home Networks scope generates revenue. The calculation of the inflation adjustment is presented below.

Inflation Adj. - Home networks	FY22 Sales in m€	% of Total Sales	Spread Infl. 2028
Sales-generating economic zones			
EMEA	392	25.26%	1.23%
Rest of Americas	181	11.68%	4.20%
Asia	72	4.64%	0.55%
Canada	239	15.43%	(0.10%)
USA	667	43.00%	0.00%
Weighted inflation adj.	1,552	100.00%	0.81%

Source: IMF Inflation Forecasts / CommScope FY22 Financial Results / RSM Analysis

Based on a weighting by the financing structure in the market, the WACC of CommScope's Home Networks scope is thus 12.34%.

11.3.1.4 Sum-up of valuations obtained using a DCF method

The central DCF valuation of the HN scope is USD92m, and €86m after conversion at the exchange rate of 1.07.

The central valuation was sensitised using the basic parameters of the DCF valuation: the discount rate (WACC or expected rate of return on the target's sector by the providers of financing resources) and the perpetual growth rate.

The DCF valuation is based on a discount rate of 12.34% and a perpetual growth rate of 1%. In order to sensitise the valuation model, the valuations were estimated based on a hypothetical upward or downward variation of these parameters of ±0.5%.

This sensitisation approach results in a high end of USD103m and a low end of USD84m, or €96m and €78m after conversion:

Variable parameters for the valuation bracket	
WACC	12.34%
PGR	1.00%

Sensitivity analysis - Home Networks - WACC Inc./(Dec.) TCI Inc./(Dec.) in mUSD									
TCI Inc./(Dec.)	WACC Inc./(Dec.)								
	(2.0%)	(1.5%)	(1.0%)	(0.5%)	0.0%	0.5%	1.0%	1.5%	2.0%
(2.0%)	95	90	85	81	77	74	70	67	64
(1.5%)	100	94	89	85	81	77	73	70	67
(1.0%)	105	99	94	89	84	80	76	73	69
(0.5%)	111	104	98	93	88	84	80	76	72
0.0%	117	110	104	98	92	88	83	79	75
0.5%	124	116	109	103	97	92	87	83	78
1.0%	132	123	116	109	102	96	91	86	82
1.5%	141	131	123	115	108	101	96	91	86
2.0%	151	140	130	122	114	107	101	95	90

Source: RSM Analysis

Sensitivity analysis - Home Networks - WACC Inc./(Dec.) TCI Inc./(Dec.) in m€									
TCI Inc./(Dec.)	WACC Inc./(Dec.)								
	(2.0%)	(1.5%)	(1.0%)	(0.5%)	0.0%	0.5%	1.0%	1.5%	2.0%
(2.0%)	88	84	79	76	72	69	65	63	60
(1.5%)	93	88	83	79	75	71	68	65	62
(1.0%)	98	92	87	83	78	75	71	68	65
(0.5%)	103	97	92	87	82	78	74	71	67
0.0%	109	102	96	91	86	82	77	74	70
0.5%	116	108	102	96	90	85	81	77	73
1.0%	123	115	108	101	95	90	85	80	76
1.5%	132	122	114	107	100	95	89	84	80
2.0%	141	131	122	113	106	100	94	89	84

Source: RSM Analysis

11.3.2 Valuation of HN using the multiples of listed companies

11.3.2.1 Presentation of the methodology

As a cross-check, we used another valuation approach based on the multiples of listed companies.

For this, we used the EBITDA multiples observed on a panel of market comparables. By applying these multiples to a reference EBITDA for HN we obtained an enterprise value.

We also took into account items that impact the enterprise value, the receipt or disbursement of which are not included in EBITDA.

11.3.2.2 Method used to calculate the EBITDA multiples

To our knowledge, there are no listed companies that are perfectly comparable to the HN business, with strictly identical characteristics in terms of business breakdown and location.

The main listed players identified are located in Asia. While these players are direct competitors of HN in its international markets, their primary market is driven by a dynamic that is distinct from the international dynamic. Also, CommScope's HN division is one of the market leaders, unlike these smaller players with less reach.

For these reasons, this method was used strictly for corroborative purposes.

The EBITDA multiple was determined based on the multiples determined for each of the following companies (these companies are described in Section 6.4 of the Report and in [Appendix 4](#)): Arcadyan Technology Corp, Sercomm Corp and Hitron Technologies Inc.

The companies in the panel were selected because of the nature of their activity, i.e. they are strictly comparable to the HN activity.

We referred to the following to calculate the EBITDA multiples of each of the comparable companies:

- The enterprise value determined on the basis of the market capitalisation at the end of the financial year (FY22A for the low end of the range, FY23F for the high end of the range) (source: *Refinitiv*).
- Actual or projected EBITDA (average of analyst estimates) for each financial year (FY22A for the low end of the range, FY23F for the high end of the range) (source: *Refinitiv*).

The companies in the panel prepare their financial statements under IFRS but have not yet adopted IFRS 16. The multiples thus obtained were applied to HN's EBITDA, which already incorporates rental expenses.

The panel gave a median multiple of 5.9x FY22A EBITDA and 7.3x FY23F EBITDA:

Public Companies (in m€)			Sales revenue	EBITDA Margin %	Market cap	EV/EBITDA		
Company	Ticker	Country				FY22	FY23	
Arcadyan	3596.TW	Taiwan	1,507	6.22%	1,055	5.9x	8.0x	
Hitron	2419.TW	Taiwan	393	8.70%	269	7.1x	n.c.	
Sercomm	5388.TW	Taiwan	2,063	5.13%	908	5.9x	6.7x	
Pure players								
Mean							6.3x	7.3x
Median							5.9x	7.3x

Source: Refinitiv Eikon // Management Data // RSM Analysis

We used EBITDA for HN in FY22E of USD32m, consistent with the EBITDA levels projected in the BP.

11.3.2.3 Adjustments to HN's enterprise value

The valuation takes into account certain anticipated disbursements that are not valued in EBITDA, as summarised below:

- Provisions for retirement benefits, recognised in the carved-out HN balance sheet at 30 June 2023;
- Expenses in respect of future employee bonuses, estimated by discounting the projected disbursements presented in the business plan;
- Restructuring costs anticipated in the business plan that we consider to be equivalent to items of net debt as their disbursement is certain and one-off. The value of these restructuring costs corresponds to the projected disbursements that they will generate discounted to the Group's WACC.

All of these adjustments had an impact on the enterprise value of USD(128)m.

11.3.2.4 Sum-up of valuations obtained using the multiples of listed companies

The valuation obtained for HN using the multiples of listed companies ranges from USD65m to USD110m.

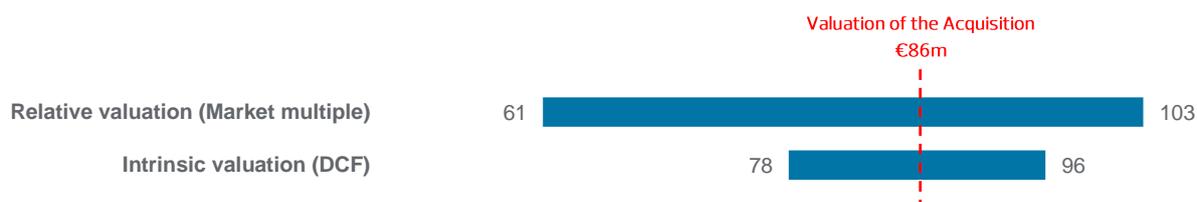
HN Valuation - Market multiple in mUSD	EBITDA FY22E	
	Min	Max
EBITDA	32	32
EV/EBITDA Multiple	5.9x	7.3x
Home Networks EV	193	238
(-) Retirement benefits provision	(3)	(3)
(-) Share-based incentives	(87)	(87)
(-) Anticipated restructuring costs	(37)	(37)
Adj. Home Networks EV	65	110

Source: HN Carve-Out / Management Valuation BP / Thomson Reuters / RSM Analysis

11.3.3 Conclusion on the valuation of HN

The central valuation assumption for HN is €86m (USD92m when converted at the exchange rate of 1.07) based on the DCF method, which corroborates the Acquisition Price of HN as part of the transaction.

The valuations obtained using the peer comparison method strictly for corroborative purposes range from €61m to €103m (USD65m to USD110m), slightly lower than the central valuation calculated by us.



Source: RSM analysis

12 VALUATION OF VANTIVA'S SHARES

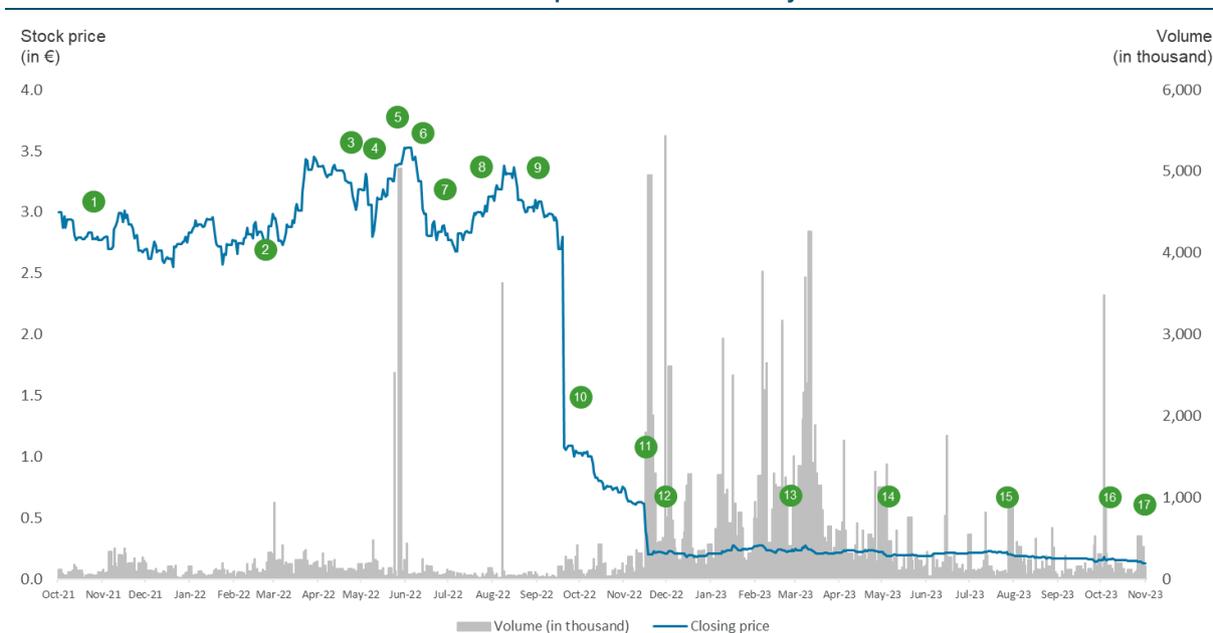
We used a multi-criteria valuation approach for Vantiva's shares, the characteristics and basic assumptions of which are set out below under the following headings:

- The basic valuation data;
- The valuation methods ruled out;
- The valuation methods used;
- Sum-up of the valuation of Vantiva's shares

12.1 ANALYSIS OF VANTIVA'S SHARE PRICE

12.1.1 Share price history

Vantiva's share price over the last two years



Source: Refinitiv Eikon

- 04/11/2021:** Publication of third-quarter 2021 results: revenue down 4.4% at constant rates due to the shortage of key components and adjusted EBITDA up 71.3% at constant rates.
- 24/02/2022:** Publication of 2021 annual results: revenue down 3.6% at current rates and adjusted EBITDA up 64.9% at current rates. Technicolor announced its intention to list its video production activity (TCS) and the expected outlook and envisaged refinancing plan.
- 05/05/2022:** Publication of first-quarter 2022 results: revenue relatively stable at constant rates and up 6.6% at current rates, adjusted EBITDA up 39.1% at constant rates and 28.6% at current rates. Technicolor confirmed that it expected to finalise the distribution of 65% of TCS in the third quarter of 2022.
- 06/05/2022:** Extraordinary General Meeting: proposal to issue convertible bonds for a nominal amount of €300 million approved during a general meeting.
- 31/05/2022:** Finalisation of the sale of the Brand Licensing business for a cash amount of €100 million.

