Research activities in HSE

Research is an old CERN Safety tradition. We conceive instrumentation for our special boundary conditions, e.g. magnetic field tolerant instruments, and for better and more efficient monitoring everything that potentially could be a radiological hazard. Instrumentation research even includes microelectronics for long term background measurements of natural radiation. Another focal point is software. Fields of software development include risk management, semantic Safety tools, activation prediction software for project studies, tracking software, remote control, data processing and software for streamlining Safety inspections.

Software also comes into play, and is the result of research into this novel field, when radioactive waste needs to be classified, stored, prepared for departure and finally shipped to our waste elimination partners. Finally fire and cryogenic cloud propagation simulations are necessary ingredients of the risk management in our extensive tunnel systems.