



**MINUTES
GENERAL ASSEMBLY OF MEMBERS
INTERNATIONAL CADMIUM ASSOCIATION
Thursday, October 12, 2006 – 1:00 PM**

**The Royal Aeronautical Society
4 Hamilton Place, London W1J 7BQ United Kingdom**

1. CALL TO ORDER

The General Assembly of Members of the International Cadmium Association was called to order at 1:00 PM by its Chairman, Graham White of Considar Metal Marketing, Inc. The following persons were in attendance or were represented by their Proxy:

REPRESENTATIVE

Graham White, Chairman
Tony Davis
Anne Dekker
Norman Gibson
Colin Graham
Patrick de Metz

MEMBER COMPANY

Considar Metal Marketing, Inc.
INCO Europe on behalf of INMETCO
Zinifex Ltd for International Zinc Association
James M. Brown Ltd.
Rockwood Pigments (UK) Limited
SAFT

STAFF AND GUESTS

Stephen Wilkinson
Andrew Green
Lidia Regoli
Christian Canoo
Hugh Morrow

ORGANIZATION

International Zinc Association
International Zinc Association
International Cadmium Association
International Cadmium Association
International Cadmium Association

An attendance roster was circulated for each attendee to sign. The Chairman asked Hugh Morrow to serve as the Secretary Pro-Tempore to record the Minutes of the General Assembly.

2. APPROVAL OF THE MINUTES OF NOVEMBER 1, 2005 GENERAL ASSEMBLY

Hugh Morrow noted that the Minutes of the previous ICdA General Assembly of Members, held in London on November 1, 2005, had previously been distributed to the membership for review and comment and were posted on the ICdA Members Only website. Chairman Graham White asked if there were any additions or corrections to these Minutes as distributed. None being forthcoming, the Chairman asked for a Motion to approve the Minutes of the November 1, 2005 General Assembly of Members. **Upon motion made by Norman Gibson, seconded by Colin Graham, and carried unanimously, the Minutes of the November 1, 2005 ICdA General Assembly of Members were approved as submitted.**

3. FINANCIAL REPORT

Lidia Regoli presented the Financial Report for 2005 which is attached to these Minutes as Annex I. The audited total costs for 2005 were 178,230 Euros against total projected subscription income of 193,623 Euros for a 2005 year end surplus of 15,393 Euros. Combined with the surplus brought forward of 91,388 Euros from previous years, the total surplus carried forward into 2006 was 106,781 Euros. The association's accounts for 2005 were reviewed by Deloitte in Belgium and their letter "Accountant's Opinion of the Financial Statements for the Year Ended December 31, 2005" is also included in Annex I.

It was noted by several that the surplus carried forward was higher than normal and that plans should be made to more properly utilize these funds. Since the cadmium industry must support certain research projects, it was suggested that part of these funds be utilized to support this research. It was also pointed out that a certain reserve had to be maintained by the association to meet its legal and social obligations if the association were to shut down. Most agreed that both options needed to be considered and were in fact subsequently discussed in more detail under consideration of the 2007 Operating Plan and Budget.

Upon motion duly made by Anne Dekker, seconded by Graham White, and unanimously approved by the meeting, the reviewed accounts of the International Cadmium Association for 2005 were accepted as presented by Lidia Regoli.

3. ELECTION OF OFFICERS AND DIRECTORS

Ms. Lidia Regoli presented the Proposed Slate of Officers and Directors of the International Cadmium Association, which is attached to these Minutes as Annex II. She noted that Colin Graham of Rockwood Pigments (UK) Ltd. would replace Damian Thomas who had left Rockwood; that Guy Ethier of Umicore S.A. has replaced Yves Dubois who had retired from Umicore; and that Jacques David had left SNAM and therefore a new Director from SNAM would be named to replace him.

Chairman Graham White asked if there were any additional discussion or further proposals for Officers and Directors. None being forthcoming, he asked for a motion to approve the Proposed Slate of Officers and Directors. **Upon motion made by Graham White, seconded by Anne Dekker, and approved by the meeting, the Proposed Slate of Officers and Directors, as shown in Annex II, were elected as Officers and Directors of the International Cadmium Association.**

4. OPERATIONAL MATTERS

International Cadmium Association By-Laws - Lidia Regoli reported that the International Cadmium Association was now officially registered as a not-for-profit trade association in Belgium and was operating under By-Laws in accordance with the laws of Belgium. Notice of the ICdA registration has been published in the *Belgian Official Gazette*, and the association's Articles of Incorporation are available on the ICdA Members Only Website under "Administrative" and "Articles of Association."

