

Management Summary

Satellite Communications In Iraq DTT Consulting Ltd

58 St John's Street
Winchester
Hampshire SO23 0HF
United Kingdom
web site www.spotbeam.com

Table of Contents

About the Report	3
Report Conclusions	6
Overview of US Foreign Policy	8
Overview of the Iraqi Business Environment	24
Comments on Logistics	30
Telecommunications and Satcoms in Iraq	31
Mobile Communications in Iraq	37
Satellite Broadcasting in Iraq	39
Baghdad as a Media Centre	48
Broadcasting in Kurdish Iraq	49
Internet in Kurdish Iraq	49
Satellite Internet in Iraq	51
Satellite Projects in Iraq	56
Comments on VSATs	61
Appendices	63
Appendix 1: Michael Leeden, the High Priest of Neoconservatism	63
Appendix 2: DTT Consulting's Research Team	64

Tables

Table 1: Basic Data on Iraq	24
Table 2: TV Audience Research Statistics	42
Table 3: TV Stations in Iraq	45
Table 4: Iraqi and Kurdish TV Stations on Satellite	47
Table 5: Overview of Planned Al Iraqiyah Satellite Network	57

About this Report

Welcome to DTT Consulting's latest market research report. It is a follow on to our 2002 report on Satellite Communications in the Middle East. When we undertook that report, Iraq was just one of 22 countries we reported on. There wasn't that much to say as the country was subject to sanctions and its communications sector severely underdeveloped.

In updating our coverage this year we found that there was far too much to detail in a comprehensive report on the Middle East so we have decided to issue the section on Iraq as a mini-report.

We have taken a relatively broad approach to covering Iraq. In 2003 we published a report on satellite communications in Central and Eastern Europe which has lessons for understanding Iraq. The report covered rebuilding of the communications infrastructure in a number of failed or near-failed states in the Balkans and how international relations reflected in the issues behind that rebuilding. This particularly covered broadcasting and the long-term stability and business environment in the countries involved.

Developments that resulted in the invasion of Iraq reflect a very different international relations environment than that seen in the 1990s and 2000. We happen to believe that the environment will be modified as a result of the Iraq experience.

However, there remains a possibility that there will be further regime changes forced or otherwise) in the Middle East which will result in substantial changes in the market for satellite communications in the region.

We have provided is a critical look at the changes in international relations policies in the USA which led to the Iraq invasion. They also have some big implications for satellite communications world-wide. We have long argued that the Bush administration is not good news for satellite communications.

One recent development in the changing environment is Libya's continuing policy of opening up to the West. That predates 9/11 but suggests more opportunities for satellite communications as the country's broadcasting sector is liberalised. Libya's problem isn't lack of money. Years of sanctions means that it has much more money that it can spend.

Indeed, our general view of the Middle East is that it has been struggling to modernise. In places such as Dubai it has been successful to a staggering degree. The opposite is Al Qaeda, a deeply reactionary and backward looking movement inspired by the idea of taking the region back to the medieval world. In between is, perhaps, Iran.

The oddity of the region, though, is the Israel/Palestine problem. If ever in history there was a problem with a glaringly obvious solution this is it. Such, though, is the Viper's nest of politics in a country split between penury and paranoia, we don't see any early end to the dispute. All's the pity for the Middle East as it is this issue, above all, which makes the region so hostile to the West.

The principal author of this report is Roger Stanyard. However, he must give considerable credit to his colleague, Chris Forrester, for input on both satellite communications in the region and an understanding of the economics, politics and culture of the region. Chris is editor of Satcoms Insider, a world-class industry newsletter published by us. He is a recognised expert on the Middle East, having worked for the Middle East Economic Digest in its heyday. He has lived in the Middle East and is a frequent visitor there. In recognition of his expertise, he is an honorary professor at

the American University in Cairo. In the course of research behind this report, Chris visited a number of countries in the Middle East and talked with leading industry players there in satellite communications.

Like Chris, Roger Stanyard has many years experience in satellite communications, both as a publisher and consultant. He established the industry newsletter Interspace in 1982 after having cut his teeth on the computer industry and insuring satellites. Chris later went on to edit Interspace.

Roger holds a degree in economics from University College London, a post-graduate qualification in finance from the Southbank University, London, and an MBA from Cranfield University.