- 6 **06/06/2022:** Information on the Group's refinancing process: Technicolor excluding TCS was considering (i) private debt in the form of asset-based lending of between €300m and €375m, (ii) a term loan of between €575m and €650m and (iii) a revolving credit facility of €40m. A downward revision of the outlook given on 24 February 2022 was also announced.
- 7 **14/06/2022:** Technicolor presented the TCS entity and Technicolor excluding TCS announced that it would become Vantiva. Confirmation of the revisions announced on 6 June 2022 with adjusted EBITDA from continuing operations of €140m in 2022 and above €140m in 2023.
- 8 **28/07/2022:** Publication of first-half 2022 results: revenue up 8.8% at constant rates and up 18.4% at current rates, adjusted EBITDA up 48.9% at current rates.
- 9 **06/09/2022:** Extraordinary General Meeting: announcement of the approval of the exceptional distribution of 65% of the capital of TCS in the form of a dividend in kind resulting in the admission of TCS shares on the regulated market of Euronext Paris and agreement to change Technicolor's name to Vantiva.
- 10 **27/09/2022:** Technicolor officially became Vantiva and the spin-off of TCS was executed.
- 11 **16/11/2022:** Announcement of the loss in value of the TCS share of (67.15)%, having fallen from €1.95 to €0.51.
- 12 **01/12/2022:** Publication of third-quarter 2022 results: revenue up 27.1% at constant rates and up 45% at current rates, adjusted EBITDA up 25.5% at constant rates and 38.9% at current rates.
- 13 **09/03/2023:** Publication of full-year 2022 results: revenue up 11.4% at constant rates and up 23.4% at current rates, adjusted EBITDA up 3.7% at constant rates and up 14.3% at current rates.
- 14 **27/04/2023:** Publication of first-quarter 2023 results: revenue down 0.6% at constant rates and up 2.5% at current rates, contribution by CH up 8.7% at constant rates and 12.1% at current rates and that of SCS down 25.4% at constant rates and 23.3% at current rates. Vantiva confirmed its guidance for 2023.
- 15 **28/07/2023:** Publication of first-half 2023 results: revenue down 13.3% at constant rates and down 12.9% at current rates, adjusted EBITDA down 33.3% at constant rates and down 32.4% at current rates.
- 16 **03/10/2023:** Announcement of an agreement with CommScope to acquire HN, its home networks business, for a 25% stake in Vantiva.
- 17 **26/10/2023:** Publication of third-quarter 2023 results: revenue down 34% at constant rates and down 38% at current rates, contribution by CH down 37% at constant rates and 42% at current rates and that of SCS down 22% at constant rates and 26% at current rates.

Until the end of August 2022, Vantiva's share price fluctuated considerably. It stood at €2.87 at the close of market on 3 January 2022:

- On 24 February 2022, Technicolor announced it intended to separately list its TCS business on Euronext Paris and a €300m refinancing plan for its existing debt. The share price fell to €2.68.
- The price rose significantly at the end of May, reaching €5.33 on 31 May 2022 following the completion of the sale of the Trademark Licensing activity.
- The following month, Technicolor defined its refinancing process, introduced the new TCS entity and announced that it would change its name to Vantiva. The share price decreased significantly and steadily to €2.68 on 7 July 2022.
- The share price rose to €3.36 on 16 August 2022, following the publication of the first-half 2022 results.

Between September 2022 and the end of December 2022, Vantiva's share price fell significantly:

- Initially to €1.06 on 22 September 2022 following the announcement by Vantiva in early September of the exceptional distribution of 65% of TCS's share capital resulting in the admission of TCS shares on Euronext Paris.
- The share price then fell to €0.62 on 13 November 2022 with Technicolor's name changed to Vantiva on 27 September.
- It reached further lows following this, at €0.39 on 16 November 2022 (representing a fall of approximately (36)%), then €0.20 on 18 November following the announcement that TCS had lost 67% of its value on 16 November 2022.

The Vantiva share price did not subsequently change significantly until the third quarter of 2023, when it fell slightly to €0.15 on 2 October 2023 following the publication of the first-half 2023 results.

Finally, on 3 October 2023, Vantiva announced it intended to acquire CommScope's Home Networks (HN) business in return for a 25% stake in Vantiva. Following this announcement, we note a temporary rise in the share price to €0.18, before falling back to €0.13.

Volume-weighted average prices	in €/share	Volume traded (in thousand)		% of capital	% of free float
		Average	Cumulated	Volume traded	Volume traded
Spot (11/01/2023)	0.13	158	158	0.04%	0.05%
VWAP 1 month	0.17	343	7,879	0.10%	0.11%
VWAP 2 month	0.16	252	11,080	0.07%	0.08%
VWAP 3 month	0.17	240	15,855	0.07%	0.08%
VWAP 6 month	0.19	266	34,552	0.07%	0.09%
VWAP 12 month	0.23	598	152,980	0.19%	0.20%
VWAP 24 month	0.80	380	195,498	0.14%	0.14%
VWAP since 09/26/22	0.24	556	156,685	0.18%	0.18%
VWAP since 10/03/23	0.17	352	7,747	0.10%	0.12%

Source: Refinitiv Eikon

Between 1 May and 1 November 2023, i.e. over the last six months, the volume of Vantiva shares traded was 34,552 thousand, i.e. an average of approximately 266 thousand shares per trading day. Over this period, the volume traded represented only 0.07% of the capital and 0.09% of the free float.

Between 26 September 2022 and 1 November 2023, i.e. since the announcement of the spin-off of TCS, the volume of Vantiva shares exchanged was 156,685 thousand, i.e. approximately 556 thousand shares per trading day. Over this period, the volume traded was not significant, representing only 0.18% of the capital and 0.18% of the free float. This period was marked by several events:

- The announcement on 16 November 2022 of a 67% loss in value of TCS, which generated a peak of 4,957 thousand shares traded on 18 November 2022;
- The publication of TCS's third-quarter 2022 results on 30 November 2022, which generated a peak of 5,436 thousand shares traded on the same day;
- The publication of Vantiva's third-quarter 2022 results on 1 December 2022, which generated a peak of 2,612 thousand shares traded on 2 December 2022, and the publication of the full-year 2022 results on 9 March 2023, which generated a peak of 4,263 thousand shares traded on 10 March 2023;
- The announcement by Vantiva that it was acquiring CommScope's home networks business on 3 October 2023, which generated a peak of 3,476 thousand shares traded.

Between 3 October 2023 and 1 November 2023, i.e. since the announcement of Vantiva's acquisition of HN, the volume of Vantiva shares traded was 7,747 thousand, i.e. an average of approximately 352 thousand shares per trading day. Over this period, the volume traded was not significant, representing only 0.10% of the capital and 0.12% of the free float. This period was mainly marked by the announcement of the Acquisition, which generated a peak on 3 October of 3,476 thousand shares traded and a second peak on 4 October of 1,071 thousand shares traded.

Over this period, the share price fell from €0.18 to €0.13, i.e. by approximately (28)%.

12.1.2 Target price given by analysts

The Vantiva share is regularly covered by two analysts.

Bryan Garnier & Co published a target price of €0.35 and a buy recommendation in its report dated 4 October 2023 (same target price of €0.35 published on 28 July 2023). The report was positive on the potential synergies that could be generated by Vantiva acquiring CommScope's Home Networks division. In particular, it identified economies of scale and gains in market share in the telecoms equipment sector.

Kepler Cheuvreux published a target price of €0.20 and a neutral recommendation in its report of 27 October 2023 (same target price of €0.20 published on 8 July 2023). The analyst said he was sceptical about Vantiva's ability to achieve the guidance set for 2023 due to the results of the Connected Home (CH) division. However, he believed that the acquisition of HN would benefit the company in the medium term.

12.2 BASIC VALUATION DATA

Accounting framework

Vantiva prepares its consolidated financial statements in accordance with international financial reporting standards (IFRS), which apply to listed companies.

Vantiva's consolidated and annual financial statements both close on 31 December of each calendar year. The most recent consolidated financial statements certified by the statutory auditors concern the financial year ended 31 December 2022.

Vantiva also publishes an interim statement as at 30 June of each calendar year and reports quarterly on its key financial performance.

Valuation date

Vantiva's shares are valued as at 31 December 2023.

The consolidated financial statements (and statements by division of the last financial year ending 31 December 2022) and the interim statement of Vantiva as at 30 June 2023 were used as a reference for the historical financial data used to value Vantiva's share.

Vantiva's net cash (debt) position was closed at 30 June 2023 and corrected for interim operating inflows and outflows at 31 December 2023.

The calculation of discount rates is dated 4 October 2023.

Financial forecasts

The financial forecasts used are those provided to us by Vantiva.

To carry out the assignment entrusted to us, we worked on the basis of standalone financial forecasts, i.e. not taking into account the effects of the integration of the HN scope into the Group, or any share of the synergies that the Group could benefit from as a result of this integration.

Transitional items between enterprise value and share value

To get from the enterprise value to the value of the Vantiva share, we used (i) a net financial debt position at 30 June 2023 and (ii) the recognition of the value of certain fixed assets not valued using the valuation methods already used.

The net financial debt position differs depending on the valuation method used due to disbursements taken into account in the business plan but excluded from normative EBITDA in the comparison approach. These disbursements were taken into account via the net financial debt position specific to the method.

Details of the restatements by valuation method are provided under the description of each valuation approach.

12.3 VALUATION METHODS RULED OUT

We ruled out the following methods for valuing the Vantiva share:

Net asset value (NAV) method

This method involves estimating the value of the shares based on Vantiva's equity, adjusted for the individual revaluation of identifiable assets and liabilities on the balance sheet that carry unrealised capital gains or losses.

This method is particularly suitable for valuing companies that hold assets or liabilities with their own recognised market values or that can be valued independently (such as real estate companies that hold real estate, or holding companies that hold interests in various activities and various assets on the balance sheet).

This method was not used as all of the assets held are used for the Group's operations and their value is directly integrated into the valuation methods that we have selected, and presented below.

Reference to net book value

This method involves estimating the value of the shares based on Vantiva's equity.

The net book value is not a usual valuation criterion, in particular because it does not take into account future earnings or losses.

Dividend discount model (DDM)

This method involves estimating the value of the shares based on the discounted value of future dividend payments by the Group.

It examines the dividend pay-out policy of the Group.

This method was not used for the following reasons:

- The Group's historical dividend distribution policy does not make it possible to project a standardised distribution model;
- The method results in a strictly utilitarian value of the share from the shareholder's point of view, calculated only on the basis of the dividends that can be received by the shareholder without taking into account the wealth created and not distributed.

Peer comparison method

This method involves estimating the value of the shares based on the valuation multiples observed for comparable companies that were recently acquired and for which the financial data of the transaction have been published.

This method was not used due to (i) the lack of information provided on the financial terms of the transactions identified and (ii) the context in which they occurred.

We identified the following three transactions on targets deemed to be pure players comparable to the CH activity:

Sagemcom – July 2023: transfer of Sagemcom Group interests held by Charterhouse Capital Partners LLP to a new continuation fund through a new pool of limited partners in July 2023.

Sagemcom's offers and markets are perfectly comparable to Vantiva's CH activity. It is one of the pure players presented in this Report and is ranked the global leader.

According to information published in the press, this transaction would have been carried out on a basis of around €1 billion²¹.

We have excluded this reference for the following reasons:

- The price provided is approximate;
- The financial terms of this transaction (in particular the net financial debt) were not disclosed, so it is not possible to obtain a reliable estimate of the enterprise value;
- Sagemcom does not publish its financial statements, so it is not possible to obtain a reliable estimate of the implied valuation multiples.

Sagemcom – April 2019: reorganisation of SagemCom and entry of co-investors.

According to the information we obtained²², this transaction concerned a minority share of the capital (28.1%), based on a 100% valuation of SagemCom of around €700m and an estimated enterprise value of €823m. The estimated implied multiples on this transaction would be 4.9x 2018 group EBITDA and 8x 2019 group EBITDA.

We excluded this reference for the following reasons:

- The financial terms of this transaction were not fully confirmed by Epsilon Research;
- The implied EBITDA multiples calculated are at variance;
- In 2019, SagemCom was growing strongly on foot of its success in the fibre market in Europe and other global economic zones, and the financial performances and forecasts used to negotiate the price of this transaction are potentially not comparable to those of Vantiva today.

Cisco Connected Device – 2015: acquisition of Cisco Connected Device by Vantiva.

This activity is now fully integrated into Vantiva's Connected Home (CH) division.

According to information provided by Vantiva's management, the Cisco Connected Device division was acquired by Vantiva based on an enterprise value of USD522m and an implied multiple of between 7x and 9x 2016 or 2017 EBITDA of that scope.

