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ON NANNIES



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YOUR COUNTRY  
NEEDS YOU

ALAN STOKES, PAGE 59



# THE AUSTRALIAN FINANCIAL REVIEW

WEDNESDAY 28 MARCH 2012

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## Pay TV piracy hits News

### Secret emails reveal scandal

**Exclusive**  
Neil Chenoweth

A secret unit within Rupert Murdoch's News Corporation promoted a wave of high-tech piracy in Australia that damaged Austar, Optus and Foxtel as News was trying to take control of the pay TV industry.

The piracy cost the pay TV companies millions of dollars a year. Foxtel, of which News Ltd holds 25 per cent, is in the process of acquiring satellite broadcaster Austar for \$1.9 billion, cementing its dominance of pay TV. Austar shareholders will vote on the deal on Friday.

A four-year investigation by *The Australian Financial Review* reveals a global trail of dirty tricks targeting competitors by Operational Security, a group of ex-police and intelligence officers within News Corp. Their actions devastated News's competitors, helping it acquire rivals at reduced prices — including DirecTV in the US and Teletu in Italy.

The security group, headed by Reuven Hasak, a former deputy director of the Israeli domestic secret service Shin Bet, was established in the mid-1990s within News subsidiary NDS, to counter internal fraud. It soon began hunting the pirates targeting its own operations as the global battle for pay TV dominance raged.

But documents uncovered by the *Financial Review* reveal that NDS encouraged and facilitated piracy of its competitors as well as companies



Sydney engineer David Cottle at his home this week. Inset, from top: Ray Adams, Reuven Hasak. Main photo: LOUIE DOUVIS

such as Foxtel, for whom it provided pay TV smartcards. NDS sabotaged business rivals, fabricated legal actions and obtained telephone records illegally. News Ltd chairman at the time, Lachlan Murdoch, declined to comment. A spokesman said NDS had not reported to News Ltd, the Australian arm of News Corp.

Pay TV pirates cracked the codes of smartcards issued to customers paying for the service. The hackers would then sell black-market smartcards giving viewers free access and

costing the broadcasters millions. NDS's actions are documented in an archive of 14,400 emails once held by former Metropolitan Police commander Ray Adams, who was European chief for Operational Security between 1996 and 2002.

The *Financial Review* is posting many of the emails on its website at afr.com. They provide a unique insight into the secret side of Rupert Murdoch's sprawling global empire, exposing an operational arm that has generated multibillion-dollar windfall profits for News Corp. NDS was

sold last week to Cisco for \$5 billion. The emails bolster claims by the BBC *Panorama* program that News sought to derail ONdigital, which collapsed with losses of more than £1 billion in 2002.

A Foxtel spokesman said yesterday it had worked with NDS for many years. "The entire basis of our contractual relationship is that NDS provides Foxtel with encryption services to prevent piracy."

News Corp has consistently denied any role in fostering pay TV piracy.

Full reports, pages 12-16, 49

### Hacker who got stung

Neil Chenoweth and Angus Grigg

For the undercover watchers in Rupert Murdoch's private security force, David Cottle was the "king", the "co-ordinator" of all hacking activities in Australia.

He called himself "Bond 007" online and hosted web forums about hacking pay TV smartcards — he certainly didn't think his telephone records could be hacked.

"Cottle is the pirate in OZ," wrote Avigail Gutman, the Asia-Pacific head of Operational Security at News Corp's NDS unit.

Cottle denied being part of a global hacking team when *The Australian Financial Review* located him in north-western Sydney on Monday.

"Good luck to them proving it because I was never involved," he said. But the 47-year-old father, who was employed by Fox Sports to install satellite TV in hotels, was not surprised to learn that NDS had put him under surveillance in 1999 and attempted to obtain his phone records.

His was a complicated relationship with NDS.

On the one hand, Cottle was encouraged by those working for NDS to hack into smartcards from a rival provider, Irdeto. At the same

Continued page 16

### Coalition rift on Huawei ban

The federal Coalition split yesterday over the Gillard government's decision to block Chinese technology company Huawei from tendering for the \$36 billion national broadband network.

Respected security analysts branded Labor's decision as heavy-handed. But technology experts said Huawei's attempts to ally fears would not be enough to ensure the integrity of the NBN.

Reports, page 10

Ben Potter: Features, page 60

## Unions fight for super-charged wage rises

**Exclusive**

Mark Skulley and Pip Freebairn

The union movement will today defy Workplace Relations and Superannuation Minister Bill Shorten and refuse to give up wage increases in return for higher superannuation payments.

The national executive of the Australian Council of Trade Unions will

meet in Melbourne and recommit to opposing trade-offs for an increase in super contributions from 9 per cent to 12 per cent over a decade.

The Gillard government introduced the policy as part of the minerals resource rent tax and regards it as one of its top priorities.

The ACTU's move could embarrass Mr Shorten, who recently promised the business community it wouldn't be forced to cover the full

cost of super increases in addition to normal wage rises.

ACTU secretary Jeff Lawrence said the body planned to send a clear statement of its position, "given some of the comments in the last week from the Minister [Shorten] and from other people."

"There's no way that unions are going to say that there's any trade-off because, apart from anything else, the phase-in time is so long," he told

*The Australian Financial Review.*

Mr Shorten has argued that employees will recognise that larger superannuation payments are equivalent to delayed pay rises and will restrain claims for immediate wage increases.

His spokesman said yesterday that

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ACTU rejects importing staff, page 4  
Editorial: Opinion, pages 62, 63

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# PAY TV PIRACY

## THE ROAD TO \$US5 BILLION

Key dates in the NDS story



**FEB 1988**

Rupert Murdoch sets up News Datacom (NDS) in Israel with \$US3.6m. Weizmann Institute has 20% share.

**FEB 1989**

Launch of Sky Television in the UK, using NDS smartcards to prevent unauthorised viewing of the satellite TV service

**NOV 1990**

News Corp debt crisis: Murdoch merges Sky with rival BSB to form BSkyB. NDS introduced to all services

**1990-1991**

Michael Clinger runs News Datacom as CEO despite US arrest warrant outstanding for stock fraud.

**1992**

Rupert Murdoch persuades General Motors to use NDS for its planned DirecTV satellite television service

**MID-1995**

News counsel Arthur Siskind supervises investigation into continuing fraud of NDS by Michael Clinger. Murdoch hires former Israeli Army signals officer Abe Peled as CEO and former Shin Bet deputy head Reuven Hasak as security chief

**OCT 1995**

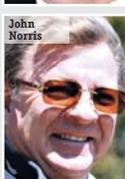
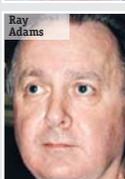
Foxtel launches on cable in Australia using NDS

**1996**

Hasak sets up Operational Security unit to fight piracy of NDS cards at BSkyB and DirecTV under former Scotland Yard commander Ray Adams (Europe), ex-US Army intelligence officer John Norris (US) and later Avigail Gutman (Asia Pacific)

**OCT 1996**

Israeli police raid News Datacom offices in Haifa, Jerusalem, with warrant to hold Rupert Murdoch and others for questioning after Clinger reveals tax fraud



# Free to air: dirty tricks

It was established to protect News Corp's pay TV interests, but the secretive organisation soon turned its attention to damaging the company's competitors, writes **Neil Chenoweth**.

A secret unit within Rupert Murdoch's News Corporation promoted a wave of high-tech piracy in Australia that damaged Austar, Optus and Foxtel at a time when News was moving to take control of the Australian pay TV industry.

The piracy cost the Australian pay TV companies up to \$50 million a year and helped cripple the finances of Austar, which Foxtel is now in the process of acquiring.

