Summary:
Expert Meeting with the International Advisors of Japan's Nuclear Regulation Authority

Opening Session

An expert meeting was held on 11 June 2014 under the framework of the Fukushima Global Communication Programme (FGC) of the UNU Institute for the Advanced Study of Sustainability (UNU-IAS). It brought together a distinguished group of experts from Japan and abroad for an engaging discussion focused on public perceptions of nuclear energy and paths forward in rebuilding trust.

During short welcoming remarks, Prof. Kazuhiko Takeuchi (Senior Vice-Rector, UNU) noted that more than three years after the triple disaster of 11 March 2011, Japan continued to struggle to deal with its impacts. While the Tohoku region had suffered the most, he pointed out that the effects had been felt across Japan and the world, where the current and future role of nuclear power and associated safety concerns were under consideration. Prof. Takeuchi pointed out that a strong division had grown between proponents and categorical opponents of nuclear energy, and emphasized the constructive role that UNU could play as a neutral institution with strong global connections and communications capacity.

Commissioner Kenzo Oshima (Nuclear Regulation Authority of Japan – NRA) also noted the novel perspective introduced by the FGC through its adoption of a human security approach to examining the impact of the 3.11 disaster in Fukushima. He expressed his hopes that FGC would generate useful insights through the emphasis it placed on understanding the human consequences on the ground. He concluded his opening speech by introducing the NRA's three international advisors: Mr. André-Claude Lacoste (former Chairman of the French Nuclear Safety Authority), Dr. Richard A. Meserve (former Chairman of the US Nuclear Regulatory Commission), and Dr. Mike Weightman (former Head of the UK's Office for Nuclear Regulation).

Remarks from International Advisors

In his remarks, Dr. Richard A. Meserve first reflected on how the Fukushima nuclear accident had impacted opinions about nuclear power in the USA. He suggested that three different categories could be distinguished here: the general public, nuclear experts and the anti-nuclear community. Among the general public, he said that past experience had shown that nuclear accidents cause an immediate decline in support for nuclear power, but that support levels recover over the long term. In the case of the Fukushima Daiichi nuclear accident, he said that US public support had already returned to pre-accident levels, although the specific reasons for this were unclear. Within the second category of nuclear experts, he said that in the USA as well as the rest of the world, there was tremendous attention being paid to how Japan is handling the disaster and lessons learned from the decontamination and decommissioning process. Dr. Meserve noted that the nuclear accident in Fukushima had spurred a broad range of activities by nuclear experts around the world to enhance disaster and emergency planning. The third category covers members of the anti-nuclear community, whom Dr. Meserve sees to have been galvanized in their opposition to nuclear power. He noted that in the USA, extension of nuclear power plant licenses may now become a contentious issue due to such opposition from those who consider nuclear power generation an unacceptable risk. Dr. Meserve concluded by emphasizing the crucial need for a "safety culture" that went beyond simply complying with regulations, and designates safety as the absolute highest priority in all activities. He expressed concerns about overreliance on engineering solutions, and underscored how important it was for everyone involved in nuclear operations to accept individual responsibility and be fully empowered to openly identify and address shortcomings and/or weaknesses in operations.

Dr. Mike Weightman expressed full agreement about the need for a safety culture, and then shared further insights about the nature of risk and benefits. He explained that every step of growth and the benefits accrued in such processes come hand-in-hand with certain risks. The crucial point, he emphasized, was deciding how much risk was tolerable, and working to reduce it to acceptable levels. With regard to the FGC approach, Dr. Weightman noted that human security entailed freedom from fear, but not freedom from risk. As a result of the nuclear accident, he perceived that there had been a fundamental break in trust with institutions in Japan, and that this may be due in some part to prior misconceptions of nuclear power being entirely free of risk. In the United Kingdom, all of the main political parties are in agreement that nuclear power should make up some portion of the nation's energy mix, and there is a commitment to reducing risks to the greatest reasonable level vis-à-vis the benefits of preventative measures. He also noted the growing awareness among the public of the risks of climate change and the understanding that nuclear power had the potential to be a lower-carbon energy source. In his final remarks, Dr. Weightman emphasized the need for "humble"

leadership built on inner strength and a capacity to accept and address criticism. Such leadership is a means to earning the public's trust, although he noted that this requires long and continuous efforts, and would be built on outcomes.