We excluded this reference as this transaction took place while Vantiva was seeking to acquire market share in North America and Asia Pacific to boost the international expansion of the CH division. The price paid by Vantiva was therefore in a particular context and was likely to incorporate significant synergies and return expectations in

²¹ Source: Epsilon Research

²² Source: Epsilon Research

these markets, which means the resulting multiples would potentially be too high if applied in our case on a standalone basis.

We have not identified any other relevant transaction involving pure players in the home networks business.

Stock valuation method

Reference to the stock valuation involves estimating the value of a company based on the share prices observable over defined periods.

Vantiva's shares are admitted for trading on compartment B of Euronext Paris. We presented our analysis of changes in the share price above.

The volumes traded daily are negligible given the free float and the number of securities outstanding, thus limiting the relevance of this method.

In addition, the target prices published by the analysts covering the stock are derived from intrinsic approaches (DCF) applied on the basis of financial forecasts that differ from those communicated to us by Vantiva as part of our work. The latter include macroeconomic data as well as the Group's development ambitions, which are not necessarily reflected in the forecasts used by the analysts.

12.4 VALUATION METHODS USED

We used the following methods to estimate the value of the Vantiva share:

- Primarily, the discounted cash flow (DCF) method applied to the Group scope;
- For cross-checking purposes, we used an EBITDA multiple comparison, derived from a panel of comparable listed companies.

The parameters specific to each of these methods are presented in specific sections below.

12.4.1 Valuation of Vantiva shares using the DCF method

12.4.1.1 Presentation of the methodology

This method involves calculating the intrinsic value of a company by discounting the expected financial flows as per its business plan at a rate that reflects the profitability requirement of the market.

In valuing a going concern for an indefinite period, the calculation of the terminal value, calculated beyond the explicit period of the forecast plan, is based on estimated normative free cash flow and a long-term growth rate (perpetual growth rate).

Our work was based on (i) Vantiva's net cash (debt) position at 30 June 2023, adjusted for the free cash flow forecasts provided by Management for the second half of 2023 and (ii) the free cash flow forecasts calculated from FY24F based on the business plan.

12.4.1.2 Presentation of the key assumptions of Vantiva's provisional business plan

The standalone business plan provided to us by Vantiva was prepared by management for the period FY23F-FY28F, including the key parameters and assumptions presented below.

Management parameters

Revenue is projected to grow at an average annual rate of 2.9% between FY23F and FY28F. This is due to (i) a stabilisation of the revenue of the CH division and (ii) the development and diversification ambitions already undertaken by management in the SCS division (particularly in the vinyl industry; non-media customers on supply-chain offers; microfluidic devices for medical diagnostics, and the IoT).

The forecasts of stable revenue for CH between FY23E and subsequent years are consistent with the market forecasts for the EMEA and North America economic zones. We understand that management remains cautious in its forecasts for the development of its market share in APAC due to intense competition from Asian manufacturers.

Furthermore, as specified earlier in this Report, the FY23E budget of Vantiva's management takes into account a fall in the revenue of the CH activity resulting from inventories accumulated on the market since 2020, implying a fall in demand from operators. This decline was confirmed by the initial results presented for the first half of 2023. In projecting stability in the business plan, management is therefore assuming that the 2023 floor level of activity will be maintained in the long term.

The projected normative EBITDA margin from FY24A, all activities combined, is slightly higher than Vantiva's EBITDA margin in FY22A. This margin (as a percentage of revenue) increases at an average annual growth rate of 8.2%, mainly due to the development of the SCS business.

Vantiva's investment plan (CAPEX) provides for stable investments, representing on average (3)% of revenue.

The business plan also takes into account:

- an internal restructuring plan, not related to the transaction, representing approximately (1)% of annual revenue over the first two years of the explicit period of the business plan (FY23-FY24) then (0.3)% over the following three years (FY25F – FY27F);
- two restructuring plans specific to two operating sites representing approximately (1.1)% of annual revenue;
- Retirement benefit disbursements representing approximately (0.9)% of annual revenue over the explicit horizon of the BP;
- Restated leases in accordance with IFRS16 are considered as disbursements from free cash flows and represent approximately (1)% of annual revenue over the explicit period of the BP.

RSM parameters

The projected cash flows take into account:

- A change in WCR estimated on average at (2)% of annual revenue over the explicit period of the business plan.
- Corporation tax calculated on the basis of EBIT taxed at the French corporation tax rate in 2023 of 25.83% (after taking into account the additional contribution).
- An extrapolation by us of the explicit period of the business plan prepared by Vantiva's management over four years in order to align Vantiva's forecast D&A with the normative CAPEX forecasts. The extrapolation period is based on a perpetual growth rate of 1% and a fixed EBITDA margin equal to that projected for the last year of the explicit period of the business plan (FY28). The level of WCR over the extrapolated period of the BP is stabilised at (2.42)% of total annual revenue. Non-current cash flow items increase at a perpetual growth rate of 1% over the extrapolation period.
- A terminal value that was estimated by applying the Gordon-Shapiro formula. The normative flow was determined based on the following assumptions and parameters:
 - o A perpetual growth rate of 1%, symptomatic of the loss of momentum and saturation of the sector, but nevertheless incorporating the long-term impact of inflation rates on supply costs and selling

prices; the perpetual growth rate is applied to FY28F revenue (at the end of the explicit period of the business plan);

- A normative EBITDA margin equal to that projected over the horizon of the explicit period of the business plan;
- The level of CAPEX and D&A is equal to the FY32F level impacted by the perpetual growth rate;
- Retirement benefits are calculated based on the same assumptions as those used for the explicit period of the business plan;
- The change in WCR is virtually zero, impacted only by the perpetual growth rate.

12.4.1.3 Presentation of the discount rate

The discount rate used to value the Vantiva share was calculated at 13.25%. It corresponds to the estimated discount rate for each division (CH and SCS), weighted by the weight of their projected EBITDA in relation to the Group's total projected EBITDA (over the explicit horizon of the business plan prepared by management).

The discount rate for each division corresponds to the weighted average cost of capital (WACC), calculated taking into account economic conditions in France and adjusted for (i) a country risk premium, calculated based on the risk premiums of the economic zones in which Vantiva operates, weighted by the weight of revenue in each zone, and (ii) the inflation differential in the economic zones in which it operates.

Details of the WACC calculation for Vantiva are presented below.

Discount Rate - WACC - HN scope	CH 4-oct.-23	SCS 4-oct.-23
Cost of equity		
Risk-free rate	3.79%	3.79%
Beta (unlevered)	0.94	0.68
Market gearing	17.85%	35.82%
Beta (levered)	1.07	0.86
Market risk premium	7.33%	7.33%
Cost of equity	11.60%	10.07%
Specific risk premium	0.00%	5.00%
Country risk premium	0.54%	0.54%
Adj. Cost of equity	12.15%	15.62%
Cost of debt		
EURIBOR - 12m	4.06%	4.06%
Default spread	7.71%	7.71%
Tax rate	25.83%	25.83%
Adj. Cost of debt	8.73%	8.73%
Weight of debt	15.15%	26.37%
Weight of equity	84.85%	73.63%
Inflation adj.	0.99%	0.99%
WACC	12.62%	14.79%
Adjustment by the weight of EBITDA	70.70%	29.30%
Vantiva WACC RSM	13.25%	

Source : Refinitiv Eikon / Damodaran / IMF / Management data / RSM Analysis

The key parameters used to calculate the WACC for Vantiva are as follows:

- The risk-free rate corresponds to the average rate per year of a French OAT (government bond) with a maturity of 12 months;
- The sector beta is the median deleveraged 5-year beta calculated using a panel of comparable listed companies (see below and [Appendix 5](#) and [Appendix 6](#)). The beta of the CH division was estimated from the median betas observed on the same panel as that used for HN, comprising listed companies operating in their market. The beta of the SCS division was estimated based on the median beta observed on companies operating in markets exposed to volatilities considered similar to those to which SCS is exposed, i.e. audiovisual production companies, supply chain management, logistics and packaging;
- The gearing applied to the calculation of the cost of capital corresponds to a market gearing level derived from a panel of comparable companies (see below and [Appendix 5](#) and [Appendix 6](#));

Beta peer sample - SCS	Unlevered beta	Gearing
Entertainment		
Warner Bros Discovery Inc	0.34	135.68%
Walt Disney Co	0.79	42.79%
Universal Music Group NV	0.27	n.a
Ubisoft Entertainment SA	0.30	33.55%
Electronic Arts Inc	0.47	0.00%
Nintendo Co Ltd	0.71	0.00%
Paramount Global	0.56	136.83%
Supply Chain/Logistics		
Oesterreichische Post AG	0.32	11.36%
DSV A/S	0.72	38.40%
Radiant Logistics Inc	0.58	19.34%
CH Robinson Worldwide Inc	0.35	75.10%
Expeditors International of Washington	0.73	0.00%
Forward Air Corp	0.80	10.55%
Hub Group Inc	0.67	14.94%
ID Logistics SAS	0.27	186.63%
International Distributions Services PLC	0.96	14.04%
DX (Group) PLC	0.29	140.25%
Manufacturing/Packaging		
Smurfit Kappa Group PLC	0.58	87.08%
DS Smith PLC	0.78	58.82%
Mondi PLC	0.84	45.46%
UPM-Kymmene Oyj	0.89	5.76%
Stora Enso Oyj	0.92	30.68%
Svenska Cellulosa SCA AB	0.69	13.58%
Sappi Ltd	0.76	85.39%
Huhtamaki Oyj	0.58	77.95%
General beta & gearing		
Median	0.68	35.82%
Mean	0.61	53.26%

Source: Refinitiv Eikon / RSM Analysis

Beta peer sample	Pure player	Unlevered beta	Gearing
Pure players			
Arcadyan Technology Corp	✓	1.04	0.00%
Sercomm Corp	✓	0.77	7.22%
Skyworth Group Ltd		0.79	28.48%
Humax Co Ltd	✓	0.85	65.54%
Hitron	✓	1.19	0.00%
Kaon Group Co Ltd	✓	1.03	34.96%
Multi-sectoral companies			
Telefonaktiebolaget LM Ericsson		0.77	0.00%
Nokia Oyj		1.14	0.00%
Dinglong Culture Co Ltd		0.81	0.09%
Comba Telecom Systems Holdings Ltd		0.94	1.70%
Cisco Systems Inc		0.69	0.00%
Wistron NeWep Corp		0.78	14.37%
Harmonic Inc.		0.72	20.08%
ZTE		0.68	4.93%
Dasan Networks		1.14	20.57%
Pure players			
Median		0.94	17.85%
Mean		0.94	22.70%
Multi-sectoral companies			
Median		0.78	1.70%
Mean		0.85	6.86%

Source: Refinitiv Eikon / RSM Analysis

- The market risk premium corresponds to an average of the one-year risk premium forecasts for the French market;
- The country risk premium corresponds to an average of the credit default spread weighted by the revenue in each economic zone in which Vantiva operates. The calculation of the country risk premium is presented below;

Country Risk Premium - Vantiva	FY22 Sales in m€	% of Total Sales	CRP
Sales-generating economic zones			
Europe	117	4.21%	3.40%
Rest of Americas	419	15.09%	4.50%
Asia	243	8.75%	1.50%
France	456	16.43%	0.00%
UK	18	0.65%	0.20%
USA	1,523	54.86%	(0.75%)
Weighted country risk premium	2,776	100.00%	0.54%

Source: Damodaran / Vantiva FY22 Financial Results / RSM Analysis

- The cost of capital of the SCS division was adjusted for a specific risk premium of 5% due to management's forecasts of diversification of this activity (renewal of the offering to cover the loss of momentum on the traditional activity). For simplification purposes and in the absence of any redefinition of Vantiva's divisions to date, the IoT business under development has been integrated into this division;
- The cost of debt is calculated based on the 12-month EURIBOR, plus the default spread on 5-year bonds of B-rated companies (Moody's rating, representative of the outlook for intrinsic debt);
- The financing structure is derived from market debt levels, based on market gearing observed for the panel of comparable companies;
- The inflation adjustment is calculated based on the IMF's inflation forecast differential for 2028 (long-term) between the economic zones in which Vantiva generates revenue. The calculation of the inflation adjustment is presented below.

Inflation Adj. - Vantiva	FY22 Sales in m€	% of Total Sales	Spread Infl. 2028
Sales-generating economic zones			
Europe	117	4.21%	2.09%
Rest of Americas	419	15.09%	3.52%
Asia	243	8.75%	1.05%
France	456	16.43%	0.00%
UK	18	0.65%	0.40%
USA	1,523	54.86%	0.50%
Weighted inflation adj.	2,776	100.00%	0.99%

Source: IMF Inflation Forecasts / Vantiva FY22 Financial Results / RSM Analysis

Based on all of this, the WACC for CH is calculated at 12.62% and the WACC for SCS is calculated at 14.79%.