Over recent years, he has specialised in broadband satellite communications and Internet via Satellite, producing the Ka-band Report in 1997 and the annual Internet via Satellite reports in 1998, 1999, 2000 and 2001. In 1996 he undertook a major multi-client contract on the market for digital satellite communications in Western Europe.

He has extensive experience as a consultant in such diverse areas as spectrum management, DTH television, digital terrestrial television, conditional access, STBs, satellite operations and satellite service provision. He is a regular speaker at conferences on satellite communications.

At one time or other he has researched on satellite communications in every sovereign state in the world with the sole exception of North Korea.

Steve Roberts, our technical consultant, reviewed the report for us and provided the technical support. Steve started his career in satellite communications engineering in the UK before working on military and civil satellite ground systems in North America, Europe and the Far East. He joined DTT Consulting in 1989.

Report Conclusions

Given the security situation in Iraq, no reasonably accurate forecast of demand of satellite equipment and services in Iraq can be made. Nor can we predict how the security issue will develop.

Working, though, on the assumption that Iraq will see considerable reconstruction of its infrastructure over the next two years or so we conclude that:

- * DTH TV will increasingly dominate the broadcast markets and, possibly include a small pay-TV sector. Terrestrial TV may be by-passed as a major broadcasting platform.
- * GSM will be the dominant form of voice telephony.
- * VoIP will develop rapidly as a successor to switched fixed line telephony.
- * VSATs will be used in a wide variety of applications for at least the next few years.
- * Innovative satellite services are needed such as those used to connect banking ATMs, wireless local loop and Wi-Fi networks.
- * There are major short term opportunities in provision of mobile satellite phone services.

* There are major short to medium term opportunities in provision of international trunk voice and data services via satellite.

Despite the extremely slow progress in restoring the country's infrastructure in 2003, substantial demand for satellite equipment and services has already emerged.

The nature of the market indicates that satellite communications are a major element in the overall communications marketplace because of their ability to provide a very quick fix solution. There is so little terrestrial infrastructure that satellites are frequently the only alternative.

Moreover, their use is across a wide variety of applications. Ignoring core military applications, these include DTH (DBS), satellite phones, satellite broadband access, VSATs, international PSTN and ISP links.

Whilst reconstruction has been slower than expected, we expect that demand will also arise in other sectors including thin-route telephony, interconnection of GSM cells and GSM connection to the international PSTN networks, further ISP point to point links, civil administrative and security networks, fixed satellite TV uplinking and so on.

We note that satellites provide a more secure communications option than terrestrial landlines because installers are less likely to be exposed to terrorism. Moreover, landlines are difficult to police against sabotage or theft.

The current extensive use of satellite phones may fall if and when mobile GSM networks start operating. In other areas, though, we expect at least a substantial growth in installed base of satellite equipment over the next two years.

Upgrading the country's fixed telephony network is a low priority and, in any event, GSM is likely to provide the dominant platform for voice. This suggests significant demand for satellite-based broadband access and VSAT services.

Whilst reconstruction plans have placed telecoms well down the list of priorities, the reconstruction expenditure is so large that it should drive substantial demand for satellite communications.

Reconstruction funds earmarked for 2004 are approximately ten times larger than those spent in 2003.

The four key issues surrounding reconstruction are as follows:

* In early 2003 the United States grossly under-estimated the scale of reconstruction needed.

* As at year-end 2003, reconstruction had largely failed to provide significantly improved basic and public utility services to the country including fuel and electricity.

* There is a strong element of quick-fix muddling through in the 2004 reconstruction plans.

* The overall success of the post 9/11 foreign policy agenda of the USA is probably now wholly dependent on a successful reconstruction programme in Iraq.

As at the start of 2004 the Iraqi economy was experiencing a mini-consumer boom but the underlying economic problems remained daunting. Long-term unemployment may be around 50%.

Iraq is an extremely dangerous place for contractors, especially in the Sunni triangle around Baghdad. The Coalition forces and the Iraqi police and military are unable to provide security. Those working on US governmental contracts must have insurance cover. Needless to say the insurance rates are extremely high, around 20-25% of the value of cover.

How to purchase this report

This report costs UK £ 250, or USD 475.

Delivery is generally by e-mail in PDF or MS Word format.

Hard copies are available if requested.

Please e-mail sales@spotbeam.com for payment options.