

CABLE & SATELLITE

YEARBOOK 2008

informa
telecoms & media

**Mortimer House
37-41 Mortimer Street Street
London W1T 3JH
United Kingdom**

Tel: +44 20 7017 5000

Fax: +44 20 7017 4951

E-mail: cabsateurope@informa.com

Website: www.informamedia.com

BROADBAND TECHNOLOGY

BROADBAND TECHNOLOGY

AD TELECOM S.L

c/. Alts Forns, 36-44, 3r1a
08038 Barcelona
Spain

Tel: +34 93 223 79 00

Fax: +34 93 223 79 01

e-mail: firstnamelastname@adtelecom.es

Website: www.adtelecom.es

Key Personnel

Export Manager: Anton Masso

International Manager: Sonia Asesio

ADC

13625 Technology Drive
Eden Prairie, MN 55344
US

Tel: +1 800 366 3889

Fax: +1 952 917 1717

Website: www.adc.com

Key Personnel

President & CEO: Robert E. Switz

VP, CFO: James Mathews

VP Investor Relations, Treasurer: Mark Borman

VP Tax: Bradley Cray

VP Technology & Strategy, CTO: Michael Day

VP Asia Pacific Sales, Marketing & Customer

Service: John Dulin

VP Americas Sales, Marketing & Customer

Service: Kimberley Hartwell

VP, Controller: Steven Nemitz

Adtec Digital

408 Russell Street
Nashville
TN 37206
US

Tel: +1 615 256 6619

Fax: +1 615 256 6593

e-mail: firstnamelastnameinitial@adtecinc.com

Website: www.adtecinc.com

Key Personnel

President: Kevin Ancelin

VP Technology: Andre Ancelin

VP, Customer Services: David Cook

VP, Sales & Marketing: Ron Johnson

Advent Networks

9600 Great Hills Trail
Suite 300 East
Austin TX 78759-5681
US

Tel: +1 512 241 8000

Fax: +1 512 241 8001

e-mail: firstinitiallastname@adventnetworks.com

Website: www.adventnetworks.com

Key Personnel

President & CEO: Ed Perry

Chief Architect: Ryan Leatherbury

VP & General Counsel: Irene Williams

VP Engineering: Maulin Patel

MD, North American Sales: Jace Horton

Alcatel-Lucent

54 Rue La Boétie
75008 Paris
France

Tel: +33 1 4076 1010 / 1382

Fax: +33 1 4076 1400

e-mail: firstname.lastname@alcatel-lucent.fr

Website: www.alcatel-lucent.com

Key Personnel

CEO: Patricia Russo

CTO: Olivier Baujard

CFO: Jean-Pascal Beaufret

CMO: John Giere

Head of Research, CTO, Strategy, Corporate

Marketing and Service: Etienne Fouques

SVP, Corporate Communications: Claire Pedini

Alps Electric Europa

Hansaallee 203
40549 Düsseldorf
Germany

Tel: +49 211 597 70

Fax: +49 211 597 7146

Website: www.alps-europe.com

Key Personnel

Group President: Matsataka Kataoka

AM Communications

1900 AM Drive
Quakertown PA 18951
US

Tel: +1 215 538 8700

Fax: +1 215 538 8779

e-mail: firstinitialsecondname@amcomm.com

Website: www.amcomm.com

Key Personnel

Chairman: Javad Hassan

COO: C. (Gus) Kamnitsis

General Manager: Bret Matz

CTO: Robert Smith

Director of Operations: James Gillespie

Ambit Broadband

Denver Tech Center
4600 South Syracuse, 9th Floor
Denver
Colorado 80237
US



ARRIS
3871 Lakefield Drive
Suwanee
GA 30024
USA
Tel: +1 678 473 2000
Fax: +1 678 473 8454
e-mail: alex.swan@arrisi.com
Website: www.arrisi.com

Company Shareholders: Publicly quoted company (NASDAQ: ARRS)

Countries Operated In: HQ in Atlanta with sales offices in China, Korea, Japan, Mexico, Chile, The Netherlands, Spain and Denver, Colorado.

