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Peter Husi, Solution Sales  
T&N Telekom & Netzwerk AG

## The nucleus of security, energy security for our future – for security in nuclear power

Even if the Swiss population were to resolve the phase-out of nuclear power, ENSI, the Swiss Federal Nuclear Safety Inspectorate, would still be responsible for supervising the safety and security of nuclear power facilities in Switzerland for quite a few decades. This inspectorate controls and monitors the operators of nuclear power facilities, thus helping to protect the population. Communication as a whole and T&N as ENSI's ICT partner plays a key role in its work.



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

**Eidgenössisches Nuklearsicherheitsinspektorat ENSI**  
**Inspection fédérale de la sécurité nucléaire IFSN**  
**Ispettorato federale della sicurezza nucleare IFSN**  
**Swiss Federal Nuclear Safety Inspectorate ENSI**

>>> Swiss nuclear power facilities, which include the future geological repository for radioactive waste, have to be safe for humans and the environment. ENSI implements this statutory requirement and acts as an independent, state inspectorate on behalf of the population. It makes sure that operators assume their responsibility for the safe operation of the facilities and that they keep these in proper working order. If a power plant does not satisfy the specifications, ENSI intervenes and imposes corresponding conditions or requirements, and can even order a temporary shut-down.

ENSI succeeded the HSK (Main Department for the Safety of Nuclear Power Plants) in 2009. Like the SUVA (Swiss National Accident Insurance Organization) it is a public-law institution. ENSI monitors the Swiss nuclear power facilities.

These include the nuclear power plants, the interim storage facility for radioactive wastes, the nuclear research institutions of the Paul Scherrer Institute, the EPFL (Ecole Polytechnique Fédérale in Lausanne) and the University of Basel. Its regulatory remit covers the entire life of a facility, i.e. from initial planning, through construction and operation to final decommissioning including the transport, storage and disposal of radioactive wastes. <

### >>> International Competence Centre

The job profiles of the more than 140 employees are just as diversified as their work. The majority of them have completed some form of technical or academic/scientific training and come from the fields of mechanical, electrical or civil engineering, physics, chemistry, geology, biology, psychology, etc.. ENSI gains new knowledge for its supervisory activities through research projects in the fields of reactor safety, radiation protection, the disposal of radioactive wastes as well as humans, organization and safety culture, for example. What's more, the results are evaluated both within and outside Switzerland.



At the same time the employees profit technically by swapping experiences with researchers from around the globe. The exchange with foreign authorities and experts as well as consistent training and further education are important for the responsible work in the service of the population. ENSI's competence is internationally recognized. <

**>>> Communication as a key factor**

ENSI plays a crucial role in handling a possible crisis in the event of an incident in a nuclear power facility. It stands between the public authorities, blue light organisations, the military, civil defence and the corresponding power plant operator. Thanks to its supervisory activities, ENSI knows the facilities inside out and has corresponding documents. Its headquarters in Brugg has a protected control room where specialists can monitor a serious incident over several days in shift work. Various public and closed special networks guarantee selective communication with ENSI at all times. Redundancy is a matter of course here, from the communication systems through to power supplies. <

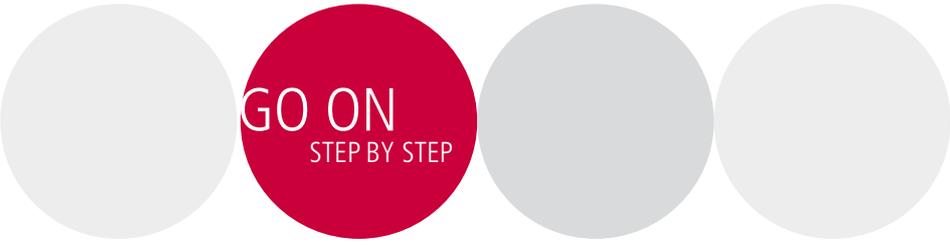


**>>> Move to a new building**

On account of the increase in personnel to cope with the growing demands, the search for a new location began in 2008. An evaluation was carried out within the scope of the planning for the overall IT and communication solution which also led to a partnership with Telekom & Netzwerk AG. 'Apart from the professional way in which the offer was presented and the conceptual advice, what really convinced us was the focus on solving the problem and the fact that we got a "one-stop" offer. At the same time, a key factor was the size of the company and an adequate range of services. The partner had to have widespread experience in the realization of telephony projects and shouldn't be too small. On account of the easy operation of the terminal equipment as well as the high requirements on the availability and security of the system, we decided on the globally established Avaya solution for telephony. This allowed us to transfer smoothly from conventional ISDN telephony to modern VoIP technology in hybrid operation.' says Peter Schmid, Operational Manager. <

**>>> Solution**

ENSI were able to move into the new building near the station in Brugg in January 2010 following a short introductory period. Everything went smoothly from a technical point of view. All of the expectations were met. The solution is based on an Avaya ACM (Avaya Communication Manager). Conventional analogue equipment can be connected to this along with IP and SIP terminals. CTI integration with Caesar allows users to dial directly from MS Outlook, document or web pages as well as other applications. Furthermore, the GSM mobile phone network was also integrated. This means that employees have only one (office) number, namely the landline extension number, which applies for both the office workplace and mobile phone. Employees can use their GSM mobile phones for in-house calls (to the Avaya switchboard and/or other ENSI mobile phones) without having to pay for these, thus guaranteeing their mobility.



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This also has another big advantage, namely that existing public aerials/infrastructures can be used without having to set up and maintain any additional/parallel, complex DECT infrastructure. <

### >>> Mobile in future

Peter Schmid also has something to say about the future requirements: 'It's natural that our employees should want to exploit the advantages offered by mobile communication more and more, despite the high security requirements. This is a big problem that has to be solved prudently, particularly in connection with smartphones and other mobile devices. Further developments in the field of viewphones/video-telephony are also an interesting topic with the rapid increase in bandwidth and improved security mechanisms, especially since these functions will soon be possible not just for every workplace but also for every mobile end device within a unified communication strategy. So some exciting and interesting work awaits us in future.' <

### Services and scope of the project

The following solution was used at ENSI:

- Avaya ACM platform – what makes this solution special is:
  - Fixed-mobile integration (one-number-solution)
  - CTI Computer Telephony Integration with Caesar (integrated in Outlook)
  - NICE call logging
  - Polycom video conference system

### Benefits for ENSI

- Project competence and security with respect to the solution and costs
- Just one point of contact and thus fast project implementation
- Simple interface management
- Open platform for future integration in third-party systems
- Significant reduction of operating costs

### Support from T&N

- Uncomplicated project management
- Better adherence to budget and schedules
- Comprehensive advice and support
- High flexibility and focus on solution