ANNEX 2
Particular Packaging Requirements (PPRs) in the 2001-2002 ICAO TI
Decisions Made during Packing Instruction Consolidation Working Group Meetings

PPR		Working Group Decision	Affected Packing Instructions
2	Plastic inner packagings must be packed in tightly closed metal or rigid plastic receptacles before packing in outer packagings.	Combine with PPR 13 and revise to read: "Plastic or glass inner packagings must be packed in tightly closed metal or rigid plastic receptacles before packing in outer packagings. Inner packagings must be packed with absorbent material as required by 4;1.1.10.1."	304 418 306 501 Y306 Y501 308 506 412 416 Y416
3	Pure aluminium or aluminium alloys are permitted only for halogenated hydrocarbons that will not react with aluminium.	Deleted - compatibility issues should be addressed in Part 4, Chapter 1.	304 306 Y306 308
4	Plastic bags must be packed in tightly closed metal or rigid plastic receptacles before packing in outer packagings.	Add this into the new packing instruction P5X1 as an additional requirement.	509 Y509 512 517 519
5	Steel packagings must be corrosion-resistant or with protection against corrosion.	Deleted - compatibility issues should be addressed in Part 4, Chapter 1.	304 421 306 422 Y306 Y422 308 509 409 Y509 412 512 416 517 Y416 519 418
6	Glass ampoules must be packed with absorbent material in tightly closed metal or rigid plastic receptacles before packing in outer packagings.	Deleted - glass ampoules are now considered glass receptacles and will be covered under the revised PPR combining PPR 2 and 13.	304

PPR		Working Group Decision	Affected Packing Instructions
8	When metal inner packagings are permitted, only appropriate gas cylinders or other pressure vessels may be used.	Recommend assignment of this requirement harmonize with the UN. Where substances are assigned to P200 in the UN, they should also be assigned that PI in ICAO. Other substances may require further review.	304 501 306 409 431 432
9	Glass or earthenware inner packagings and glass ampoules must be packed with cushioning material in tightly closed metal or rigid plastic receptacles before packing in outer packagings.	Add this provision into the new packing instructions as an additional requirement using the same wording as the combined 2/13.	412 416 Y416 418 421 422
10	Copper cartridges only permitted when the substance is not in dispersion.	Delete. The packing instruction working group was unsure of it's current applicability but believes if it is still relevant, it is a compatibility issue better addressed by Part 4, Chapter 1.	412
13	Glass or earthenware inner packagings and glass ampoules must be packed with absorbent material in tightly closed metal or rigid plastic receptacles before packing in outer packagings.	Combine with PPR 2 and revise to read: "Plastic or glass inner packagings must be packed in tightly closed metal or rigid plastic receptacles before packing in outer packagings. Inner packagings must be packed with absorbent material as required by 4;1.1.10.1."	304 Y501 306 506 Y306 308 409 431 432 501
22	If the substance is in dispersion in organic liquid, the organic liquid must have a flashpoint above 50 deg. C.	Propose the DGP working group delete the PPR and consider a more appropriate means to address this concern. This PPR assigns a requirement for a liquid to a solid type packaging, current PI's would not be suitable as Part 4;1.1.17 must apply. This may partially be resolved once the new UN solid/liquid entries are adopted.	412 416 Y416 418 421 422 Y422

ANNEX 3
Proposed Changes to Quantity Limits or Other Restrictions

Proposed Changes for Class 3			
Class 3 PGI UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
1280	304	From 1.0 - 2.5 L - IP.3 CAO Align with similar substances	
1305	304		
Class 3 PGII UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
1154	308		From 5.0 - 2.5 L - IP.2 and IP.3 CAO Align with similar substances
1184	308		From 5.0 - 2.5 L - IP.2 CAO From 10.0 - 2.5 L - IP.3 Align with similar substances
1277 1278	308		From 5.0 - 2.5 L - IP.3 CAO Align with similar substances
1279	306 308		From 5.0 - 1.0 L - IP.2 and IP.3 PAX From 5.0 - 2.5 L - IP.2 CAO From 10.0 - 2.5 L - IP.3 CAO Align with similar substances
2363	308	From 1.0 - 2.5 L - IP.3 CAO Align with similar substances	
2486	308	From 1.0 - 2.5 L - IP.2 CAO Align with similar substances	
3064	311	Added 4D and 4F packaging to harmonize with P300	
3269	312	Deleted activator IP.9 reference and inner quantity limit -provides one inner quantity limit. Deleted Class 3 base material quantity limit - recommend standardize with P302. Recommend adding a gross limit to the DGL. Added additional outer packaging to harmonize with UN Model.	
Proposed changes for Class 4			
Division 4.1 PGI UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**