A four-year investigation by *The Australian Financial Review* has revealed a global trail of corporate dirty tricks directed against

competitors by a secretive group of former policemen and intelligence officers within News Corp known as Operational Security.

Their actions devastated News's competitors, and the resulting waves of high-tech piracy assisted News to bid for pay TV businesses at reduced prices — including DirecTV in the US, Teletip in Italy and Austar. These targets each had other commercial weaknesses quite apart from piracy.

The Australian Competition and Consumer Commission is still deliberating on final details before approving Foxtel's \$1.9 billion takeover bid for Austar, which will cement Foxtel's position as the dominant pay TV provider in Australia.

News Corp has categorically denied any involvement in promoting piracy and points to a string of court actions by competitors making similar claims, from which it has emerged victorious. In the only case that went to court, in 2008, the plaintiff EchoStar was ordered to pay nearly \$19 million in legal costs.

The issue is particularly sensitive because Operational Security, which is headed by Reuven Hasak, a former deputy director of the Israeli domestic secret service, Shin Bet, operates in an area which historically has had close supervision by the Office of the Chairman, Rupert Murdoch.

The security group was initially set up in a News Corp subsidiary, News Datacom Systems (later known as NDS), to battle internal fraud and to target piracy against its own pay TV companies. But documents uncovered by the *Financial Review* reveal that NDS encouraged and facilitated piracy by hackers not only of its competitors but also of companies, such as Foxtel, for whom NDS provided pay TV smart cards. The documents show NDS sabotaged business rivals, fabricated legal actions and obtained telephone records illegally.

### The email trail

The actions are documented in an archive of 14,400 emails held by former Scotland Yard Commander Ray Adams who was European chief for Operational Security

between 1996 to 2002. The *Financial Review* is publishing thousands of the emails on its website at URL afr.com.

The email archive, which News Corp has previously sought to suppress, provides a unique insight into the secret side of Rupert Murdoch's sprawling global empire — it reveals an operational arm that has generated multi-billion dollar windfall profits for the company.

The emails support claims by the BBC *Panorama* program, aired in the UK on March 26, that News sought to derail OnDigital, a UK pay TV rival to News's BSkyB, that collapsed with losses of more than £1 billion in 2002, after it was hit by massive piracy, which added to its other commercial woes.

While News has consistently denied any role in fostering pay TV piracy, the Adams emails contradict court testimony given by Operational Security officers as well as statements by News lawyers in the past three weeks.

In addition to the controversy over OnDigital and Austar, the actions of Operational Security have triggered five separate unsuccessful legal actions by pay TV companies around the world, each claiming damages of up to \$US1 billion.

Covert operations in Australia were directed by the head of Operational Security for Asia Pacific, Avigail Gutman. At the time Gutman was based in Taiwan, where her husband Uri Gutman was the Israeli consul, before she was promoted to be a Group Leader based in Jerusalem.

### Battle of the boxes

In 1999, the battle to control the set-top box in Australia was at its height. The country's first pay TV service, Australis Media, had collapsed in May 1998 leaving Foxtel, owned by Telstra, News Corp's wholly owned Australian subsidiary News Ltd and Kerry Packer's Consolidated Media, to pick up its satellite customers. At the same time News Ltd under Lachlan Murdoch focused on controversial strategies to rationalise the pay TV industry and bring it under News's control.

At the time, Australia had no effective laws against pay TV piracy. None of the actions that followed would be illegal, senior lawyers told the *Financial Review*.

On Monday, NDS issued a comprehensive statement denying any role in promoting piracy or providing competitors' codes for use in piracy. A full version of the statement can be found online at broadbandtvnews.com.

Back in 1999, Telstra was involved in a poisonous dispute with News, which it accused of double dealing, and in July 1999 Telstra executives drew up a board submission that recommended legal action to force News to sell its 25 per cent stake in Foxtel.

Internal Telstra documents tabled in the Kerry Stokes C7 court case in 2006 said News Ltd "had breached, in Telstra's belief, its contractual obligations in respect of programming and its good faith obligations by seeking to benefit its own financial interests to the detriment of Foxtel".

Telstra's then chief executive



Ziggy Switkowski testified in 2006 that he had decided not to submit the paper to the board but noted: "There is no doubt in my mind that executives from all three shareholders often came to negotiations with a degree of emotion and ferocity that wasn't helpful."

With the internet in its infancy, the set-top box of the pay TV service was seen as the key to controlling future media, through the interactive and expanded services the box could offer.

The key to the set-top box — and the heart of any pay TV business — is the conditional access system. The broadcaster issues paying customers with a smartcard that is inserted into the set-top box to decrypt the satellite or cable signal fed into the customer's home. The system also manages the entire customer record base. It's the nerve centre for the business — but if the encryption is broken and the smartcard is hacked, the pay TV operator is wide open to piracy. It can no longer control who watches its broadcasts and loses its revenue stream.

When it established Foxtel in Australia, News used its own conditional access provider, its Israel-based subsidiary NDS. But the smart card NDS provided Foxtel was similar to NDS cards that had already been pirated elsewhere.

Only a handful of companies

offered conditional access services for pay TV — NDS's chief rivals were Nagra, owned by Kudelski in Switzerland; Seca, owned by Canal Plus in France; and Irdetto, owned by Mindport in South Africa.

By the mid-1990s, NDS had become the glue holding Rupert Murdoch's global pay TV empire together providing conditional access services to Foxtel, BSkyB and STAR (in Asia). It also had big contracts with other broadcasters such as GM's DirecTV in the US. But the NDS conditional access system was also the most widely pirated and was in danger of being driven out of business.

### Hunting the pirates

Operational Security was set up as a secret unit within NDS with the active involvement of the Office of the Chairman at News. Initially when Reuven Hasak was hired in 1995, the goal was to help News sue Michael Clinger, a former NDS chief executive who had defrauded the company.

The target then became pay TV pirates and hackers — and Operational Security proved ruthless at prosecuting pirates attacking News Corp systems.

It's an unusual step for a media company to set up its own security service and it was perhaps an indication of how desperate the

**Lee Gibling built thoi.com into the world's leading piracy site where hackers could download programs, swap codes and ask other hackers for help.**



# 14,400 emails Go to afr.com

The Financial Review is publishing thousands of the emails, a sample from an archive of 14,400 emails held by former Metropolitan Police commander Ray Adams who was European chief for Operational Security between 1996 to 2002.

# broadcast for all to see



**Former Metropolitan Police commander Ray Adams. European chief for Operational Security between 1996 and 2002.**  
Photo: PANORAMA

## The key to pay TV

Subscription television is controlled through the set-top box. The key to the set-top box is the conditional access system, which uses a smart-card to decrypt the cable or satellite signal and manage the customer record base.

High-tech pirates, or hackers, try to break the encryption coding by reverse engineering the smart-cards, disassembling them microscopic layer by layer to reveal the hardware circuitry and crack the software coding. The hackers might be commercially driven or just in it for the thrill.

There is a multi-million dollar black market for pirated smart-cards that enable buyers to access pay TV for nothing apart from the \$1.00 or so for the dodgy card – no monthly fees and unlimited access to all channels, including premium services.

The pirated smart-cards are sold over the internet, by word of mouth, in pubs, flea markets and car-boot sales.

Once a broadcaster's encryption system has been hacked, there's a race between the pirates and the broadcaster. The pirates produce and



**Foxtel was the only Australian pay TV company to use the NDS cards; the others used Mindport's Irdeto.**

sell as many of the corrupted cards as possible before the broadcaster can fix the problem, either by replacing the cards or disabling the pirated cards with a software patch, an ECM. As soon as a new card or patch is issued, the game begins again. Nobody, especially the pirates, wants blank screens.

