

**Presentation of Neil Harvey, Cefic and ICCA, at OPCW NGO Forum
on 9 April [Check against delivery]**

[Slide1]

Good afternoon to Your Excellencies, distinguished conference delegates and guests.

I am honoured to appear before you today to present views from the International Council of Chemical Associations. I do so as Head of International Trade at the Chemical Industries Association in London and Chairman of a panel of 12 European Trade Policy Experts that advises industry CWC and Dual Use goods legislation.

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The ICCA is the policy making body for the global chemicals industry. ICCA represents companies involved in the business of chemistry representing over 70% of global chemical productive capacity. The bonafides of the European membership of the ICCA that I represent here today are shown on the next slide.

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As all of us know, the chemical industry manufactures products the world depends on every day for health, safety, transportation, communication, agriculture, medicine, and virtually every aspect of our lives. It is therefore not surprising that Europe's chemical industry is as large as it is. Cefic represents most of the chemicals supply chain in Europe. The chemical companies within ICCA do not make chemical weapons, yet, some very common chemicals can be misused as – or transformed into – chemical weapons.

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I shall use this opportunity to tell you a little bit about the chemical industry, legal controls and its risk management. I also want to focus on

the changing pattern of global trade in chemicals. I will say a few words about non-proliferation issues being debated during the Rev Con and I will finish with a couple of proposals that may help with the outreach of the CWC.

The purpose of the presentation is to complement the points and issues made in the room paper prepared by the ICCA. The paper sets out the basis of industry's support for the CWC and was prepared for a meeting of OPCW States Parties in June last year as a contribution to the 10 Year CWC Review process. In order to save time I shall not attempt to cover every position within the paper.

To give context to my presentation it might be helpful if I first explain what chemical manufacturers actually do.

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In chemistry the most basic building blocks are air, water, animals, vegetables and minerals. We mix up these organic and inorganic substances, cook them (we call it processing) in order to produce base chemicals. From basic chemicals we can produce many others to produce ingredients for consumer and industrial products or are consumer products in their own right such as detergents, biocides, cosmetics. The point I want to make here is that if you have access to raw materials and energy then you can set up chemical production.

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Eventually after several stages of processing these products emerge. In the case of the most complex products, like pharmaceuticals, more than 20 different stages of manufacture could be involved. Price, technical ability, intellectual property, quality of product and service and reliability keep chemical companies in business. Take away any of these competitive advantages and a chemical company's viability is threatened. Shutting down chemical production and starting up again is technically

difficult and expensive and is to be avoided at all costs. The industry will source from anywhere to keep input costs down. This is why supply chemical supply chains can straddle many borders. But it also explains that the biggest customer of the chemicals industry is the chemicals industry itself.

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The more complex the molecule the more likely that it will be unstable or toxic. It will require more specialist equipment and staff to process it. Responsible Care programmes play an important role in ICCA member countries to help companies deal with the problems that can arise with making and handling such chemicals. So what is Responsible Care? It is a world-wide obligation by the chemical industry to continually improve environmental, health and safety performance independent of legal requirements. The ICCA sets the guiding principles for Responsible Care. These are cascaded down to national associations who turn the principles into objectives and programmes. National associations must take on Responsible Care commitments if they want to be ICCA members. At a company level, national associations require all member company CEOs or equivalents to sign a declaration that the company will incorporate the principles of Responsible Care in the operations of the company. Some associations, like the one in the UK, have developed indicators of performance and national sector goals or targets with NGOs. Performance in health, safety (which includes security in some countries) and environment is measured at a company level. Data is collected from member companies annually, collated and aggregated by the association and published.

At a higher level, Responsible Care promotes co-operation with governments and organizations in the development and implementation of effective regulations and standards, and helps companies meet or

exceed these requirements. What this means in practice for implementing trade controls is that: A responsible officer is appointed by the company's managing board. The officer is responsible for all organizational measures to ensure the company's compliance with the relevant regimes. The officer is the responsible contact person regarding all questions originating internally and externally.

