# Only flying is more secure.

Terminals 1 and 2 of Munich Airport are equipped with an elaborate video surveillance system with a total of 1,800 cameras.

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|------------------------|------------------|-------|-----------------|---------|----------------------------|--------|----------------|---------|-------------------|---------------------------------------|-----------------------|
| LH 3168                | Pasei            | 11.10 | ABL Lul Iherse  | LH 1754 | London (LHR)               | 11-25  | H25 Lufthanse  | NC 847  | Torente           | 11 50                                 | H24 303-313           |
| LH 3224                | 51 Petersburg    | 11.10 | NZO Lul Ihanse  | LH 1070 | Dresden                    | 11.20  | 626 Luithanse  | LH 2070 | Izeir (ADD)       | 11.55                                 | KIN LUTTHING          |
| LH 1095                | Venedia          | 11.10 | #15 Lul Ihatsa  | LH 4072 | Flurence                   | 11.20  | 654 Lutitette  | LH 718  | Secul (104)       | 12:00                                 | NZB LUTTINISH         |
| LH 3360                | Rekara           | 11.15 | H11 Luffhatsa   | LH (764 | Mumbei (Bumbev)            | 11:30  | H28 Lufthetse  | GR 010  | Coha              | 12:10                                 | 100 111-130           |
| 83 803                 | Attes            | 11.15 | 818 332-335     | LH 110  | New York (3FE)             | 11:30  | HEE Lufthatse  | 局 707   | PHL Heshin (OCH)  | 12(15                                 | MIN 314-312           |
| Ln. 3584               | Gent             | 11.15 | EVY Lufthansa   | LH 3H97 | Zasreb                     | 111:30 | HIS Lutitatse  | UR 507  | Chicaso (SR0)     | 1Z(35                                 | PG 323-325            |
| 1.1 1510               | Lisston          | 11:15 | EHE Luftherse   | LH D15  | Hanburn                    | 11:35  | 615 Luffhanse  | LH 3552 | Genua             | 12:40                                 | 663 Lui Ihansa        |
| 1.8 4976               | Barcelona        | 11-20 | BDK Lutthanse   | LH WITH | Madrid                     | 11/35  | 609 Lutitetse  | KH 207  | Malla             | 12:40                                 | Bis Lutihama          |
| LH 3822                | Birsel (BSL1     | 11-20 | BN3 Lutthansa   | LH 3858 | Rose LFCB1                 | 11:35  | 663 Luithense  | TP 557  | Lissabot          | 12:55                                 | 607 Lui Ihersa        |
| LH 3352                | Islanbul [157]   | 11 20 | #10 Lutthanse   | 18 128  | Charlotte                  | 11110  | HD2 Lutihense  | LH 3730 | Kice              | 13 00                                 | HIG Lufthense         |
| LH 1152                | Mütster / Osnab: | 11:20 | 507 Luithanse   | LH 832  | Dusseldor (                | 11:40  | 613 Lutitense  | LH 3436 | Sella             | 13.00                                 | HZO Lui thense        |
| LH .530                | Borzbers         | 11-20 | 553 Lut themse  | LH 3562 | Eleventurt                 | 11:50  | 671 Lufthense  | LH 1606 | Orüssel           | 13:05                                 | 529 Luithanse         |
| LH 3270                | Fras             | 11 20 | 687 Lut thansa  | UR 503  | Denver                     | 11140  | HHB 320-326    | LH 3518 | Sinckholm (ARN)   | 13:05                                 | BEB Lutthansa         |
| LH 1258                | Stulteert        | 11-20 | 614 Lul thansa  | L# 3792 | Turich                     | 11:45  | 625 Lutinensa  | 4.8 220 | Berlin (TXL1      | 13:10                                 | 630 Luithense         |
| LH 3554                | Hiss             | 11:20 | 631 Luf thense  | 13 395  | Ociensk                    | 11.50  | 637 Lui thanse | LH DHE  | Heeburg           | 13-10                                 | 615 Lutthense         |
| LH 3248                | Banezk           | 11-25 | 105 Eul I hetse | LH 971  | Frankfurt / Nain           | 11:50  | 830 Lutthemse  | 18 1029 | Hannover          | 13:10                                 | BIO Luithense         |
| the last size when it. | Leirtis / Halle  | 11:05 | E01 Lutithates  | LB 171  | Montreal LVILL             | 11:58  | K32 Lui Ihense | SK 1666 | Korenhesen        | 13:10                                 | BIS Lufthense         |
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# Organization: Munich Airport