In the mid 1990s only a few companies provided conditional access services: News Corp subsidiary NDS; Nagra owned by Kudelski in Switzerland; Irdeto owned by Netherlands-based Mindport; Seca owned by Canal Plus in France.

piracy situation was for NDS. Pay TV piracy is a murky world of hackers, hobbyists, dealers chasing millions of dollars from selling pirate cards and the growing incursion of organised crime.

Operational Security, headed by Hasak, Ray Adams in Europe, former US Army intelligence officer John Norris in the US, and Avigail Gutman in Asia, quickly gained a reputation for handling complex criminal investigations, using more than 20 informants and undercover agents and executing "stings" on pirate groups, often working with law enforcement agencies.

NDS in a statement yesterday said it was common for conditional access companies to obtain code for competitors' products – either through raids on pirates or for research and analysis.

However, the Adams emails show that Operational Security also had its own agenda, pursuing broader corporate goals for News, at times to the cost of News Corp's allies and customers including Foxtel in Australia and DirecTV in the US.

In Australia, only Foxtel used NDS for conditional access. Australis, Austar and Optus all used Mindport's Irdeto conditional access system. After Australis collapsed Foxtel took over its Galaxy satellite customers and relaunched them as a new arm, Foxtel Satellite, in April 1999. But

that service also had to be broadcast using Irdeto services. Irdeto enjoyed a market niche in Australia that would be worth tens of millions of dollars if NDS could take it over. But to break that stranglehold, NDS had to be able to show that Irdeto had been pirated and was no longer secure.

The frustration wasn't just in Australia. News had bought into an Italian pay TV operation called Stream SpA that also used Irdeto.

Something had to be done. "Hello Gentlemen, we've now managed to write to an Australian Irdeto card using the s/w [software] I got from Joyce," Avigail Gutman wrote to her boss Hasak and to Ray Adams in London, on May 29 1999.

Joyce was a codename for an informant Gutman used, and she was concerned that nothing could link back to him in the software "so that we do not expose Joyce in the process of exposing Irdeto."

Adams proposed that one of his hackers rewrite the software into a new pirate program. Gutman said the new pirate cards by Adams' contact could "be to our benefit if these came out on the market first". She was proposing to sell the Operational Security pirate card before the real pirate card could be distributed.

On May 5, Andy Coulthurst, a British hacker working for Operational Security, emailed

Gutman: "Hacking Irdeto is SO EASY! All you need is . . ." and he rattled off the details.

"Andy this is great stuff," Gutman emailed back from Taiwan. She had been working with David Johnson, the business development manager at the NDS Sydney office, who had been testing the pirate software for her. "I am trying to get more cards (Foxtel this time) – but despite all the stories about crooked installers who will sell you extra cards—I have yet to find them."

Johnson now proposed to get a Foxtel service installed in his building as he had no contacts with Foxtel Satellite apart from people who worked at Foxtel.

"WE WILL NOT USE THE ONES AT FOXTEL," Gutman wrote.

"Somewhat we ask the install crew for a de-authorised card," Johnson replied.

The reason Gutman wanted the old cards without telling Telstra or Foxtel was to test out pirate software that she had downloaded from a UK piracy site called thcoic.com (The House of Ill Compute).

Lee Gibling, who ran Thcoic, had built it into the world's leading piracy site, where hackers could download software programs, swap codes, and ask other hackers for help. Many hackers even used a Thcoic email address.

"We currently see some 4 gigabytes of daily requests on all the sites averaging somewhere in the region of 300,000 hits a day," Gibling wrote to Bob Cooper, the publisher of the influential monthly trade magazine SatFACTS.

Gibling hoped Cooper would advertise on Thcoic. What he didn't mention was that Thcoic was funded, supervised and controlled by Operational Security. Copies of all postings were forwarded to Operational Security in NDS offices in Israel.

So the pirate codes that Gutman planned to use on Foxtel cards came from a piracy site run by Operational Security. And now Op Sec wanted to earn advertising revenue from it.

Gibling had set up a special site on Thcoic for Australian piracy, and elite Australian hackers had access to Area 51, a closed section run by a Sydney hacker called David Cottle under his online name Bond 007.

The Financial Review contacted Cottle under the company name listed in the Adams emails. He said he had become aware of Thcoic after reading of it in SatFACTS, but he knew nothing of the piracy scene or Thcoic other than rumours and reports.

"Wow what an integrate twisted tale of events!" Cottle said. "Funny about someone same surname as me that's a coincidence in a very creepy way."

## The Mad Max sting

By the end of May 1999, the piracy market in Australia had exploded. At its height more than 50,000 people were using pirate cards, which cost around \$200. They were original Foxtel or Austar cards that had been reprogrammed to allow viewing of all programs without paying any subscription.

In that month, Rolf Deubel, a German hacker known as MadMax and based in South Africa, visited Australia to set up pirate dealerships. It was Deubel's Millennium Group – composed mainly of German hackers in Europe – which had been posting the Irdeto pirate software on the Thcoic website.

MadMax began a public correspondence with Bob Cooper at SatFACTS, describing in emails published on the internet his business plans for Australia, insisting that the reprogrammed cards he was selling were perfectly legal under Australian law.

What followed then was one of the strangest episodes in the history of Operational Security. Lee Gibling discovered from an email in MadMax's Thcoic account that he was travelling to Bangkok in September 1999.

Avigail Gutman alerted Mindport, the company making the Irdeto system, and arranged for

Continued next page

**MAY 1997**  
Murdoch breaks off talks with Echostar CEO Charlie Ergen to merge their US satellite interests, after Ergen refuses to use NDS. Ergen sues for \$5bn damages

**LATE 1997**  
NDS decides to use 'Black Hat' team to reverse engineer Echostar smartcard 'to prepare material in anticipation of litigation or for trial'

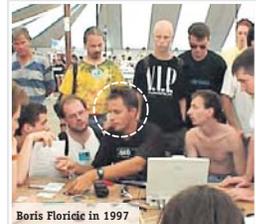
**FEB 1998**  
BSkyB and NDS outraged when UK satellite TV rival OnDigital decide to launch using Canal Plus 'Seca' cards, not NDS

**APR 1998**  
News Datacom settles Israel tax dispute for £3m. Later changes name to NDS

**MAY 1998**  
Ray Adams unveils Thcoic.com: "This is my site." Thcoic.com (The House of Ill-Compute) is a website-forum for pay TV hackers

Australis Media collapses, its satellite customers transferred to Foxtel using Irdeto cards

NDS Black Hat team uses Bristol University Focused Ion Beam to reverse engineer Echostar and Seca cards, after cracking Viaccess and Irdeto cards



Boris Floride in 1997

**OCT 1998**  
Black Hat team complete draft report on how to hack Echostar cards. Code from the card is posted four days earlier on pirate site DR7.com. DirecTV later abandons plan to drop NDS cards

German hacker Boris Floride found hanging in a Berlin wood

**NOV 1998**  
News in humiliating \$1bn settlement with Echostar in return for stock



**MAR 1999**  
Rupert Murdoch breaks off talks to merge BSkyB with Canal Plus after CEO Pierre Lescure insists French control merged entity

ROM codes for Canal Plus Seca card posted on DR7.com. NDS employee and hacker Chris Tarnovsky emails part of ROM code for Echostar card to Swiss independent hacker Jan Saggiore

**MAY 1999**  
South African hacker Rolf Deubel (MadMax) visits Australia to sell cards that can pirate Foxtel and Austar