Based on the weighting of these WACCs by the forecast EBITDA contributions of each division to the forecast Group EBITDA, the WACC for Vantiva stands at 13.25%.

12.4.1.4 Transitional items between enterprise value and equity value

To get from the enterprise value to the value of the Vantiva share, we used (i) a net financial debt position at 30 June 2023 and (ii) the recognition of the value of certain fixed assets not valued using the valuation methods already used.

The financial debt position used is presented below, as at 30 June 2023:

Adjusted net financial debt - Vantiva - DCF	
in m€	jun-23
Cash and equivalents	39
Borrowings	(407)
Debt on fixed asset purch.	-
Retirement benefit provisions	(217)
Lease liabilities	(71)
Accounting net debt	(655)
(+) FCF FY23 Year-end cash/(debt) adjustment	26
(+) Cash pledged as collateral	57
(-) Provisions for risks and liabilities (excluding 4m€ earn-out)	(58)
(+) Retirement benefit provisions	217
(+) Lease liabilities (IFRS 16)	71
(+) Cash-like items	25
Adjustment on net financial debt	339
Adjusted net debt RSM	(317)

Source: Vantiva annual reports / Financial Statements at June 2023 / RSM Analysis

Net financial debt is included in the amount of €(317)m, comprising the book value of net debt at 30 June 2023 of €(655)m adjusted for the following items:

- Correction of interim operating inflows and outflows at 31 December 2023 (FCF);
- Addition of cash pledged in the amount of €57m, recognised as fixed assets in the Group's consolidated balance sheet at 30 June 2023;
- Inclusion of provisions for risks and charges in the amount of €(58)m, which are considered certain according to our discussions with Vantiva's management, with the exception of a provision for an earn-out of €4 million that is not intended to be paid;
- Exclusion of provisions for retirement and similar benefits of €(217)m, and IFRS16 lease liabilities of €(71)m insofar as the disbursements related to these liabilities are directly taken into account in the projected cash flows.

In our work, we did not take into account any future tax savings that the Group could benefit from through accumulated tax loss carryforwards, considering that given the results, the allocation of these losses in the areas of taxation is not certain. At 31 December 2022, these tax loss carryforwards amounted to €2.7bn and are fully amortised in the Group's financial statements.

We also took the following items into account in obtaining the value of Vantiva's shares:

- Value of non-consolidated investments of €21m (based on their value at 31 December 2022 as published in the Group's registration document);
- Value of the stake held by Vantiva in TCS (7.5%), the value of which was estimated at €3.1m based on the filing on 18 October 2023 of the proposed takeover bid on a basis of €1.63 per share.

12.4.1.5 Sum-up of the valuations obtained using a DCF method

The enterprise value estimated using the DCF method is €552m. After adjustments to net debt, allocation of the fair value of non-consolidated investments and TCS shares, the value of Vantiva's shares is €259m.

The central valuation was sensitised using the basic parameters of the DCF valuation: the discount rate (WACC) and the perpetual growth rate.

The DCF valuation is based on a discount rate of 13.25% and a perpetual growth rate of 1%. In order to sensitise the valuation model, the valuations were estimated based on a hypothetical upward or downward variation of these parameters of $\pm 0.5\%$.

This sensitisation results in a value range of between €222m and €303m:

Variable parameters for the valuation bracket											
WACC		13.25%									
TCI		1.00%									
Sensitivity analysis - Vantiva - WACC Inc./(Dec.) TCI Inc./(Dec.) in mUSD											
TCI Inc./(Dec.)	WACC Inc./(Dec.)										
	(2.0%)	(1.5%)	(1.0%)	(0.5%)	0.0%	0.5%	1.0%	1.5%	2.0%		
(2.0%)	306	279	254	231	209	189	170	152	135		
(1.5%)	322	294	267	243	220	199	179	161	143		
(1.0%)	340	310	282	256	232	210	189	170	152		
(0.5%)	360	328	298	270	245	222	200	179	160		
0.0%	382	347	315	286	259	234	211	190	170		
0.5%	406	368	334	303	274	248	224	201	180		
1.0%	432	392	355	322	291	263	237	213	191		
1.5%	462	418	378	342	309	279	252	227	203		
2.0%	496	447	404	365	329	297	268	241	216		

Source: RSM Analysis

12.4.2 Valuation of Vantiva shares based on the multiples of listed companies

12.4.2.1 Presentation of the methodology

As a cross-check, we used another valuation approach based on the multiples of listed companies.

For this, we used the EBITDA multiples observed on a panel of market comparables. By applying these multiples to a reference EBITDA for Vantiva we obtained an enterprise value.

This enterprise value was then restated for the projected net financial debt position at the end of 2023 in order to arrive at the value of the Vantiva shares.

Our work focused in particular on (i) Vantiva's net cash (debt) position at 30 June 2023, adjusted for the free cash flow forecasts provided by Management for the second half of 2023 and (ii) the Group EBITDA levels for FY22A, FY23F and FY24F.

12.4.2.2 Method used to calculate the EBITDA multiples

To our knowledge, there are no listed companies that are perfectly comparable to Vantiva, with strictly identical characteristics in terms of business breakdown and location. In particular:

- the specific positioning of the Group's CH division as systematically ranked among the top five manufacturers by economic zone clearly separates it from many of its competitors;
- the main listed players identified are located in Asia. While these players are direct competitors of Vantiva in its international markets, their primary market is driven by a dynamic that is distinct from the international dynamic;
- there is no company that is purely comparable to the Group's SCS activity.

For these reasons, this method was used strictly for corroborative purposes.

The EBITDA multiple was determined based on the multiples determined for each of the following companies (these companies are described in Section 6 of the Report and in [Appendix 4](#)): Arcadyan Technology Corp, Sercomm Corp and Hitron Technologies Inc.

The companies in the panel were selected because of the nature of their activity, i.e. they are strictly comparable to the CH activity.

We referred to the following to calculate the EBITDA multiples of each of the comparable companies:

- The enterprise value determined on the basis of the market capitalisation at the end of the financial year (FY22A for the low end of the range, FY23F for the high end of the range) (source: *Refinitiv*).
- Actual or projected EBITDA (average of analyst estimates) for each financial year (FY22A for the low end of the range, FY23F for the high end of the range) (source: *Refinitiv*).

The companies in the panel prepare their financial statements under IFRS but have not yet adopted IFRS 16. We took this element into account by applying the multiples thus obtained to a reference EBITDA for Vantiva restated for the impacts of IFRS16.

The panel gave rise to a median multiple of 5.9x FY22A EBITDA and 7.3x FY23F EBITDA:

Public Companies (in m€)			Sales revenue	EBITDA Margin %	Market cap	EV/EBITDA	
Company	Ticker	Country				FY22	FY23
Arcadyan	3596.TW	Taiwan	1,507	6.22%	1,055	5.9x	8.0x
Hitron	2419.TW	Taiwan	393	8.70%	269	7.1x	n.c.
Sercomm	5388.TW	Taiwan	2,063	5.13%	908	5.9x	6.7x
Pure players							
Mean						6.3x	7.3x
Median						5.9x	7.3x

Source: Refinitiv Eikon // Management Data // RSM Analysis

We used an average EBITDA for Vantiva of €130m calculated between FY22A and FY24F.

12.4.2.3 Transitional items between enterprise value and equity value

To get from the enterprise value to the value of the Vantiva share, we used (i) a net financial debt position at 30 June 2023 and (ii) the recognition of the value of certain fixed assets not valued using the valuation methods already used.

The net financial debt position used is presented below, as at 30 June 2023:

Adjusted net financial debt - Vantiva - Multiples	
in m€	jun-23
Cash and equivalents	39
Borrowings	(407)
Debt on fixed asset purch.	-
Retirement benefit provisions	(217)
Lease liabilities	(71)
Accounting net debt	(655)
(+) FCF FY23 Year-end cash/(debt) adjustment	26
(+) Cash pledged as collateral	57
(-) Provisions for risks and liabilities (excluding 4m€ earn-out)	(58)
(-) Anticipated restructuring costs	(78)
(+) Lease liabilities (IFRS 16)	71
(+) Cash-like items	25
Adjustment on net financial debt	44
Adjusted net debt RSM	(611)

Source: Vantiva annual reports / Financial Statements at June 2023 / RSM Analysis

Net financial debt is included in the amount of €(611)m, comprising the book value of net debt at 30 June 2023 of €(655)m adjusted for the following items:

- Addition of cash pledged in the amount of €57m, recognised as fixed assets in the Group's consolidated balance sheet at 30 June 2023;

-
- Inclusion of provisions for risks and charges in the amount of €(58)m, which are considered certain according to our discussions with Vantiva's management, with the exception of a provision for an earn-out of €4 million that is not intended to be paid;
 - Inclusion of restructuring costs anticipated by Vantiva's management in the business plan that we consider to be equivalent to items of net debt as their disbursement is certain and one-off. The value of these restructuring costs corresponds to the projected disbursements that they will generate discounted to the Group's WACC.
 - Exclusion of IFRS16 lease liabilities, which amount to €(71)m insofar as expenses related to existing contracts were integrated into the EBITDA used as a reference.

In our work, we did not take into account any future tax savings that the Group could benefit from through accumulated tax loss carryforwards, considering that given the results, the allocation of these losses in the areas of taxation is not certain. At 31 December 2022, these tax loss carryforwards amounted to €2.7bn and are fully amortised in the Group's financial statements.

Compared with the net financial debt position used in the DCF valuation, the difference stems mainly from (i) taking into account provisions for retirement and similar benefits (the disbursements of which are directly integrated in the DCF method) and (ii) taking into account restructuring expenses (the disbursements of which are also directly integrated in the DCF method).

We also took the following items into account in obtaining the value of Vantiva's shares:

- Value of non-consolidated investments of €21m (based on their value at 31 December 2022 as published in the Group's registration document);
- Value of the stake held by Vantiva in Technicolor Creative Studios (TCS) (7.5%), which was estimated at €3.1m based on the filing on 18 October 2023 of the proposed takeover bid on the basis of €1.63 per share.

12.4.2.4 Sum-up of the valuations obtained using the multiples of listed companies

The value of Vantiva's shares using the multiples of listed companies comes out at between €183m and €362m.

Vantiva valuation - Market multiples in m€	Aver. EBITDA FY22A-FY24F	
	Min	Max
EBITDA (incl. Charges IFRS 16)	130	130
EV/EBITDA Multiple	5.9x	7.3x
Vantiva EV	770	949
Net cash/(debt) - adj. FY23	(611)	(611)
(+) minority subsidiaries	21	21
(+) TCS shares	3	3
Equity value	183	362

Source: Annual Report 2022 / Management Valuation BP / Thomson Reuters / RSM Analysis

12.4.3 Conclusion on the valuation of Vantiva's shares

The central valuation of the shares is €259m based on the DCF method. The valuations obtained using the peer comparison method, strictly for corroborative purposes, are between €183m and €362m, corroborating the central valuation calculated by us.



13 COMBINATION OF THE RELATIVE VALUATIONS OF HN AND VANTIVA

Based on the relative standalone valuations of Home Networks and Vantiva's shares presented in the Report, specifically:

- €86m for the Home Networks division, corroborating the Acquisition price of €88m indicated by Vantiva and CommScope in the contractual arrangements for the Acquisition; and
- €259m as the central assumption for Vantiva's shares based on the relevant methods used as part of a multi-criteria valuation.

This gives a combined valuation of the new merged entity comprising Vantiva and Home Networks of €345m, where the valuation of the Home Networks division represents 24.9% as the central assumption.

We present below the sensitivity of this combined valuation according to the minimum and maximum valuations calculated using the valuation methods applied for HN and Vantiva:

Summary of valuation in m€	Standalone	
	Min	Max
Vantiva SA		
Intrinsic valuation (DCF)	222	303
Relative valuation (Market multiple)	183	362
Quoted share price [exclu]	74	74
Home Network		
Intrinsic valuation (DCF)	78	96
Relative valuation (Market multiple)	61	103
Parité induite		
Intrinsic valuation (DCF)	26.01%	24.03%

Source: RSM Analysis

14 SUM-UP OF THE VALUATIONS AND CONCLUSION ON THE FAIRNESS OF THE PROPOSED TRANSACTION

At the end of our work, we observe that:

The acquisition value for the purchase of the Home Networks division from CommScope of €88 million proposed by Vantiva as part of the planned industrial merger with its Connected Home division is the result of negotiations between the two independent groups, both of whom are well-informed as international leaders in their business sectors and in terms of market share in broadband and video products.