The company should use or establish a corporate code of conduct (of course many chemical companies have extended their corporate code to cover all aspects of Corporate Social Responsibility). There should be an appropriate general control programme and guidelines for education and training; responsibilities of staff should be clear in the organisational structure and there should be an audit framework for Health, Safety, Environmental controls. There is an expectation that companies should establish an interface with competent authorities and trade bodies from which best practice advice can be obtained. Order processing (including regulatory holds and red flags) and appropriate management systems are core provisions.

The rules on record keeping for all transactions involving a substance subject to trade controls shall be maintained for a period of not less than four years and shall be made available to the appropriate government authorities upon request. This includes logging details of those involved in the transportation process.

Often trade bodies, like mine, produce guidance for member companies. The UK CIA has just published its 80 page code that covers all the trade controls that apply to chemicals, not just those that affect chemical weapon precursors. We also organise seminars and training sessions for staff of member companies to be trained in understanding their responsibilities. This includes giving guidance on how to identify and respond to suspicious enquiries. The companies are encourage to "Know

their Customers” and to undertake checks on potential new customers. Cefic member companies do not sell any scheduled substances to non-registered business.

I shall return to the subject of chemicals management later. Now I would like to explain the changing global patterns of trade and production.

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There are two primary factors that determine when and where a chemical manufacturing facility is built:

What demand is there for the product? - this is a straight forward business question that is not unique to the chemicals sector.

However the second consideration is probably more important for chemicals than most other industries and that is - *Are input criteria more important than being close to customers or research facilities?* In other words is it more beneficial to put a chemical factory close to raw materials, water and energy sources (which would be the case, say, for low cost, high volume chemicals such as petrochemicals) or close to user industry customers e.g. in a chemical manufacturing park.

These are key determinants in setting global trade flow patterns. But so is the market pull of global consumerism.

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I am afraid I do not have complete up-to-date global figures to illustrate this next point and so I will use EU data instead. Total EU chemicals sales were estimated at €476 billion in 2006. Sales to EU partner countries (as represented by the middle band on the slide) have more than doubled over the last ten years. The European internal market has had a very positive effect on chemicals. Removing both trade and non-trade barriers inside the EU area has been a key driver for the growth and competitiveness of the EU chemical industry.

By 2006, half of sales were intra EU (excluding domestic or home market sales). While intra EU sales are rising, the importance of home market sales is decreasing, accounting only for 25% of EU sales.

One quarter of chemicals sales are exported outside of the EU area.

NAFTA, neighbouring countries of the EU and Asia are the key markets.

Hence the need for trade controls.

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Like the previous slide this one is based on the last 10 years of EU trade statistics in chemicals. But this slide compares EU trade competitiveness in chemicals with the trade competitiveness of other major chemical producing countries. The chart is colour coded to reflect the EU's relative trade competitiveness to other countries. Green means that the EU chemical industry is globally competitive in the sector; blue means that EU industry has strength in high end products and is sustainable; grey represents those sectors that have difficulty in attracting investment and red represents shrinking sectors that cannot compete with imports.

This is an historic overview and the competitive situation of EU industry continues to evolve. Similar charts could be produced to reflect the competitive situation elsewhere in the world. A red block for one region will be matched by a green block somewhere else. By 2015 we expect to see less green and more red on the EU chart as a greater proportion of new capital investment comes on stream in Asia. I shall come back to this point in Part III of this presentation.

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The European chemical industry is still portrayed as vibrant and strong.

However, worldwide competition is getting fiercer. In 2006, world chemicals sales were estimated at €1641 billion, an increase of 9% compared to the previous year.

With €476 billion, the EU chemical industry is still in a top position, but has lost its first place in the ranking to Asia (including China and Japan), mainly due to the rise of China and India. In 2006, China alone occupied the second place after the USA in worldwide chemical sales by country, followed by Japan, Germany and France.

China and India both are among the world's ten largest chemical producers. Taken together, the EU, Asia and NAFTA (North American Free Trade Area) account for almost 90% of the world turnover.

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What drives the chemical industry is global Gross Domestic Product. Growth in GDP is good news for the chemicals sector because it tends to outperform average economic growth. Economies with expanding populations or those that obtain most of their GDP from manufacturing offer the best prospects for an industry that provides vital ingredients for every industrial sector.

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This has resulted in a changing pattern of trade and investment in the global chemicals industry.

