IAEA safeguards: a vital contribution to international peace and security

By Yukiya Amano

Preventing the spread of nuclear weapons is a complex task. Seventy years after the destructive power of nuclear weapons was demonstrated in Hiroshima and Nagasaki, several international political and legal mechanisms are now in place to deter the spread of nuclear weapons. Key among these mechanisms are IAEA safeguards.

The IAEA is often referred to as the world’s ‘nuclear watchdog’. We have the technical competence, independence and objectivity to provide credible assurances that States are honouring their international obligations to use nuclear material only for peaceful purposes. Through the early detection of any diversion of nuclear material or misuse of nuclear technology, the IAEA can alert the world to potential proliferation. This makes a vital contribution to international peace and security.

IAEA safeguards are technical, scientifically based and make use of modern technologies — as our articles on pages 18 and 22 illustrate. The implementation of safeguards is based on legal agreements, both international treaties and bilateral agreements between the IAEA and States (see article page 4). Applying IAEA safeguards is therefore a legal obligation for the IAEA. We draw our safeguards conclusions independently.

Keeping pace with change

The world in which we implement safeguards today is very different from that in 1957, when the IAEA was founded. To meet evolving challenges, we need to remain agile and be able to adapt. We also need to take advantage of modern technology, for example, through the use of remote monitoring and satellite imagery. We have significantly improved our analytical capabilities by completely modernising our safeguards laboratories. Our safeguards inspectors travel the world seven days a week to conduct in-field verification activities.

This issue of the IAEA Bulletin provides a look behind the scenes. You can follow a safeguards inspector for a day in a nuclear power plant, and see how environmental sampling works. We also show you examples of our many types of safeguards equipment and explain how taking small samples of nuclear materials regularly helps us to check that nothing has gone missing.

It is my hope that this publication will contribute to an improved understanding of the IAEA’s safeguards activities, both among our stakeholders and the wider public.

“Through the early detection of any diversion of nuclear material or misuse of nuclear technology, the IAEA can alert the world to potential proliferation.”
— Yukiya Amano, Director General, IAEA