News Corp buys 35% of Italian pay TV group Stream, which soon switches to NDS

**SEP 1999**  
Deubel arrested in Bangkok after NDS read travel details in his Thcoic email account

Continued next page

**German hacker Rolph Deubel, aka MadMax, was arrested in Thailand on information provided by Operational Security Asia-Pacific head Avigail Gutman.**



# PAY TV PIRACY

## THE ROAD TO \$US5 BILLION

Continued from previous page



Rolf Deubel in prison in Bangkok

### OCT 1999

Ray Adams receives copy of report by Jan Saggiiori to Canal Plus linking NDS to piracy, sets out to discredit him

### NOV 1999

Avigail Gutman of NDS Operational Security team provides protection for Sydney hacker David Cottle, who is attacking Foxtel Irdeco cards, then sends him a system to pirate Malaysian Astro network to divert him from hacking StarTV's NDS card. Astro later moves to NDS

News floats 20% of NDS on Nasdaq, valuing NDS at \$1bn



### EARLY 2000

Murdoch plans to spin off News satellite assets to acquire DirecTV. NDS has software to kill most DirecTV pirate cards but does not use it for 15 months

### MAY 2000

OnDigital hit by piracy of its Seca cards



### 2001

DirecTV sues NDS over unauthorised actions

### MAR 2002

Canal Plus Technologies sues NDS for \$US1bn

OnDigital (renamed ITV Digital) collapses

### MAY 2002

Ray Adams sacked after his agent, master hacker Oliver Kömmerling, provides testimony supporting Canal Plus. The hard drive from Adams' laptop disappears



Oliver Kömmerling in Monte Carlo

### JUN 2002

With Canal Plus and its parent Vivendi a week away from liquidation, News agrees to buy Italian pay TV arm Telepiu for €1bn, on condition that Canal Plus drops lawsuit on completion of the deal



# Whistleblower made

They knew they had no case but it didn't stop Operational Security chasing a stubborn hacker through the courts, writes **Neil Chenoweth**.

Senior executives in Rupert Murdoch's media empire mounted a sham multimillion-dollar lawsuit in the United States to silence a whistleblower whose evidence threatened to expose a dirty tricks campaign by News Corp.

A former Metropolitan Police commander who worked for Murdoch, Ray Adams, orchestrated an extraordinary legal campaign to destroy the reputation of a Swiss hacker, Jan Saggiiori, who held key evidence that News had sabotaged its competitors' products.

"We... have no case against Jan," the US executive overseeing the lawsuit, former Army intelligence officer John Norris, told Adams two months after it was served on Saggiiori, yet legal proceedings continued for another nine months. Emails between Adams, Norris and other News executives and lawyers raise questions about whether News was involved in an abuse of process of the US court system.

Saggiiori was added to a lawsuit lodged in Montana in February 2000 by a News subsidiary, NDS, against a group of Canadian pay TV pirates after he became a consultant to News' competitors, the French media group Canal Plus and later Nagra, a Swiss technology firm. A secretive NDS unit, Operational Security, had earlier "reverse engineered" the two competitors' products to extract their coding.

To add to the charade, two Bulgarian hackers, who were secretly on the NDS payroll, were also added to the lawsuit even though NDS knew that the legal proceedings against them would never proceed.

The decision to sue the three men was taken at a telephone conference call on November 16, 1999 overseen by News Corporation's deputy general counsel, Genie Gavenchak, who worked with general counsel Arthur Siskind in the Office of the Chairman.

It would emerge later that Saggiiori had key records linking NDS Operational Security to the leak of source codes for both Nagra and Canal Plus, which made the Seca card. Such "smartcards" are at the heart of satellite television encryption systems, enabling broadcasters to control who can access their services.

"Just to recap, we included Jan in the lawsuit in hopes it would give you leverage to impact Jan's relationship with Nagra and/or slanderous comments he apparently has made towards NDS, you, Mike, Alex, et al," Norris told Adams on June 8, 1999 in an email copied to their supervisor, Reuven Hasak, in Israel.

The three men worked in Operational Security, a unit within News Corporation and attached to NDS, an Israeli technology company that provided encryption and customer management services to pay TV companies including Murdoch-controlled BSkyB and General Motors' DirecTV.

Lawyers who spoke to *The Australian Financial Review* said

that as soon as a party came to the conclusion that they had no case, it was their legal duty to drop the case immediately.

A senior barrister said that in the Australian legal system, joining a defendant to an action without a genuine belief in the merits of the case would amount to an abuse of process, if this could be demonstrated on the facts.

Instead, the case continued for another nine months as Adams continued to pressure Saggiiori to sign a sweeping permanent injunction which was later used by NDS lawyers in a 2008 court case with EchoStar, another rival satellite TV company, as proof of his involvement in piracy.

The crisis for the Operational Security team began on October 22, 1999, when Adams received a copy of a four-page report written by Saggiiori for Canal Plus that linked Operational Security personnel to piracy of a range of European pay TV companies including Canal Plus.

Saggiiori was now assisting the security chief of Canal Plus, Gilles Kaehlin, in a major investigation of NDS and Operational Security.

Adams was alarmed. "I can tell you that the French Security Services and the German Police are investigating and that one of them is in touch with one of the agencies in the USA," he wrote to Norris on October 22.

The new Canal Plus security chief wanted to sue Adams. "He was until recently a senior member of the French Security Services.

"I met him briefly in Paris a couple of weeks ago. He claimed that he can get anything done anywhere in the world."

The timing was unfortunate. That same day Adams was involved in the



prosecution in Thailand of Rolf Deubel, a German hacker known as MadMax. Adams was also arranging to send a pirate device to a Sydney hacker to promote piracy in Malaysia. His colleague, Avigail Gutman, who headed Operational Security in Asia, suggested Deubel should be released so that he could continue the hack of the Canal Plus system in Asia.

Meanwhile, NDS was scheduled to float 20 per cent of its stock as an IPO on Nasdaq on November 21 and any hint of the Canal Plus investigation could undermine the stock price.

Adams set out to convince Canal Plus that Saggiiori was trying to shift

the blame and that in fact it was Saggiiori who was responsible for all of the piracy.

Hopefully they would realise Saggiiori was "a bullshitter and a person on a personal vendetta", Adams told Hasak, the head of Operational Security.

"I believe that I should start making use of the inevitable outcome and start influencing the thoughts of Canal+ in this direction. This must be subtle and discreet and come from others."

Having earlier conferred with Norris, Adams wrote to him again on November 3: "Anyway I have a very nice little plan to really shake things up. Can you tell me if you have managed to have Plamen, Vesco and Jan SAGGIORI named in the court case in the USA. This is an important step in my little plan which is all European."

Norris was about to launch the major lawsuit against the Canadian pirate dealers who had reverse engineered NDS's new P2 smartcard designed for US satellite broadcaster DirecTV, NDS's biggest client.

Back in 1997, the Canadians had smuggled the two Bulgarian hackers, Plamen Donev and Vesselin Nedeltchev (known as Vesco) into Canada under false papers, then into the US, where they had hired the University of Montana physics lab to crack the P2 card.

Adams now wanted to add Saggiiori to the lawsuit. By November 12, Adams was writing to Norris, "We have a problem. Jan Saggiiori is now known to be working full time with Canal+. He considers that he is on a mission to determine who and where the hack of the SECA system took place."

Norris replied: "What problem? Whoever hacked Canal plus and SEDKA [sic] may have a problem. 'We' don't have a problem."

He went on to say that Scott Wilsdon, an external lawyer at Yarmouth Wilsdon Calfo, was working on the lawsuit that would include Saggiiori.

"I'll have more details on Tuesday after a conference call with the lawyers and Genie," Norris said.

