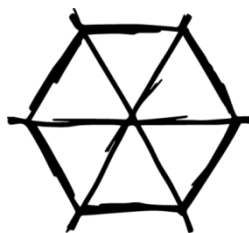


snom

Case Study

Snom and Organised Chaos
at the 2015 Chaos Communication
DECT Coverage of a 1km² Open Space



CHAOS
COMMUNICATION
CAMP 2015

Section 1 – Background

The Chaos Communication Camp is an international meeting of hackers that has taken place once every four years since 1999, somewhere in the Brandenburg countryside. These camps, which have had that festival feel for a while now and which also enjoy a kind of cult status on the scene, have to be set up in the shortest time possible – a tented community consisting of multiple “themed villages” must be built, by volunteers, for approx. 5,000 guests from across the globe. These events are organised by the Chaos Computer Club (CCC), Europe’s largest union of hackers. They deal with a range of topics, from civil rights and online privacy to internet neutrality and censorship and have, as facilitators in the sensitive areas of technical and social development, have been hosting the Chaos Communication Congress for the last thirty years. Snom was thrilled to be asked to provide a DECT solution for the 2015 camp – there can be no better confirmation of how secure DECT technology is!

Section 2 – Problem

Snom had to provide this DECT solution for one square kilometre of open meadow – and there had to be no coverage dropouts. This was a huge challenge because there was practically no infrastructure available on the land where the camp was held. Initially, more than 2½km of fibre optic cables were laid between a nearby pylon and the event’s location. This provided the camp with a symmetrical 10GB dedicated line. Of course, electricity was also unavailable, which meant that diesel aggregates with an overall output of about 1.8 megawatts had to be procured to generate enough power.



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In addition, the DECT solution had to be connected to a stationary analogue telephone system. If this wasn’t enough... all of this had to be completed in twelve hours and, ultimately, neither the power nor the fibre optic cables were available at all in the run up to the camp.

Section 3 – Solution

Unusual requirements demand creative solutions – and this is something the Snom experts are particularly good at! After analysing what was available on site and after close consultation with the CCC team, the decision was made to use fifty M700 base stations and 100 handsets.

The M700 base station is usually intended for wireless connections within office complexes and on business premises. In a single operation, up to thirty M65 handsets can be connected to it. Up to 235 of these M700 basis stations can be connected to a network, on which up to 1,000 DECT telephones can be used – this is how a multi cell solution can also cover large areas and complexes of buildings perfectly.

Via the M700 multi cell system, the Snom M65 mobile equipment hooked up to it could make use of a number of telephony functions, such as direct access to the telephone book and high definition audio quality. Security was provided by high-level DECT encryption, while TLS and SRTP facilitated secure SIP communication.

Section 4 – Uses/Benefits

The DECT solution allowed the CCC team to prepare for and carry out their event, attended by approx. 5,000 people, without a

hitch. Thanks to the use of mobile equipment in combination with the extensive installation of base stations, the team could communicate with each other on every area of the premises, finding solutions to organisational issues or problems quickly and decisively. Their success in this

security-related CC event was special confirmation of Snom's competence and professionalism in this field.



The M700 base station uses VoIP to offer wireless coverage of larger areas. In a single operation, up to thirty M65 handsets can be used with it. Up to 235 of these M700 basis stations can be connected to a network, on which up to a thousand telephones can be used.



Chaos Communication Camp 2015: Snom DECT Solutions for a 1 km² area of open meadowland.

“Installing a DECT solution for an event being held on a square kilometre of open land was quite a special challenge, particularly as there were no buildings or equipment that we could hook everything up to. That our specialists eventually found an effective solution to this task and contributed to the success of the legendary Chaos Communication Camp demonstrates creativity and flexibility on Snom's part.”

Oliver Wittig, Senior Presales Engineer, Snom Technology GmbH

Snom Technology GmbH

Wittestr. 30 G | 13509 Berlin | Germany

Tel.: +49 30 398 33-0 | Fax: +49 30 398 33-111

office.de@snom.com