



SARASIN

Sarasin Basic Report

Sarasin Sustainable Investment

Concise version

On track for sustainability

- How is the Telecommunications industry faring?

Themes, trends and leaders

July 2003

Dr. Gabriella Ries
++41 61 277 71 66
gabriella.ries@sarasin.ch

Christoph Ladner, CFA
++41 1 213 94 96
christoph.ladner@sarasin.ch

Copyright fee: CHF 50 / EUR 35

Please take note of the important legal information on the last page.

Contents

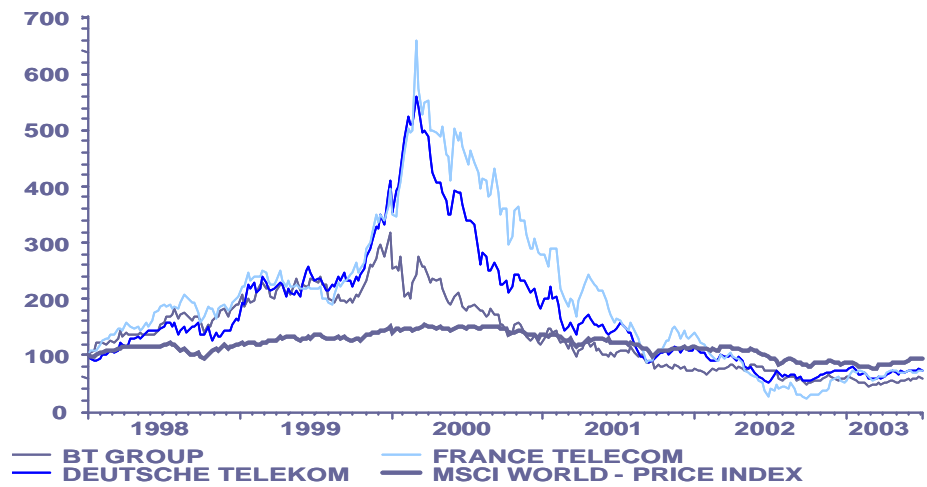
Introduction	3
Sustainability Ratings	4
Sustainability Key Issues	6

Contacts	9
Publications	10

Introduction

The Telecommunications industry went through a turbulent period in the last decade. New technologies and the deregulation of markets created a euphoric mood which pumped up investors' expectations to unrealistic levels. But soaring company debt and delays in rolling out UMTS brought investors back to earth with a jolt, and share prices plummeted across the entire sector at the start of the new millennium (see graph below).

Telecom share prices (indexed): boom and bust



Source: Datastream

Attractive sector – even for investors committed to sustainability

It must be said, however, that Telecommunications is still an attractive sector to invest in. The same is true for investors committed to sustainability, as the sector basically has a favourable environmental and social profile. This is supported by the sustainability rating given to the industry by Bank Sarasin in its periodic assessment of all the different sectors on the basis of sustainability criteria.

Purpose of the study

In order to identify suitable candidates for sustainable investment, however, a more detailed investigation is necessary. The report therefore has two goals:

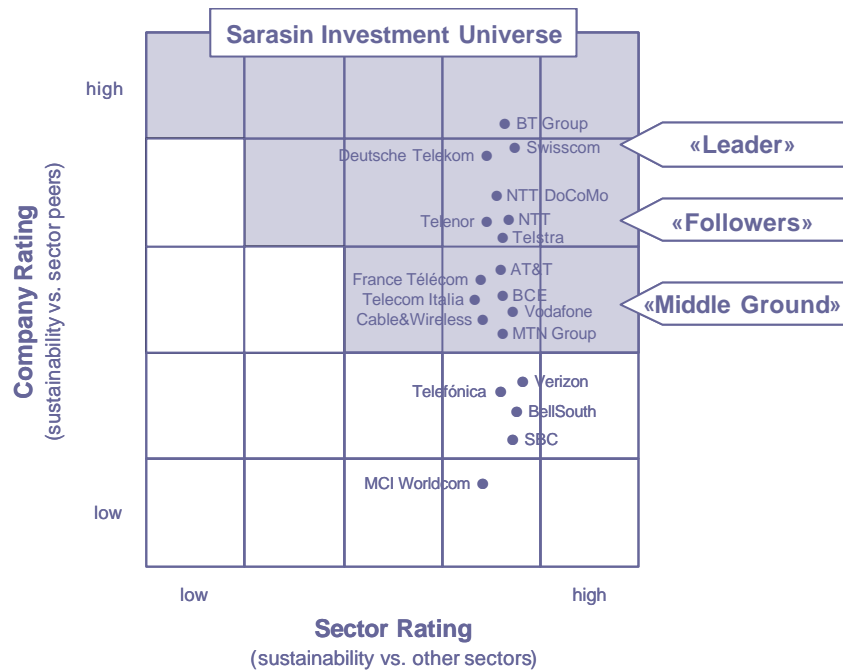
- ◆ To establish the sustainability rating of the most important industry players in order to create a basis for selecting stocks from the universe of sustainable investments. As a complement to environmental and social analysis, we also assess the long-term economic prospects of the sector as a whole.
- ◆ To identify the sustainability key issues that are critical for the industry both now and in the future.