The chemicals industry is characterised by :

“World-scale” plants supported by satellite production units either on-site or anywhere in the world. The really big facilities are owned by multinationals. There is a high degree of standardisation for optimal business operation. There has been significant increases in trade volume and production in non-traditional countries as we shall see later. Basically, sourcing, production and trade is global.

In other words the CWC has to be dynamically applied by industry and national authorities if it is to retain its status as the most successful multilateral peace treaty ever.

Just because production is moving eastwards does not necessarily mean fewer controls are required in established chemical production areas. In order to remain competitive, companies in established chemical producing regions are required to move up the value chain. More specialist production potentially means more Dual-Use capability.

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The global share of chemicals production in SE Asia has doubled in the last decade and that trend is expected to continue for another decade.

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Although the EU share has gone down in overall percentage terms it has increased in value terms because global chemical production has risen in 10 years by almost €700 billion to €1.6 trillion.

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The global pattern of trade in chemicals is shifting quite markedly. But sales from established chemical producing regions still have an upward trend even though production, as a percentage of global capacity, is falling. There is ever increasing competition out there; as well as focusing on higher added value products, established companies are rationalising and merging in order stay profitable. Reinvestment levels have become harder to attain for production plants based in established chemical producing areas. Most investment in new production facilities is taking place in Asia and the Middle East.

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Within the next 7 years, consumer market demographics will shift to Asia, especially China.

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As the focus of consumerism shifts, so will production. Clearly this process is already well under way. Over the span of 12 years, global production (in Year 2000 value terms) will have increased by 43%. This is

a 43% increase in production that is measured in terms of Trillions of US Dollars

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What are the key factors that affect future trade and investment flows across the global chemicals industry?

As I mentioned earlier GDP growth is a key determinant of such flows which is why I have put world economic activity at the heart of this cluster of issues. But other factors as indicated on this honeycombe slide, such as technology and research capability, are also critical in identifying new sources of chemical trade and investment.

As I said in the beginning of the presentation all that is needed to start making chemicals is air, water, animals, vegetables and minerals. That was an over-simplification. Chemical manufacturing requires high competence in engineering and science skills. Without such skills available locally it is unlikely that any investor will want to build a chemical plant. So all countries will trade in chemicals but not all countries have the capability to sustain a manufacturing plant that can service global customers.

Global communications is important – in theory a number of chemical production sites can be operated remotely from another facility on the other side of the world.

Clearly markets with strong industrial development and research basis or attractive taxation regimes will attract the interest of chemical suppliers. The competitiveness of the EU chemicals industry is very sensitive to the business environment in the European Union, the USA, Asia and Middle East.

So each chemical trading country, each chemical producing country has its own strengths and weaknesses that will determine their position in the global chemicals market place. The price of oil, the price of \$s or €,

may cause problems for one business but may open up opportunities for another business elsewhere in the world. Over time these variable factors even themselves out. In the middle to long term the key drivers to the pattern of global trade and investment in chemicals are reflected in this honeycomb of key business factors.

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So chemical industry production in non-traditional chemical producing areas is increasing rapidly. Trade levels are still on a rising trend, even from traditional chemical producing regions – but the world market can only sustain so much production capacity. As I mentioned earlier some rationalisation of production capacity is taking place which will probably accelerate the shift of production eastwards which in turn may slow down trade levels.

My second point is that the addition of mass chemicals to export control lists is useless if no such control is applied on other key producing countries. Which is why better implementation of the CWC and achieving of key purpose and object remain essential before stepping up control of control on industry. This is a key point in the ICCA conference paper. But there are also some technical issues that are highlighted in the paper, such as no global approach to defining appropriate mixture thresholds. Our UK Responsible Care mixture threshold for referring suspicious enquiries is 30% content of a chemical weapon agent. There should perhaps be common regulatory alignment of mixture content thresholds across the globe. At the moment the rules for mixtures vary between zero and 80%.

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There are not only chemical weapon and dual-use controls in existence. In OECD countries and elsewhere there are other national and

international trade and production control measures in place listed to stop the illicit use of chemicals.