Description: ARRIS is an international communications technology company which manufactures broadband network system products and solutions. The company specializes in the design, engineering, product development and distribution of cable television and telecommunications equipment and services. ARRIS produces products that allow operators to deliver a full range of integrated voice, video and high-speed data services to their subscribers. Premier voice, video and data offerings include the ARRIS C4(R) and C3 (TM) CMTS', Touchstone (R) customer premises products, the ARRIS D5 (TM) Universal Edge QAM and a complete line of cable infrastructure supplies marketed through the company's Telewire Supply (R) division. ARRIS supplies these products to cable system operators and other broadband suppliers worldwide.

Key Personnel
Chairman & CEO: Bob Stanzione
Sr. VP and CFO: David Potts
Exec. VP of Strategic Planning, Administration and Chief Counsel: Larry Margolis
President ARRIS Broadband: Jim Lakin
President Worldwide Sales: Ron Coppock
President New Business Ventures: Bryant Isaacs
President TeleWire Supply: Bob Puccini
Sr. VP, Europe & Latin America Sales: Claudio Cerioli
VP, International Sales Engineering: Mitch Matteau
VP, Marketing & Broadband Business Development: Stan Brovont
CTO: Tom Cloonan
CTO (Europe): Charles Cheevers
Director of Media Relations: Alex Swan

Star One

Praia de Botafogo, 228 - 3rd Floor
Rio de Janeiro 22250-906
Brazil
Tel: +41 351 5511
Fax: +41 351 5555
Website: www.starone.com.br

Satellite Information

Name: Brasilsat B1
Location: 70° West
Launch Date: Aug 1994
Target Area: Brazil
Transponder Capacity: 28 C-Band

Name: Brasilsat B2
Location: 65° West
Launch Date: Mar 1995
Target Area: Brazil & Mercosur
Transponder Capacity: 28 C-Band

Name: Brasilsat B3
Location: 84° West
Launch Date: Feb 1998
Target Area: Brazil
Transponder Capacity: 28 C-Band

Name: Brasilsat B4
Location: 92° West
Launch Date: Aug 2000
Target Area: Brazil
Transponder Capacity: 28 C-Band

Telesat Canada

1601 Telesat Court
Gloucester
Ontario K1B 5P4
Canada
Tel: +1 613 748 0123
Fax: +1 613 748 8712
email: info@telesat.ca
Website: www.telesat.ca

Local Offices:

Brazil Office
Av das Americas
500 - bl.2 - Sala 306 - Barra
22640-100 Rio de Janeiro - RJ
Brazil
Tel: +55 21 2494 5098
Fax: +55 21 2494 5098

Argentina Office

Av Pte Roque Saenz Pena 730 9° Of 94
C1035AAO Buenos Aires
Argentina
Tel: +54 11 4328 9238
Fax: +54 11 4328 9238 Ext102

US Office

15776 Leone Drive
Macomb MI 48042
US
Tel: +1 586 242 4091

Business Details

Ownership: PSP Investments and Loral Space & Communications Inc.

Satellite Details

Footprint Area: North and South America

Satellite Information

Name: Nimiq 1
Location: 91° West
Launch Date: May 1999
Target Area: North America
Transponder Capacity: 32 Ku-Band
Beams: 1 Fixed

Name: Anik F1
Location: 107.3° West
Launch Date: Nov 2000
Target Area: South America
Transponder Capacity: 36 C-Band, 48 Ku-Band
Beams: 4 Fixed

Name: Nimiq 2
Location: 82° West
Launch Date: Dec 2002
Target Area: North America
Transponder Capacity: 32 Ku-Band, 2 Ka-Band
Beams: 1 Fixed

Name: Anik F2
Location: 111.1° West
Launch Date: Jul 2004
Target Area: North America
Transponder Capacity: 24 C-Band, 32 Ku-Band, 38 Ka-Band

Name: Anik F1R
Location: 107.3° West
Launch Date: Sep 2005
Target Area: North America
Transponder Capacity: 24 C-Band, 32 Ku-Band

Name: Anik F3
Location: 118.7° West
Launch Date: 2006
Target Area: North America
Transponder Capacity: 24 C-Band, 32 Ku-Band, 2 Ka-Band

Name: Nimiq 4
Location: 82° West
Launch Date: 2008
Target Area: North America
Transponder Capacity: 32 Ku-Band, 8 Ka-Band

