Joint Standing Committee on Treaties
Industry roundtable and second hearing on the HNS Convention
Canberra 18 March 2013

Response by the Department of Infrastructure and Transport to issues raised at the industry roundtable and second hearing

The Department provides the following information in response to the issues raised at the industry roundtable and second hearing on proposed Australian accession to the HNS Convention.

Some of the information supplements the information in the Department's response to the public submissions dated 27 February 2013.

"The existing arrangements are neither broken nor flawed and continue to serve Australia well."

At the roundtable, Mr Peter Gniel from PACIA questioned the need for the HNS Convention, quoting the following statement from AMSA's report on the 2011-12 review of the National Plan:

> " It is important to recognise the existing arrangements are neither broken nor flawed and continue to serve Australia well domestically as we continue to meet our international obligations under the OPRC Convention and OPRC-HNS Protocol."[1]

This statement refers to the existing *pollution response arrangements* embodied in the National Plan and NMERA.[2] These are arrangements for combating, containing and cleaning up serious oil or HNS pollution incidents that take place in or adjacent to Australian waters. Similarly, the OPRC Convention and OPRC-HNS Protocol are international conventions which require the parties to prepare for and respond to

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[1] At the top of page 2 of the proof transcript. The statement is on page 53 of AMSA's *Report on the 2011-12 Review of the National Plan to Combat Pollution of the Sea by Oil and Other Hazardous and Noxious Substances and the National Maritime Emergency Response Arrangements*, October 2012. (When Mr Gniel quoted the statement, he omitted the concluding words "under the OPRC Convention and OPRC-HNS Protocol.")

[2] The National Plan to Combat Pollution of the Sea by Oil and Other Hazardous and Noxious Substances (**"National Plan"**) is a national arrangement for enabling effective response to marine pollution incidents. Under the National Plan, which is managed by AMSA, the Commonwealth, State and Northern Territory governments, emergency services, and the shipping, ports, oil, salvage, exploration and chemical industries co-operate to provide a national marine pollution response capability; this involves the provision of vessels and aircraft, the maintenance of stockpiles of equipment and materials for combating pollution, the provision of training for responders, and the conducting of exercises.

The National Maritime Emergency Response Arrangements (**"NMERA"**) is a related national arrangement for the provision of emergency towage vessels.

maritime pollution incidents, both individually and, where necessary, in co-operation with other countries.[3]

The quoted statement is not addressed to the existing *liability and compensation arrangements* for HNS incidents. Those arrangements could indeed be characterised as broken and flawed.

As explained in the RIS (at paragraphs 116 to 139), at present there are no insurance or other funding arrangements to cover the cost of damage and environmental remediation in the event that we suffer a serious HNS incident in Australia.

At present, any serious HNS incident can give rise to a "disorderly" situation in which the costs of the incident are not met, necessitating *ad hoc* cost allocation and cost-shifting which is uncertain and inefficient.

This is a global problem. That is why concerned countries have come together and developed an international solution in the form of the HNS Convention. Relevant global and regional industry organisations have participated in the development of the convention; they include the International Group of P & I Associations (the P & I Clubs), the International Union of Marine Insurance, the International Chamber of Shipping, the International Association of Independent Tanker Owners, the Oil Companies International Marine Forum, the European Chemical Industry Council (**"CEFIC"**) and the World LPG Association (**"WLPGA"**).

The HNS Convention affords Australia the opportunity to participate in an international arrangement that spreads the risk of HNS incidents in accordance with the principles of insurance, and provides a high level of cover on economical terms.

The HNS Convention "will not do a single thing to protect the Australian environment."[4]

This criticism of the HNS Convention is misplaced, since the purpose of the convention is to cover the costs of HNS incidents that actually occur. Prevention of HNS incidents is addressed by other national and international safety and environmental protection regimes (including the international shipping safety regime described at pages 6 to 12 of the Department's response to the public submissions).

However, despite the compensatory objective of the HNS Convention, it should also help to improve safety and environmental outcomes. It will do this in three ways.

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[3] **"OPRC Convention"** means the International Convention on Oil Pollution Preparedness, Response and Co-operation, which entered into force in 1995. **"OPRC-HNS Protocol"** is the protocol to the OPRC Convention, which was adopted in 2000.

[4] Mr Anthony Gilbert of Elgas, at page 6 of the proof transcript. He makes a similar point at page 8: "Getting coverage is not going to prevent an environmental disaster."

First, it will increase incentives for shipowners to make their carriage of HNS even safer because it will increase their liability for HNS incidents three-fold to six-fold compared to what it is now.

Second, by requiring receivers to contribute to the HNS Fund, it will give them an incentive to contribute to making the carriage of HNS safer – for example, through choice of supplier and mode of delivery, or by using their commercial influence with suppliers and/or shipping service providers.

Third, it will contribute to better environmental outcomes by ensuring that adequate funds are available for environmental remediation following an HNS incident.