Lidia Regoli also reported that the association was working with the Belgian authorities to obtain a 100% refund of the VAT tax imposed by Belgium on certain of the association's expenses. ICdA has received back 85% of its VAT tax in the past, but beginning in 2007 will request to receive a 100% refund. It also may be possible to receive a retroactive refund for the years 2005 and 2006.

Membership Report – Ms. Regoli presented the Membership Report for the association as of October 12, 2006, which is attached to these Minutes as Annex III. Two resignations had been received, from First Solar, LLC, and Kraft Chemical Company. In addition, the cadmium pigments business of Millennium Specialty Chemicals had been acquired by James M. Brown Ltd., and accordingly James M. Brown will now represent Millennium's cadmium pigments' interests in ICdA.

The question was raised as to new possibilities for ICdA membership. The NiCd battery producers Energys, BYD and GP Batteries International Limited were mentioned as well as the NiCd battery

recyclers Accurec in Germany and Kinsbursky Brothers in the United States. The question was raised about the inclusion of metal traders in ICdA membership. While there appeared to be no objection to traders as members, a question did arise as to how traders would be assessed which would require some study and a proposal.

5. PROPOSED OPERATING PLAN AND BUDGET FOR 2007

Lidia Regoli presented the Proposed 2007 Business Plan for approval by the Members of the International Cadmium Association which is attached to these Minutes as Annex IV. While the basic objectives of the association will remain the same as they did in 2006, Ms. Regoli noted that major changes are proposed for the operational structure in 2007. Ms. Regoli will be leaving her position as General Manager of ICdA effective November 1, 2006, and will be replaced by Mr. Christian Canoo, from IZA staff on a part-time basis (63 days per year or 0.25 man-years). Steve Wilkinson, President of International Zinc Association, spent a few minutes introducing Christian Canoo as the new General Manager of ICdA, describing his background and experience with his previous employer. He indicated that a Memorandum of Understanding between IZA and ICdA was being updated.

A human health consultant is also proposed for the Brussels office to handle the EU Risk Management Program and all human health issues. His level of effort is proposed at 25 days per year (0.10 man-years). Utilization of an environmental assistant from IZA is also proposed to handle EU and international regulatory affairs with respect to environmental issues. The level of effort is proposed at 88 days per year (0.35 man-years). Hugh Morrow's responsibilities to handle North American and specific international regulatory affairs from Washington, DC are proposed to be reduced to 80 days per year (0.32 man-years).

Lidia Regoli then reviewed the specific activities which were anticipated to be undertaken in 2007 by ICdA and the planned and projected 2006 budgets along with the proposed 2007 budget. All of these items are discussed in further detail in the Proposed 2007 Business Plan in Annex IV. The originally planned ICdA budget for 2006 was 192,270 Euros and is currently forecast to be 192,335 Euros at year's end. However, the planned income for 2006 was 205,713 Euros whereas only 194,209 Euros was realized due to member resignations, unpaid subscriptions, and currency exchange losses. Chairman Graham White pointed out that in future it would be well to itemize currency exchange losses, membership resignations, and unpaid subscriptions individually so that the balance sheet would accurately reflect causes of lower-than-expected income. Thus, the total surplus projected to be carried forward at the end of 2006 is estimated at 102,750 Euros.

Ms. Regoli then discussed the proposed 2007 budget which calls for reduced staff costs but slightly increased operations costs to produce an overall proposed budget below the 2006 level and more in line with expected 2007 subscription income. The proposed 2007 budget will yield a year-end surplus of 5,760 Euros, which, combined with the existing surplus expected to be carried forward at the end of 2006, would produce a year-end 2007 surplus of 108,510 Euros. As pointed out under the Financial Report in Section 3 above, ICdA members agreed, and had previously discussed on a conference call of the Board of Directors on October 2, 2006, that this high a reserve was unnecessary and could be put to better use to serve the needs of the association.

The two items which appeared to be necessities and which could be addressed with the association's cash reserve were closure costs in the event of a shutdown and monies to fund required or necessary cadmium research projects. During the October 2, 2006 Board of Directors conference call, Christian Canoo was asked to establish an estimate for the association's closure costs. Mr. Canoo reported that the association had no regular full-time staff or contracts, and the amount he estimated to fulfill existing commitments would be 40,000 Euros. Graham White asked if ICdA could obtain a detailed itemization of the specific items and amounts of these closure costs. Colin Graham also suggested that the association should prepare a specific Closure Document Statement which would outline procedures, costs, and any other legal requirements. Hugh Morrow also pointed out that, at least in the United States, legal and final auditing costs were incurred in the shutdown of an association, and that legal notification of a number of specific authorities was necessary.

