

## **Summary of Survey on Air Transport of Radioactive Materials in RCA Member States**

### **1. Background**

At the 21<sup>st</sup> RCA Meeting of National Representatives held in Singapore from 1-5 March 1999, a few Member States commented that some airlines refused to carry radioactive kits, thereby affecting the delivery of training courses which require the use of these kits. These MS requested that the Agency take the issue up with International Airlines Transport Association (IATA), the international body which regulates air transport rules of commercial airlines.<sup>1</sup>

The Meeting requested that the IAEA raise the matter with the body governing the transport of hazardous (including radioactive materials or RAM) materials by airlines.

In order to obtain more information to assist the Secretariat in raising the issue with IATA, a questionnaire was sent to all RCA Member States in March 1999. Annex 1 is the sample letter and questionnaire used for the survey.

### **2. Results & Analysis**

Replies were received from 15 of the 17 RCA Member States. These have been tabulated and indicated in Table 1.

The following is the summary of the findings:

- a. Not all the airlines in the respondent countries would refuse to carry RAM (Question 1);
- b. In 8 respondent countries, between 1 and 5 airlines would refuse to carry RAM;
- c. For those airlines refusing to carry RAM, the reasons given were either singly or in combination:
  - due to company policy (5 countries) ;
  - due to pilot's prerogative and lack of space (1 country); and
  - others (no permission from civil aviation (4 countries); fear of radiation (1 country); incompatible airlines (1 country).
- a. Requirements of airlines for carrying RAM include:
  - a certificate of transport plus other documentation (10 countries);
  - only a certificate of transport from concerned authorities: (2 countries);
  - in combination with other documentation (5 countries); and
  - other documentation (10 countries), (see footnote 8,9,10).
- f. Five countries cited specific examples of airlines refusing to carry RAM (footnotes 11, 12, 13, 14 and 15).
- g. Except for one country (THA), all respondents have safe transport regulations based on Agency rules.(Question 6);
- h. The authorities responsible for regulating air transport of radioactive materials vary.—Among the countries surveyed: the national atomic authorities (9); public transport departments (4) , air transport bodies (5) and others (2). In 5 of the respondent countries (ROK,MAL, MON,

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<sup>1</sup> The specific case mentioned at the 21<sup>st</sup> RCA Meeting was from INDIA, which could not ship radioactive kits needed in a training event in another country because the an airline refused. A few other MS made a similar observation.

MYA and SIN) there were at least 2 government bodies involved. ROK and SIN have 3 bodies.

### **3. Conclusion:**

It can be seen from the survey that the refusal of the airlines to carry radioactive materials is not prevalent in the region. In this regard, the request for the Agency's representation with IATA on the issue may not have a strong basis.

### **4. Recommendation**

It is recommended that each authority in the MS make its own representation with the concerned airlines that have refused to carry the RAM. Alternatively, the shippers should try to use other airlines which offer the service of carrying RAM.

## Summary Sheet on Responses to Questionnaire on Air Shipment of Radioactive Materials

	AUL	BGD	CPR	IND	INS	JPN	ROK	MAL	MON	MYA	NZE	PAK	PHI	SIN	SRL	THA	VIE
Question No.	1	2	3	4 <sup>2</sup>	5	6	7	8	9	10	11	12	13 <sup>3</sup>	14	15	16	17
1. All airlines refuse to carry RAM?	No	No		No	No	No	No	No	No	No	No	No	No	No	No	No	
2. If some airlines refuse to carry RAM				-		-						Nil				-	
a. how many airlines	1-5	3 <sup>4</sup>			>15		1-5	1-5	1-5	1-5			1-5	1-5	1-5	-	
b. bases for refusal? <sup>5</sup>	i	i		iv <sup>6</sup>	iv <sup>7</sup>		iii	i	ii;iii	iv			i	i, iii	iv <sup>8</sup>		
3. Requirements of airlines carrying RAM?						-											
a. certificate of transport				X	X			X	X	X		X	X	X	X	X	
b. other documentation	X	X			X			X		X	X	X	X	X			
c. others(specify)				X <sup>9</sup>				X <sup>10</sup>					X <sup>11</sup>				
4. Cite examples of refusal by airlines	-	<b>EX</b> 12			EX 13	-	EX 14	-	-	<b>EX</b> <sup>15</sup>	No	N.A	<b>EX</b> 16	Not pre vale nt		-	

<sup>2</sup> Based on private communications.

