HONG KONG—The AirAsia Flight 8501 disaster has cast a spotlight on an insurance treaty that could restrict compensation for victim’s families to a
fraction of the assistance offered to victims of the Malaysia Airlines disasters this year, experts say.

Indonesia, unlike its neighbors Malaysia or Singapore, hasn’t signed the Montreal Convention, an international treaty that offers payments from airlines covering total liability of around $170,000 a passenger and covers advance payments for accommodation and transport costs for the families of victims after an air crash. Carriers based in countries that have signed the 2003 treaty are liable for the compensation, which is separate from personal insurance contracts.

Indonesia observes an older aviation agreement—the Warsaw Convention of 1929—which has a substantially lower liability limit per victim of around $8,300 according to one expert’s estimates, and doesn’t require advance payments for passenger’s families.

While AirAsia is based in Malaysia, the missing AirAsia jet is operated by PT Indonesia AirAsia, an affiliate 49%-owned by Malaysia based AirAsia Bhd.

“We are prepared and we will not be running away from any of our obligations,” AirAsia Chief Executive Office Tony Fernandes told media after meeting with Indonesian President Joko Widodo and the families of passengers on the doomed flight.

He said that AirAsia will move ahead with “some financial assistance” straight away, but did not specify what this might entail. He said the company would not “hide behind any convention,” a possible reference to the Montreal convention.

“The Warsaw pact offers much worse liabilities rights for those passengers compared with Montreal,” said Joseph Wheeler, an aviation lawyer at the law firm Shine Lawyers based in Brisbane Australia.

“The Warsaw system is acknowledged by all players in international aviation regulation to be antiquated,” Mr. Wheeler added.

While the insurance companies that cover the AirAsia airline could make advance payments and compensation similar to the Montreal Convention as a gesture of goodwill, legally, most family member of the victims of the AirAsia jet that was bound for Singapore from Indonesia could receive just a fraction of previous payouts. Victims of both Malaysia Airlines Flight 370, believed to have
crashed without trace over the Southern Indian Ocean in March, and Malaysia Airlines Flight 17, shot down over Ukraine in July, were covered by the Montreal Treaty.

German insurance giant Allianz SE, the lead reinsurer for AirAsia and Malaysia Airlines, declined to comment. Reinsurers charge fees to insurers for taking on some responsibility for policies sold to a company or person.

All but a handful of the 162 passengers and crew on board Flight 8501 were Indonesians.

Some passengers may be covered by the Montreal Convention, however. For example, passengers with a one-way or return ticket from Indonesia to Singapore will be governed by the Warsaw treaty, but if the passenger had departed from a country that ratified the Montreal agreement and the final destination was also a signatory to the convention, that victim is eligible for compensation under the newer aviation agreement.

“It comes down to individual claims. You have a hundred plus passengers—some may have purchased tickets in different countries, some may have been on a leg of a three-leg ticket that was covered by Montreal,” said Robert Jensen, chief executive of Kenyon International Emergency Services, a crisis and disaster management company.

The International Air Transport Association has in the past urged Indonesia to ratify the Montreal Convention, last year even specifically warning of the dangers if a plane crashes from the country en route to Singapore.