While foreign countries' international shipping is well regulated and inspected, the standard of safety of their coastal shipping is non-transparent, and may be dubious. Australian receivers' contributions to the HNS Fund may therefore end up paying for HNS incidents in foreign countries which result from the poor safety standards of their coastal shipping.[5]

We make the following observations in response to this concern.

- As Ms Philippa Power from the Department and Mr Paul Nelson from AMSA noted at the second hearing, coastal trading generally involves smaller vessels which carry smaller amounts of HNS cargo, resulting in a smaller scale of damage should an HNS incident occur. Therefore it is less likely that the damage will exceed the shipowner's limit of liability under the HNS Convention so as to require a payment of compensation from the HNS Fund.
- Coastal trading vessels are subject to many of the same international environmental protection and safety standards, developed and administered under the auspices of the IMO, as international trading vessels.[6]
- Coastal trading vessels are subject to flag State control inspections by or on behalf of their country's maritime administration. Flag State control inspections serve a similar function to port State control inspections, which apply to international shipping.

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[5] Mr Gilbert at pages 2, 3 and 8 of the proof transcript.

[6] The main convention that deals with the prevention of pollution by ships is the International Convention for the Prevention of Pollution from Ships (**"MARPOL"**). Most of the provisions of MARPOL apply to ships of 400 gross tons or over, irrespective of whether the ship is engaged in coastal trade or international trade. (For comparison, a Sydney Harbour ferry of the *Freshwater* class is 1,200 gross tons.) A number of key provisions of MARPOL also apply to very small oil tankers of 150 gross tons or over.

The main convention that deals with ship safety is the International Convention for the Safety of Life at Sea (**"SOLAS"**). Most of the provisions of SOLAS apply to ships that are engaged on international voyages; the minimum threshold tonnages of the ships to which the provisions apply vary from no minimum threshold to 500 gross tons. Only Chapter V of SOLAS, which deals with safety of navigation, applies to ships on all voyages, whether coastal or international. However, IMO member countries are encouraged to apply the same safety standards to their coastal shipping, and many have done so. (Even where they do not apply the standards in SOLAS, they will apply other appropriate safety standards through their domestic legislation.)

- The flag State control inspection regime is subject to the Voluntary IMO Member State Audit Scheme, under which the IMO provides member States with a comprehensive assessment of the effectiveness of their inspection regime as well as their compliance with other IMO standards.
- While it is true that coastal shipping is not subject to the additional, valuable safeguard of port State control inspections in other countries' ports (insofar as the ships concerned do not visit other countries), the absence of reported serious HNS incidents involving coastal shipping in recent times suggests that coastal carriage of HNS is not significantly more unsafe than international carriage of HNS.

The ships that carry LPG, and certain other kinds of HNS, to Australian receivers already take out additional liability insurance. Therefore, while the HNS Convention will impose additional costs on Australian industry, it will not add much value, since the additional liability insurance means that adequate compensation for HNS incidents is already available in Australia.

This argument was made repeatedly at the roundtable: by Mr Gilbert and Mr Gniel at pages 3 and 6 of the proof transcript, and by Mr Gniel at page 7. It is illustrated by the following exchange at page 6:

> " **SENATOR FAWCETT**: One of the other aspects of the convention is ensuring that ship owners must carry liability insurance in respect of damage or pollution resulting from their ships. Is that something you support?
>
> **MR GILBERT**: We support that and it would already be in place with the parties who are supplying us."

This argument is based on a misunderstanding of the existing liability arrangements relating to shipowners.

As pointed out previously, the LLMC Convention limits the liability of shipowners (including ship operators, charterers and salvors) for loss or damage, including loss or damage caused by HNS cargo, to relatively low amounts based on the ship's gross tonnage. The HNS Convention will increase shipowners' limits of liability for HNS incidents by between three and six times, will impose strict liability on shipowners for HNS incidents, and will "channel" the liability of ship operators, charterers, salvors and crew members to the shipowner.

The shipowners or charterers that supply LPG and other kinds of HNS to Australian receivers may, as Mr Gilbert and Mr Gniel have testified, maintain a higher level of liability insurance than their limit of liability under the LLMC Convention. That additional insurance cover may be useful in enabling them to meet some other kind of liability not covered by the LLMC Convention – but it will not be used to pay an amount

of compensation for an HNS incident which is in excess of the shipowner's limit of liability under the LLMC Convention.[7]

In other words: irrespective of how much liability insurance the shipowner or charterer takes out, the insurance payout for an HNS incident will not exceed the shipowner's (relatively low) limit of liability under the LLMC Convention.

The HNS Convention will undermine the international competitiveness of the Australian chemical industry vis-a-vis developing countries that are rising chemical producers, such as China and South-East Asian countries. Most of those countries will not become parties to the convention, at least in the near term.[8]

It is not in question that Australia's chemical industry faces a highly competitive international trading environment. As part of the manufacturing sector, it faces the familiar challenges of lower labour costs in developing countries and the high Australian dollar.