Location: Munich, Germany

Industry segment: Transportation

Application: Airport safety and security, threat protection

Axis partners: Alcatel Lucent, Aimetis

## Mission

Munich Airport is the 2nd largest airport in Germany and the 7th largest in Europe in terms of passenger growth (2009). With about 400,000 takeoffs and landings and approximately 33 million passengers per year, first-class security is a matter of prime importance. To enable the system to be controlled via centralized management software, all of the cameras must transmit digital images. Munich Airport therefore equipped about a third of its cameras with Axis video encoders.

## Solution

The European-wide tender for the project was made in mid-2007, and Alcatel and Lucent were awarded the contract. As Alcatel's partner, Lucent contributed 800 AXIS Q7406 Video Encoders in AXIS Q7900 racks.

"We had no problems installing the encoders. We had a telecommunications company that was already working for us perform the installation. Alcatel Lucent then took over the task of integrating the hardware into the Aimetis Symphony software," recounts Michael Fröhlich, Munich Airport's project manager for closed circuit television.

#### Result

The new digital video surveillance system simplifies many processes at the airport. On the one hand, it's a matter of ensuring compliance with the Aviation Security Act, which covers border surveillance, support for the security authorities and passenger checks. On the other hand, it's also about the simplification of work processes.

"We're very proud that our encoders have been integrated into such a prestigious project as the Munich airport. The cooperation with our partners Alcatel Lucent and Aimetis was flawless," recounts Edwin Roobol, Regional Manager Middle Europe, Axis Communications.



"The cameras at the airport allow us to see exactly when the plane lands. Once the aircraft has safely landed, the servicing processes begin, and these processes require adherence to a very tight schedule. The cameras allow us to closely monitor these logistics processes and therefore simplify them."

Johann Götz, Manager, ITN Engineering, Munich Airport.

The airport, located in Erdinger Moos, began operations in 1992, initially with only one terminal. At the same time, work also began on setting up a video surveillance system in which analog cameras were initially used. When Terminal 2 was added in 2003, analog cameras were also installed. However, over time it became ever more apparent that a digital video surveillance system based on a common platform strategy was required. "Our goal was to reduce IT costs and to operate more efficiently. We therefore wanted to integrate voice, data, TV and also video recordings into one platform on one network," explains John Götz, Manager ITN Engineering, Munich Airport.

#### All digital

The European-wide tender for the project was made in mid-2007, and Alcatel Lucent were awarded the contract. As Alcatel's partner, Lucent contributed 800 AXIS Q7406 Video Encoders in AXIS Q7900 racks. "By conserving bandwidth and storage, the seamless integration between the AXIS Q7406 Video Encoder and Aimetis video management software enables us to minimize costs through the use of the effective network video solution," Marc Holtenhoff, CEO of Aimetis points out.

#### Simplified processes

The new digital video surveillance system simplifies many processes at the airport. On the one hand, it's a matter of ensuring compliance with the Aviation Security Act, which covers border surveillance, support for the security authorities and passenger checks. On the other hand, it's also about the simplification of work processes.

"The cameras at the airport allow us to see exactly when the plane lands. Once the aircraft has safely landed, the servicing processes begin, and these processes require adherence to a very tight schedule. For example, to service an aircraft, a stairway for the disembarking passengers must be brought to the aircraft, all passengers must disembark, their luggage must be unloaded, the aircraft must be cleaned, and fresh food and water need to be brought on board. Many more tasks need to be completed before the aircraft can roll back for the next takeoff. The cameras allow us to closely monitor these logistics processes and therefore simplify them," explains John Götz.



Flughafen München