This acquisition value appears fair with regard to the standalone values obtained from the methodologies that we used. We arrived at a central valuation very close to €86m for the Home Networks division using the discounted cash flow method, which seems to us to be the most appropriate.

The terms of the reinvestment by CommScope in the capital of Vantiva, which would give it, on the basis of the acquisition value and the valuation of Vantiva stated by the parties, before the expected synergies are realised, a 25% stake in the capital of Vantiva on a fully diluted basis, also resulted from negotiations between the two groups.

This investment is consistent with the results of our work, which gave a central valuation assumption for Vantiva of €259m using a multi-criteria valuation.

The exchange value that emerges from the maximum number of shares that would be issued as part of the Reserved Capital Increase appears fair with regard to the comparison of the standalone values calculated using a multi-criteria approach of (i) of the Home Networks division and (ii) Vantiva. We obtained a valuation for the Home Networks division that would represent 24.03% to 26.01% of the valuation of the new merged entity following the Acquisition.

The Acquisition Price for the Home Networks division and the terms of the reinvestment by CommScope on a standalone basis, therefore, show a fair remuneration for the Seller given the individual valuations of the Home Networks division and Vantiva.

The fairness of the transaction for Vantiva's shareholders must, in addition to the opportunity of becoming a shareholder of a major new sector player, be found in the value creation resulting from the merger.

To examine the consequences of the Acquisition for shareholders, we also compared the combined standalone valuations of Home Networks and Vantiva based on a standalone DCF analysis with the value of the combined entity based on a DCF analysis incorporating the expected synergies from the transaction.

We obtained a business plan providing details of the synergies expected from the Acquisition. These synergies are described in the draft securities memorandum sent to us and were also published by Vantiva and CommScope. They were presented to us by Vantiva's management and by d'Angelin & Co, the financial advisor appointed by the parties for the Acquisition. These synergies are expected to generate more than €100m of free cash flow (before tax) on a full-year basis from 2026, mainly through cost optimisation initiatives and improved operational efficiency.

Based on the information provided to us by the parties and following a critical examination, the well-identified cost synergies likely to enable the new merged entity to achieve a level of profitability exceeding the current level of profitability of Vantiva and Home Networks prior to the merger seemed appropriate to us and relevant for use in examining the valuation of the new group.

Taking into account all the expected synergies, the valuation of the new group improves by more than 100%. The transaction therefore creates value for all shareholders.

In this context, the transaction is fair for all parties.

APPENDIX 1 – ENGAGEMENT LETTER

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RSM France
26, Rue Cambacérés
75008 Paris

A l'attention de :
Monsieur Benoît Coustaux
Associé

Paris, le 25 septembre 2023

Cher Monsieur,

Dans le cadre du projet d'acquisition par Vantiva de la branche « Home Networks » du groupe CommScope, après détournage de cette activité (l'« **Activité HN** »), puis du réinvestissement par CommScope (« le **Cédant** »), au moyen de la souscription à une augmentation de capital réservée de Vantiva libérée par compensation avec la créance correspondant au produit de cession de l'Activité HN (l'« **Opération** »), le conseil d'administration du groupe Vantiva, lors de sa réunion du 12 septembre 2023, a décidé d'approuver la nomination d'un expert indépendant en charge d'établir un rapport sur les conditions financières de l'Opération et son caractère équitable pour les actionnaires de Vantiva et a délégué au Directeur Général le pouvoir de le choisir et de le désigner.

Cette attestation figurera dans le prospectus visé par l'Autorité des marchés financiers (« **AMF** ») qui sera publié par Vantiva avant tenue de l'assemblée des actionnaires appelée à approuver l'augmentation de capital réservée au profit de CommScope (le « **Prospectus** »)

A cette fin, Vantiva a décidé de désigner le cabinet RSM que vous représentez, sur la base de votre proposition de services détaillée.

C'est dans ces conditions que le Président de Vantiva, sur délégation de son conseil d'administration, m'a mandaté aux fins de signer la présente lettre de mission.

1. Objectif de la mission

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Entity address
and coordinates to update
in the filing

vantiva.com





Dans ce cadre, le caractère équitable de l'Opération d'un point de vue financier pour les actionnaires de Vantiva, fera l'objet d'une expertise indépendante.

Cette expertise indépendante vise à apprécier du point de vue de l'équité, d'une part la valeur d'acquisition de l'Activité HN du groupe CommScope, d'autre part, à se prononcer compte tenu de cette valeur, sur les conditions de réinvestissement du Cédant dans le capital de Vantiva, au regard des modalités de détermination du prix de souscription et de la valorisation de Vantiva établie selon la méthode d'évaluation multicritère.

Aux termes du projet de contrat d'acquisition, les parties sont d'ores et déjà convenues, sur le fondement du montant des synergies du Cédant et de Vantiva lié à l'intégration de l'Activité HN du Cédant au sein de la division Maison Connectée de Vantiva, que CommScope recevrait :

- une participation dans Vantiva à l'issue de l'Opération, représentant 25 % du capital de Vantiva sur une base entièrement diluée ;
- un montant cumulé maximum earnout de 100 millions de dollars, soumis à l'atteinte par Vantiva (à périmètre constant) d'un EBITDA égal ou supérieur à 400 millions d'Euros dans une année fiscale donnée au cours des 5 ans suivant le premier exercice après la conclusion de l'acquisition. Le paiement annuel de cet earnout ne pourra excéder 50 millions de dollars.

2. Calendrier de la mission

Le calendrier indicatif de la mission serait le suivant :

Date	Action
12 septembre 2023	Conseil d'administration de Vantiva approuvant la nomination d'un expert indépendant et déléguant au Directeur Général le pouvoir de le choisir et de le désigner
Octobre 2023	Réunion de lancement
Mi-octobre 2023	Réunion intermédiaire sur la base d'un premier projet de rapport
Mi-novembre 2023	Réunion en vue de restitution du rapport de l'expert indépendant et de sa présentation au Conseil d'administration de Vantiva

Nous avons compris de nos échanges que vous disposiez des ressources nécessaires pour accomplir cette mission dans les délais impartis, étant précisé qu'une fois désigné, l'expert doit disposer d'un délai suffisant pour élaborer son rapport en fonction de la complexité de l'opération et de la qualité de l'information mise à sa disposition, et que ce délai ne peut être inférieur à vingt jours de négociation.

Ce délai minimum s'entend à compter de la réception de l'ensemble de la documentation nécessaire à l'élaboration de votre rapport. Le calendrier prévu est conforme à ce délai. Ainsi, le rapport de l'expert indépendant serait finalisé fin novembre 2023 selon le calendrier indicatif susvisé.





Vous vous engagez à nous prévenir rapidement si vous vous heurtiez à des difficultés pour tenir ce calendrier, l'objectif de Vantiva étant de tenir une assemblée générale en vue de l'approbation de l'augmentation de capital réservée mentionnée ci-dessus avant la fin de l'année 2023.

3. Cadre de votre mission

Sur une base volontaire, vos diligences seront effectuées en respectant les dispositions de l'article 262-1 du règlement général de l'AMF, de son instruction d'application n°2006-08 relative à l'indépendance, elle-même complétée de la recommandation n°2006-15 de l'AMF relative à l'expertise indépendante.

Pour la mise en œuvre de vos diligences, sera mise à votre disposition la documentation juridique relative à l'Opération à la seule fin de collecter les informations utiles à votre mission.

Vous pourrez vous entretenir avec le management et adresser vos questions à Vantiva pour appréhender le contexte de l'Opération, comprendre sur la base du plan d'affaire, les perspectives de synergies et de prévisions financières de Vantiva qui en découlent, et disposer de l'information utile à votre mission aux fins de réaliser l'approche multicritère de manière homogène selon la méthodologie décrite ci-après, s'agissant à la fois de l'Activité HN détournée de CommScope et de la société Vantiva.

Vous pourrez également prendre connaissance des modalités de détermination du prix de souscription des actions Vantiva dans le cadre de l'augmentation de capital réservée au Cédant afin de pouvoir rendre votre opinion à cet égard.

Vous bénéficierez dans le cadre de vos travaux du support de la Banque d'Angelin à laquelle vous pourrez soumettre vos questions et requérir ses études quant à la valorisation de l'Activité HN et de Vantiva sur lesquelles vous porterez l'appréciation critique inhérente à votre mission.

Vous pourrez être conduit dans le cadre de l'examen par l'AMF du Prospectus à devoir répondre à des questions quant à l'attestation d'équité que vous aurez rendue et qui comme indiqué plus haut figurera dans ledit Prospectus.

4. Méthodologie envisagée

L'évaluation de Vantiva et de la division « Home Networks » du groupe CommScope seront effectués selon l'application d'une approche multicritère, telle que prescrite par l'AMF

A ce titre, les méthodes d'évaluation suivantes pourraient, le cas échéant, être appliquées :

1. Prise de connaissance détaillée de l'Opération envisagée, des modalités et des contextes spécifiques dans lesquels elle se situe ;
2. Détermination et mise en œuvre d'une approche d'évaluation multicritère du groupe Vantiva comprenant notamment :
 - Revue des valorisations proposée dans le cadre de l'Opération (méthodes, paramètres, etc);
 - Analyse des risques et opportunités identifiés pour Vantiva susceptibles d'affecter sa valorisation, dont la synthèse étant présentée sous la forme de matrice SWOT ;
 - Choix motivé des critères d'évaluation (exclus/retenus) ;
 - Analyse de l'évolution du cours de bourse sur une période pertinente ;
 - Examen de la performance financière historique du groupe Vantiva ;





- Analyse de l'information publique incluant la revue des notes d'analystes ;
 - Analyse du plan d'affaires avec le management opérationnel, intégrant l'identification des hypothèses clés considérées et l'appréciation de leur pertinence incluant les synergies attendues de l'intégration de l'Activité HN dans la division Maison Connectée de Vantiva, permettant la mise en œuvre d'une modélisation des flux futurs de trésorerie actualisés au taux jugé pertinent (Discounted cash flows ou DCF) ;
 - Identification des comparables boursiers et transactionnels et exploitation de l'information disponible les concernant (si pertinent) ;
 - Examen des transactions intervenues précédemment sur le capital de la société Vantiva ;
 - Analyse de sensibilité des paramètres structurants identifiés et des principaux paramètres de marché jugés opportuns (taux d'actualisation, taux de croissance à l'infini...).
3. Détermination et mise en œuvre d'une approche d'évaluation multicritère de l'Activité HN transférée du groupe CommScope comprenant notamment :
- Analyse des risques et opportunités identifiés par CommScope susceptibles d'affecter la valorisation de l'Activité HN ;
 - Choix motivé des critères d'évaluation (exclus/retenus) ;
 - Examen des comptes détournés de la branche d'activité reprise ;
 - Analyse du plan d'affaires avec le management opérationnel, intégrant l'identification des hypothèses clés considérées et l'appréciation de leur pertinence, permettant la mise en œuvre d'une modélisation des flux futurs de trésorerie actualisés au taux jugé pertinent (Discounted cash flows ou DCF) ;
 - Identification des comparables boursiers et transactionnels et exploitation de l'information disponible les concernant (si pertinent) ;
 - Examen de la valeur de transaction et des méthodes de détermination de cette valeur ;
 - Analyse de sensibilité des paramètres structurants identifiés et des principaux paramètres de marché jugés opportuns (taux d'actualisation, taux de croissance à l'infini...).
4. Analyse critique des éléments et études qui vous seront transmis concourant à la valorisation de Vantiva et de l'Activité HN transférée par CommScope ;
5. Au regard de l'analyse qui précède, appréciation critique du pourcentage de capital de Vantiva sur une base diluée réservée au Cédant tel que convenu entre le Cédant et Vantiva aux termes de leurs accords, le montant souscrit par CommScope et le réinvestissement par le Cédant du produit de la cession de l'Activité HN (s'assimilant à une parité d'échange) ;
6. Analyse critique des modalités de détermination du prix de souscription de l'augmentation de capital réservée ;
7. Analyse des éventuels accords et opérations connexes susceptibles d'avoir un impact significatif sur l'Opération ;
8. Prise en compte des observations éventuellement formulées par les actionnaires minoritaires et des questions de l'AMF dans le cadre du visa du Prospectus ;
9. Restitution au fur et à mesure de nos travaux auprès de Vantiva ;
10. Etablissement d'un rapport, dont les conclusions sont présentées sous la forme d'une attestation d'équité sur les conditions financières de l'Opération et son caractère équitable pour les actionnaires de Vantiva.