Name: Nimiq 5
Location: 72.7° West
Launch Date: 2009
Target Area: North America
Transponder Capacity: 32 Ku-Band

**Telenor Satellite Broadcasting**

Snarøyveien 30
1331 Fornebu
Norway
Tel: +47 67 89 00 00
Fax: +47 67 89 36 29
email: sbcsales@telenor.com
Website: www.telenorsbc.com

Satellite Details

Footprint Area: Nordics, Europe and Middle East

Satellite Information

Name: Thor II
Location: 1° West
Launch Date: May 1997
Target Area: Nordics
Transponder Capacity: 15 Ku-Band

Name: Thor III
Location: 1° West
Launch Date: Jun 1998
Target Area: Nordics, Central & Eastern Europe
Transponder Capacity: 24 Ku-Band

Name: Intelsat 10-02
Location: 1° West
Launch Date: Jun 2004
Target Area: Europe & Middle East
Transponder Capacity: 11 Ku-Band

Name: Thor 5
Location: 1° West
Launch Date: Q4 2007-Q1 2008
Target Area: Nordics, Europe & Middle East
Transponder Capacity: 24 Ku-Band

Key Personnel

CEO: Cato Halsaa
Deputy CEO: David Gilmore
Director of Sales: Lars Janols
Director of Operations: Torstein Solberg

Cable Europe – European Cable Communications Association (ECCA)

Ave Des Arts 41
1040 Brussels
Belgium
Tel: +32 2 521 1763
Fax: +32 2 521 7976
Website: www.cable-europe.eu

Key Personnel

President: Manuel Cubero
VP: Manuel Kohnstamm
President Eurocable Labs: Eric Lennon
Managing Director: Caroline Von Weede
Head of Communications: Toon Diegenaut
Regulatory Affairs Officer: Gilone d'Udekam
Office Manager: Laurene Idezak

CASBAA – Cable & Satellite Broadcasting Association of Asia

802 Wilson House
19-27 Wyndham Street
Central
Hong Kong
Tel: +852 2854 9913
Fax: +852 2854 9530
Website: www.casbaa.com

Key Personnel

Chairman: Marcel Fenez
Treasurer: Peter Jackson
Director: Jonathen Spink
Director: William Pfeiffer
Director: Ian Carroll
Director: Sompan Charumillinda
Director: James Ross
Director: Nic Van Swanenberg
Director: Thomas Choi
CEO: Simon Twiston Davies

CTAM Europe

c/o Cablecom GmbH
Zollstrasse 42
PO Box 8021 Zurich
Switzerland
Tel: +41 43 534 5440
e-mail: ctameurope@yahoo.com
Website: www.ctameurope.com

Description: Cable and Telecommunications Association for Marketing.

Key Personnel

Chairman: Dennis Hodges
Treasurer: Jace Johnson
General Manager: Krisztina Homolay
Commercial Director: Sarah Sweeney

DigiTAG

17 Ancienne Route
1218 Grand-Saconnex
Geneva
Switzerland
Tel: +41 22 717 2735
Fax: +41 22 717 2462
e-mail: surname@ebu.ch
Website: www.digitag.org

Description: DigiTAG promotes the widespread introduction and implementation of digital terrestrial television.

Key Personnel

Project Manager: Ed Wilson
Communications Officer: Natalie Mouyal
Administration: Nicole Frey

DVB

17a Ancienne Route
1218 Grand Saconnex
Geneva
Switzerland
Tel: +41 22 717 2714
Fax: +41 22 717 2727
e-mail: surname@dvb.org
Website: www.dvb.org

Description: DVB is a worldwide consortium of 250+ organisations, agreeing specifications for digital media delivery systems.