Lidia Regoli also indicated that the proposed assessment rates for 2007 would remain unchanged from that for 2006. However, several present at the meeting noted that the assessment categories were really

no longer relevant and perhaps should be restudied and revised. For example, there is now only one individual Cadmium Producer member, and all the others are represented by the International Zinc Association or the Japan Mining Industry Association. There are no Mining Company members of ICdA at present and in the past we have had only one such member. There are no longer any Distributors as members of ICdA. Association Members include IZA, JMIA, NAMF, TFI and PRBA but the subscription basis for their specific memberships are all different. Thus, it is necessary to revise and reclassify members to more accurately reflect the present membership requirements.

It was also mentioned that the association should have a more defined payment policy with regard to payment of subscriptions. Lidia Regoli indicated that some members tend to pay very late in the year even though they are invoiced very early in the year. Some of the larger members pay on a quarterly basis or at a specific time during the year to coincide with their funding cycle. However, a few members in the past have not paid their subscription and then informed the association very late in the year of their intention to resign. Even though they are legally obligated to pay dues for the year in which they resign and the following year, it has sometimes proved difficult to collect those funds with an inevitable disruption in proper budget planning and management. Thus, it is felt that a more specific invoicing and payment receipt system should be imposed to assure good budget management.

The members present at the meeting asked that a revised budget be submitted to the members for approval by October 31, 2006 which accurately reflected the reserve necessary for closure costs. **Upon motion made by Anne Dekker, seconded by Colin Graham, and approved by the meeting, the proposed budget for 2007 was tentatively approved pending receipt and approval of the revised 2007 budget.**

6. UPDATE ON REGULATORY ISSUES

Lidia Regoli presented an overview of the present status of cadmium regulatory affairs. She covered the European Union's Risk Assessment on Cadmium, the EU Risk Reduction Strategy for Cadmium and the newly issued revision to the EU Battery Directive. Dr. Regoli also described the UNEP Heavy Metals Program. Christian Canoo covered the current status and future work needed on the EU's REACH program. Hugh Morrow described North American cadmium regulatory issues and the UNECE LRTAP Heavy Metals Protocol and the recent Intergovernmental Forum on Chemical Safety (IFCS) conference calling for global action on heavy metals.

European Union – Lidia Regoli presented an overview of the European Union's Risk Assessment on cadmium and cadmium oxide, the proposed EU Risk Reduction Strategy for cadmium, and the newly issued revision of the EU Battery Directive. Her regulatory affairs presentation is attached to these Minutes as Annex V.

With respect to the EU Cadmium and Cadmium Oxide Risk Assessment, Dr. Regoli emphasized that industry was responsible for conducting a study of cadmium ecotoxicity in very soft waters and this program had been initiated in early October. The costs of this program will be split amongst the 10 zinc/cadmium producers who were listed in the original dataset (HEDSET) in 1997 and so far most producers have contributed. This program is expected to be completed in September 2007.

In connection with the EU Cadmium Risk Reduction Strategy, Ms. Regoli emphasized that it would be necessary for industry to fund a proposed study of the effects of cadmium on bone density in workers occupationally exposed to cadmium. Not only was such a study necessary as part of the EU Cadmium Risk Reduction Strategy but is also becoming an international concern, e.g. in the World Health Organization (WHO), as well. It is anticipated that a formal proposal will be submitted by February 2007, and that the program costs will be 120,000 Euros for a two-year program. The suggested split of the costs would be one third to be paid out of existing ICdA reserves, one third by International Zinc Association zinc/cadmium producers, and one third by the battery and pigments cadmium consumers based on their

cadmium metals annual usage. This suggested funding would therefore require 20,000 Euros per major group per year.

Tony Davis and Patrick de Metz both indicated that they had a number of questions related to the proposed bone density study such as the specific parameter utilized to establish bone density loss, the effects of age and sex on critical bone density loss, the size of the cohort needed for the study, and the necessity of including women in the study sample. They suggested the establishment of a Steering Committee to properly define the bone density loss study prior to the February 2007 formal proposal. Lidia Regoli summarized by stating that what industry wished to prove was that if workers were protected by standards against adverse renal effects, then they would also be protected against any adverse bone density loss effects. Patrick de Metz added that this information is very important to industry and will be needed for compliance with REACH as well as for the EU Cadmium Risk Reduction Strategy.

Lidia Regoli also summarized the requirements of the new revision to the EU Battery Directive. It exempts certain NiCd batteries such as industrial cells, cordless power tool batteries, and emergency lighting and alarm system batteries, but prohibits other applications with cadmium contents above 0.002%. It also requires a fairly high collection rate. The new Battery Directive goes into effect in two years.