5. Conflits d'intérêts





Nous avons compris que Monsieur Benoît Coustaux et que le cabinet RSM France sont indépendants des sociétés concernées ainsi que de leurs actionnaires. Ils n'ont pas de lien juridique ou financier avec les sociétés concernées et ne se trouvent dans aucune des situations de conflit d'intérêt telles que visées à l'article 1 de l'instruction 2006-08 de 25 juillet 2006 telle que modifiée le 10 février 2020, prise en application du titre VI du livre II du Règlement Général de l'AMF.

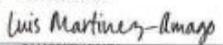
Vous nous avez notamment précisé que RSM France, comme ses associés et collaborateurs affectés à la mission décrite dans la présente lettre :

- N'entretiennent pas de liens juridiques ou en capital avec les sociétés et personnes concernées par l'Opération ou avec leurs conseils, susceptibles d'affecter leur indépendance ;
- N'ont conseillé aucune des sociétés concernées par l'Opération, ou toute personne que ces sociétés ou personnes physiques contrôlent, au sens de l'article L233-3 du Code de commerce au cours des dix-huit derniers mois ;
- N'ont procédé à aucune évaluation pour le compte de Vantiva ou de CommScope au cours des dix-huit derniers mois ;
- Ne détiennent aucun intérêt dans la réussite de l'Opération, ni créance ou dette sur l'une quelconque des personnes morales ou physiques concernées par l'Opération ou sur l'une quelconque des personnes contrôlées par les personnes concernées par l'Opération.

Et que vous attestiez donc de l'absence de tout lien avec les personnes concernées, susceptible d'affecter leur indépendance et l'objectivité de leur jugement lors de l'exercice de la mission décrite dans la présente lettre.

Si les termes de la présente lettre vous agréent, je vous remercie de bien vouloir nous retourner un exemplaire signé de votre part avec la mention « bon pour accord »

Je vous prie de croire, cher Monsieur, à l'expression de nos salutations distinguées.

DocuSigned by:

C:4A096794C94B1...
Monsieur Luis Martinez-Amago
Chief Executive Officer

Bon pour accord


RSM
RSM France
Experts Comptables - Commissaires aux Comptes
26, rue Cambacérès - 75008 PARIS
Tel.: 01 47 63 67 00 - Fax : 01 47 63 69 00
RCS Paris 800 709 891



APPENDIX 2 – WORK SCHEDULE

Preliminary familiarisation work

- Interviews with senior managers, operational managers and external advisers on various occasions;
- Obtain a detailed understanding of the proposed Acquisition and the related legal and financial procedures and specific contexts;
- Obtain an understanding of the business models of Vantiva and CommScope's HN division;
- Study and analyse information in the public domain and regulated information concerning Vantiva and CommScope;
- Take note of the work carried out by the external advisers of the parties in the context of the Acquisition;
- Consult our sector documentation as well as extracts from our financial databases relating to the activities carried out by Vantiva and the HN division of CommScope in their competitive environments;
- Examine the telecoms equipment and media products markets, and the positioning of Vantiva and CommScope in these markets;
- Consult the minutes of the Board of Directors meetings and AGMs of both parties;
- Review the draft securities memorandum;
- Take note of the financial due diligence reports on the scope of HN.

Valuation work

- Review the financial performances of Vantiva and the HN scope of CommScope;
- Read the reports of the analysts that cover the Vantiva share and use the resulting consensus medium-term forecasts;
- Analyse the effects of significant events and announcements by Vantiva on the history of the share price and the trading volumes of the Vantiva share;
- Examine the contribution of the operating segments to the Group's activity, profitability and balance sheet structure, in particular with reference to the universal registration document and the 2022 financial report;
- Analyse and use the medium-term budget and forecast data for Vantiva and the HN scope, and compare these projections with historical financial performance and market forecasts;
- Analyse and use the documentation made available by the parties to the Acquisition and the responses to the requests for documents;
- Create a panel of comparable stocks;
- Research transactional references;
- Carry out a multi-criteria valuation of Vantiva and HN;
- Compare the RSM valuation of Vantiva and the HN scope with the valuation work carried out by the parties to the Acquisition.

Administration of the assignment and preparation of the Report

- Hold meetings and telephone interviews
- Prepare the letter of representation
- Prepare and present the Report containing the certificate of fairness
- Manage exchanges with the AMF
- Draft the Report.

APPENDIX 3 – MAIN SOURCES OF INFORMATION

Documentation relating to the Acquisition

Legal information

- Draft amendment to the 2022 Universal Registration Document (4 November 2023)
- Call Option Agreement (2 October 2023)
- Acquisition Agreement [undated draft]
- Draft Securities Memorandum (9 October 2023)

Accounting and financial information

- Information related to the valuation of the Vantiva shares and HN by the parties to the Acquisition and the related advisers

Documentation relating to Vantiva

Legal information

- Kbis (registration information)
- Articles of association
- Minutes of Board of Directors' meetings
- Minutes of AGMs
- Press releases

Accounting and financial information

- 2018 consolidated financial statements
- 2019 consolidated financial statements
- 2020 consolidated financial statements
- 2021 consolidated financial statements
- 2022 consolidated financial statements
- 2016 Registration Document
- 2017 Registration Document
- 2018 Registration Document
- 2019 Universal Registration Document
- 2020 Universal Registration Document
- 2021 Universal Registration Document
- 2022 Universal Registration Document
- Presentation of Vantiva's customers and domestic markets (2023)
- Group business plan for FY23-28 (2023)
- Management reports for FY18-22 + YTD 09/23 (September 2023)
- Notes from analysts covering the stock (2023)
- Vantiva Budget Representation FY23-25 (6 March 2023)
- Vantiva Reforecast 9+3 Audit Committee (24 October 2023)
- Vantiva S.A Credit Rating (15 March 2023)
- Capitalisation table (30 September 2023)

Documentation relating to CommScope

Legal information

- Organisation chart of CommScope
- Preliminary Disposition Strawman – Structure Memo (19 September 2023)

Accounting and financial information

- *CommScope 2021 Annual Report*
- *CommScope 2022 Annual Report*
- CommScope Home Networks Business Overview (October 2023)
- 2020 carved-out financial statements for HN
- 2021 carved-out financial statements for HN
- 2022 carved-out financial statements for HN
- CommScope Budget FY23 (April 2023)
- Business plan HN FY23-27 (April 2023)
- Transaction Consideration Assessment – Valuation Models (October 2023)
- Financial Due Diligence Report, PwC (11 April 2023)
- Financial and Separation Due Diligence Red Flag Report, Eight Advisory (28 April 2023)

Other sector and financial documentation used by RSM

- Statista, Number of Internet of Things (IoT) connected devices worldwide, 2023
- ITU, Measuring digital development, (Facts and Figures 2022)
- Rohde & Schwarz, Actualités 211/14: Caractérisation d'antennes précises (News 211/14: Characterisation of precise antennas)
- Xerfi, La fabrication d'équipements de télécommunication (The manufacture of telecommunications equipment), 2023
- Xerfi, L'industrie mondiale du divertissement (The global entertainment sector), 2021
- Boston Consulting Group, Home Networks & Devices Market Study, March 2023

Information sites

Stakeholders in the Transaction

- Vantiva, <https://www.vantiva.com>
- CommScope, <https://www.commscope.com>

Stock market comparables

- Arcadyan, <https://www.arcadyan.com>
- Hitron, <https://www.hitrontech.com>
- Sercomm, <https://www.sercomm.com>

Other sites

- AMF, <https://www.amf-france.org/fr>

Databases

- Epsilon Research
- Refinitiv Eikon
- Statista
- Xerfi

APPENDIX 4 – PRESENTATION OF STOCK MARKET COMPARABLES

Ticker	Nom	Pays	Description de l'activité
3596.TW	Arcadyan Technology Corp	Taiwan	Arcadyan Technology Corp is a Taiwan-based company principally engaged in the research, development, manufacture and sale of wireless local area network (LAN) products and broadband wireless gateways. The Company's main products include wireless LAN products, integrated digital home and mobile office multimedia gateways and wireless audio and video products. The Company distributes its products in domestic market and to overseas markets.
2419.TW	Hitron Technologies Inc.	Taiwan	Hitron Technologies Inc. is a Taiwan-based company mainly engaged in the development, manufacture and distribution of network communication equipment. The Company provides broadband central processing elements (CPEs), cable modems, cable routers, cable modem modules, upstream noise blockers, downstream signal and video quality monitors, fiber optic data access concentrators, digital convergence gateways and others. The Company distributes its products mainly within Taiwan market and to overseas markets, including the rest of Asia, the Americas, Europe and other areas.
5388.TW	Sercomm Corp	Taiwan	SerComm Corp is a Taiwan-based company principally engaged in the research, development, manufacture and distribution of wireless network products and wired network products. The Company's main products include fixed-line and mobile convergence products, home broadband access equipment, commercial Netcom equipment, IoT-related applications and others. The Company mainly distributes its products in the domestic market and overseas markets, such as the Americas, Asia and Europe.

APPENDIX 5 – PRESENTATION OF THE CH & HN SAMPLE FOR CALCULATION OF THE WACC (1/2)

Ticker	Nom	Pays	Description de l'activité
Pure players			
3596.TW	Arcadyan Technology Corp	Taiwan	Arcadyan Technology Corp is a Taiwan-based company principally engaged in the research, development, manufacture and sale of wireless local area network (LAN) products and broadband wireless gateways. The Company's main products include wireless LAN products, integrated digital home and mobile office multimedia gateways and wireless audio and video products. The Company distributes its products in domestic market and to overseas markets.
5388.TW	Sercomm Corp	Taiwan	SerComm Corp is a Taiwan-based company principally engaged in the research, development, manufacture and distribution of wireless network products and wired network products. The Company's main products include fixed-line and mobile convergence products, home broadband access equipment, commercial Netcom equipment, IoT-related applications and others. The Company mainly distributes its products in the domestic market and overseas markets, such as the Americas, Asia and Europe.
0751.HK	Skyworth Group Ltd	Hong Kong	The Company operates its business through four segments. The Multimedia Business segment is engaged in the manufacture and sales of smart TV systems in China and overseas markets, as well as the provision and sales of Internet value-added services of Coocaa system. The Smart System Technology Business segment is engaged in the manufacture and sales of home access systems, intelligent manufacturing, automotive electronic systems, lighting products, security systems and other electronic products. The New Energy Business segment is engaged in the sales and installation of distributed photovoltaic power stations for residential use in the client retail sector in the China market. The Smart Appliances Business segment is engaged in the manufacture and sales of smart white goods, smart air conditioners, smart refrigerators, smart kitchen appliances and others.
115160.KQ	Humax Co Ltd	Korea; Republic (S. Korea)	HUMAX Co., Ltd. is a Korea-based company engaged in the manufacture and marketing of set-top boxes (STBs). The Company provides digital STBs, which are used as broadcasting receivers, including high-definition (HD) satellite STBs, personal video recorder (PVR) STBs, cable HD PVRs and satellite HD PVRs. The company provides its products under the brand name of HUMAX. The Company distributes its products within domestic market and to overseas markets, including Asia, America, Europe, the Middle East, Latin America and others.
019490.KS	Hitron Systems Inc	Korea; Republic (S. Korea)	HITRON SYSTEMS INC. is a Korea-based company engaged in the manufacture and distribution of security products. The Company mainly provides closed circuit television (CCTV) surveillance systems, including Internet protocol (IP) surveillance products, cameras, digital video recorders (DVRs), monitors, controllers, observation systems, video cassette recordings (VCRs), lenses and other accessories. In addition, the Company is engaged in the operation of security system integration (SI) business, which provides security equipment and surveillance systems. The Company distributes its products to government and public institutions, such as railways, airports and ports, as well as to the overseas markets.
078890.KQ	Kaon Group Co Ltd	Korea; Republic (S. Korea)	Kaon Group Co Ltd, formerly KAON Media Co Ltd, is a Korea-based company primarily engaged in the manufacture and sale of artificial intelligence solutions, over-the-top (OTT) services, network devices and integrated solutions. The Company operates its business through two segments. The Over-the-Top business segment is engaged in the provision of artificial intelligence and digital broadcasting reception services. The Network Business segment is engaged in the provision of broadband services.