While we do not doubt that chemical producers in developing countries are major competitors of our chemical industry, it is a truism of international trade economics that advanced industrialised countries' main trade competitors tend to be other advanced industrialised countries. (If the key and enduring comparative advantage of a particular product line lies in low labour costs, producers in high-wage countries are unlikely to be able to compete in the long term.)

A briefing paper on the Australian and Thai chemical industries prepared by DFAT's Economic Analytical Unit in 2004 in response to the Australian plastics and chemicals industry's concerns about the impending Australia-Thailand Free Trade Agreement made the observation that:

> " Australian chemical and plastic exports tend to be focused on niche markets with an emphasis on high quality and value added products."[9]

As regards the advanced industrialised countries, European countries are among the world's leading chemical producers. Eight of the top 30 chemical producing countries are European, producing 17.5% of world chemical sales.[10] Six European countries have already signed the HNS Convention and are undertaking the process of ratification (they are Germany, France, the Netherlands, Denmark, Norway and Greece). A number of

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[7] The reason is that liability insurance policies only require the insurer to meet the shipowner's or charterer's legal liability; they do not require the insurer to make voluntary payments over and above that amount, or to compensate the shipowner or charterer for any voluntary payments they may make over and above that amount.

[8] Mr Gniel at page 8 of the proof transcript; a similar point is made by Mr Chris Oughton of Kwinana Industries Council at page 9.

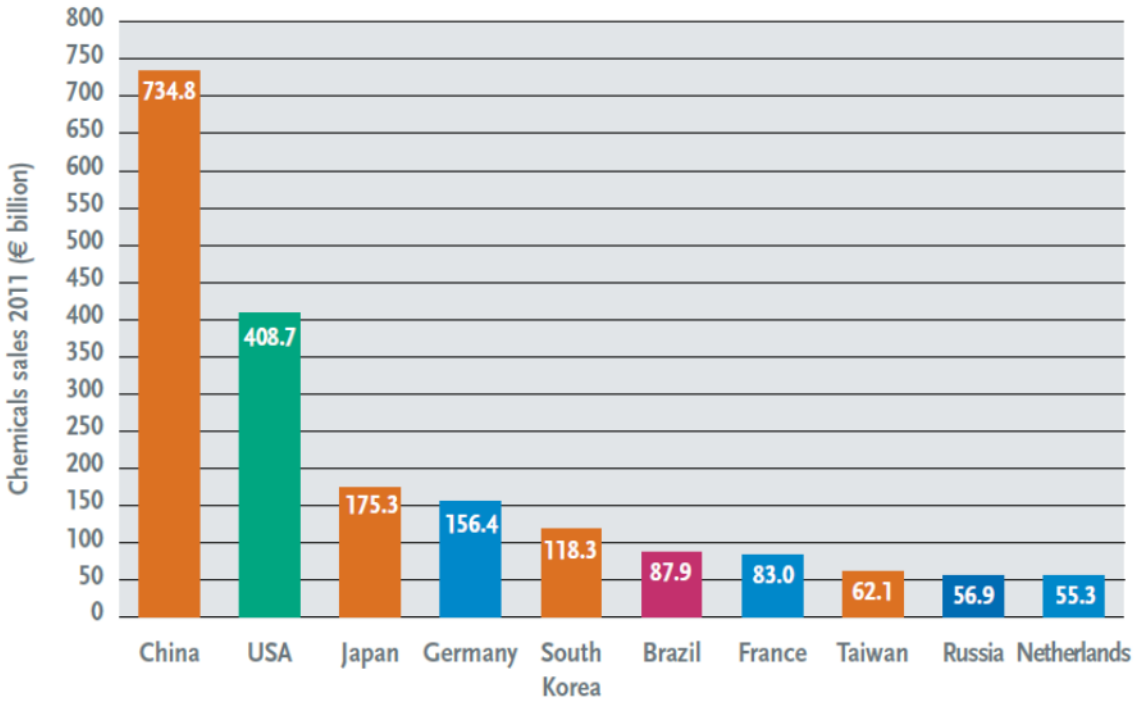
[9] Department of Foreign Affairs and Trade, Economic Analytical Unit *Australia-Thailand Trade Relations: The Plastics and Chemicals Industry*, 2004, at page 8.

[10] CEFIC *The European Chemical Industry in Worldwide Perspective - Facts and Figures 2012*, at page 5.

other European countries have indicated that they intend to become parties to the convention.

Canada and Turkey, which are also signatories to the HNS Convention, also have large manufacturing sectors which exceed the size of Australia's manufacturing sector.[11]

The following chart lists the world's top ten chemical producing countries and the value of their output:[12]



All three of the European countries that are in the top ten (Germany, France and the Netherlands) have signed the HNS Convention.

As regards the United States, its approach so far has been to adopt its own domestic liability and compensation arrangements, and we do not expect that it will become a party to the HNS Convention.