On the following pages we summarise the most important findings. This is a concise version of the more detailed report published in German.

Sustainability Ratings

We subjected a total of 19 companies in the Telecommunications sector to an in-depth sustainability analysis. This stock selection covers around 85% of the market capitalisation of the MSCI World Telecom Index. (The table on page 8 provides an overview of the selected stocks and their weighting in the MSCI).

Sarasin Sustainability Matrix™:
sustainability ratings of the 19 telecom companies analysed



Source: Bank Sarasin

Leaders, followers and middle ground

The graph shows the rankings for the companies analysed. BT Group, Swisscom and Deutsche Telekom are leaders in sustainability. Below them come the «followers»: NTT DoCoMo and NTT from Japan, Norway’s Telenor and Australia’s Telstra. They also score better than average sustainability ratings and have the potential to improve their rankings. They are followed by a broad «middle ground» that includes various European, several North American telecom stocks as well as South Africa’s MTN Group. There were five stragglers in the table which failed to qualify for Sarasin’s investment universe: four US telecom providers and Spain’s Telefónica. The text box that follows provides a description of Sarasin’s methodology and sustainability matrix.

Sarasin methodology in brief

Our sustainability rating is based on an assessment method developed in house by Bank Sarasin. We use a sector-specific catalogue of criteria to assess both the social and environmental performance of a company, and then produce an overall sustainability rating on this basis. We not only provide a rating for the individual company, but a rating for the sector as a whole. A number of environmental and social risks are analysed during this process. As far as sector ratings go, the Telecommunications industry performs relatively well, and falls in the second highest band (out of 5 rating bands). By combining the sector and company rating we are able to position the analysed stock universe on the Sarasin Sustainability Matrix™ (see figure). Only the stocks in the shaded area subsequently qualify for Sarasin sustainability funds. An average performance is therefore sufficient for the Telecom sector: the criteria are tougher in less sustainable sectors such as the building industry or the transport sector.

Consequences
for investors

For investors interested in sustainability, the analysis of the Telecom sector's sustainability rating produces two main findings:

Sector's attractive risk profile means a broader investment universe:

The analysis shows that the Telecom sector has a relatively good sustainability standing. Because of the favourable risk profile, investments are therefore justified in companies with both higher than average and purely average valuations.

Wealth of investment opportunities:

About three-quarters of the stocks analysed managed to qualify for the Sarasin investment universe. The sector therefore offers many different investment opportunities to investors committed to sustainability. By grading the companies into three groups – leaders, followers and the middle ground – investors can furthermore give preference to the top-ranked stocks.

Long-term economic
opportunities

The report not only provides sustainability ratings, but also assesses the long-term economic opportunities of the entire Telecom industry. The two most important themes currently influencing profitability in the telecommunications market are companies' debt situation and their growth prospects. Generally, debt levels are gradually falling. Growth prospects are still intact – particularly for telecom providers with mobile telephony interests – and are now back to more realistic levels following the dizzy heights of the boom years.

Sustainability key issues

Our analysis of the dominant sector trends and risks identified four sustainability key issues:

- ◆ Health risks associated with mobile phones
- ◆ Data protection, network security and Internet safety for children
- ◆ Restructuring and lay-offs
- ◆ Energy consumption and waste from electronics.

The report explains the sector's past achievements in these areas in question and the responsibilities it faces in the future. In this concise version of the report we provide a brief description of the four key issues.