Christian Canoo next presented some thoughts on the EU's REACH program and the steps which the cadmium industry would have to undertake to comply with the new regulation which is expected to reach a final vote in December 2006 and to enter into force in April 2007. Mr. Canoo's presentation on REACH is attached to these Minutes as Annex VI. In his presentation, he emphasized that the cadmium industry, including all manufacturers or importers of cadmium, cadmium compounds and cadmium products, would have to register their substances including exposure and toxicity information by certain dates. Most industries are proposing consortia of companies and organizations with similar interests which could develop all the required information and data in a collective manner. Much of the information needed could be taken directly from the recently completed EU Risk Assessment on Cadmium and Cadmium Oxide. The details of exactly how such a consortium for the zinc / cadmium industry would be established are currently being addressed. Participation would be required by as many producers, processors, recyclers, consumers, traders, and end users as possible.

North America – Hugh Morrow briefly reviewed some of the major regulatory developments for cadmium in North America. His presentation is attached to these Minutes as Annex VII. These included development of the Metals Assessment Framework by the U.S. Environmental Protection Agency, the NAFTA Program on Children's Health, USA State legislation on cadmium products, cadmium collection and recycling, and cadmium air and water quality standards, and Canada's Domestic Substances List, which is currently undergoing revision under the last version of the Canadian Environmental Protection Act (CEPA).

International Cadmium Issues – Both Lidia Regoli and Hugh Morrow covered international cadmium issues of importance in their presentations (see Annexes VIII and IX). These included the United Nations Economic Commission for Europe (UNECE) Long Range Transboundary Air Pollution (LRTAP) Heavy Metals Protocol, the United Nations Environment Programs's (UNEP) Heavy Metals Program, and the International Forum on Chemical Safety (IFCS) call for global action on heavy metals.

UNEP Heavy Metals Program: Lidia Regoli reported on the UNEP Heavy Metals Program Working Group meeting which was held in Geneva on September 18-22, 2006 (see Annex VIII). A "scientific review" on cadmium was prepared by a Danish consultant which will

subsequently be finalized and presented to the UNEP Governing Council meeting in Nairobi in February 2007. The report which has been developed has been strongly criticized by the USA, Canada and the ICdA. At our insistence, many of the speculative and unsubstantiated statements have been removed. The report also focuses heavily on Nordic and EU data as being typical of worldwide data. Several countries emphasized that international trade in cadmium and cadmium products is evidence of transboundary and global effects and cited poor waste management practices in developing nations and therefore risks associated with cadmium products traded globally. Dr. Regoli concluded that there would probably be a strong call for global action on cadmium products at the UNEP Governing Council meeting in February 2007 in Nairobi.

UNECE LRTAP Heavy Metals Protocol: Hugh Morrow reported on the UNECE LRTAP Heavy Metals Protocol which covers lead, mercury and cadmium and entered into force on December 29, 2003 (see Annex IX). It applies Best Available Technology (BAT) and Emission Limit Values (ELVs) to heavy metal point sources to reduce emissions from their 1990 base year levels. To date, there are only mandatory restrictions on lead in gasoline and mercury in non-rechargeable batteries listed in the Protocol, but there are voluntary restrictions on mercury in a number of products. Cadmium products are not included in either the mandatory or voluntary product restrictions. The Task Force on Heavy Metals met twice during 2006 (Dessau, Germany and Ottawa, Canada) to consider the sufficiency and effectiveness of the protocol and to consider the addition of cadmium products to the list of either mandatory or voluntary restrictions. With the support of the USA and Canada, ICdA was able to prevent the inclusions of any new measures directed at cadmium products. At the same time, many European nations are promoting the use of the critical loads approach to evaluating the sufficiency and effectiveness of the Protocol rather than the best available technology approach already agreed to. This effort too has been diverted by Canada and the USA who have pointed out the limitations of the critical loads approach and are suggesting alternate approaches. The Task Force on Heavy Metals is expected to meet again next April or May 2007 and may once again have to address proposals to limit cadmium products even though it is widely agreed that cadmium emissions are diminishing and that emissions from cadmium products constitute only a small fraction of total cadmium emissions.