The United States has an oil pollution liability and compensation regime which is very similar to the Civil Liability Convention and the IOPC Funds Conventions. The United States regime is established by the *Oil Pollution Act of 1990.* Unlike the Civil Liability Convention and IOPC Funds Conventions, the United States regime also covers shore-based oil facilities. It sets very high limits of liability and mandatory liability insurance requirements for shipowners and oil facility operators, and establishes the Oil Spill Liability Trust Fund to provide top-up compensation for serious oil spills where the damage exceeds the shipowner's or oil facility operator's mandatory liability

[11] World Bank data table *Manufacturing, value added (% of GDP)*.
[12] CEFIC *op cit*, at page 5.

insurance cover. The trust fund also contributes to the cost of oil pollution response arrangements.

The main source of revenue for the trust fund is a fuel levy:

> " The largest source of revenue has been a per-barrel excise tax, collected from the oil industry on petroleum produced in or imported to the United States. The original 5-cent-per-barrel tax expired at the end of 1994 because of the sunset provision in the law. The 2005 Energy Policy Act again reinstated the tax (effective April 2006). The Energy Improvement and Extension Act of 2008 extended the per-barrel excise tax through December 2017 and increased the per-barrel excise tax from 5 cents to 8 cents from 2009-2016 and to 9 cents in 2017."[13]

Given the size of the United States' economy and its importance as a trading destination, it can more readily impose its own rules on international shipping than a country like Australia. At present the United States does not have a liability and compensation regime that covers HNS incidents. If it decides to adopt such a regime, the regime may well take a similar form to the oil pollution regime under the US Oil Pollution Act (which, like the HNS Convention, requires receivers to pay contributions to a compensation fund).

Of the Asian countries, Korea (which is one of the top ten chemical producers), Malaysia and Singapore have shown a consistent interest in the HNS Convention. We understand that Malaysia and Singapore have not yet made a final decision on whether they will become parties; we do not know what Korea's current position is.

The HNS workshop which was held at the IMO in November last year was attended by representatives from 29 countries spread across all regions of the world (listed below). While not all the countries are committed to becoming parties to the HNS Convention, the large turnout is indicative of the level of international interest in the convention.

AUSTRALIA	GUATEMALA	NIGERIA
BAHAMAS	IRAN	NORWAY
BELGIUM	IRELAND	SINGAPORE
CANADA	ITALY	SPAIN
CYPRUS	KOREA (SOUTH)	SWEDEN
DENMARK	MALAYSIA	SWITZERLAND
FINLAND	MARSHALL ISLANDS	SYRIA
FRANCE	MEXICO	UNITED KINGDOM
GERMANY	MOROCCO	YEMEN
GREECE	NETHERLANDS	

[13] National Pollution Funds Center website (www.uscg.mil/npfc), on the *About NPFC/The Oil Spill Liability Trust Fund (OSLTF)* webpage.

There is "a lack of certainty about which commodities will be covered by the convention." This uncertainty will increase receivers' compliance and reporting costs.[14]

There is no uncertainty about which substances are HNS for the purposes of the HNS Convention. All HNS are listed in the searchable online HNS Finder, under their Proper Shipping Name (under the IMDG Code[15] or the IBC Code[16]), UN number,[17] chemical name (if different from the Proper Shipping Name) and all other known synonyms.[18]

For example, a search for "Ethylene bromide" produces the following result:

Proper Shipping Name: ETHYLENE DIBROMIDE
UN Number: 1605
Synonyms: 1,2-Dibromoethane
Ethylene bromide

As another example, a search for "Chloroethanol" produces the following result:

Proper Shipping Name: ETHYLENE CHLOROHYDRIN
UN Number: 1135
Synonyms: 2-Chloroethanol
Chloroethanol-2
2-Chloroethyl alcohol
beta-Chloroethyl alcohol
Glycol chlorohydrin

The search result on the HNS Finder also identifies the account of the HNS Fund to which the substance belongs. As we have previously indicated, the HNS Fund will comprise four accounts, namely the oil account, LPG account, LNG account and general account (which covers all other types of HNS).

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[14] Mr Griffiths at page 4 of the proof transcript.
[15] **"IMDG Code"** means the International Maritime Dangerous Goods Code, which relates to the carriage of hazardous goods and substances in packaged form.
[16] **"IBC Code"** means the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, which relates to the carriage of hazardous chemicals in bulk.
[17] UN numbers are four digit numbers and accompanying descriptors that identify hazardous substances and articles in the framework of international transport. They have been developed by the United Nations Committee of Experts on the Transport of Dangerous Goods. The UN numbering system is used in the regulation of all modes of transport of hazardous substances, including the transport in Australia of hazardous substances by road and rail, which is governed by the Australian Code for the Transport of Dangerous Goods by Road and Rail (**"Australian Dangerous Goods Code"**).
[18] To obtain the most comprehensive search results on the HNS Finder, untick the "Bulk Cargo Only" box. Click on the name of a substance in the initial search result to bring up further relevant details about the substance, including synonyms.
Dry bulk cargoes covered by the International Maritime Solid Bulk Cargoes Code (**"IMSBC Code"**), which relates to the carriage of hazardous solid substances in bulk, are given Bulk Cargo Shipping Names under that code. The Proper Shipping Name and the Bulk Cargo Shipping Name of a substance are frequently identical. Where they are not identical, the HNS Finder lists the Bulk Cargo Shipping Name of the substance as a synonym.

