

[European Synchrotron Radiation Facility Uses WIN-911 Software to Manage Alert System](#)



A synchrotron is a truly gigantic, stadium-sized machine that produces multiple beams of X-ray light. The machine uses different magnetic fields and radio frequencies to keep electrons accelerated at almost the speed of light in a ring tube maintained under high vacuum. This results of the production of X rays around the ring.

[Dictionary.com](#) defines a synchrotron as follows:

synchrotron [sing-kruh-tron] noun, Physics : a [machine] consisting of magnetic sections alternately spaced with sections in which particles are electrostatically accelerated.

The [European Synchrotron Radiation Facility](#) (ESRF) is located in [Grenoble, France](#) and is supported by 21 countries, including the Federation of Russia which joined ESRF in June 2014. It is the most powerful facility of its kind in Europe. Globally, only four other synchrotrons are similar in output or design. What goes on there is scientific research at its most advanced levels. Employing over 600 people, each year several thousand physicists, chemists, materials scientists, biologists, medical doctors, meteorologists, geophysicists, and even archaeologists make the trek to the ESRF to conduct research in this world-class environment at the cutting edge of modern science.

As one might easily imagine, there is no shortage of opportunities for disaster to strike in such a large and complex operation. Because of this, the ESRF is now using WIN-911 [alarm notification software](#) to help protect the facility and its occupants.

WIN-911's alarm notification software is being used by ESRF in coordination with a supervisory control and data acquisition (SCADA) system that monitors the facility's water supply, HVAC systems, and electrical power distribution. The SCADA system itself is controlled by primary logic controllers (PLCs) and [FactoryTalk View software](#) from [Rockwell Automation](#).

WIN-911 Software Version [PRO](#) was selected as the best fit for this application. ESRF also signed on to a [support contract subscription](#), ensuring that they receive the best and most up-to-date information and support to help the facility operate and maintain its alarm notification system.

The initial phase of the project included installation of a system designed to send voice messages on a localized public address system. This allowed operators to be kept informed when the main control system was offline or under maintenance.

“We depend on WIN-911’s reliability,” said an ESRF spokesperson. “Especially when the main global alarm system is not running.”

Future phases of the installation will see the facility using WIN-911 software to manage automatic emails and voice messages, as well as to transmit alarm notifications according to class and severity. This will ensure that critical alarms will always be at the top of the list and receive the appropriate level of response.

Once final installation is completed, the system will be able to send discrete alarms to two sets of teams, the maintenance company, and ESRF staff, thereby ensuring that every event is handled appropriately and in a timely fashion.

That such a prestigious institution would select WIN-911 Software is truly an honor indeed.