Email records show that Genie was Eugenie Gavenchak, News Corp's deputy general counsel. She had worked closely with general



'[Jan] Saggiiori was a bullshitter and on a personal vendetta,' wrote Ray Adams



Eugenie Gavenchak, News Corp's deputy general counsel worked on the lawsuit



Gilles Kaehlin, security chief at Canal Plus, was involved in a major investigation of NDS



Chris Tarnovsky was a paid informant for NDS and became a full-time employee

**"I have recently put him in a corner. He is starting to realise that we are in charge."** Ray Adams wanting Gilles Kaehlin to rein in Saggiori

**"What problem? Whoever hacked Canal Plus and SEDKA [sic] may have a problem. 'We' don't have a problem."** John Norris

# to change his tune

**'We named Jan [Saggiori, pictured left], only to accommodate your efforts to make his life difficult.'**

John Norris, Operational Security

claiming from the piracy of its cards?

In this tortuous story, Tarnovsky (by this time a full-time employee), had played a significant role. Also, News would have to sue Plamen and Donev as well, before they could add Saggiori to the lawsuit.

However, by this time, Plamen and Vesco were working for NDS under contract as consultants. Adams and Norris needed to explain to them the lawsuit against them was a ruse, and to guarantee there was no intention to enforce any claim against them.

"Now we can start to put the rest of the plan into operation," Adams wrote to Norris on January 7, 2000 after receiving a draft of the lawsuit. "Now with the suit I will be able to get the Bolgers involved."

Norris wrote to Wilsdon, who was handling the case for NDS: "The Bulgars actually are not going to be defendants (they are now our consultants)."

Wilsdon wrote back about serving the lawsuit on Plamen and Vesco, "but, as you point out, we are not going to proceed against them any way so we need not worry about the procedural requirements."

In mid-February, Plamen wrote to the Canadians who had told him of the lawsuit. "I am surprised and pissed off! The silly matherf--ers[sic] ... By the way, what is the place of Jan there? He has nothing to do with it!"

But by March 11, Norris could write to Wilsdon, "Ray Adams has the two Bulgars fully on board re the HH suit (that names the Bulgars and Jan S). I met with the Bulgars in the UK this week and Ray. The bottom line is, I am 100 per cent confident in their cooperation and support of our objectives."

Adams emailed a lawyer with the Bulgarian anti-piracy group BulAKT, Velislava Dimitrova, saying Plamen and Vesco were "as part of an ongoing operation I need to officially serve papers on both of them denouncing them in a civil case in the USA". Could she help?

"They have some papers with them. You need to take the papers from them and then hand them back as a formal service," Adams wrote.

Saggiori was served with the lawsuit on April 4. By June 7, Adams was pressuring Gilles Kaehlin at Canal Plus to rein in Saggiori because of the lawsuit. "Jan is still playing silly buggers. He calls us the 'enemy'. Yet I have recently put him in a corner. He is starting to realise that we are in charge."

The following day Norris exuberantly reported that the Canadian pirates were negotiating a settlement, and asked what should be done about Saggiori. They had previously discussed ways to target Saggiori's parents: "Just to recap, we included Jan in the lawsuit in hopes it would give you leverage to impact Jan's relationship with Nagra and/or

## EUROPEAN HACKERS

**Oliver Kömmerling**  
German master hacker hired by NDS, later Canal Plus  
NDS codename Alex



**Chris Tarnovsky**  
US serviceman in Germany turned NDS agent in US  
NDS codename Mike, George or Biggun



**Jan Saggiori**  
Swiss hacker, blows whistle on NDS  
NDS codename Hannibal



**Plamen Donev**  
Bulgarian hacker, later hired by NDS  
NDS codename Pluto



**Vesselin Nedeltchev**  
Bulgarian hacker, later hired by NDS  
NDS codename Vesco

**Boris Floricic**  
German hacker who worked with Kömmerling, dies in park  
Online name Tron



**Rolf Deubel**  
South African hacker, hacks Foxtel 1999, lured to and arrested in Bangkok in NDS sting  
Online name MadMax



**Lee Gibling**  
Founder of Thioic.com (The House of Ill Compute), world's biggest piracy site in UK, which becomes a front for NDS to trap hackers — sets up MadMax sting



**David Cottle**  
Sydney based satellite dish installer  
Online name Bond 007  
Gutman describes him as the "master-organizer, who has managed quite an infrastructure in OZ."



slandorous comments he apparently has made towards NDS, you, Mike, Alex, et al.

"We (NDS-US and DIRECTV) have no case against Jan although the lawsuit certainly impacted him somewhat. I think the biggest impact was the concerns his family has on their good name.

"When and if you can use the lawsuit to your advantage do so as you see fit."

On July 14 Norris wrote again that Plamen and Vesco "should be reassured they are NOT part of the suit even though named".

"RE Jan S. We named Jan only to accommodate your efforts to make his life difficult and to give you leverage. If you want us to proceed, we can go through the expense I believe that will require him to spend \$\$\$ on a lawyer (or to ignore us in which case we will get a judgement against Jan in US Federal Court that is enforceable in Switzerland)."

On October 16, Adams wrote to Norris, "It is all window dressing to continue with the action we have taken against him so far. As you know Canal+ have asked for my assistance in having the action in the USA stopped against S..... I told them that this would probably involve S..... signing a document stating that he would not harm NDS in the future ... I am afraid that without some sort of document it will look as if he has won."

Adams continued to pressure Saggiori to sign an undertaking. Despite Norris having said there was "no case", on November 18, Adams wrote to Saggiori: "We have just over a week. The US lawyers are withdrawing the case against those who have signed the same agreement as I sent you ..."

"Bear in mind that many others that have signed have also paid millions of dollars in compensation - you will not pay anything. We could be faced with the position where you are the only one left and the rest of them give evidence against you. Please hurry."

By March 20, 2001, with the case about to be wrapped up, Adams wrote to Norris and Wilsdon: "The plan against Saggiori worked out well. Now that our operation is over we must now avoid any embarrassment or problem to ourselves in settling the case.

"I suppose the bottom line is that we are now obliged to settle on whatever terms we can muster."

Despite this, Adams wrote to Saggiori the same day pressing him to sign the enforceable undertaking: "I intervened on your behalf because Giles asked me to help you and to stop the case. At the same time I asked for nothing in return."

Faced with the unlimited legal resources of one of the world's largest media companies, Saggiori signed an undertaking not to reverse engineer NDS products while denying the allegations in the lawsuit.

Saggiori, through his lawyer, Lee Brunner of Montana law firm Poore, Roth & Robinson, PC, declined to comment.

Saggiori rebuffed subsequent attempts by Adams to befriend him. After inquiring after the health of Saggiori's parents in October 2001, Adams wrote to him: "All I have ever said about you is the truth. Above all I stopped a prosecution case against you. Now you hint that you will be in one against NDS."

Saggiori finally testified against NDS in the case brought by EchoStar in 2008, providing an encrypted email sent to him by Chris Tarnovsky in March 1999, which contained part of the source code for the Nagra smartcard used to secure EchoStar programming — a document that the NDS independent expert did not challenge.

Tarnovsky said he would not have used the high level PGP encryption in the email as this would have been illegal in the US.

In cross-examination, the NDS lawyer took Saggiori through the undertaking he had signed, clause by clause, not to pirate NDS cards and suggested other payments to him represented money laundering.

The agreement to settle the Montana case against Saggiori, which was not produced, was signed by Genie Gavenchak in April 2000.

■ nchenoweth@afr.com



counsel Arthur Siskind since they were partners at New York law firm Squadron Ellenoff Plesent & Sheinfeld and had joined News in the 1980s. A News Corp spokesman yesterday told the *Financial Review* that News wished to respond to questions emailed to Gavenchak last week, but the *AFR* had not received a response by the time it went to press.