It would be a matter for concern if an Australian firm that imports over 20,000 tonnes of hazardous substances annually complained that it was incurring significant administrative costs in determining whether the substances are HNS within the meaning of the HNS Convention because it did not know the Proper Shipping Names or the UN numbers or the chemical names of those substances, and was therefore unable to resort to the quick and easy method of ascertaining their HNS status, which is to type the relevant name or number into the HNS Finder's search functionality.[19]

It is important to note that contributions are only payable in respect of a substance if the substance *in its entirety* is classified as HNS. Thus, receivers will not need to carry out a detailed examination of the ingredients or chemical constituents of all the substances they receive, in order to determine whether they *contain* any HNS.[20]

For example, since methanol is an HNS, a receiver will be required to pay contributions in respect of its receipts of bulk methanol (provided that it received more than 20,000 tonnes of bulk HNS covered by the general account during the previous calendar year). However, the receiver will not be required to pay contributions in respect of a bulk compound that contains, say, 5% methanol (unless that compound itself happens to be classified as HNS).

As we have indicated previously, contributions are only payable in respect of receipts of bulk HNS (as contrasted with packaged HNS). The concept of bulk HNS for the purposes of the HNS Convention is straightforward. Basically, bulk cargo comprises any liquid, gas, or granular substance that is pumped or loaded directly into the cargo holds or tanks of a ship without any intermediate form of containment.[21] Thus, substances carried in shipping containers or chemical or gas tanks that are loaded onto the ship (as

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[19] In any case, the receiver should be able to ascertain the Proper Shipping Name of the substances from the shipping documents and from the consignment documents and labels attached to the cargo. (Note that a receiver is defined as the person who physically receives HNS cargo when it is discharged from the ship: Article 1(4)(a) of the HNS Convention.) The Proper Shipping Name of a hazardous substance that is transported by ship must be specified in the shipping documents (IMDG Code (2012 Edition) Chapter 5.4). SOLAS Chapter VII regulation 7-2 requires the shipping documents relating to a solid bulk substance to specify its Bulk Cargo Shipping Name.

[20] This is subject to the rules relating to mixtures and solutions, which are set out in section 3.1.3 of the IMDG Code (2012 Edition). Those rules can be summarised as follows:

(i) A substance that meets the definition of an HNS generally does not cease to meet that definition if it contains impurities or additives for stability or other purposes.

(ii) A mixture or solution containing multiple substances is generally classified according to the predominant substance.

As the Proper Shipping Name of a hazardous mixture or solution that is transported by ship must be specified in the shipping documents, the receiver should be able to verify the classification from those documents.

Similar rules for the classification of mixtures and solutions apply to the transport of hazardous substances in Australia by road and rail; those rules are set out in section 3.1.3 of the Australian Dangerous Goods Code. Australian firms dealing with hazardous substances will be familiar with the provisions of the Australian Dangerous Goods Code.

[21] Compare IMSBC Code regulation 1-1(2) (definition of "solid bulk cargo") and regulation 7 (definition of "dangerous goods in solid form in bulk").

opposed to containers or tanks that are structurally part of the ship) are not classified as bulk HNS, irrespective of the size of the tanks or containers concerned.[22]

All substances that are not bulk HNS are classified as packaged HNS for the purposes of the HNS Convention.

How much uncertainty do receivers face regarding their contribution liability under the HNS Convention?

Unfortunately, in explaining the difficulties that *we* face in determining the amount of contributing HNS that is received in Australia annually, we may have created the impression that *Australian firms* cannot determine the amount of contributing HNS that *they* receive annually.[23]

If so, then we must apologise for having inadvertently misled the committee (and also the industry representatives at the roundtable, who are evidently very concerned about this supposed uncertainty facing their members).

The fact is that any Australian firm that receives chemicals or other substances that have been transported in bulk form by ship is able to determine *today* whether those substances are HNS for the purposes of the HNS Convention, by using the HNS Finder as described above.

The firm can also determine from its business records the total quantities of those substances that it received last calendar year. Thus, it can determine:

- whether it received the minimum threshold amount of bulk HNS that triggers liability to pay contributions to the HNS Fund (generally 20,000 tonnes per calendar year); and
- if it met this contribution threshold – the quantities of bulk HNS in respect of which it would be liable to pay contributions if the HNS Convention were in force.

The only matter of uncertainty is the contribution rate per tonne that will apply. Since the contribution rate will depend on the amount of compensation that has to be paid by the HNS Fund from time to time, it will necessarily vary from year to year.

Even as regards the contribution rate, the uncertainty is not unbounded. In the Department's response to the public submissions, we estimated what the annual

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[22] Thus, a full-size shipping container filled with a granular HNS is classified as "packaged HNS" rather than "bulk HNS". Although this is somewhat counter-intuitive, it is good for receivers as it reduces the amount of HNS that is classified as bulk HNS and is therefore liable to contributions.