<sup>3</sup> Source: Civil Aviation board; Bureau of Air Transportation; Philippine Airlines; Aboitz Cargo; Cebu Pacific ; PNRI licensees(SCITEC Int'l; Ind CBI Philippines; EEI Corporation and Welders Testing Laboratories).

<sup>4</sup> 3 airlines: Singapore Airlines; British Airways and Thai Airlines). They were looking for RAM license. Biman Bangladesh airlines is carrying all RAM.

<sup>5</sup> Grounds for refusal: (i ) company policy; (ii) pilots' prerogative; (iii) no space at time; (iv) others(specify).

<sup>6</sup> Some airlines do not have the permission of Civil Aviation to carry RAM.

<sup>7</sup> Fear of danger of radiation; Some people thought that the RAM might explode.

<sup>8</sup> May refuse if airline is incompatible.

<sup>9</sup> Civil Aviation Permit to carry RAM; Advanced confirmation from intermediate airports in case direct flights are not available and trans shipment is involved.

<sup>10</sup> Dangerous goods regulation certificate.

<sup>11</sup> Appropriate labeling/markings on packages; in the case of the Philippine Airlines, goods must be presented to airlines 2 days prior to flight schedule; dangerous good certification.

<sup>12</sup> Recently, Beijing Yuanfeng Science and Technology Dev Corporation shipped RIA kits from China to Dhaka via Bangkok. Bangkok Airport authority imposed restriction on handling of dangerous goods after the kits reached the Bangkok airport; Bangkok authority did not inform China Airlines about this restriction before the shipment. RIA kits were not shipped from Bangkok airport to Dhaka airport.

<sup>13</sup> In some cities,i.e. Balikpapan, Batam, Jakarta and Surabaya, shipment was refused by airline companies.

<sup>14</sup> Korean airlines refused shipment at the time; no space was the reason given.

	AUL	BGD	CPR	IND	INS	JPN	ROK	MAL	MON	MYA	NZE	PAK	PHI	SIN	SRL	THA	VIE
5. If problem in No.4 is recurring, what are the measures done by national atomic authority						-						N.A				-	
a. None	X	X					X	X	-	X							
b. Not within mandate																	
c. Low priority problem																	
d.Others(specify)					X <sup>17</sup>								X <sup>18</sup>				
6. Is there regulations for safe transport of RAM?	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
7. If the No. 6 answer is Yes, is this based on Agency's regulations on safe transport?	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No <sup>19</sup>		
8. If the No. 6 answer is No, is there a plan to develop this?											-	N.A			Yes	-	
9. Which authorities in your country regulate air transport of radioactive materials																	
a. atomic energy authority		X			X		X	X <sup>20</sup>	X	X		X	X		X		
b. public transport department						X	X							X		X	
c. Air transport body	X						X	X <sup>21</sup>		X				X			
d. Others(specify)					X <sup>22</sup>				X <sup>23</sup>		X <sup>24</sup>			X <sup>25</sup>			

<sup>15</sup> Thai airways refused a radiography source to be sent to Germany. Local office said it was decided by Bangkok Office. Nothing can be done. It has been explained to Thai Airways, but they still refuse.

<sup>16</sup> Only Philippine Airlines accept shipments of radioactive materials within country. Shippers are aware of this.

<sup>17</sup> The Indonesian Nuclear Energy Control Board (NECB) tells the airline representative that if the package is provided with transportation permit issued by NECB and meets all regulations, it is then certified safe to transport the RAM package.

<sup>18</sup> Collaboration with model agencies, e.g. Bureau of Air Transportation; Civil Aviation Board; conduct of training courses on safe transport of radioactive materials.