APPENDIX 5 – PRESENTATION OF THE CH & HN SAMPLE FOR CALCULATION OF THE WACC (2/2)

Ticker	Nom	Pays	Description de l'activité
Multi-sectoral companies			
ERICB.ST	Telefonaktiebolaget LM Ericsson	Sweden	Telefonaktiebolaget LM Ericsson (Ericsson) provides infrastructure, services and software to the telecommunication industry and other sectors. The Company's segments include Network, IT & Cloud and Media. The Network segment consists of two business units: Network Products and Network Services. The overall focus is on evolving and managing access networks, including the development of hardware and software for radio access and transport networks. The IT & Cloud business includes two business units: IT & Cloud Products and IT & Cloud Services. The focus in IT & Cloud is to help telecom operators and selected enterprises through the digital transformations ahead. It develops and delivers software-based solutions for television and media and combines a product portfolio that spans the television value chain, with systems integration and managed services. The portfolio includes compression, content publishing through set-top box or pure over-the-top, content delivery and analytics.
NOKIA.HE	Nokia Oyj	Finland	Nokia Oyj is a Finland-based company engaged in the network and Internet protocol (IP) infrastructure, software, and related services market. The Company's businesses include Nokia Networks and Nokia Technologies. The Company's segments include Ultra Broadband Networks, IP Networks and Applications, and Nokia Technologies. The Ultra Broadband Networks segment comprises Mobile Networks and Fixed Networks operating segments. The IP Networks and Applications segment comprises IP/Optical Networks and Applications & Analytics operating segments. The Applications & Analytics operating segment offers software solutions spanning customer experience management, network operations and management, communications and collaboration, policy and charging, as well as Cloud, Internet of things (IoT), security, and analytics platforms that enable digital services providers and enterprises to accelerate and optimize their customer experience. The Company has Comptel Oyj among its subsidiaries.
002502.SZ	Dingdong Culture Co Ltd	China	Dingdong Culture Co., Ltd., formerly Huawei Culture Co., Ltd., is a China-based company, principally engaged in the manufacture of film and television plays, and the design, development, production and distribution of kinds of toys and game products. The Company provides smart toys, plastic toys, model toys, cartoon and other toys. The Company distributes its products in domestic market and to overseas markets.
2342.HK	Comba Telecom Systems Holdings Ltd	Hong Kong	Comba Telecom Systems Holdings Ltd is an investment holding company mainly engaged in the provision of wireless telecommunication network system equipment and services. The Company operates its business through two segments. The Wireless Telecommunications Network System Equipment and Services segment is engaged in the research, development, manufacture and sale of wireless telecommunication network system equipment. The Segment is also engaged in the provision of related engineering services. The Operator Telecommunication Services segment is engaged in the provision of operator telecommunication services and value-added services.
CSCO.O	Cisco Systems Inc	United States of America	Cisco Systems, Inc. designs and sells a range of technologies that power the Internet. It is integrating its platforms across networking, security, collaboration, applications and the cloud. Its segments include the Americas; Europe, Middle East, and Africa (EMEA), and Asia Pacific, Japan, and China (APJC). Its product categories include Secure, Agile Networks; Internet for the Future; Collaboration; End-to-End Security; Optimized Application Experiences, and Other Products. Secure, Agile Networks consists of its core networking technologies of switching, enterprise routing, wireless, and compute products. Internet for the Future consists of its routed optical networking, public fifth generation (5G), silicon, and optics solutions. Collaboration consists of its meetings, collaboration devices, calling, contact center and communication platform as a service (CPaaS) offering. End-to-End Security consists of cloud and application security, industrial security and other offering.
6285.TW	Wistron NeWeb Corp	Taiwan	Wistron NeWeb Corporation is a Taiwan-based company principally engaged in the research, development, manufacture, sales and import and export trading of wireless communications products. The Company's main products include satellite communications products, mobile and home communications products and other wireless communications products. The Company distributes its products to the Americas, Asia, Europe and other markets.
HLIT.O	Harmonic Inc.	United States of America	Harmonic Inc. is a provider of video delivery software, products, system solutions, and services. The Company enables its customers to create, prepare, store, playout and deliver a full range of broadcast and streaming video services to consumer devices, including televisions, personal computers, laptops, tablets and smart phones and broadband access solutions that enable broadband operators to deploy high-speed internet, for data, voice and video services to consumers homes. The Company operates through two segments: Video and Broadband. The Video business sells video processing and production and playout solutions and services to cable operators and satellite and telco Pay-TV service providers (collectively referred as service providers) and to broadcast and media companies, including streaming media companies. The Broadband business provides broadband access solutions and related services, including its CableOS software-based broadband access solution to broadband operators globally.
0763.HK	ZTE	China	ZTE Corp is a China-based company principally engaged in the design, development, production, distribution and installation of a range of Information and Communication Technology (ICT) related systems, equipment and terminals. The Company mainly operates its business through three segments. Carriers' Network segment mainly provides wireless network, wired network, core network and telecommunication software systems and services, as well as other technologies and product solutions. Government and Corporate segment provides the government and corporate information projects with top-level design, consulting services and integrated information solutions. Consumer segment is mainly involved in the development, production and sale of smart phones, mobile data terminals, family terminals and wearable devices, as well as the provision of related software applications and value-added services.
039560.KQ	Dasan Networks	Korea; Republic (S. Korea)	DASAN Networks, Inc. is a Korea-based company mainly engaged in the provision of network communication equipment. The Company mainly provides switches and digital subscriber line (xDSL) solutions, which enable wire-speed transmissions required for managing high-density data switching applications; fiber to the X (FTTx) solutions, which enable service providers to deliver bandwidth solutions; triple play service (TPS) devices, including Internet protocol (IP) set-top boxes (STBs), wireless fidelity (Wi-Fi) phones, desktop phones, IP phones and others, as well as gigabit Ethernet line cards, software and others. The Company distributes its products within domestic market and to overseas markets.

APPENDIX 6 – PRESENTATION OF THE SCS SAMPLE FOR CALCULATION OF THE WACC (1/3)

Ticker	Nom	Pays	Description de l'activité
Entertainment			
WBD.O	Warner Bros Discovery Inc	United States of America	Warner Bros. Discovery, Inc. is a global media and entertainment company. The Company operates through three segments: Studios, Networks, and DTC. The Studios segment consists of the production and release of feature films for initial exhibition in theaters, production, and initial licensing of television programs to third parties. It also includes networks/DTC services, distribution of its films and television programs to various third party and internal television and streaming services, distribution through the home entertainment market (physical and digital), related consumer products and themed experience licensing, and interactive gaming. The Networks segment primarily consists of its domestic and international television networks. The DTC segment primarily consists of its premium pay-TV and streaming services. The Company's brands and franchises include Warner Bros. Pictures Group, Warner Bros. Television Group, DC, HBO, HBO Max, Discovery Channel, discovery+, and CNN.
DIS	Walt Disney Co	United States of America	The Walt Disney Company is a worldwide entertainment company. The Company's segments include Disney Media and Entertainment Distribution (DMED), and Disney Parks, Experiences and Products (DPEP). The DMED segment encompasses the Company's global film and episodic television content production and distribution activities. The Company's DMED's lines of business consists of Linear Networks, Direct-to-Consumer and Content Sales/Licensing. The Company's DPEP segment business consists of sale of admissions to theme parks, the sale of food, beverage and merchandise at its theme parks and resorts, sales of cruise vacations, sales and rentals of vacation club properties, royalties from licensing its intellectual properties (IP) for use on consumer goods and the sale of branded merchandise. The Company's Content Sales/Licensing business consist of selling film and episodic television content in the television and subscription video-on-demand (TV/SVOD) and home entertainment markets.
UMG.AS	Universal Music Group NV	Netherlands	Universal Music Group NV is a company based in the Netherlands which is mainly engaged in music entertainment. The Company is focused on the discovery and development of artists and songwriters and the marketing, promotion, distribution, sales and licensing of audio and audio-visual content. Universal Music Group N.V. includes music publishing companies Universal Music Publishing Group. Its recorded music catalog consists more than three million recordings includes a wide array of performers such as ABBA, Louis Armstrong, The Beatles, The Beach Boys, The Bee Gees, Ariana Grande, Imagine Dragons, Lady Gaga, James Brown, Bon Jovi, Neil Diamond, Marvin Gaye, Drake, Billie Eilish, Eminem, Selena Gomez, Guns N' Roses, Elton John, Bob Marley, Paul McCartney, Nirvana, Luciano Pavarotti, Queen, The Rolling Stones, Frank Sinatra, U2, Amy Winehouse and Stevie Wonder among others.
UBIP.PA	Ubisoft Entertainment SA	France	Ubisoft Entertainment SA is a France-based company active in the video game industry by developing, publishing and distributing video games for consoles, PCs (personal computers), smartphones and tablets in both physical and digital formats. It owns several brands and a diversified portfolio of franchises, including Assassin's Creed, The Crew, Far Cry, For Honor, Tom Clancy's Ghost Recon, Tom Clancy's Rainbow Six Siege, Tom Clancy's The Division and Watch Dogs. The Company, through its subsidiaries is active globally.
EA.OQ	Electronic Arts Inc	United States of America	Electronic Arts Inc. is a digital interactive entertainment company. The Company develops, markets, publishes, and delivers games, content and services that can be played by consumers on a range of platforms, which include game consoles, personal computers (PCs), mobile phones and tablets. Its portfolio includes brands that it either wholly owns, such as Apex Legends, Battlefield, and The Sims or licenses from others, such as Madden NFL, Star Wars, and the 300 plus licenses within its global football ecosystem. The Company develops and publishes games and services across diverse genres, such as sports, racing, first-person shooter, action, role-playing and simulation. The Company markets and sells its games and services through retail channels and through digital distribution channels. The Company also offers live services, including content, subscription offerings and sale of its base games and free-to-play games.
7974.T	Nintendo Co Ltd	Japan	Nintendo Co., Ltd. is mainly engaged in the development, manufacture and sale of entertainment products in home entertainment field. The Company's main products include game machines such as portable and console game machines and software, as well as Trump and Carta (Japanese-style playing cards). The console game machines are hardware and software for mobile games and home console games, developed by the Company and its affiliates, manufactured mainly by the Company, and sold mainly by the affiliates overseas.
PARA.O	Paramount Global	United States of America	Paramount Global is a global media, streaming and entertainment company that creates content for audiences worldwide. The Company's segments include TV Media, Direct-to-Consumer and Filmed Entertainment. The TV Media segment consists of its domestic and international broadcast networks and owned television stations; domestic and international extensions of its cable networks, and domestic and international television studio operations, and production and distribution of first-run syndicated programming. The Direct-to-Consumer segment consists of its portfolio of domestic and international pay and free streaming services. The Filmed Entertainment segment consists of its production and acquisition of films, series and short-form content for release and licensing in media around the world, including in theaters, on streaming services, on television, and through digital home entertainment and digital versatile discs (DVDs).