[23] We explained at paragraph 170 of the RIS that the statistics currently collected by Australian Departments and agencies do not enable us to determine the amount of HNS received in Australia in respect of which contributions will be payable to the HNS Fund, or the number of receivers in Australia that will be required to pay contributions to the HNS Fund.

It would be possible to piece together from Customs' import data the amount of HNS that is imported to Australia – although this would be a very resource-intensive exercise. However, it would not be possible to identify the receivers of the HNS, or to determine whether those receivers receive the minimum annual tonnage of HNS (generally 20,000 tonnes) that triggers liability to pay contributions.

contribution rate would be in four different scenarios (at pages 24 and 25). In those scenarios the estimated contribution rates for HNS covered by the general account range from 1.3 cents per tonne to 10.2 cents per tonne.

(The low estimate of 1.3 cents per tonne is based on the assumption that the annual amount of compensation payable by the HNS Fund is the same as the average for the eight year period from 2002 to 2009. The high estimate of 10.2 cents per tonne is based on a "reasonable worse case scenario" in which the annual amount of compensation payable by the HNS Fund is assumed to be *four times* the average for the eight year period from 2002 to 2009. This worse-case contribution rate would only apply during a period that is bedevilled by a spate of unusually serious and costly HNS incidents.[24])

Clarification of the administration costs of the HNS Fund and the likely impact of those costs on receivers

At the second hearing, Senator Fawcett (as acting Chair) asked a series of questions about the HNS Fund's initial establishment costs and annual administration costs (at page 13 of the proof transcript). We provided details about these costs at pages 14 to 16 of the Department's response to the public submissions.

For greater clarity on this issue, we set out below reasonable estimates of the establishment costs and annual administration costs, and the contribution rates needed to recover those costs.

(i) Estimates of the establishment costs and annual administration costs

Estimate of the establishment costs: These costs will be around £1,300,000 ($1,880,000).[25] They will be recovered via the initial contribution, which will be payable by contributing receivers *once only*, in the first year after their country becomes a party to the HNS Convention.

Under Article 20 of the HNS Convention, the initial contribution will be calculated as a single, uniform contribution rate that applies to each unit of HNS in respect of which contributions are payable. The Assembly of the HNS Fund will determine, in respect of each account of the HNS Fund (*ie* the oil account, LPG account, LNG account and general account) and in respect of each sector of the general account, the type of unit to which the contribution rate will apply. The Assembly may decide that the units will be tonnes for all the accounts. However, it will have the discretion to specify different units for different accounts (*eg* barrels for oil, ten-tonne units for LPG, thousand-cubic metre units for LNG, and single-tonne units for HNS covered by the general account). By specifying different units for different accounts, it will be able to vary the distribution of the initial contribution burden between different types of HNS.

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[24] The four scenarios do not include the "best possible case scenario" where the contribution rate is zero because no serious HNS incidents have occurred which require a payment of compensation from the HNS Fund.

[25] Details are at page 14 of the Department's response to the public submissions.

Estimate of the annual administration costs: These costs will be very low in the first few years until claims come in; thereafter they could range from the £10,000s up to about £200,000 per year – say £150,000 ($217,000) per year.[26] These costs will be recovered via the annual contributions. (The annual contributions will be the primary ongoing source of revenue for the HNS Fund – as well as funding its administration costs, they will also fund the compensation payments that it will make.)

The Assembly of the HNS Fund will determine how the annual administration costs are apportioned between the accounts of the HNS Fund and the sectors of the general account. It is expected that the apportionment will be based on a formula that takes into account both the volume of HNS covered by the relevant account or sector and the number of compensation claims made in respect of the account or sector. (That is, low volume of HNS and/or small number of claims = a smaller share of the annual administration costs.)

(ii) Estimates of the contribution rates needed to recover the establishment costs and annual administration costs

In estimating the contribution rates for both the initial contribution (which will recover the establishment costs) and the annual contributions (which will recover the annual administration costs), we have assumed that aggregate annual receipts of contributing HNS by receivers in all the countries that are parties to the HNS Convention are the minimum amounts needed to enable the HNS Convention to come into force and to establish the accounts of the HNS Fund, *ie* a total of 425 million tonnes of HNS, comprising 350 million tonnes of oil, 15 million tonnes of LPG, 20 million tonnes of LNG and 40 million tonnes of HNS covered by the general account.

Estimate of the contribution rate needed to recover the establishment costs:
We have assumed that the units used for calculating the initial contribution will be *tonnes* for all types of HNS – *ie* the contribution rate will be a rate per tonne for all types of HNS.

Based on this assumption, the contribution rate for the initial contribution will be $0.0044235 per tonne for all types of HNS (*ie* forty-four hundredths of a cent).[27]

As already indicated, the initial contribution will only have to be paid once.

