



## Simulation: Non-Crisis



### Situation

The Japanese freighter Shiziki Maru, carrying 34 tonnes of partially-spent uranium fuel from four European countries, collided with its French naval escort, the frigate Le Splendid, in the Indian Ocean. Preliminary evidence suggests that while the two ships were running closely alongside one another to facilitate the transfer of an ill crew member, Le Splendid's rudder was hit by flotsam sending it careening into the side of the Shiziki Maru. The collision ripped a gaping hole in the starboard side of the freighter, setting its diesel tanks alight. Over the subsequent three hours, fire spread to the lower decks of the ship, incurring structural damage to the hull. At 0549 Hours, the Shiziki Maru's hull cracked in two, sinking her in 14 minutes. With it, 34 tonnes of partially-spent uranium fell to the seabed along one of the strongest currents in the Indian Ocean. None of the crew members of either ship were injured in the incident.

### Initial Investigation by Le Splendid

It appears as if Le Splendid collided with flotsam made up of steel cabling and crossbeams buoyed by empty oil drums, possibly a piece of a type of common barge known to travel the coast of the Indian Ocean. There was no evidence of foul play and the incident appears to have been an accident. The hazard to navigation has since been removed by a trawler from the Seychelles. The French navy has chosen not to criticize the captain of Le Splendid, citing the accidental nature of the collision, and has praised the crews of both ships for their brave efforts in fighting the fire.

### Background

The Taiwan-based consortium, IKB, bid and won a contract for the transshipment of spent uranium rods from European reactors in France, Italy, Belgium and Algeria to purpose-built breeder reactors in Japan (Kyoto). It has quickly become apparent that IKB and the Shiziki Maru were uninsured, which is a breach of contract with the Belgian and French energy companies.



The Taiwanese legal office disclaimed any responsibility, citing that while IKB was registered in Taiwan, its de facto headquarters was in Rangoon, Myanmar.

IKB's CEO has fled to Peru where he is believed to have influential allies. IKB is funded and directed by international shareholders, some 34% of which can be traced to the United States, but the largest single shareholder is the Bank of Brunei, at 25%. The Japanese-flagged vessel Shiziki Maru appeared to meet all proceeding safety standards, though it had never carried this specific type of cargo and its crew was reluctant to fight the fire in its advanced stages because of unfamiliarity with the dangers of radioactive waste.

It was the EU which had decided to assign the naval escort, as was standard procedure with previous Japanese shipments. This was the first serious mishap to occur in 17 years of over 60 such transshipments.

## **Public Reaction**

Both regional governments and international environmental groups are decrying what has been called the largest nuclear accident in 50 years. It is estimated that over half of the uranium rods fell to the bottom of the ocean in fire-damaged containers, and are therefore likely to be spilling their contents into the prevailing ocean currents, endangering fish stocks and the human populations that rely on them. The ocean currents in June will carry the pollutants northeastward along the Indian Ocean, into the Arabian Sea, along the Indian coast, into the Bay of Bengal. Affected areas provide fishing stocks for nearly 175 million persons living along the littoral. As long as the uranium rods remain on the seabed, they are likely to continue to bleed both toxins and radioactive pollution. At this early stage, it is unclear where the uranium rods have come to rest. Furthermore, the accident occurred within the 200 Exclusive Economic Zone of the Seychelles Islands. Portugal and a number of African countries had filed protests that the ship had previously passed through their economic zones but there had been little reaction or response until this accident.



Retrieval assets for this sort of environmental clean-up operation are only possessed by the leading developed maritime states, though their deployment is expected to be lengthy, expensive, and potentially dangerous.

## **United Nations**

In light of the scale of the international reaction to this incident, the Secretary-General of the United Nations has urged discussion and action on this specific crisis and on the transshipment of pollutants more generally. There is certainly domestic support for the regulation of sensitive transnational shipments, but it is unclear how expensive, intrusive and restrictive such an agreement would be. It is also unclear whether legal responsibility for the clean-up can be assigned to any one State or group of states.