Wilsdon, of US law firm Yarmuth Wilsdon Calfo, said in an email last week that his client, NDS, had declined permission for him to respond to questions from the *AFR*.

Although it was a joint lawsuit with DirecTV, three NDS plaintiffs led the case — NDS Americas Inc in the US, and NDS and News Datacom Ltd in the UK.

Adams and Norris were the responsible officers with the US and UK NDS companies directing the litigation under Gavenchak's supervision. Their emails were copied to Hasak.

Gavenchak's decision to add Saggiori to the lawsuit must have been a difficult judgment as the Swiss hacker's role had been at first sight peripheral.

In April 1997, the Canadian pirate dealers were offering up to \$1 million for a top-flight hacker to crack the DirecTV NDS card. They had asked an American hacker, Chris Tarnovsky, to recommend someone in Europe.

The world of pay TV piracy is murky and complicated. What the Canadians didn't know was that Tarnovsky was a paid informant for NDS, and would shortly become a fully fledged employee.

Tarnovsky contacted Saggiori, a friend of his, for names of hackers.

Saggiori testified in a different case brought by US satellite TV provider EchoStar against NDS in 2008 that he gave Vesselin Nedeltchev's phone number to Tarnovsky, which he passed on to the Canadians.

Providing a telephone number and a name was the extent of Saggiori's involvement. He had a loose arrangement with the two Bulgarian hackers whom he said offered to pay him \$15,000 as an introduction fee but did not pay him.

Did this make Saggiori equally liable for the tens of millions of dollars of damage that NDS was

## SEP 2002

EchoStar, Astro (Malaysia), Sogecable (Spain) join Canal Plus lawsuit with their own separate claims. DirecTV reopens lawsuit against NDS. US District Attorney appoints grand jury to investigate NDS

## OCT 2002

General Motors ends negotiations for sale of DirecTV to News, instead announces sale of DirecTV to EchoStar

## 2003

Canal Plus lawsuit closes; EchoStar forced to launch new legal action against NDS but is beyond statute of limitations on most claims. EchoStar acquisition of DirecTV is blocked

Piracy costing Foxtel and Astar \$50m a year, forcing move to new card. Foxtel switches fully to NDS, Astar chooses new Irdeeto card



## 2004

News buys DirecTV. Plans to replace NDS are cancelled. Lawsuit against NDS is dropped. US grand jury investigation with new DA clears NDS

## FEB 2008

Italian police charge Europe's leading anti-piracy expert, Davide Rossi, with using his position "in the exclusive interest of NDS" to support and protect a hacker on



the NDS payroll who was pirating Canal Plus cards in 2003

News buys into Germany's Premiere after wave of piracy. Renamed Sky Deutschland. Changes to NDS

## MAY 2008

EchoStar wins three of seven claims against NDS but awarded nominal damages of \$1546. Ordered to pay about \$19m in costs. Sogecable drops its separate lawsuit

## JUN 2008

News and private equity fund Permira take NDS private, News stake cut to 49%, valuing NDS at \$3.7bn

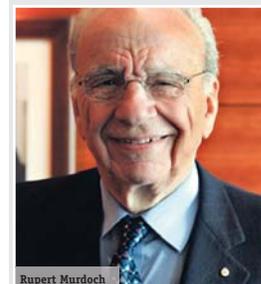
## MAY 2011

Piracy trial of Rossi and 25 other defendants begins in Sicily Mafia court. The case is ongoing

## MAR 2012

News cements control of Australian pay TV as Foxtel moves to complete takeover of Astar, which is expected to move to NDS

March 15, 2012, News and Permira sell NDS to Cisco for \$5bn.



Rupert Murdoch

# PAY TV PIRACY

## Where the emails came from



### PAY TV PIRACY

Neil Chenoweth

The 14,400 emails from which this story has emerged come from a hard drive in a laptop operated by Ray Adams, a former Metropolitan Police commander who was European chief for NDS Operational Security from January 1996 to May 2002.

The emails, which come from several different folders within that drive — thus there is some duplication — were passed to *The Australian Financial Review* by an anonymous source. The *Financial Review* has undertaken its own inquiries to verify the emails.

Separate to this, the emails' authenticity is supported by:

1. The internal consistency and verifiability of many details within the vast body of documents.
2. While the emails have been converted to text files, they include the internet headers, which contain unique information about the email and the path taken in its delivery.
3. About 2000 of the emails are in PGP encrypted form. These messages have been encrypted with the public PGP keys of the recipients, many of them NDS employees. The text files

From: Gutman, Avigail  
To: Adams, Ray  
Date: 12/14/1999 5:58:42 PM  
Subject: RE: damn and blast!  
-----  
Ray - ok, thanks.

Rest assured we are NOT doing any joint action with Irdet would clash with our business interests (we are currently a simulcrypt solution for the satellite and the digital — and other broadcasters might show interest, too. Mindport aware of this yet, as far as I know.)

we know that Curle wanted to take action against bond (hi were voiced both to me and to peter smart at Foxtel) but checking with lawyers - I think the legal case is very ve despite his big-mouth, Bond is mindful of his rights.

(Curle certainly must know by now that he cannot use any emails in a court. It would be counter-productive for him

include the public PGP keys of many of these recipients. These public keys can be used to verify that the messages were indeed encrypted to the email recipients. The recipients are still able to open the messages today, with their private PGP keys, which also provide the date and time when the message was sent.

When Ray Adams stepped down as European head of NDS Operational Security in May 2002, his successor, former chief inspector Len Withall, went to Adams' home in Windsor in the UK to retrieve his laptop, his mobile phone and his laptop. The head of Operational Security, Reuven Hasak, testified in a 2008 court case brought against NDS by US satellite broadcaster

**One of the thousands of emails that emerged from a hard drive in a laptop operated by Ray Adams.**

EchoStar that when an NDS hacker, Andy Coulthurst, examined the laptop he believed the disk had either been erased or corrupted.

Withall then called Adams, who said he had replaced the hard drive. "Ray said, 'I wanted to keep the hard drive because I had some family pictures there, so come by and I'll give you the original hard drive,'" Hasak testified.

When Withall went to Adams' house the following day, Adams told him someone had broken into his wife's car and stolen several items including the hard drive, which was on the front seat. Adams had reported the burglary to the police.

Hasak testified that he believed Adams had given the hard drive to someone, but did not consider that Adams was a whistleblower.

"The only thing I said was that after we are over with this trial, I am going to sue him, yes," Hasak testified.

However, NDS has taken no action against Adams. EchoStar's lawyers later obtained a copy of the hard drive files, but were severely restricted in using them for the 2008 trial after NDS launched an unsuccessful counter-claim against EchoStar claiming that they received the files improperly.

NDS gained a court order against a Canadian pirate dealer, Gary Tochke, in 2007 after he obtained some of the Adams files.

## The hacker who got stung

From page 1  
relationship with NDS. Cottle was encouraged by those working for NDS to hack into smartcards from a rival provider, Irdet, but at the same time NDS was concerned Cottle might turn his attention to their own pay TV platform.

It was former Metropolitan Police commander Ray Adams, who had joined Operational Security as its European chief in 1996, who suggested spying on the Sydney engineer.

"Getting his itemised telephone billing would tell us who he is in contact with abroad. Do you have resources to do that?" Adams asked Gutman in January 2000.

Gutman, who juggled a semi-public role as the wife of the Israeli consul in Taiwan with her job at NDS, told Adams this was illegal.

"Many who have attempted 'other means' were caught (including PIs, who were 'shut down')," she wrote in an email to Adams.