Intergovernmental Forum on Chemical Safety (IFCS): Hugh Morrow reported on the IFCS “side-event” which was organized by the Swiss Government at IFCS Forum V held in Budapest on September 25- 29, 2006 (see Annex IX). This meeting was entitled “Human Health and Environmental Concerns Associated with Heavy Metals: Global Need for Further Action?” The meeting consisted of 12 case studies, a roundtable discussion on cadmium as well as lead and mercury, and a final plenary session. The emphasis of the meeting was on developing nations, and contended that, while cadmium emissions and exposure were diminishing in developed nations, they were increasing in the developing nations. Of the 12 case studies, only 5 directly involved cadmium and 3 of those were simply descriptions of the existing UNEP, UNECE and WHO activities on cadmium. Sweden, as usual, gave its condemnation of cadmium products and emphasized the adverse human health and environmental effects of cadmium. A delegate from India proposed the argument that it was worldwide trade in cadmium products which was promoting global cadmium contamination and leading to increased cadmium problems in developing nations. The cadmium working group roundtable was full of emotional and alarmist statements with very few if any knowledgeable and scientific opinions rendered. In the final plenary session, Norway, Denmark, Switzerland and Nigeria called for global actions on heavy metals, but the USA, Canada, Japan and Australia, as well as industry opposed them. Our argument was that IFCS was not the appropriate forum to address such global action and that there already were existing programs within UNEP and UNECE to propose such action. However, it is felt that the “Budapest Declaration” which was issued from this meeting will bring additional pressure at the UNEP Governing Council meeting in February 2007 to propose some form of action.

9. UPDATE ON MARKET AND MARKET DEVELOPMENT ISSUES

Hugh Morrow made a brief presentation on the current worldwide cadmium market. His presentation is attached to these Minutes as Annex X. He noted that primary cadmium supply continued to decrease while secondary cadmium supply continued to increase. Most cadmium in the world today comes from Asia where cadmium supply is increasing. Cadmium supply from Europe continues to decrease while North American and Australian production are relatively constant. Consumption is dedicated almost entirely to NiCd batteries and almost all of that occurs today in China and Japan. Mr. Morrow also provided some details regarding the cadmium pigments and coatings markets. Finally, he presented the recent price history for cadmium and noted its historical volatility.

10. NEXT MEETING DATE

The next meeting date proposed for an informational meeting of ICdA will probably occur in North America during the Spring 2007, either April or May. The meeting site of Washington, DC was mentioned as being convenient, but alternative dates and locations will be considered and the membership advised.

11. ADJOURNMENT

There being no further business before the General Assembly of Members and upon motion duly made Tony Davis, seconded by Patrick de Metz, and approved by the meeting, the General Assembly of Members of the International Cadmium Association was adjourned by its Chairman, Graham White, at 4:15 PM.

Respectfully Submitted,

Hugh Morrow
Secretary, Pro-Tempore

Approved,

Graham White
Chairman

Financial accounts 2005

Deloitte.

International Cadmium Association
(Association Internationale à but scientifique)

ACCOUNTANT'S OPINION ON THE FINANCIAL STATEMENTS FOR THE YEAR
ENDED DECEMBER 31, 2005


We have reviewed the financial statements of International Cadmium Association.

The financial statements are the responsibility of, and have been approved by the management.
Our responsibility is to report on the results of our review.

Our review consisted principally of obtaining and understanding of the process involved in the preparation of the accounting, applying analytical procedures to underlying financial data, assessing whether accounting policies have been consistently applied and making inquiries of persons responsible for financial and accounting matters. The accounting review was less in scope, and provides less assurance than an audit performed in accordance with Auditing Standards. Accordingly, we do not express an audit opinion on the true and fair view of the financial statements.

Based on our accounting review we believe that the financial statements are in accordance with the Belgian accounting legislation and that the financial statements do properly reflect the financial position at December 31, 2005, and its profit for the period ended on that date.

September 11, 2006



Guy Van De Velde
Partner

International Cadmium Association 2005 Financial statement (EUC)	
	2005 Audited
STAFFING	
Headquarters (A)	45,820
Sr Cons (North America)(B)	80,461
Scientific Support - Health	8,157
Scientific Support - Environment	462
Secretarial	0
Administration/Accounting	1,080
Total Staff Costs	135,979
OPERATIONS	
Rent/rates/office services	10,437
Office relocation / refurbishment	0
Documentation, IT support	6,596
Insurances/banking costs	1,005
Telecommunications	5,127
Postage	902
Meetings	184
Travel & subsistence	14,776
Recharge membership	2,483
Publications	0
Contingency (D)	0
Depreciation & non recoverable	741
Total Operation Costs	42,251
TOTAL COSTS	178,230
TOTAL PROJECTED SUBSCRIPTION INCOME	193,623
Unpaid subscriptions	
SURPLUS/(LOSS) FOR YEAR	15,393
SURPLUS/(LOSS) BROUGHT FORWARD	91,388
SURPLUS/(LOSS) CARRIED FORWARD	106,781