Health risks associated with mobile phones

So far research has still not been able to categorically prove or disprove whether mobile phones can damage your health. Uncertainty therefore reigns in many sectors of the population. The construction of new masts repeatedly meets with public opposition. And the health risks of using a mobile phone are still not clear. Initially the industry adopted a very defensive stance, and this caused a massive loss of confidence. Mobile operators were accused of pursuing a policy of non-information or disinformation, and the independence of scientific research was called into question.

Our report shows that most providers have now changed their attitude. They provide better information and support independent research projects. But it is also clear that communication and research will not be enough in future – words and action are necessary. The report provides a number of examples: the development of low-radiation networks and mobile phones, performance reports showing that maximum limits are adhered to or undershot, and – as has already happened in the case of Paris – a voluntary commitment to reduce the maximum levels.

Data protection, network security and Internet safety for children

The Telecom industry has provided many applications to help smooth our transformation into an information society. Apart from the broad acceptance of the Internet, e-mail or mobile telephony, there are some reservations as well: Fear of the misuse of personal data, unsolicited direct marketing via e-mail and SMS (spam), fraud through premium phone numbers or reservations about Internet content, such as pornography or extremist views. One thing is certain: greater networking and mobility will exacerbate these problems.

The industry therefore has a big responsibility towards its customers. The report shows the most important areas of responsibility, such as compliance with strict data protection standards, transparency in the use of personal details, educating the client in matters such as spam mail, or the safety risks associated with new broadband connections. The report also makes it clear that telecom operators still hardly ever provide information on their policy or the work they are doing in the areas described in their reporting.

Restructuring and lay-offs

Telecom companies employ a lot of people. The salaries, social benefits and working conditions they offer are generally good or even better than average. The ongoing wave of redundancies is the industry's Achilles heel, however, and technological advances mean lay-offs are likely to continue in the foreseeable future. Surveys show that badly managed redundancy programmes have a very negative impact on employees – they can lead to loss of confidence, stress, increasing mobbing and the departure of highly qualified employees. Socially responsible downsizing is therefore essential for the sector.

The report shows that former telecom monopolies have made great progress in this field. Most of them offered fair redundancy settlements, early retirement and support measures such as staff recruitment pools. Measures to preserve jobs, such as internal retraining or reducing work hours, are less common in the sector. But the report also shows that before the recent recession hit, the sector at least had the necessary resources and also the political will to implement socially responsible downsizing. There is no guarantee that this will be the case in future. Two new potential sources of conflict have also arisen: the withdrawal of companies from their traditionally close dialogue with trade unions, and the outsourcing of call centre jobs to countries with low labour costs, such as India.

Energy consumption and waste from electronics

In the environmental area, the advent of the Internet and mobile phones has meant the sector makes a contribution towards the reduction of environmental problems. Examples are: e-mail, teleworking and videoconferencing. But there are also a number of threats that accompany these opportunities. The biggest is the growing energy consumption of the telecom infrastructure and the increase in waste from discarded electronic products. In the latter case, mobile phones are increasingly becoming a problem. Although small by size, they are changed very frequently. If they are not disposed of properly, dangerous heavy metals can leach into the soil and groundwater and pollute the environment.

The report shows that the telecom industry has already made significant progress in saving energy. Far less energy is consumed now per bit of data transmitted. In future, however, new technologies such as UMTS will bring even greater energy saving opportunities. The pattern of usage for renewable energy sources such as wind or solar power is extremely varied. While companies such as BT Group, Deutsche Telekom or Swisscom have already reached a level of around 5 percent, US companies have made virtually no efforts in this field. These differences can also be seen in the problem of disposal: Europe, Australia and Japan have laws governing disposal and systems in place for returning used goods. Now telecom companies need to do their bit in helping to educate customers and increase financial incentives to encourage recycling. North America is still well behind in this field.

Stock selection for the sustainability analysis (shaded) of shares in the MSCI World Telecom Sector. Selected titles cover 85% of the market capitalisation.