<sup>19</sup> Based on the IAEA's old regulations, not as per SS no. 6

<sup>20</sup> Atomic Energy Licensing Board.

<sup>21</sup> Dept. of Civil Aviation.

<sup>22</sup> BAPETEN or Nuclear Energy Control Board.

<sup>23</sup> Civil Aviation Authority of Mongolia.

<sup>24</sup> National Radiation Laboratory, part of the NZE Ministry of Health.

<sup>25</sup> Radiation Protection Inspectorate.

	AUL	BGD	CPR	IND	INS	JPN	ROK	MAL	MON	MYA	NZE	PAK	PHI	SIN	SRL	THA	VIE
10. How many commercial airlines operate in your country?																	
a. Local airlines	10	1			11	7	2	4	4	2	2	4	7	2	3		
b. Foreign airlines	49	20			28	68	2(?)	30	5 <sup>26</sup>	5	12	35-40	48	30	-		

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<sup>26</sup> Three are regulars: Air China; Aeroflot; and Korean Air. Two are irregular: Japan Airlines and ANA.

## QUESTIONNAIRE ON AIR SHIPMENT OF RADIOACTIVE MATERIALS

### Background:

Some Member States reported that shipments of radioactive materials were refused by some airlines and requested the Agency (IAEA) to interface with IATA, the international body regulating shipments of air cargo to address this issue.

In order for the Agency to be guided in this consultation please take a few minutes of your time to answer this questionnaire. After completion please return to the RCA Office by mail or fax or email by \_\_\_\_\_.

### (Please check the appropriate information and/or supply the needed answers)

1. Do **all** airlines—foreign and local—flying into and out of your country refuse to carry radioactive materials(RAM)? Please check

(a) Yes \_\_\_\_\_ (b) No \_\_\_\_\_

If the answer is **yes** please go to **item 4**.

2. If only some airlines refuse to carry RAM,

- (i) How many airlines are involved (give approximate numbers if exact numbers cannot be given)

(a) 1 - 3 \_\_\_\_\_

(b) 4 - 6 \_\_\_\_\_

(c) 7 - 10 \_\_\_\_\_

(d) more than 11 \_\_\_\_\_

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- (ii) What are their bases for refusal? (please check as appropriate)

(a) company policy \_\_\_\_\_

(b) pilots prerogative \_\_\_\_\_

(c) no space at the time \_\_\_\_\_

(d) others (please specify) \_\_\_\_\_

3. For airlines which carry RAM, what are their requirements ?

(a) certificate of transport from concerned authorities \_\_\_\_\_

- (b) other adequate documentation on the radioactive cargo \_\_\_\_\_
- (c) others (please specify) \_\_\_\_\_
4. Can you cite recent examples in your country where a shipment of RAM was refused by an airline company? (Please provide brief details on the circumstances)
5. If the problem in **item 4** is prevalent or recurring, what is being done by your national atomic authority or the concerned authorities to address this problem?
- a) None \_\_\_\_\_
- b) Not within mandate \_\_\_\_\_
- c) Low priority problem \_\_\_\_\_
- d) Others (please specify) \_\_\_\_\_
6. Are there regulations for the safe transport of radioactive materials in your country?
- (a) Yes \_\_\_\_\_ (b) No \_\_\_\_\_
7. If the answer to No. 6 is **YES**, is this based on the Agency's regulations on the Safe Transport of Radioactive Materials ?
- (a) Yes \_\_\_\_\_ (b) No \_\_\_\_\_
8. If the answer to no 6 is **NO**, is there a plan to develop such regulations?
- (a) Yes \_\_\_\_\_ (b) No \_\_\_\_\_
9. Which authorities in your country regulate air transport of radioactive materials?
- (a) Atomic energy authority \_\_\_\_\_
- (b) Public transport department \_\_\_\_\_
- (c) Air transport body \_\_\_\_\_
- (d) Others (Please specify) \_\_\_\_\_
10. How many commercial airlines operate in your country? (Fill in the number)
- (a) Local airlines \_\_\_\_\_
- (b) Foreign companies \_\_\_\_\_