"What say you . . . ?"

It was illegal in Britain as well, but Adams, who ran a network of 18 agents and informants as the European chief for this secretive arm of Rupert Murdoch's empire, did it nevertheless.

Eight weeks before his email exchange with Gutman, Adams had obtained two months' of phone records belonging to a piracy suspect who lived in Canada, through what he described as "the agent". He was in the process of applying for a third month of records, according to an email he sent to the US head of Operational Security, John Norris.

Adams was in the market for surveillance gear. Days later Lee Gibling, who ran the piracy website thoi.com, which was secretly funded and controlled by Operational Security, wrote to



Photo: LOUIE DOUVIS

**Sydney hacker David Cottle says NDS is most likely making him a scapegoat.**

Adams, who had recruited Gibling.

He said he had been offered a device to eavesdrop on mobile phone calls for £6000. Adams forwarded the email to a German consultant to NDS, asking: "Can you do better?"

In January 2000, when Adams first suggested targeting Cottle's phone records, he and Gutman wanted to find names of the hackers Cottle was calling in Europe.

No further moves were made on Cottle's telephone records until August 2000.

By now, Gutman's need to know who Cottle was talking to had become compelling.

"We know EVERYTHING about him (really every single detail...)," she told Adams. "The one thing we cannot seem to get is a print out of his phonecall billings — as this is illegal to do in OZ."

"So — phone numbers are . . ."

Cottle's phone records were needed not to monitor his hacking, but to check whether he was working with NDS competitor Irdet, whose system it was trying to replace.

Adams was unfazed. "I will need his full name and address," he replied in a return email.

Gutman supplied Cottle's address in Sydney. "I am not so much interested in Bond [Cottle's online name] as such — but I want to make sure our guys down there aren't at risk of being told about Irdet."

Gutman had several Australian informants who were in contact with Cottle, whom she feared could be exposed. Subsequent emails between Gutman and Adams on this subject were encrypted.

On Monday Cottle said NDS was most likely making him a scapegoat, as he had been the moderator of thoi.com.

"I think they [NDS] wanted me involved to look after the website and then, as it turned out in the end, they can point the fingers at me," he said. Cottle moderated a closed site on Thoi called Area 51, which could be accessed only by 16 of Australia's top hackers — and, unbeknown to them, Lee Gibling, Gutman, Adams and a string of Operational Security personnel.

When shown on Monday emails detailing his role in the hacking of pay TV smartcards, Cottle maintained his only role was moderating the thoi.com website.

"It's certainly news to me and I'd like to see that proof," he said.

In an email in October 1999 Gutman wrote: "Cottle is the pirate in OZ. He is a bit technical but he is mostly the leader and co-ordinator of all hacking activity there."

After the arrest of another hacker, Rolf Deubel, in Thailand in September 1999, Gutman wrote: "Cottle is the new king."

If so, he makes for an unlikely monarch. When *the Financial Review* visited Cottle at a friend's place in the outer Sydney suburb of Kenthurst, he was dressed in cut-off track suit pants and plastic sandals.

Before this the engineer was living in a modest brick veneer home in suburban Castle Hill that he recently sold for \$600,000.

"I was never making a great deal of money. Look at my house, it's from the 1960s and has never been renovated," he said.

"[If I was] involved in some mastermind that is hacking pay TV, good luck. I only wish it was the case because I guess I would be living in some 50 acres in the middle of Durai."

Cottle said he was planning a move to the United States, with his wife and son, where he would "semi-retire".

### NDS

**Michael Clinger**  
CEO of NDS 1990-92. Operational Security established in part to track down Clinger whom News accused of fraud



**Abe Peled**  
CEO of NDS since July 1995

**Reuven Hasak**  
NDS security chief, former deputy head of Israel domestic security agency Shin Bet



**John Norris**  
Security chief of NDS US, former US Army intelligence. Orchestrated numerous stings against Canadian hackers



**Ray Adams**  
Security chief NDS UK, former commander Metropolitan Police criminal intelligence. Ran a network of informers and hackers for whom he offered protection from prosecution



**Yossi Tsuria**  
Chief technology officer for NDS Israel. Tsuria was part of a radical group of Jewish Israelis in the 1980s that plotted to bomb the Dome of the Rock



**Avigail Gutman**  
NDS Operational Security, Israel and Asia. Worked on the entrapment in Thailand of Rolf Deubel, a hacker known as MadMax

### NDS RIVALS

**Charlie Ergen**  
Head of EchoStar, Dish Network



**Andrew Kudelski**  
Head of Kudelski Corporation, which produces Nagra conditional access system, used by EchoStar in US and Express BellVu in Canada



**Pierre Lescure**  
Head of Canal Plus, provider of the Seca smartcard system



**Gilles Kaehlin**  
Canal Plus security chief, former French Intelligence



**Alan Guggenheim**  
Head of Nagra US and NagraStar

**Francois Carayol**  
Head of Canal Plus Technologies

**Larry Rissler**  
Head of security for DirecTV

**JJ Gee**  
Head of security for EchoStar

# PAY TV PIRACY

## Free to air: dirty tricks for all to see

From page 13

Deubel to be arrested in Thailand. He was thrown into prison for attempting to monitor the local UBC pay TV broadcaster, which used Mindport's Irdeto.

Just five weeks after engineering an arrest for piracy in Thailand, Avigail Gutman was planning to use Australian hackers to promote piracy in neighbouring Malaysia.

In a 2008 court case in California brought by EchoStar against NDS, Reuven Hasak cited the MadMax operation as an example of how NDS Operational Security would help its competitors.

But in December 1999, Ray Adams had painted a different view: the only assistance Operational Security had given Mindport was the Bangkok operation.

"That was done primarily as Avigail feared that MM was about to become a threat to NDS products in Australia. We are withdrawing from assisting them."

Gutman herself wrote: "Rest assured we are NOT doing any joint action with Irdeto in OZ. This would clash with our business interests (we are currently negotiating a simulcrypt solution for the satellite and the digital-cable there, and other broadcasters might show interest, too. Mindport are not aware of this yet, as far as I know.)"

### Double dealings

Thus while Irdeto believed they were collaborating with NDS Operational Security to stop piracy in Australia, Gutman was now working to replace Irdeto with an NDS card used by StarTV in Hong Kong.

The conflict came to a head in London with a meeting on October 13, 1999 between Ray Adams and Irdeto's vice president Special Project, Andrew Curle, and a former Dutch policeman, Steven Kuster. "The man is very keen but a bit of an amateur," Adams wrote later of Kuster.

Curle and Kuster had identified Bond 007 (Cottle) in Sydney as the biggest hacking threat to Irdeto cards used by Foxtel, Austar and Optus. Adams deflected them and persuaded Curle to leave the matter in Gutman's hands.

Gutman wrote to Adams that Reuven Hasak had told her to postpone any joint action ("I am concerned that it is premature to take Cottle out of the picture and we don't stand to benefit from such an operation at this stage.")

Later she would tell Curle was that "it is premature, in our opinion" to move against Cottle, as there was more to gain from keeping an eye on him.

It should be noted that under Australian law at the time, none of the hacking or piracy of smartcards that took place was illegal.

Making things even more difficult for Operational Security, while Bond 007 was working on Irdeto piracy, he was also working on a hack for the Star TV digital system. That card, which NDS hoped to use with Foxtel, had already been widely pirated in Latin America. Any report that StarTV was pirated could torpedo the deal NDS was working on with Foxtel. "StarTV is not in the loop on the issue at this stage," Gutman wrote on October 20. But she was working on a plan.

"The objective of any current



Lee Gibling ran thoi.com, but it was funded and supervised by Operational Security.