Mr. André-Claude Lacoste shared thoughts about effective preparedness measures for accidents and disasters, emphasizing that preparedness and prevention could not be achieved simply by measuring how much money had been spent. In Japan, for example, he noted that tremendous effort had been dedicated to building up impressive infrastructure, but that there was a pervasive sense that this precluded the possibility of an accident occurring. Mr. Lacoste pointed out that nuclear power plant operators should first aim at preventing accidents from happening, but in the case that an accident happens, their role was to mitigate the impacts as much as possible. Sharing his experience in France, he expressed pride in his country's realization that an accident was possible at any time, and that a team of over 300 people was working on post-disaster management scenarios for implementation in the case of such an accident. Finally, Mr. Lacoste emphasized the importance of responsibility and accountability. He expressed frustration about cases in which different parties (nuclear authorities, utilities, governments, etc.) made claims of not being responsible rather than working towards solutions. In conclusion, he raised the issue of national and international responsibilities, for nuclear accidents could have consequences that extend far beyond national boundaries.

Discussion Session

Following these initial comments, the international advisors to the NRA engaged in a lively discussion session with the other participants, moderated by Dr. Kazuhiko Takemoto (Director, UNU-IAS). Expanding on the issue of a "safety culture", Dr. Christopher Hobson (Assistant Professor, Waseda University) asked about the potential for fostering a work environment in which critical feedback was possible in Japan's traditionally hierarchical culture. The advisors pointed out that every country has its own unique culture, and that one potential pathway to encouraging a constructively critical atmosphere would be to focus on existing positive cultural strengths: for example, the production culture in Japan's automotive sector that enables critical input and has led to impressive efficiency and precision.

Prof. Takeuchi underscored the importance of understanding the impacts of the nuclear accident on people's psychological and mental well-being. His question related to how to effectively communicate with people in order to address such concerns about radiation and thereby recover their trust. The advisors agreed with the need to regain trust, but emphasized that trust must be earned and deserved. Dr. Meserve summarized their feedback into a list of four pathways to trust: listening carefully; communicating effectively; involving people; and being completely honest even when there were uncomfortable facts to share.

Prof. Andrew Dewit (Professor, Rikkyo University) brought the discussion back to safety culture, and asked about the role of whistleblowers, particularly in light of recent legislation in Japan to strengthen secrecy laws. Speakers pointed out that whistleblowers felt that they have no option but to go outside their institutions to report their concerns. In a safety culture, however, there would be appropriate mechanisms in place so that feedback from individuals with concerns about safety or management would be welcomed. Building on this point, Dr. Hobson asked about a recent decision by the government to not publicly release over 700 interviews that had been conducted during the assessment of the Fukushima Daiichi nuclear accident. While the advisors were unfamiliar with the specifics of the interviews or their content, they pointed out that open processes were generally helpful and fostered less suspicion than closed-door dealings.

A final question regarding the economics of nuclear power as opposed to other types of energy production was raised by Mr. Tom O'Sullivan (Director, Mathyos) who pointed to concerns about the variance in estimates of total life-cycle energy costs. Dr. Meserve shared thoughts based on the energy outlook in the USA. While recent dynamism in the natural gas industry might suggest a complete shift from nuclear power, nevertheless several new reactors are currently under construction. Ultimately this is due to a policy of fostering a balanced energy portfolio hedged against certain unpredictability in supply and demand as well as growing concerns about greenhouse gas emissions and potential future regulatory action on this issue.

A video of the session will be made available on the FGC website.