APPENDIX 6 – PRESENTATION OF THE SCS SAMPLE FOR CALCULATION OF THE WACC (2/3)

Ticker	Nom	Pays	Description de l'activité
Supply Chain/Logistics			
POST.VI	Oesterreichische Post AG	Austria	Oesterreichische Post AG (Austrian Post) is an Austria-based logistics and services company in letter mail and parcel segments. The Company operates, along with its subsidiaries, in three business divisions: the Mail & Branch Network Division focuses on letters, and offers services, including acceptance, sorting and delivery of letters, addressed and unaddressed direct mail items, newspapers and regional media, as well as a range of complementary services relating to letters; the Parcel & Logistics division covers acceptance, sorting and delivery of parcels and express mail items, an offering of specialty logistics, such as combined freight, pharmaceutical and temperature-controlled logistics and value logistics, and the Corporate division involves the management of commercial properties owned by the Company, information technology (IT) support services, financing and administrative activities, as well as the administration of the internal labor market of Austrian Post.
DSV.CO	DSV A/S	Denmark	DSV A/S, formerly DSV Panalpina A/S, is a Denmark-based company engaged in the transportation and logistics services. The Company's operations are divided into three business segments: The Air and Sea service, which provides air and sea freight services across the globe; The Road, that provides road freight services across Europe, North America and South Africa and The Solutions segment, which offers contract logistics services, including warehousing and inventory management, across the globe. The Company operates worldwide.
RLGT.A	Radiant Logistics Inc	United States of America	Radiant Logistics, Inc. operates as a third-party logistics company, providing technology-enabled global transportation and value-added logistics services in the United States and Canada. It provides domestic and international freight forwarding along with truck and rail brokerage services to a diversified account base, including manufacturers, distributors and retailers that have agent-owned offices throughout North America and other markets around the world. Its value-added logistics services include warehousing and distribution, customs brokerage, order fulfillment, inventory management, and technology services. It serves various industries, such as consumer goods, food and beverage, electronics and high-tech, aviation and automotive, military and government, and manufacturing and retail customers. As a third-party logistics provider, its primary business operations involve arranging the shipment, on behalf of its customers, of materials, products, equipment and other goods.
CHRW.OQ	CH Robinson Worldwide Inc	United States of America	C.H. Robinson Worldwide, Inc. is a global logistics company. The Company operates through two segments: North American Surface Transportation (NAST) and Global Forwarding. NAST provides transportation and logistics services across North America through a network of offices in the United States, Canada, and Mexico. The primary services provided by NAST include truckload and less than truckload (LTL) transportation brokerage services. Its Global Forwarding segment provides transportation and logistics services through an international network of offices in North America, Europe, Asia, Oceania, and South America and also contracts with independent agents worldwide. The primary services provided by Global Forwarding include ocean freight services, air freight services, and customs brokerage. The Company through, Robinson Fresh, provides sourcing services that primarily include the buying, selling, and/or marketing of fresh fruits, vegetables, and other value-added perishable items.
EXPD.OQ	Expeditors International of Washington Inc	United States of America	Expeditors International of Washington, Inc. provides a full suite of global logistics services, offering customers an international network of people and integrated information systems to support the movement and positioning of goods. The Company, as a third-party logistics provider, purchases cargo space from carriers, such as airlines, ocean shipping lines, and trucking lines on a volume basis and resell that space to its customers. It provides a range of transportation services and customer solutions, such as customs brokerage, order management, warehousing and distribution, temperature-controlled transit, cargo insurance, specialized cargo monitoring and tracking, and other customized logistics. Its primary services include air freight services, ocean freight and ocean services, and customs brokerage and other services. In addition, its Project Cargo unit handles special project shipments that move via a single method or combination of air, ocean, and/or ground transportation.
FWRD.OQ	Forward Air Corp	United States of America	Forward Air Corporation is an asset-light freight and logistics company. The Company provides less-than-truckload (LTL), final mile, truckload and intermodal drayage services across the United States and in Canada. The Company offers premium services that require precision execution, such as expedited transit, delivery during tight time windows and special handling. The Company's Expedited Freight segment operates a national network that provides expedited regional, inter-regional and national LTL services. Expedited Freight segment offers customers local pick-up and delivery and other services, including final mile, truckload, shipment consolidation and deconsolidation, warehousing, customs brokerage and other handling services. Its Intermodal segment provides first- and last-mile high value intermodal container drayage services both to and from seaports and railheads. The Intermodal segment also offers contract and container freight station (CFS) warehouse and handling services.
HUBG.OQ	Hub Group Inc	United States of America	Hub Group, Inc. is a supply chain solutions provider, which offers comprehensive transportation and logistics management services. The Company's service offerings include a full range of freight transportation and logistics services, some of which are provided by assets the Company owns and operates, and some of which are provided by third parties with whom it contracts. Its transportation services include intermodal, truckload, less-than-truckload (LTL), flatbed, temperature-controlled, dedicated and regional trucking. Its logistics services include full outsource logistics solutions, transportation management services, freight consolidation, warehousing and fulfillment, final mile delivery, parcel and international services. The Company serves a diversified customer base in a range of industries, including retail, consumer products and durable goods.
IDL.PA	ID Logistics SAS	France	ID Logistics SAS is a France-based company engaged in the logistics industry. It specializes in the supply of logistics and transportation services. The Company performs the logistics and supply chain optimization services for European manufacturers and French retailers. Another business segments using its services belong to the Cosmetics and E-business, as well as Food and Beverage industry. The Company offers its customers a range of services for their supply chain, such as warehousing, temperature controlled logistics and e-business. It offers value added services including Stock Management, Packaging, Order fulfillment, Quality control, Co-packing, Pooling and Suppliers consolidation center. The Company's business unit La Fileche Cavaillonnaise owns its fleet of truck, and offers transportation, organization and optimization services. It has a presence in France and abroad, such as Brazil, China and Russia, among others. In July 2013, it finalized acquiring CEPL.
IDS.L	International Distributions Services PLC	United Kingdom	International Distributions Services plc is a United Kingdom-based provider of postal and delivery services. The Company also provides designated universal postal service in the United Kingdom. The Company's subsidiary, Royal Mail Group Limited, comprises the Company's United Kingdom and international parcels and letters delivery businesses operating under the Royal Mail and Parcelforce Worldwide brands. Through the Royal Mail Core Network, the Company delivers a one-price-goes-anywhere service on a range of parcels and letters products. Royal Mail has the capability to deliver to approximately 31 million addresses in the United Kingdom, six days a week (excluding United Kingdom public holidays). Parcelforce Worldwide operates a separate United Kingdom network, which collects and delivers express parcels. The Company also owns General Logistics Systems (GLS), which operates a ground-based, deferred parcel delivery networks in Europe.
DXDXL	DX (Group) PLC	United Kingdom	DX (Group) plc is a United Kingdom-based provider of a range of delivery services to both business and residential addresses across the United Kingdom and Ireland. The Company is engaged in the provision of delivery solutions, including parcel, freight, secure, courier, and logistics services. The Company operates through two segments: DX Freight and DX Express. The DX Freight segment comprises DX 1-Man, DX 2-Man and Logistics. This segment specializes in the delivery of irregular dimension and weight freight (IDW). The DX Express segment comprises DX Parcels and DX Exchange and Mail. This segment specializes in the express delivery of parcels and documents. It provides a specialist exchange network service for legal and commercial documents, as well as for medical specimens. The Company's IDW delivery services to business and home addresses for items over 25 kilograms (kg). Its next day delivery service to business and home addresses for items under 25kg in weight.

APPENDIX 6 – PRESENTATION OF THE SCS SAMPLE FOR CALCULATION OF THE WACC (3/3)

Ticker	Nom	Pays	Description de l'activité
Manufacturing/Packaging			
SKG.I	Smurfit Kappa Group PLC	Ireland; Republic of	Smurfit Kappa Group PLC is an Ireland-based provider of paper-based packaging. The Company is an integrated paper and paperboard manufacturer and converter whose operations are divided into Europe and the Americas. Its segments include Europe and the Americas. The Europe and the Americas segments are each integrated. They include a system of mills and plants that primarily produce a full line of containerboard that is converted into corrugated containers within each segment. In addition, the Europe segment also produces other types of paper, such as solid board, sack kraft paper, machine glazed (MG) and graphic paper, and other paper-based packaging, such as honeycomb, solid board packaging and folding cartons; and bag-in-box packaging. The Americas segment comprises forestry; other types of paper, such as boxboard and sack paper; and paper-based packaging, such as folding cartons, honeycomb and paper sacks. It serves sectors, including automotive, bakery, pet food and others.
SMD.S.L	DS Smith PLC	United Kingdom	DS Smith Plc is a provider of sustainable packaging solutions, paper products, and recycling services around the world. The Company's products and services include packaging solutions, recycling services, paper products, point of sales display solutions and packaging machinery. Its retail packaging includes transport and transit packaging, retail and shelf ready packaging and consumer packaging. Its industrial packaging includes transport and transit, heavy duty packaging, fiber-based pallets, automotive standard packaging, multi-material packaging and dangerous goods packaging. Its recycling and waste management services include total waste management, cardboard recycling, paper recycling, plastics recycling, and confidential shredding. Its paper products include specialty papers, coated papers, dual-use grades, medium/fluting grades, kraft liners, white liners, and brown liners. Its point of sales display solutions include Toblerone displays, Parasite Displays, and others.
MND.LL	Mondi PLC	United Kingdom	Mondi PLC is a United Kingdom-based packaging and paper company. The Company's business is integrated across the packaging and paper value chain, from managing forests and producing pulp, paper and films to developing and manufacturing sustainable consumer and industrial packaging solutions. The Company is engaged in providing sustainable packaging and paper solutions to meet its customers' needs. It also manufactures printing papers used at home in the office and for professional applications. The Company's segments include Corrugated Packaging, Flexible Packaging, and Uncoated Fine Paper. Its Corrugated Packaging segment provides product types, such as containerboard and corrugated solutions. The Flexible Packaging segment provides product types, such as kraft paper, paper bags, consumer flexibles, functional paper and films, and pulp. The Uncoated Fine Paper segment provides home, office, converting and professional printing papers and pulp.
UPM.HE	UPM-Kymmene Oyj	Finland	UPM-Kymmene Corporation (UPM) is a global forest company. The Company's segments include UPM Biorefining, UPM Energy, UPM Raflatac, UPM Specialty Papers, UPM Paper ENA, UPM Plywood and Other operations. The UPM Biorefining segment consists of pulp, timber and biofuels businesses. The UPM Energy segment is an electricity producer. The UPM Raflatac segment manufactures self-adhesive label materials for product and information labelling. The UPM Specialty Papers segment serves global markets with label papers and release liners, office papers in Asia and flexible packaging in Europe. The UPM Paper ENA segment offers graphic papers for advertising, magazines, newspapers, and home and office. The UPM Plywood segment offers plywood and veneer products, mainly for construction, vehicle flooring and liquefied natural gas shipbuilding, and other manufacturing industries. The Other operations segment includes wood sourcing and forestry, UPM Biocomposites and UPM Biochemicals business units.
STERV.HE	Stora Enso Oyj	Finland	Stora Enso Oyj is a Finland-based provider of renewable solutions in packaging, biomaterials, wooden construction and paper industries. The Company has six divisions: the Packaging Materials division provides renewable packaging materials based on both virgin and recycled fiber, the Packaging Solutions division develops and sells premium fiber-based packaging products and services; the Biomaterials division offers a variety of pulp grades to the paper, board, tissue, textile and hygiene product producers; the Wood Products division is a sawn wood producer and a provider of wood-based solutions to the construction industry; the Forest division manages Stora Enso's forest assets in Sweden and is responsible for wood sourcing for Stora Enso's Nordic, Baltic and Russian operations and the Paper division, that provides paper products made from recycled and virgin fiber. Stora Enso Oyj operates worldwide.
SCAb.ST	Svenska Cellulosa SCA AB	Sweden	Svenska Cellulosa Aktiebolaget SCA (SCA) is a Sweden-based private forest owner. The Company owns forests located in northern Sweden and the Baltic region. The Company offers paper for packaging and print, pulp, wood products, renewable energy, services for forest owners and transport solutions. SCA is organized into five segments: The Forest segment is responsible for supplying the Company's industries with wood raw material. Its main activities are managing and harvesting on the firm's forest and land, sourcing wood raw material from other forest owners and transportation to other industries; The Wood segment is responsible for the solid-wood business, which comprises sawmills and wood processing and distribution to the building materials trade; The Pulp segment manages pulp production; The Containerboard segment is responsible for manufacture and paper mills; The Renewable Energy segment develops wind power projects, pellets manufacture and sales.
SAP.J	Sappi Ltd	South Africa	Sappi Limited is a South Africa-based global provider of everyday materials made from wood fiber-based renewable resources. The Company operates in Europe, North America and South Africa. The Company offers raw material products, such as dissolving pulp, wood pulp and biomaterials, and end-use products, such as packaging and specialty papers, graphic papers, casing and release papers and forestry products. Its Verve brand is focused on the dissolving pulp market. Its graphic paper brands include Galerie, GalerieArt, Magno, Vantage, Quatro, Royal, McCoy, Somerset, EuroArt Plus, Opus, Flo, Classics and Ultracast, among others. Its graphic paper products include GalerieArt Web Gloss, GalerieArt Web Matt, Flo Sheets, Flo Web, Flo Digital, Quatro Gloss, Magno Web Gloss and Somerset Web. Its packaging and specialty paper products include flexible packaging papers, label papers, functional paper packaging, containerboard, paperboard, silicone base papers and dye sublimation papers.
HUHTV.HE	Huhtamaki Oyj	Finland	Huhtamaki Oyj is a Finland-based company engaged in packaging for food and drink. It reports four operating segments: Foodservice Europe-Asia-Oceania, which covers manufacturing of foodservice paper and plastic disposable tableware, supplied to foodservice operators, fast food restaurants and coffee shops; North America, which serves local markets with disposable tableware products under the Chinex brand, foodservice packaging products and ice-cream containers, among others; Flexible Packaging, which includes a range of consumer products, including food, pet food, hygiene and health care products; and Fiber Packaging, which covers recycled and other natural fibers that are used to make fresh product packaging, such as egg, fruit, food and drink packaging. The Company operates a network of manufacturing units in more than 30 countries within such regions as Europe, North and South America, Africa, Middle East, Asia and Oceania.