There are numerous regulatory controls in place to manage the supply of toxic chemicals. In addition to rigorous transport and environmental trade controls there are several others as given on the slide. The regulatory world has moved on since the last CWC review. UN Resolution 1540 on illicit brokering & transit also applies to part of the chemicals supply chain and will be absorbed into dual use controls in the EU (and presumably elsewhere in the world. There are also new regional initiatives that are looking to controlling access by potential terrorists to explosive precursor chemicals and from 1 June 2007, the biggest piece of regional legislation ever to hit any industry, not just the chemicals industry, came into effect. It is known as REACH and it will eventually introduce a user authorisation process for the most toxic chemicals. Yet another layer of compulsory chemical management control.

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The developed world's chemicals industry wants open, free and fair global trade. We are pushing hard for this in the WTO Doha Round. That does not mean that we want to dispense with all forms of control. Far from it. Trade controls are necessary and must be risk, not hazard, based. Chemicals management within the industry is based on risk and has the same objective as CWC non-proliferation: stopping chemicals getting into the wrong hands.

Industry understands that for many countries the task of regulating such a complex supply chain is a daunting challenge. But additional and complementary assistance is available outside of OPCW initiatives on non-proliferation. As I said earlier at the heart of non-proliferation is chemicals management and in 2006 the UN Environment Programme Governing Council endorsed an ICCA programme for achieving a 2020

goal for chemicals to be used and produced in ways that will lead to the minimisation of adverse effects on health and the environment – this was a 2002 Johannesburg World Summit goal. One of the key objectives of this programme, called the UNEP Strategic Approach to International Chemicals Management (SAICM), has resonance with the CWC. It seeks to help countries introduce measures to prevent illegal international traffic in toxic, hazardous, banned and severely restricted chemicals and to strengthen the capacity of developing countries to prevent and control illegal international traffic of chemicals. In other words, there is a new international programme that may help developing countries meet their CWC commitments. A review of progress of SAICM is scheduled for May 2009; it would be great if by then OPCW and UNEP could agree to work together on chemical management programmes, particularly for countries that lack national legislation to implement the CWC. Further details can be found on the website address given on the slide.

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I understand that there has been co-ordinated activity between States Parties and the OPCW to develop web-based advice to help States Parties implement appropriate national legislation to cover their obligations under the non-proliferation aspect of the CWC. Clearly without national licensing and inspection systems in place it is impossible to verify absolute 100% compliance to the CWC. So rather than wait for national legislation to set the CWC compliance framework perhaps more could and should be done to help industry introduce interim chemical management programmes that are consistent with their CWC obligations. Firstly, companies need to know what substances are covered by the CWC. The EU has provided funding to the OPCW to produce a handbook of such data. The sooner this is published and distributed the better.

The second idea is to initiate a parallel programme, similar to that available to States Parties, that will give companies a CWC compliance verification tool. Such tools are being developed by the EU to help chemical companies test their internal compliance management systems against EU legal requirements on drug precursors as well as Customs security requirements. These are being developed in e-learning modules for company representatives. The modules can only be completed if the company operators answers all the questions correctly. Once finished the operator has proven that he or she is aware of the requirements. Also, by completing the module the operator can prove that they have the competence required by the legislation. This sort of system would be an ideal interim compliance arrangement pending appropriate national legislation.

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Finally, I would like to stress that the worldwide chemical industry fully supports the goals and objectives of governments with regard to the Chemical Weapons Convention and the non-proliferation of WMD. The organisations in the ICCA and their member companies want to be partners in the implementation of trade & production control regimes. We support the logic of the CWC's verification system and so far the CWC has balanced the necessity of industry verification with the need to protect legitimate industry interests. Both big and small companies are aware of their responsibilities to avoid misuse of chemicals and have internal compliance programmes and standards that are applied worldwide. Chemical federations play a supporting role in promoting good practice through programmes such as Responsible Care, Voluntary Codes of Conduct. These bottom-up chemical management instruments are key to CWC compliance by industry, particularly in countries that lack formal national top-down non-proliferation arrangements. But more

could be done establish compliance by companies in countries without requisite national legislation to through official e-learning tools and handbooks for industry.

I would like to wish delegates from States Parties a successful fortnight in developing the effectiveness of the CWC. I hope this presentation has been helpful in promoting better understanding of the positions set out in the ICCA paper. I - and my industry colleagues here today - would be delighted to answer any questions you may have on it.

Thank you for your attention.