MSCI Telecom (World) stocks	Country	Market Capitalisation (USD m)	Relative Market Capitalisation
VODAFONE GROUP	United Kingdom	136'084	17.3420%
VERIZON COMMUNICATIONS	USA	110'188	14.0419%
SBC COMMUNICATIONS	USA	86'425	11.0136%
TELEFONICA	Spain	59'451	7.1973%
BELLSOUTH CORP	USA	51'270	6.5337%
NTT DOCOMO	Japan	108'886	4.8566%
DEUTSCHE TELEKOM	Germany	64'389	4.1027%
BT GROUP	United Kingdom	28'990	3.6944%
TELECOM ITALIA ORD	Italy	48'015	2.7535%
NTT CORP	Japan	63'803	2.6832%
AT & T WIRELESS SERVICES	USA	22'404	2.4268%
TIM ORD	Italy	41'900	2.4028%
FRANCE TELECOM	France	53'827	2.4008%
AT & T CORP	USA	15'449	1.9688%
NEXTEL COMMUNICATIONS A	USA	16'861	1.9338%
KPN (KON.)	Netherlands	17'850	1.5923%
TELECOM ITALIA RNC	Italy	11'234	1.4316%
SWISSCOM	Switzerland	19'211	0.9793%
QWEST COMMUNI. INT'L	USA	8'307	0.8998%
BCE INC	Canada	20'811	0.8752%
PORTUGAL TELECOM SGPS	Portugal	9'031	0.8632%
TELIASONERA	Sweden	19'112	0.8525%
TELSTRA CORP	Australia	37'744	0.8177%
TELECOM CORP NEW ZEALAND	New Zealand	5'658	0.7210%
BOUYGUES ORD	France	9'355	0.7153%
SINGAPORE TELECOM	Singapore	15'638	0.6975%
CABLE & WIRELESS	United Kingdom	4'360	0.5557%
SPRINT PCS GROUP	USA	6'022	0.5372%
TDC	Denmark	6'440	0.4924%
TELE2 B	Sweden	4'417	0.4222%
OTE HELLENIC TELECOM.	Greece	5'908	0.3765%
LEVEL 3 COMMUNICATIONS	USA	2'887	0.3127%
TELEKOM AUSTRIA	Austria	5'666	0.2888%
TELUS CORP N-VTG	Canada	2'561	0.2611%
TELENOR	Norway	7'651	0.2438%
PCCW	Hong Kong	2'939	0.1498%
ELISA A	Finland	1'145	0.1460%
VODAFONE	Greece	3'595	0.1374%
ALIAN T	Canada	3'004	0.1263%
MOBISTAR	Belgium	2'500	0.1115%
SMARTONE TELECOM	Hong Kong	652	0.0415%
Total		16'931'795	100%

(Telecommunication services represent 5.35 % of MSCI World)

Source: Morgan Stanley Capital International, Bank Sarasin

The sustainability analysis includes two other stocks that are not components of the MSCI:

- ◆ MTN Group (South Africa)
- ◆ MCI Worldcom (USA)

Contacts

	Andreas Knörzer Head of Sarasin Sustainable Investment	Tel. +41 61 277 7477 andreas.knoerzer@sarasin.ch
Portfolio Management	Gabriele Grewe Head, Bonds and Balanced Portfolios	Tel. +41 61 277 7073 gabriele.grewe@sarasin.ch
	Catrina Vaterlaus-Rieder Deputy Head, Equity Portfolios	Tel. +41 61 277 7805 catrina.vaterlaus@sarasin.ch
	Arthur Hoffmann Equity Portfolios	Tel. +41 61 277 7322 arthur.hoffmann@sarasin.ch
	Wulf Haasner Bonds and Balanced Portfolios	Tel. +41 61 277 7195 wulf.haasner@sarasin.ch
	Johannes Weisser Equity Portfolios	Tel. +41 61 277 7267 johannes.weisser@sarasin.ch
Sustainability Research	Dr. Eckhard Plinke Head, Machinery, Electronics and Electrical Engineering	Tel. +41 61 277 7574 eckhard.plinke@sarasin.ch
	Makiko Ashida Insurance, Consumer Goods	Tel. +41 61 277 7470 makiko.ashida@sarasin.ch
	Dr. Michaela Collins Retail, Tourism, Countries, Institutions	Tel. +41 61 277 7768 michaele.collins@sarasin.ch
	Andrew DeBoo Chemicals, Pharmaceuticals, Biotech, Medical & Healthcare, Paper, Water Utilities, Mining	Tel. +41 61 277 7038 andrew.deboo@sarasin.ch
	Dr. Matthias Fawer-Wasser Energy, Food	Tel. +41 61 277 7303 matthias.fawer@sarasin.ch
	Klaus Kämpf Banks, Business Services, Software, Recycling & Waste Management	Tel. +41 61 277 7780 klaus.kaempf@sarasin.ch
	Dr. Gabriella Ries Media, Telecommunications, Building Materials, Transport/Logistics	Tel. +41 61 277 7166 gabriella.ries@sarasin.ch
Marketing/Support	Erol Bilecen Marketing Support	Tel. +41 61 277 7562 erol.bilecen@sarasin.ch
	Gabriela Pace Administrative Support/Secretariat	Tel. +41 61 277 7331 gabriela.pace@sarasin.ch
	Balazs Magyar Research-Assistant	