Key Personnel

Executive Director: Peter MacAvock
Marketing & Communications Director: Eoghan O'Sullivan
Administration & Financial Matters: Eva Markvoort
Administrative & Member Enquiries: Desiree Gianetti

EBU – European Broadcasting Union

L'Ancienne Route 17A
1218 Grand-Saconnex
Geneva
Switzerland
Tel: +41 22 717 21 11
Fax: +41 22 747 40 00
e-mail: ebu@ebu.ch
Website: www.ebu.ch

Key Personnel

President: Fritz Pleitgen
VP: Boris Bergant
VP: John G Bernander
VP: Patrick de Carolis
VP: Richard Sambrook
Secretary General: Jean Revellion
TV Department: Bjorn Erichsen
Strategic Information: Alexander Shulzycki

ECTA – European Competitive Telecommunications Association

1a Eastheath House
Eastheath House, Wokingham
Berks, RG41 2PR
UK
Tel: +44 118 979 3282
Fax: +44 118 979 3288
e-mail: firstinitiallastname@ectaportal.com
Website: www.ectaportal.com

Key Personnel

Chairman: Innocenzo Genna
Managing Director: Steen Clausen
Vice Chairman: Richard Lalonde
Treasurer: Bart Van Der Sloot
Director: Mehmet Celebiler
Director: Mark Krummer
Director: Fabio Macaluso
Director: Raffaele Mosca
Director: Kerry Ritz
Director: Hubertus von Roenne
Director: Craig Silliman
Director: Christof Sommerberg
Secretary: Michael Ryan
Director of EU Affairs: Ms Delphine Bernet

ESA – European Space Agency

8-10 rue Mario Nikis
75738 Paris Cedex 15
France
Tel: +33 1 53 69 7155
Fax: +33 1 53 69 7690
e-mail: firstname.lastname@esa.int
Website: www.esa.int

Description: ESA has 17 Member States. Its role is to draw up and implement the European space programme.

Key Personnel

Director General: Jean-Jacques Dordain
Director, Operations & Infrastructure: Gael Winters
Director of Technical & Quality Management: M. Coutois
Director of Launch Programmes: A. Fabrizi
Director of Resource Management: L. Kronthaler
Director of Earth Observation Programmes: V Leisbig
Director of Legal Affairs & External Relations: R. Oosterlinck
Director of Human Spaceflight, Microgravity, & Exploration Programmes: D Sacotte
Director of Science Programmes: D. Southwood
Director of Telecommunications & Navigation: G. Viriglio

ETSI

650, route des Lucioles
06921 Sophia-Antipolis Cedex
France

Aruba

FREE TO AIR

ATV – Aruba Television

P.O. Box 5040
Oranjestad
Tel: +297 583 8150
Fax: +297 583 8110

Business Details

Launched: 1996

Programming Details

Channels Broadcast: 1
Hours Broadcast Per Day: 24
Programme Breakdown: NBC output, local programming news and sports
Imported Programming: 90%

Key Personnel

General Manager: Thomas C. Pietersz
Chief Engineer: Desmond Nicholson
desmond@setarnet.aw

Tele-Aruba

PO Box 392, Post Chiquito
No 1-a Oranjestad
Tel: +297 585 7302
Fax: +297 585 1683
e-mail: *telearuba@telearuba.aw*
Website: *www.telearuba.aw*

Business Details

Launched: 1963
Ownership: Government
National Coverage: 100%

Programming Details

Hours Broadcast Per Day: 84 hours/week 12
Programme Breakdown: Entertainment (76%), news (12%), government (5%), sports (4%), documentaries (3%).
Imported Programming: 60%
Countries Imported From: US, Holland

Key Personnel

General Manager: Mirghie Marchena
News Director: Christina de Kort
telenoticia@telearuba.aw
Assistant Programmer: Ronny Henriquez
programacion@telearuba.aw
Financial Director & General Affairs:
Giovanny Croes
Director, Operations: Albino Tromp
director@telearuba.aw
Chief, Production: Juan de la Salle Ras
Sales Director/Head of Marketing: Claret Lopez
sales@telearuba.aw

PAY TV

Cable Tele Aruba

Caya G.F. Betico Croes 200
P.O. Box 311
Oranjestad
Tel: +297 583 0274
Fax: +297 582 2250
e-mail: *cabletv@setarnet.aw*

Business Details

Launched: 1992

Key Personnel

Managing Director: Michele Conrod
Technical Manager: Alvin Geerman

Australia

Three media conglomerates dominate the media landscape. Publishing and Broadcasting (PBL), News Corp. and Telstra have a range of interests in terrestrial TV, pay TV and telecoms. The three companies are partners in pay TV market leader Foxtel.