**PROPOSED OFFICERS AND DIRECTORS
INTERNATIONAL CADMIUM ASSOCIATION**

The following persons are proposed for election as Officers and Directors of the International Cadmium Association for a three-year term at its General Assembly of Members to be held on October 12, 2006:

Chairman	Graham White	Considar Metal Marketing
Vice Chairman	Patrick DeMetz	SAFT S.A.
Vice Chairman	Colin Graham	RockwoodPigments (UK)
Director	Anne Dekker	Zinifex limited
Director	Guy Ethier	Umicore S.A.
Director	Mitsunori Takao	Sanyo Electric Co., Ltd.
Director	Timothy G. Pugh	Black & Decker Corporation
Director	Steven Heddle	INMETCO
Director	To Be Named	SNAM

The following changes in the Directors of the ICdA have occurred as of October 12th 2006 :

-Colin Graham of Rockwood Pigments (UK) Ltd will replace Damian Thomas as the Director representing the interests of the cadmium pigments industry.

-Guy Ethier replaces Yves Dubois as the ICdA Director from Umicore, S.A..

-A Director to represent SNAM and the interests of the European recycling industry will be named to replace Jacques David who has left SNAM.



**MEMBERSHIP REPORT
INTERNATIONAL CADMIUM ASSOCIATION
October 12, 2006**

RESIGNATIONS

First Solar, LLC - First Solar notified the International Cadmium Association on May 4th, 2006 that, due to the phasing out of cadmium from their product lines, they have decided to resign from their membership.

Kraft Chemical Company – Kraft Chemical Company notified the International Cadmium Association on September 22nd, 2006 that, given that they have shifted away from the metals industry markets and are focusing on other industries, they have decided to resign from their membership.

CHANGES IN MEMBERS STATUS

Millennium Specialty Chemicals – The American cadmium pigments producer, Millennium Specialty Chemicals, was acquired by James M Brown, and accordingly they submitted a letter of resignation to ICdA on the 13th February 2006. Their cadmium pigments interests are now represented by James M Brown's membership in ICdA.



International Cadmium Association

2007 BUSINESS PLAN

Submitted to the approval of the Members
Of the International Cadmium Association

12 October 2006

1 Introduction

The International Cadmium Association has represented the interests of the producers and users of the metal since its formation in 1993, with the amalgamation of the UK-based Cadmium Association and the US-based Cadmium Council Inc. The organisation has strong practical and financial support from a broad range of cadmium-related industries.

Following a strategic review of the organization's structure by ICdA's Board of Directors, ICdA has now stabilized its financial structure through the support of IZA and benefits from synergies in operation of ICdA and IZA. Nevertheless, the organization operates on a reduced budget over previous years and activities are inevitably constrained by resources.

This Business Plan sets out the operational and financial plans for ICdA in 2007.

2 Mission and Objectives

ICdA's mission is:

- Monitor scientific and regulatory developments that impact members' cadmium-related activities
- Respond to regulatory proposals and advocate the interests of members
- Report on scientific and regulatory developments to members

ICdA's primary objectives are to ensure market access for cadmium products and to respect the principles of sustainable development, including the protection of human health and the environment.

3 ICdA Secretariat and Staff

As was done in 2006, IZA will provide secretariat services, including staffing, for ICdA. Activities will largely be executed by three part-time principal staff members. The use of outsourced technical and administrative support and synergies with IZA has significantly enhanced operating effectiveness in the core activity of regulatory affairs.

An overview chart of the staffing structure, sources of external support, and synergies are available on the intranet.

Principal ICdA's staff officers are shown in Table 1.

Table 1: ICdA Staff 2007		
Proposed General Manager (Mr. Christian Canoo)	<i>Location:</i> <i>Responsibilities:</i> <i>Reports to:</i> <i>Min Activity level:</i>	Brussels, Belgium Association management and control; EU regulatory affairs ICdA Chairman 0.25 man-year
Human Health Consultant	<i>Location:</i> <i>Responsibilities:</i> <i>Reports to:</i> <i>Min Activity level:</i>	Brussels, Belgium Risk Management – Human Health General Manager 25 days/year
Environment Assistant	<i>Location:</i> <i>Responsibilities:</i> <i>Reports to:</i> <i>Min Activity level:</i>	Brussels, Belgium EU and International regulatory affairs General Manager 0.35 man-year
Senior Consultant (Mr Hugh Morrow)	<i>Location:</i> <i>Responsibilities:</i> <i>Reports to:</i> <i>Min Activity level:</i>	Washington DC, USA North American regulatory affairs; specific international regulatory affairs General Manager 0.35 man-year

These staffing arrangements are flexible and higher levels of staffing can be applied dependent on ICdA requirements and available funding.