Address Bank Sarasin & Co. Ltd, Sustainable Investment
Gabriela Pace
Elisabethenstrasse 62
CH-4002 Basel

E-Mail gabriela.pace@sarasin.ch

Website www.sarasin.ch/sustainability

Publications

- Performance «Share Performance and Sustainability. Does environmental and social performance have any influence on share performance?» Eckhard Plinke et al. September 2002
- The report was prepared within the framework of the research project «Corporate Environmental and Sustainability Transparency for the Stock Markets» (Institute for Environmental Management and Business Administration at the EBS, ZEW (Centre for European Economic Research), Institute for Applied Ecology, on behalf of the German Federal Minister for Education and Research, Berlin/Bonn).
- Concise version in English, full version in German available only.
-
- Photovoltaics «Photovoltaics 2002. The market, players and forecasts.» Christoph Butz, August 2002
-
- Food «How sustainable is the food industry? A study of environmental and social compatibility of food & beverage companies.» Matthias Fawer-Wasser/Christoph Butz/Catrina Vaterlaus-Rieder, August 2001
-
- Forestry «Are the founders of sustainability true to their roots? An overview of the forestry and paper industry.» Christoph Butz/Catrina Vaterlaus-Rieder, July 2000.
-
- Available from Bank Sarasin & Co. Ltd, Sustainable Investment
Gabriela Pace
Elisabethenstrasse 62
CH-4002 Basel
gabriela.pace@sarasin.ch
-
- Website An up-to-date list of publications can be found on our website:
www.sarasin.ch/sustainability

Legal Disclaimer

During the previous three years Bank Sarasin & Co. Ltd («BSC») has performed investment banking services to **France Télécom**. This may create a potential conflict of interests.

This report, prepared by BSC, contains selected information and does not purport to be complete. The report is based on public available information and data («the Information») believed to be accurate and complete. BSC has not verified and does not guarantee the accuracy and completeness of the Information contained herein. Possible errors or incompleteness of the Information do not constitute grounds for liability, either with regard to direct, indirect or consequential damages. In particular, BSC shall not be liable for the statements, projections or other details contained in the Information concerning the examined companies, their associated companies, strategies, economic situations, market and competitive situations, regulatory environment, etc. Although due care has been taken in compiling this report, it cannot be excluded that it is incomplete or contains errors. BSC, its shareholders and employees shall not be liable for the accuracy and completeness of the statements, estimates and conclusions derived from the Information contained in this report. Provided this report is being transmitted in connection with an existing contractual relationship, i.e. financial advisory or similar services, BSC's liability shall be restricted to gross negligence and wilful misconduct. Only in case of failure in essential tasks shall BSC be liable for normal negligence. In any case, the liability of BSC is limited to typical expectable damages, and liability for any indirect damages is excluded. This report does not constitute an offer or a solicitation of an offer for the purchase or sale of any security. BSC may perform investment banking services or other services for companies examined, and partners, directors or employees of BSC may serve on the board of directors of companies mentioned in this report. Although measures are taken to avoid conflicts of interest arising from such services or relationships with partners, directors or employees, BSC cannot guarantee that such conflicts of interest will not occur. BSC shall therefore not be liable for any direct or indirect or consequential damages arising from such conflicts of interest. Opinions or prices expressed in this report are subject to change without notice.

This document may not be distributed to any person directly or indirectly in the US or to U.S. persons, or in Canada or Japan. Persons domiciled in other jurisdictions must observe any applicable sales restrictions for these products.

© Copyright Bank Sarasin & Co. Ltd. All rights reserved.



SARASIN