There was mixed news on digital progress in 2006. Foxtel, Austar and Optus are on target to turn off their analogue transmissions while the number of Digital Terrestrial Television (DTT) households increased to 1.8 million. But the government has admitted that market forces alone will not enable it to achieve its intended end-2008 switchover date. It has put back the target to 2010-2012 and drawn up intervention measures.

During 2006, pay TV subscriber numbers continued to rise on the back of hard pushes by Foxtel and the regional DTH player Austar. By late 2006, Foxtel had more than 1.1 million subscribers, while Austar had passed the 600,000 subscribers barrier.

Media companies have lobbied successive governments for a change to Australia's foreign and cross media ownership laws. They claim that the tight controls have restricted growth, placing limits on investment. Communications Minister Helen Coonan heeded at least some of their calls and pushed through new legislation in October 2006, although the government might not 'declare' - officially bring into law - the reforms until 2H07, according to local press reports.

Once enacted, cross-ownership and foreign-ownership limitations will largely be removed on free-to-air broadcasters and newspaper publishers. Previously the owner of a TV-station could not also own more than 15% of a newspaper in the same city, and vice versa, while foreign companies were

restricted to owning a 15% stake in a broadcaster or 25% of a newspaper.

Some restrictions will remain. Media owners, for example, will be unable to own TV, radio and print assets in the same regional market, although they will be able to own two of the three. The concern was that allowing too much cross-ownership in underserved regional markets would dilute diversity of ownership in rural areas. In metropolitan areas, media owners will be allowed to own TV, radio and print assets as long as there are at least four other media owners in the market.

While welcomed by many broadcasters and publishers, dominant telco Telstra has criticised some of the changes. Telstra, which owns half of pay TV operator Foxtel, is especially critical of the government's decision to extend a moratorium on new commercial terrestrial channels until at least 2010 and of the continuation of the anti-siphoning list, which prevents pay TV providers from securing exclusive key sports rights, also until 2010 at the earliest. News Corp was also critical of this aspect of the legislation, with its Australian CEO, John Hartigan, calling the regulations a "protection racket" for the commercial networks. News Corp. also dislikes the government's plan to allow the commercial networks to offer one extra channel via digital terrestrial services, creating more competition for Foxtel.

While the anti-siphoning list will continue, a change to the way it is operated could benefit Foxtel. Terrestrial broadcasters will retain the ability to acquire rights to major sporting events before pay TV, but the new regulations will change the emphasis of the anti-siphoning-list rules by introducing a so-called 'use-it-or-lose-it' clause that will prevent terrestrials from buying some sports rights on the list and not fully screening them.

News Corp., along with Fairfax, also criticised the government for deciding that commercial terrestrial broadcasters can bid for the mobile TV component of two new digital broadcasting licences. The government is planning to make two digital-broadcasting licences available during 2007, with one licence allowing the broadcast of data-based services to DTT boxes, for which the three incumbent commercial broadcasters cannot apply.

But the government will allow the three incumbent commercial broadcasters, as well as Foxtel, to apply for the second digital licence, for 30 channels of mobile TV broadcasting. News Corp. and Fairfax say that this demonstrates that the government is taking a protectionist approach toward the commer-

India

Investors looking at the four BRIC countries (Brazil, Russia, India, and China) may view India as the market that will offer the quickest return on any investment. The TV market is already successful, with the promise of more to come.

Two main factors are driving the market's appeal. First, the TV advertising market is surging, caused by its rapidly growing economy. Second, it is experiencing significant success in pay TV take-up via the rollout of new DTH platforms and the expected growth in pay TV homes caused by the launch of conditional access for cable.

These factors are causing two rapid changes: local broadcasters' acquisition budgets are rising, and pay TV platforms' subscriber bases are increasing. The growth in DTH services poses a threat to the cable industry but it is still considerably more expensive than cable so it will be very tough for it to make progress in key urban areas. But pressure is building for cable TV to work hard to make conditional access work, so it can aggressively convert to digital and launch value-added services.

DTH has arrived relatively recently. Zee launched its DTH platform, Dish TV, in October 2003 while public broadcaster Prasar Bharati launched its free-to-air, government-sponsored DD Direct Plus in December 2004. The much anticipated Tata Sky DTH project finally came to market in August 2006.