Estimate of the contribution rate needed to recover the annual administration costs:
We have assumed that there is *no adjustment* of the contribution rate that is payable by each account of the HNS Fund, to take account of the volume of HNS receipts and the number of compensation claims.

The contribution rate needed to recover the annual administration costs will therefore be $0.0005106 per tonne for all types of HNS (*ie* fifty-one thousandths of a cent).[28]

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[26] Details are at page 15 of the Department's response to the public submissions.
[27] The calculation is: $1,880,000 ÷ 425 million tonnes of HNS = $0.0044235 per tonne.
[28] The calculation is: $217,000 ÷ 425 million tonnes of HNS = $0.0005106 per tonne.

These contribution rates would change once they were adjusted to take account of the volume of HNS receipts and the number of compensation claims. For example, if LPG maintains its safety record and no LPG-related compensation claims are made on the HNS Fund, its contribution rate to cover annual administration costs (which is estimated at fifty-one thousandths of a cent above) would be lower.

How much will contributions add to the price of bulk HNS that is imported by Australian receivers?

Indicative prices of 25 types of HNS that are imported by Australian firms

To illustrate the impact of contributions on the prices paid by Australian importers of bulk HNS, we have set out in the table below the spot prices of 25 types of bulk HNS that are imported by three Australian firms that are members of PACIA.[29]

Substance	**Terms of supply**	**Spot price (in US dollars/ Euros/Australian dollars per tonne)**	**Low end spot price (in Australian dollars per tonne, inclusive of shipping cost)**
2-ethyl hexanol (2EH)	East Asia CFR	US $1685-1730	$1610
Acetic acid	SE Asia CFR	US $455-475	$435
Dioctyl phthalate (DOP)	East Asia CFR	US $1760-1830	$1681
Ethyl acetate	SE Asia CFR	US $980-990	$936
Ethylene glycol	Asia CFR	US $1230-1270 (contract price)	$1175
Isobutanol	East Asia CFR	US $1150-1185	$1099
Normal butanol (N-Butanol)	SE Asia CFR	US $1340-1390	$1280
Phenol	SE Asia CFR	US $1480-1490	$1414
Vinyl acetate monomer	SE Asia CFR	US $1020-1040	$974
Vinyl chloride monomer	SE Asia CFR	US $860-880	$822
Solvent naphtha	Europe FOB Rotterdam	US $1170-1190	$1156
Hexane	Europe FOB Rotterdam	US $1090-1120	$1079
Acetone	NW Europe FD	€930-970	$1154
Ethanol	SE Asia CFR	US $811-837	$774
Acetic anhydride	China FOB	US $600-1200 (Alibaba)	$611
Caustic soda	SE Asia CFR	US $490-500	$468
Chlorine	US Gulf FOB	US $249-281	$276

[29] In October 2012, we invited stakeholders to respond to a survey seeking information about receipts of bulk HNS that has been carried by ship. The survey was initiated by the secretariat of the IOPC Funds to help inform the development of HNS reporting guidelines. Three members of PACIA completed the survey, and PACIA provided us with their responses in a way which did not reveal the identity of the firms involved. The responses indicated that the three firms received the types of imported bulk HNS listed in the table. (Not all of the firms received all of the listed substances.)

Phosphoric acid	Ex-China, various terms of supply	US $750-1100 (MIC)	$716
Sulphuric acid	NW Europe CFR	€50-85 (contract price) (FERTECON)	$62
Urea ammonium nitrate	NW Europe FCA	€355-365 (price of urea only)	$479
Flourosilicic acid	China FOB	US $450-$600 (Alibaba)	$467
Anhydrous ammonia	Korea CFR	US $740-750	$707
Ammonium nitrate	China FOB	US $250-650 (Alibaba)	$277
Petrol - MOPS95 (Singapore benchmark)	As supplied in Australian capital cities	$568 (AIP Weekly Petrol Prices)	$568
Diesel - Gasoil 10ppm sulphur (Singapore benchmark)	As supplied in Australian capital cities	$668 (AIP Weekly Diesel Prices)	$668

Explanation of the table

- Spot prices are from ICIS sample reports, unless otherwise indicated. (We believe that these sample reports, although not current, contain the most reliable and consistent price information.)
- The "Low end spot price" column specifies the lower spot price in the preceding column, converted to Australian dollars as at the date of the report or the date of publication of the offer. The dates of the ICIS sample reports are 21 September 2012, except for the date of the report on ethanol which is 19 September 2012, and the report on caustic soda ex-US Gulf (which provided the prices for chlorine) which is 28 September 2012. The dates of the other reports and published offers are indicated in the table via the abbreviated references which are explained below.
- Where the terms of supply for a substance are FOB or FCA, the low end spot price for that substance specified in the "Low end spot price" column includes an uplift of $38 (US$40) per tonne to cover the estimated shipping cost. This is to ensure that the low end spot prices of all the substances are roughly comparable. The estimated shipping cost is based on the shipping cost data contained in the ICIS sample reports *Chemical Tanker Shipping Report (Europe)* and *Chemical Tanker Shipping Report (Asia Pacific)* dated 28 September 2012.
- Abbreviations:

  CFR = Cost and Freight (*ie* price includes freight to the customer's designated port).

