



ATC, Satellite Radio and Other Hybrid MSS Networks: report overview

“ATC, satellite radio and other hybrid MSS networks: business cases and spectrum valuations” provides a comprehensive analysis of the business cases and spectrum valuations associated with different hybrid MSS networks. This 150+ page report from Telecom, Media and Finance Associates (TMF Associates), presents a detailed analysis of all the principal existing and proposed hybrid MSS networks, including both broadcast applications such as satellite radio and mobile TV, and interactive handheld systems, such as TerreStar and MSV.

The report describes the regulatory and technical issues that impact MSS networks, and develops detailed fifteen year business cases for MSV, TerreStar (North America and Europe), XM, Sirius, WorldSpace, TU Media, CMBSat, Solaris and ICO. Predictions are made about which systems will deliver the highest return on investment and which systems will fail to raise further funding. The report then analyzes the implications both for MSS operators and equipment vendors and for potential partners and competitors across the terrestrial wireless market.

Publication Date: October 2007

Topics covered

- Spectrum and hybrid MSS networks
- Design of hybrid MSS networks
- Business cases for interactive applications
- Business cases for broadcast services
- Implications for MSS
- Implications for terrestrial wireless

Extensive forecasts (2007-2022)

- Number of subscribers for each operator
- Revenue and costs for each operator
- Business and spectrum valuations
- Incremental funding requirements

All of your key questions answered

- Which applications deliver most value?
- Will satellite-based mobile TV take off?
- Can satellite radio expand internationally?
- Who are the most likely partners?
- How will MSS spectrum be used?
- What will it mean for investors?

About the author

Tim Farrar has over 14 years consulting experience across the satellite and telecom sector, and over the last decade has worked with almost all of the leading MSS players, developing business plans and assisting in optimization of the technical design for new systems. He has an M.A. and a Ph.D. from the University of Cambridge, UK and runs his own consulting company, Telecom, Media and Finance Associates, Inc. (www.tmfassociates.com), based in Menlo Park, CA, which specializes in the technical and financial analysis of satellite and telecom ventures.

ATC, satellite radio and other hybrid MSS networks

1	Executive summary	1
1.1	Spectrum and hybrid MSS networks	1
1.2	Design of hybrid MSS networks	5
1.3	Business cases for interactive and broadcast applications	7
1.4	Implications of ATC	10
1.5	Conclusions and recommendations	11
2	Spectrum and hybrid MSS networks	13
2.1	Introduction	13
2.2	Definition of hybrid MSS networks	16
2.3	MSS spectrum allocations and regulations	20
2.3.1	North America spectrum allocations and regulations	21
2.3.2	European spectrum allocations and regulations	23
2.3.3	Asian spectrum allocations and regulations	24
2.4	Alternative sources of spectrum	25
2.5	Valuing MSS spectrum	28
3	Design of hybrid MSS networks	37
3.1	Historical perspective on MSS	37
3.2	Historical perspective on satellite mobile broadcasting	42
3.3	Orbits: the move to GEO	45
3.4	Limitations of satellite-delivered mobile services	47
3.5	Expectations for ATC handset size	51
4	Business cases for interactive applications	57
4.1	Profiles of interactive hybrid MSS systems	57
4.1.1	MSV	59
4.1.2	TerreStar	60
4.1.3	Other systems	62
4.2	MSS revenue streams for interactive systems in North America	65

4.2.1	Government and emergency services (satellite backup)	66
4.2.2	Cellular extension services	67
4.2.3	Asset tracking services	68
4.3	Business cases for interactive applications	69
4.3.1	MSV	74
4.3.2	TerreStar in North America	79
4.3.3	TerreStar in Europe	83
4.4	Spectrum valuations for interactive applications	85
5	Business cases for broadcast applications	89
5.1	Profiles of broadcast hybrid MSS systems	89
5.1.1	XM and Sirius	91
5.1.2	WorldSpace	94
5.1.3	TU Media	96
5.1.4	CMBSat	97
5.1.5	Solaris and Inmarsat	98
5.1.6	ICO	100
5.1.7	Other systems	101
5.2	Business cases for broadcast applications	102
5.2.1	XM and Sirius	106
5.2.2	WorldSpace	109
5.2.3	TU Media	115
5.2.4	CMBSat	119
5.2.5	Solaris and Inmarsat	121
5.2.6	ICO	125
5.3	Spectrum valuations for broadcast applications	128
6	Implications of ATC	133
6.1	Optimizing the value of MSS spectrum	133
6.2	Implications for the MSS market	136
6.3	Implications for the terrestrial wireless market	139
6.4	Implications for other players	141

7	Conclusions and recommendations	143
7.1	The hybrid MSS network opportunity	143
7.2	Recommendations for MSS operators	145
7.3	Recommendations for other players	147
A	Business case data	149
	About TMF Associates	163

ORDER FORM

ATC, SATELLITE RADIO AND OTHER HYBRID MSS NETWORKS



CONTACT INFORMATION

Name

Title

Company

Address

City / State / ZIP code

Country

Email

Phone

ORDER OPTION

US\$2,995 Electronic copy (PDF),
with corporate license

US\$3,195 Electronic + paper copy,
with corporate license

Unless you indicate otherwise, printed copies will be sent to the contact address listed on the left.

Your order will be final upon delivery of the report. No returns or cancellations are allowed thereafter. For questions about our policy, please contact us.

PAYMENT METHOD

Check: attach a check in US dollars payable to Telecom, Media and Finance Associates, Inc.

Wire transfer: please call for details

Credit card: complete information below

Mastercard Visa Amex

Credit card number

Expiration date (month/year)

Name as it appears on the card

Billing address (if different from above)

City / State / ZIP code

Country

Signature and date

RETURN THIS FORM BY FAX TO +1 650 839 0375 OR BY MAIL TO:

TMF ASSOCIATES, 3705 HAVEN AVENUE, SUITE 113, MENLO PARK, CA 94025

FOR MORE INFORMATION PLEASE CALL TIM FARRAR ON +1 650 839 0376 OR

EMAIL: TIM@TMFASSOCIATES.COM