3.1 Accounting and Administrative / secretarial support

ICdA does not employ any support staff. Administrative and secretarial support for ICdA's HQ will be drawn from IZA staff or otherwise outsourced. IZA will be reimbursed for costs incurred in providing this support. Accounting will be administered through IZA's internal systems, with ICdA retaining its separate bank accounts and audited annual accounts.

Office accommodation, office services, computing services and other support services will be provided by IZA.

3.2 Scientific Support

Expert support for regulatory affairs activities will be drawn, as required, from IZA's related organisations, in particular ILZRO. Support may also be drawn from other individuals/organisations as required. These organisations will be reimbursed for costs incurred in providing this support.

4 2007 Activities

Activities in 2007 will focus on:

- Regulatory developments with impact on members' activities
- Communications strategy and activities

4.1 Regulatory Developments

4.1.1 European Union

Priorities:

- Cadmium Risk Assessment and Risk Reduction Strategy conducted under Regulation 793/93.
- REACH : initiating the development of consortium if deemed necessary, and provide scientific support for the submission of the dossier
- Revision of the BREF notes under IPPC
- Supporting actions to the European portable rechargeable battery association (RECHARGE)
- Specific issues related to pigments have been identified such as
 - o monitoring of Directive 91/338/EEC (Restrictions on marketing and use of cadmium pigments, stabilizers and coatings)
 - o strategy and activities related to risk management.
 - o Other identified product specific regulatory threats
- Monitoring the revisions of the Classification and Labeling of cadmium and cadmium compounds for the 30th ATP(Adaptation to Technical Progress).

Monitoring level:

- EU directives for Groundwater, Soil Protection, Water Framework Directive, Waste, SCALE program (through Eurométaux)
- End-of-life Directives on Vehicles and other end of life directives, affecting certain cadmium products.

4.1.2 North America

Priorities:

- Activities in support of North American Metals Council on the U.S. EPA's Metals Assessment Framework for Metals
- Activities in support of North American Metals Council on the NAFTA CEC Sound Management of Chemicals Program
- Activities in support of the Portable Rechargeable Battery Association (PRBA) and Rechargeable Battery Recycling Corporation (RBRC) on the collection and recycling of nickel-cadmium batteries

Monitoring level:

- Proposed regulations on occupational exposures, emissions and waste disposal of cadmium containing products
- Introduction of proposed Federal or local regulations to ban or limit cadmium products in North America based on EU Directives.
- Toxicological reviews on cadmium and cadmium compounds by the Agency for Toxic Substances & Disease Registry (ATSDR), the National Toxicology Program (NTP), the Integrated Risk

Information System (IRIS) and other agencies.

4.1.3 International

Priorities:

- UNECE Long Range Transboundary Air Pollution (LRTAP) Heavy Metals Protocol including possible tighter emission limit values and restrictions on cadmium products
- UNEP Heavy Metals Program evaluation of the long range transboundary pollution of cadmium and the need for undergoing global actions for cadmium.
- IFCS discussions on future activities on cadmium

Monitoring level:

- The application of mandatory cadmium product recycling laws and EU-type restrictions on cadmium products in Asia, South America and Africa.
- WHO/FAO limits for dietary exposures to cadmium

4.2 Internal Communications and Association Meetings

Briefings on regulatory developments and consultations with members on association strategy/actions are an important element of ICdA activity. A regular series of member communications will be maintained through 'Progress Reports'. Use of the pass-worded Intranet to ensure members have up-to-date access to information and positions will be an important part of this activity and will create a valuable archive for members' use.

One general meeting of members (and Board meeting) will be held. It is envisaged to be held in October (London, England). Other meetings and conference calls will be held as required to address specific developments.

4.3 Communications activities

It has become clear that there is a need to further integrate both general and sector-specific communications activities to support the regulatory affairs work and maintain confidence in markets. A general communication pamphlet "Cadmium, working towards a sustainable future" has been developed during the course of 2005, and has been made available electronically on the ICdA Members-Only website.

Activities related to sector specific communications will be explored at the General Assembly in October 2006.

Specific suggestions are to update the public website (www.cadmium.org) with the more recent developments.

4.4 Statistics and Market Information

A limited activity will be maintained to collate relevant statistical information on world cadmium production and use and will focus on the information needs of regulatory and communications activities.

5 2007 Financial Plan

The 2007 financial plan is given in Table 2.