  FCA = Free Carrier (*ie* price includes delivery to a designated location for collection by the customer's carrier).

  FD = Free Delivered (*ie* price includes delivery to the customer's designated location).

  FOB = Free on Board (*ie* price includes loading onto the ship).

  contract price = the quoted prices are reported contract prices, not spot prices.

  AIP Weekly Petrol Prices = Australian Institute of Petroleum *Weekly Petrol Prices Report* for the week ending 24 March 2013. The quoted price is the average for the previous four weeks.

  AIP Weekly Petrol Prices = Australian Institute of Petroleum *Weekly Diesel Prices Report* for the week ending 17 March 2013. The quoted price is the average for the previous four weeks.

Alibaba = the quoted prices reflect offers posted on the Alibaba website as at 3 April 2013.
FERTECON = the quoted prices are reported in FERTECON's *Sulphuric Acid Report* dated 12 February 2013.
MIC = the quoted prices reflect offers posted on the Made-In-China website as at 3 April 2013.

We readily acknowledge that the prices in the table may not accurately reflect the actual prices paid by Australian importers. Nevertheless, we think they provide a "ballpark" indication of those prices.

The highest low end spot price in the table is $1,681 per tonne (for dioctyl phthalate). The low end spot prices of a significant proportion of the listed substances are around $1,000 or more per tonne. Only three of the low end spot prices are less than $400 per tonne.

The smallest proportionate price increase for any substance in the table

The smallest proportionate price increase for any substance in the table is produced by increasing the highest low end spot price of any substance in the table ($1,681 per tonne for dioctyl phthalate) by the lowest estimated contribution rate of 1.3 cents per tonne.

1.3 cents as a proportion of $1,681 comes to 0.00000773349. (To put this another way, if the price of $1,681.00 per tonne increases by 1.3 cents per tonne, this will constitute a price increase of 0.000773349 *per cent* per tonne, *ie* seventy-seven hundred-thousandths of one per cent, or seventy-seven ten-millionths of $1,681.)

The largest proportionate price increase for any substance in the table

The largest proportionate price increase for any substance in the table is produced by increasing the lowest low end spot price of any substance in the table ($62 per tonne for sulphuric acid) by the "reasonable worse case scenario" contribution rate of 10.2 cents per tonne.

10.2 cents as a proportion of $62 is 0.00164516129. (Putting this another way, if the price of $62 per tonne increases by 10.2 cents per tonne, the resulting price increase will be 0.164516129 *per cent* per tonne, *ie* sixteen hundredths of one per cent, or sixteen ten-thousandths of $62.)

Comments on the estimated price increases

The foregoing calculations amply illustrate the tiny impact that contributions will have on the prices paid by Australian firms for imported bulk HNS.

The impact of the contributions on the prices of the products produced by the firms (which will be higher than the cost of the inputs to reflect the value added by the firm in transforming the inputs) will be tinier still.

How much will contributions add to retail prices?

The Department's response to the public submissions acknowledged that businesses will seek to pass on to consumers their costs of contributing to the HNS Fund, as part of normal cost-recovery. It also noted that it is equitable and economically efficient to pass on those costs to consumers (at pages 28 and 29 of the Department's response).

The Department's response pointed out that the impact of the contributions on the retail prices of goods and services will be very small, but it did not provide any examples.

To illustrate the potential impact of contributions on the prices of consumer products, we have chosen "Premierchlor" Pool Chemical Chlorine Liquid Swap which is sold in 15 litre plastic screw-top containers at Bunnings for $10.[30] This product consists of sodium hypochlorite (12.5% chlorine strength), which is an HNS. Assuming that the sodium hypochlorite is imported by ship and is subject to the "reasonable worse case scenario" contribution rate of 10.2 cents per tonne, the cost impact per container will be 0.1836 cents. A customer would have to buy five and a half 15 litre containers (each container weighs 18 kilograms) to incur a cost of 1 cent.

Pool Chemical Chlorine 15l Liquid Swap

Pool Chemical Chlorine 15l Liquid Swap

I/N: 3092531

$10.00

- Kills bacteria in swimming pools
- Controls algae in swimming pools
- Ideal super chlorinator for salt water Pools
- 12.5% Strength Liquid Chlorine
- Suitable for all pool surfaces

Price correct as at Thursday, 14 March 2013 01:21:44 PM

Not all products available in all stores. Contact your nearest store for product information.

[30] The product illustration on this page is from the Bunnings Warehouse website.

Note that we have deliberately chosen the most extreme example: a very bulky consumer product which consists of 100% HNS. Most consumer products contain no HNS at all. Where they do contain HNS, it will mostly be just one ingredient in the product – often only a very minor ingredient.[31]

5 April 2013

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[31] For example, if this product only contained 1% HNS, a consumer would have to buy 544 containers to incur a cost of 1 cent.