



## **Ionizing radiation and nuclear safety, what changes with the new Decree.**

Published on Ispettorato nazionale per la sicurezza nucleare e la radioprotezione  
(<https://www.isinucleare.it>)

---

Thursday 24 September 2020



## **Ionizing radiation and nuclear safety, what changes with the new Decree.**

Important innovations in the field of prevention and protection from ionizing radiation, in the recent Legislative Decree no. 101 of 31 July 2020, which entered into force on 27 August. The provision, which adapts national legislation to the provisions of Directive 2013/59 / Euratom in Europe, repeals and replaces, in particular, Legislative Decree no. 230/1995.

Legislative Decree no.101/2020, which reorganizes the sector legislation, establishes safety standards in order to protect people from the risks associated with exposure to ionizing radiation (in the industrial, medical, research and exposure to particular sources of natural radiation). It also regulates the safety of nuclear plants, installations and activities in which radioactive materials are used as well as the management of spent fuel and radioactive waste.

Radon, the scope of the Decree also concerns, and for the first time, protection from exposure to radon in living environments. The same reference level has been set for existing workplaces and homes (average annual concentration of 300 Bq/m<sup>3</sup>); from 31/12/2024 the reference level for new homes will drop to 200 Bq/m<sup>3</sup>. With regard to the workplace, in particular, important changes have been introduced with respect to the previous regulatory framework: "specific workplaces" will be identified as part of the provisions of the National Action Plan for radon.

If the reference levels have been exceeded, the standard provides for the adoption of corrective measures to reduce the concentration of radon, carried out on the basis of the indications provided by a new professional: the "expert in radon remediation".

Another change is the adoption of a National Action Plan for radon, to be adopted within 12 months of the entry into force of Legislative Decree 101/2020, by decree of the President of the Council of Ministers, on the proposal of the Ministers of Environment and Health, in agreement with the Ministers of economic development, labor and social policies and Infrastructures and transport, in agreement with the State - Regions Conference, after consulting the ISIN and the ISS. Among the various tasks of the Inspectorate, there is also that of ensuring access to the data contained in the database of the national environmental radioactivity surveillance network.

Protection of workers, the dose limits for the lens for exposed workers are lowered, set at 20 mSv/year. Employers are also obliged to ensure the health surveillance of category B workers, entrusting it exclusively to the Authorized Physician.

Industrial sectors that involve the use or storage of materials or the production of residues or effluents that contain radionuclides of natural origin: updated the scope and the list of activities and industrial sectors subject to the new laws; the industrial sectors in question are, among others, those linked to the production of cement, geothermal energy, gas and oil, coal-fired power plants. Within one year from the entry into force of the decree or from the beginning of the practice, the obligation to measure the activity concentrations of materials present in the production cycle and in processing residues is envisaged, using recognized organizations. The measurements made by the latter respond to specific guidelines drawn up by ISIN.

Among the innovations of Legislative Decree 101/2020 there is the obligation to register on the ISIN institutional website of all operators in the sector, in particular anyone who imports or produces for commercial purposes or, in any case, trades in materials or sources of ionizing radiation, whoever carries out intermediation activities of the same, activities of detention of ionizing radiation sources, transport of radioactive materials and all subjects involved in the management of radioactive waste, must transmit the information relating to each operation carried out, to the type and quantity of sources involved in the operation.

Authorization regime: the provision establishes specific provisions for the transport of radioactive materials, the safety of nuclear plants, authorizations and clearances for the construction and decommissioning of plants and installations where sources of ionizing radiation are used, operating licenses and the creation of temporary deposits.

The Decree can be downloaded at the link: <https://www.gazzettaufficiale.it/eli/gu/2020/08/12/201/so/29/sg/pdf>.

Last update: Thursday 24 September 2020



## **Ionizing radiation and nuclear safety, what changes with the new Decree.**

Published on Ispettorato nazionale per la sicurezza nucleare e la radioprotezione  
(<https://www.isinucleare.it>)

---

### **Social**

#### **Share**

**Source URL:** <https://www.isinucleare.it/en/news/ionizing-radiation-and-nuclear-safety-what-changes-with-the-new-decree>