2852	416	From 0.25 - 0.5 kg Align with similar substances	
1336 1344 1357	412 416		From 2.5 - 1 kg Align with similar substances in the same UN PI
Division 4.1 PGII UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
1339 1341 1343	416 418		Prohibit inner plastics packagings on cargo aircraft to align with passenger instruction
1871	416 418		Prohibit bags as inner packagings. They are permitted on passenger but not cargo aircraft
3182	421 422	From 0.5 - 1.0 kg	
Division 4.1 PGIII UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
General		Propose to permit plastic inners on passenger aircraft as they are permitted as inners on cargo and plastic drums are permitted	
Division 4.2 PGII Liquid UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
General			There is no requirement for glass to be protected but there is for the equivalent solid entries, propose to include a provision
Division 4.2 PGII Solids UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
3126 3128	415 417		These N.O.S. entries get more generous provisions than pure substances, reduce to align with similar substances
1369 1382 1384	416 418	It appears that plastic inner packagings are not permitted without rationale. Propose to permit	

1326 1437 1339 1871 1341 1923 1343 1929 1352 2008 1358 2545 1369 2546 1384 3182	416 418	Inner glass packagings limited to 0.5 kg while similar substances have a 1.0 kg limit. Propose increase to 1.0 kg to align the similar substances	
2002	421 422 Sup		
Division 4.3 PGIII Solids UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
1408	421 422	Increase inner packaging to align with similar substances in same PI	
2805	416 418	Increase inner packaging limits for metal on cargo aircraft to 5 kg	
Proposed changes of Class 5			
Division 5.1 PGI Liquids UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
2495	501		Make forbidden both PAX and CAO. UN only permits in cylinders P200
Division 5.1 PGII Solids UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
1471 1496 1472 1506 1483 1513 1485 1748 1495 2741	509	0.5 - 1.0 kg PAX. Align with similar substances. CAO limits are aligned	
Division 5.1 PGII Solids LTD QTY UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
1459	Y509	Remove prohibition on plastic bags - all other substances allowed in bags	
Proposed changes for Class 9			

Class 9 PGII and III Liquids UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
General	907 914 Y914	Added additional outer packagings to harmonize with P001	
Class 9 PGII and III Solids UN#	**PI**	**Increase in quantity or restriction relaxation**	**Decrease in quantity or increase in restriction**
General	911	Added additional outer packagings to harmonize with P001	

Annex 4 - Table 3-1. Dangerous Goods List
Sample Proposed Layout Incorporating New Combined Packing Instructions

Name	UN No.	Class or division	Sub-sidiary risk	Labels	State variations	Special provisions	PG	Packing Instruction	PPR	Max. net quantity per package		
										Ltd. Qty.	Pass.	Cargo
Accumulators, electric, see **Batteries,** etc.												
Acetal	1088	3		Liquid flammable	AU 1 US 3	A1	I	**3X2**		1 L	5 L	60 L
Acetaldehyde	1089	3		Liquid flammable	AU 1 US 3	A1	I	304		F	F	30 L
Acetaldehyde ammonia	1841	9		Miscellaneous		A48	III	9XX		None	200 kg	200 kg
Acetaldehyde oxime	2332	3		Liquid flammable			III	**3X4**		10 L	60 L	220 L
Acetic acid, glacial	2789	8	3	Corrosive & Liquid flammable			II	8XX		.5 L	1 L	30 L
Acetic acid solution, more than 80% acid, by mass	2789	8	3	Corrosive & Liquid flammable			II	8XX		.5 L	1 L	30 L
Acetic acid solution, not less than 50% but not more than 80% acid, by mass	2790	8		Corrosive			II	8XX		.5 L	1 L	30 L
Acetic acid solution, more than 10% but less than 50% acid, by mass	2790	8		Corrosive			III	8XX		1 L	5 L	60 L
Acetic anhydride	1715	8	3	Corrosive & Liquid flammable			II	8XX		.5 L	1 L	30 L
Acetoin, see **Acetyl methyl carbinol**												
Acetone	1090	3		Liquid flammable			II	**3X2**		1 L	5 L	60 L
Acetone cyanohydrin, stabilized	1541	6.1		Toxic	AU 1 US 3 US 4 US 8	A1	I	6XX		None	None	30 L
Acetone oils	1091	3		Liquid flammable			II	**3X2**		1 L	5 L	60 L
Acetonitrile	1648	3		Liquid flammable			II	**3X2**		1 L	5 L	60 L
Acetyl bromide	1716	8		Corrosive			II	8XX		.5 L	1 L	30 L
Acetyl chloride	1717	3	8	Liquid flammable & Corrosive			II	**3X3**		.5 L	1 L	30 L
Acetyl cyclohexanesulphonyl peroxide, more than 82%, wetted with less than 12% water	FORBIDDEN											

Annex 5 - Correlation between Current and Proposed PIs

Current PI	Proposed PI
312, Y312	312
302, 303, 305, 307, 309, and 310	3X1
304, 306, and 308	3X2, 3X3
Y305, Y306, and Y309	3X4
412, 416	4X1
411, 415, 416, 417, 418, 419, 420	4X2
416, 418	4X5
421, 422, and 434	4X7
408, 414, 425, 431, 432	4X8
416, 418	4X15
412, 416, 418	4X16
500, 502, 510, 513	5X1
508, 509, 511, 512, 516, 517, 518, 519	5X2
501, 503, 505, 506, 507, 514, 515	5X3
Y508, Y509, Y516, Y517	Y5XX
Y501, Y503, Y506, Y514	Y5XY
903, 912, and 918	9X1
907, 914	9X2
Y907, Y911, Y914	Y9X3