

## **The Path towards Strengthened Safeguards: Experiences in Iraq, South Africa, and North Korea**

This video series is a collection of dialogues centered on the immense role played by the IAEA, and in particular how the Agency supports nuclear nonproliferation through the practice of safeguards. This current update is a chronicle of events during the 1990s, Iraq, South Africa, and North Korea, that led to the development of the Additional Protocol.

### **7.13 Handling Massive Volumes of Information**

#### **Keywords: data analysis, need for integrated information system**

Laura: Speaking of notes, we had massive documentation of the chicken farm, and other documentation that we had already acquired before, from the point of view of the verification organization, you're dealing with non-English documentation...

Jacques: That was a monstrous task. And we tried to address the various aspects of the challenge just in a practical manner. First of all non-English speaking documents, Arabic was not the main working language in the Agency. All the teams were able to communicate, even with a French man in English, but the documents in particular were the original documents of the Iraq program, they were in Arabic.

So there were several layers – some way to address that was to first of all, every team that was made in particular of a majority of Agency staff, had a certain number of Arabic speaking staff. UNSCOM was also providing assistance because they had a pool of translators that would add, in the field in particular, additional capabilities in that area. The team at HQ in particular we developed this permanent team, always included one or two Arabic speakers. So usually they were IT specialists able to speak Arabic, so when there was not something urgent to translate they would develop the tools needed to put together and shape properly the tremendous amount of information we had.

And certainly and I would say that's one of the basis of my competence and responsibility today, to turn what we did in the 90's for Iraq into an integrated information system where anybody who has a duty to perform, be it in the field, or at headquarters, an analyst, the inspector, has right on the screen, the information that is needed. So we spend lots of time in digitizing information, scanning hard copies, turning it into structured key information in databases, and making sure that when a team was going to go sometime on short notice to a place where actually the team available in Baghdad was not very familiar with the site, we had in place an information system that would by a single push button, would provide the team on the way to the site with all the key information necessary. The site location, the layout, the key equipment items.

Laura: It was really fascinating – type in the name and you'd come up with a picture of something. You could click on one part of the picture, and it would give you dialog boxes where you would get data, pictures, documents...

Jacques: Absolutely. The only way for us to cope with the amount is to use what was the modern technology of the 90's and now we're trying to do the same with the modern technology of the 21<sup>st</sup> century for the Department of Safeguards.