Photo: PANORAMA

action would be to eliminate Cottle as a threat to any NDS systems but without disturbing his other hacking activities (as much as possible) ... We do not want Cottle in jail until he has a successor for the Irdeto hack."

While Operational Security was assuring Curle at Irdeto that it was in his best interest not to move against Cottle, Gutman was focused on the need for Cottle to produce a new hack of Irdeto.

Two days later the plan had taken shape. "Remember you sent me the Malaysian Astro (Seca) system? ... I would like to use it in Oz (to divert their attention away from our system)," Gutman wrote to Adams.

He had sent Gutman a pirate device for the Malaysian Astro pay TV service operated by MEASAT. It used another conditional access system called Seca, produced by Canal Plus.

Gutman was now proposing to send the Astro pirate box to Bond 007 to distract him from working on pirating StarTV.

"BUT—before I do—I want to make sure with you that there is nothing about the box or card that can trace it back to us ... is there?"

Adams was agreeable. Gutman wrote again on October 23: "Why don't we give it a shot. I can supply it to cottle and his merry men ... Double benefit - 1) diversion from the NDS systems 2) verification of the secas hack in Asia."

These two emails by Gutman were exhibits in the 2008 EchoStar case in California. Cottle told the *Financial Review* he had no knowledge of the emails: "I never had any dealings with anyone and certainly never been contacted by anyone and it's news to me I am mentioned in any documents, court or otherwise."

When shown further emails that he had posted on Thoi.com, Cottle declined to make further comment.

On Monday the *Financial Review* made contact again with Cottle, on the outskirts of Sydney, where he denied having any role in the hacking of pay TV smart cards.

"Good luck to them proving it because I was never involved [in hacking]," he said. "I was not involved with that [hacking cards]." Cottle confirmed a friend had provided him with a Star TV box, which he had used to watch news channels, but he had not hacked it.

He denied receiving an Astro box. In his 2008 court testimony, Reuven Hasak described Gutman as his "right hand" in Operational Security, but said the Astro plan was never executed.

"I wanted to tell you that maybe — I just wanted to say that maybe it

### NEWS CORP

Arthur Siskind  
News legal counsel,  
part of Office of  
Chairman, NDS  
director



Genie Gavenchak  
Senior News lawyer  
reporting to Siskind



David DeVoe  
News CFO, NDS  
director



Chase Carey  
Currently Chief  
Operating Officer,  
NDS director, was  
News executive  
overseeing NDS in  
late 1990s



James Murdoch  
Deputy chief  
operating officer,  
NDS director  
1999-2003,  
2008-present



Lachlan Murdoch  
NDS director,  
2002-05



was initiative of Ms Gutman," Hasak testified. "It was never approved." Such a move would have needed his approval and he had never given it.

### Business opportunity

Yet the emails show Gutman continued to act as if her scheme to get the Astro Seca box to Bond 007 was going ahead. "Fact is—the StarTV platform has all the holes of the Sky Latin America platform," she wrote on November 2. She was pressing for the loopholes to be closed "and once this happens, and their Ozies get their hands on a Seca box, it may delay their NDS projects."

On October 29, Cottle had received an email from "George Miller" (not his real name) in

Melbourne, who said he had been given Cottle's email address on Thoi by a business associate, "Scissors". "I have been led to believe there is a business opportunity for us to explore," George said.

"This is my guy," Gutman wrote when Adams obtained the email from Thoi. George and Scissors were both informants working for Gutman.

By November 19, George and Cottle had met and were exchanging smartcards. On November 22, George wrote to Cottle, "Scissors wants feedback on the system he has given you ..."

Cottle wrote back: "Okay the receiver is of no use to us in Australia :( We need receivers capable of IRDETO."

George replied that Scissors had told him, "The system given to you works using MEASAT satellite to receive digital broadcasts from Malaysia ... It is not Irdeto but SECA, which is also used in France, Spain and will be used in New Caledonia."

It should be a challenge to Cottle. For Scissors and Miller it was a fresh new business "with a large potential for income."

George ended with an urgent PS: "Please Bond don't let me down, I have given my associates a good impression of you. After all at the end of the day we are all in for the same reasons. \$\$\$\$\$\$\$\$\$\$\$"

Cottle wrote back: "Okay Measat, I will have a play on the weekend ... We can do this and no problem in exploiting SECA and NDS Videoguard ... You can market, sell and distribute as we discussed when you were here."

The content of the emails show Hasak's testimony about the plan to provide the Seca box to Cottle was not correct. It's puzzling that he could not recall it, because he was due to be in Australia and New Zealand with Gutman a week after these exchanges.

Throughout the 2008 EchoStar case Hasak testified on many points that he had memory problems. "One of my weak points is I don't remember. Sorry."

No further open reference to the Seca box can be found in the Operational Security emails as many were encrypted.

As this correspondence was going back and forth, Hasak had decided not to tell StarTV their system was under attack. Gutman wrote of a meeting with a StarTV exec: "I told Sue that she can/should forcefully deny any allegations of a Sky hack, should these come up."

cannot produce a hack on their own - AT ALL!!! They are parasites of sorts, living off of recycled European know-how. But they are great at spreading hacks."

As for Cottle: "it is amazing that Bond thinks he's the only one in the world who can do it. As Andy (Coulthart) will tell you — this guy is unoriginal and incapable of achieving this on his own."

"But he is a master-organizer, a project manager of sorts, who has managed quite an infrastructure in OZ." By March 2000 Gutman reported that Bond's group was working on hacking European pirate cards for Irdeto, which could be reprogrammed to pirate Foxtel and Austar.

### Delaying tactics

Gutman made arrangements with Adams to obtain 20 to 30 of the European cards for Cottle: "Blank would be great. But an assortment of both blank and loaded (no particular preference in country) would be nice, too."

Adams assured her he would obtain the cards from an Operational Security consultant. "Much appreciated," Gutman wrote back. "The idea being, of course, to delay their attempts to tamper with our StarTV system."

By mid-2000 Gutman's relations with Irdeto were breaking down, as Foxtel Satellite moved to broadcast streams using NDS as well as Irdeto (known as simulcrypt).

But for Operational Security, the answer was to drop Irdeto completely.

"I met with NELL aka Mary-Ellen Payne from Foxtel," Gutman wrote. "I explained the facts of life as far as piracy in concerned."

The problem was "the up-link satellite people want to keep Irdeto running. They say that Irdeto can fix the problem. We convinced Nell that they cannot fix it—and explained why."

"We do not want simulcrypt in our lives," Adams told Payne. "... Get rid of Irdeto and you get rid of piracy and the future threat."

Gutman complained to Adams on February 25, 2001 that Foxtel had not paid a penny for security in the years it had been an NDS customer, and said "but with the growing piracy down there, we will need them to start paying ..."

She said Foxtel believed Irdeto was working on security for them, "which is ridiculous ... occasional buys and 'boo' raids which are useless".

Two days later Telstra signed a contract worth \$937,500 for NDS to provide security for the Foxtel smartcards, when the number of subscribers was between 500,000 and 1 million.

This was on top of standard fees charged by NDS, which are believed to be up to \$15 per card per year. Piracy peaked in 2002 with about 100,000 pirate cards in circulation, costing Austar and Foxtel an estimated \$50 million per year.

In 2003 Austar after writing off \$600 million in losses, switched to the Irdeto 2 card, which promised to end piracy. Fifteen months later, Foxtel was pleading with the federal government for tougher laws to stop pay TV piracy.

But by then piracy seemed to have become entrenched in Australia.

with Angus Grigg

■ Neil Chenoweth is writing a book, *Murdoch's Spies*