Less positive for India are its social and economic inequalities. Only about half of Indian households have regular access to electricity, and there are many languages and dialects, although English is spoken by about a third of the population. Foreign channel operators and programme makers therefore need to embrace costly local-language investment if they wish to capitalise on the entire country and not just on a sub-demographic, albeit an enormous one.

TV reaches less than 50% of homes and there is a prominent rural and urban divide in penetration, with 75% set ownership in urban regions and only 30% in rural regions. Cable and satellite is available to over 50% of TV homes.

There are also some regulatory concerns. The market is less unpredictable than China, for example, but foreign direct investment (FDI) is still capped at 20% in DTH and 49% in cable.

Regulators want FDI in cable TV to be raised to 74%, which would bring the sector in line with telecoms companies. But the gov-

ernment is nervous about increasing the FDI limit for media companies, because of the 'propaganda' potential this raises.

The broadcasting market suffers from significant piracy, enormous subscriber under-reporting by cable operators, low monthly subscription rates and a convoluted industry structure. A survey compiled by CASBAA (The Cable and Satellite Broadcasting Association of Asia) and Standard Chartered bank estimated that total piracy losses to the industry in 2006 stood at US\$667 million, up from US\$632 million in 2005.

The Information & Broadcasting Ministry (I and B) completed the draft version of the long-awaited Broadcasting Services Regulation Bill in June 2006. It plans for the creation of a new Broadcasting Regulatory Authority of India, which will take over broadcast regulation duties from the Telecom Regulatory Authority of India (TRAI). It also plans to create a codified legal situation to clarify the profusion of case law that makes up Indian TV's legal framework.

Public broadcaster Doordarshan has a monopoly over terrestrial TV broadcasting, so dominates the ratings. In the cable and satellite sector, Star has held a lead for several years, although the others appear to be catching up. Star remained comfortably in the lead in 2006, but Zee TV, the flagship channel of the Zee Network, acquired some ratings momentum and replaced Sony's SET as the No. 2 channel.

India databox

Population	1,110,000,000
GDP Per Capita (US\$)	3,500
TV Homes	88,070,000
Digital TV Homes	5,322,000
Cable Homes	64,000,000
DTH Homes	2,063,000
TV Advertising (US\$m unless stated)	1,900
TV advertising as a % of total	44.0

DTH OPERATORS

DD Direct Plus

Doordarshan Bhagwan
Copernicus Marg
New Delhi 110001
Tel: +91 11 264 92123
Fax: +91 11 264 97316
Website: www.ddindia.com

Business Details

Launched: 2003

Ownership: Prasar Bharati

Key Personnel

Director General: L. D Madloi
Engineer In Chief: D Ray
Director, Finance: Rajat Bhargava
Director, News & Current Affairs: Arvind M Singh
Deputy Director Programme: Ashok Jaikhanani
Deputy Director, Programmes: R Venkateswarlu
Director, Commercial Sales: V A Magazine

Dish TV

FC-19, Sector 16A
Film City
Noida 201 301
Tel: +91 11 3313 9000
Website: www.dishtvindia.com

Business Details

Ownership: ASC Enterprises (an affiliate of Zee Telefilms)
Subscribers: 1.5 million

Programming Details

Number of Channels: 160

Key Personnel

CEO: Arun Kumar Kapoor
Head of TV Business: Jawahar Goel

Tata Sky

Army & Navy Building
2nd Floor, 148 MG Road
Mumbai 400 001
Tel: +91 22 6656 8484
Fax: +91 22 6656 8494
Website: www.tatasky.com

Business Details

Launched: Launched August 2006
Ownership: Tata Group (80%), Star (20%)

Key Personnel

Managing Director & CEO: Vikram Kaushik
Chairman: Ishaat Hussein

CABLE OPERATORS

Achal Cable Vision

No 25, 40ft Servive Road, Phase II
Manjunath Ngr
Rajajing
Bangalore
Tel: +91 80 3305053

Key Personnel

Director: M.L Suresh

Asianet Communications

3rd Floor
Karimpanal Arcade
East Fort