Table 2: International Cadmium Association			
2007 Financial Plan			
(EU€)			
	<u>2006 Plan</u>	<u>2006 Forecast</u> <u>7+5</u>	<u>2007 Plan</u>
STAFFING			
Headquarters (A)	50,000	45,820	45,000
Sr Cons.(North America)(B)	73,600	70,848	40,000
Scientific Support - Health	0	7,737	27,500
Scientific Support - Environment	7,000	7,006	7,500
Secretarial	2,500	2,500	2,500
Administration/Accounting	4,000	5,504	6,000
Total Staff Costs	137,100	139,415	128,500
OPERATIONS			
Rent/rates/office services	10,000	10,233	11,000
Office relocation / refurbishment	0	2,340	0
Documentation, IT support	7,000	4,803	7,234
Insurances/banking costs	2,500	270	445
Telecommunications	5,000	3,920	5,063
Postage	750	674	695
Meetings	5,000	5,000	5,000
Travel & subsistence	15,000	18,261	18,250
Recharge membership	2,420	2,420	2,420
Publications	2,500	0	1,500
Contingency (D)	5,000	5,000	5,000
Depreciation & non recoverable			
Total Operation Costs	55,170	52,920	56,608
TOTAL COSTS	192,270	192,335	185,108
TOTAL PROJECTED SUBSCRIPTION INCOME	205,713	194,209	190,868
Unpaid subscriptions		5,000	0
SURPLUS/(LOSS) FOR YEAR	13,443	-3,126	5,760
SURPLUS/(LOSS) BROUGHT FORWARD	106,781	106,781	103,655
SURPLUS/(LOSS) CARRIED FORWARD	120,224	103,655	109,415

Rates of subscription for 2007 are unchanged over 2006, and are given in Appendix I.



ASSESSMENT SCHEDULE 2007

The assessable period for 2007 Membership dues is based upon the pounds of cadmium, expressed on a contained metal basis, mined, produced, recycled or consumed during the period, January 1, 2006 through December 31, 2006. The Board of Directors has set the following assessment rates (euro per pound of cadmium contained) for 2007:

<u>CLASSIFICATION</u>	<u>DUES BASIS</u>	<u>2007 DUES</u>
Cadmium Producers	Total Pounds of Cadmium Production	euro 0.025
	Minimum Assessment	euro 5,115
	Maximum Assessment	euro 51,140
Cadmium Recyclers	Total Pounds of Cadmium Production (excluding toll treatment)	euro 0.0128
	Minimum Assessment	euro 2,560
	Maximum Assessment	euro 25,570
Cadmium Oxide Producers	Total Pounds of Cadmium Contained In Cadmium Oxide Production (excluding Primary Metal Production reported above)	euro 0.0013
	Minimum Assessment	euro 2,560
	Maximum Assessment	euro 25,570
Cadmium Consumers	Total Pounds of Cadmium Consumption	euro 0.0026
	Minimum Assessment	euro 2,560
	Maximum Assessment	euro 25,570
Mining Companies	Total Pounds of Cadmium Mined (excluding Primary Metal Production reported above)	euro 0.0128
	Minimum Assessment	euro 2,560
	Maximum Assessment	euro 25,570
Associations, Distributors	Flat Fee or Special Fundraisings*	euro 1,535
Others	IZA	euro 95,000

* the one member paying this flat fee has resigned in 2006, and therefore it will no longer apply for 2007.



Status of EU and International Legislation

*ICdA General Assembly
October 12th 2006*

ICdA

International Cadmium Association

L. Regoli, ICdA/ Presentation for
ICdA GA/12/10/06

8



EU Regulation

- EU risk assessment
- EU risk reduction strategy
- A few words on REACH (C. Canoo)
- EU Battery Directive

International Regulation

- IFCS (H. Morrow)
- UNEP
- UNECE LRTAP (H. Morrow)

L. Regoli, ICdA/ Presentation for
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EU Cd/CdO Risk Assessment

- EU Cd risk assessment is finalised.
- Only 1 remaining issue:
Concl i) Cd ecotoxicity in very softwater
- Testing programme has started in early October
- Costs have been split across the Zn/Cd producers (of the original headset in 1997)
- Testing is expected to be finalised in September 2007



EU Risk Reduction Strategy

For ↓ risks to the general population (& environment)

- Makes reference to current and developing legislation
 - Cd limits in food and tobacco
 - IPPC Directive,
 - Water Framework Directive, Sewage Sludge Directive

For ↓ risks to workers

- Dossier will be sent to *Scientific Committee on Occupational Exposure Limits (SCOEL)*
- Industry promotes the comprehensive guidance '*ICdA/ Eurométaux risk management of Cd exposure in workers*'



Study : Effects of Cd on bone in workers

- The EU Cd/CdO risk assessment:
- Renal effects :
- General population ~ 2 Cd µg/g creatinine
- Workers ~ 5 Cd µg/g creatinine

- Bone effects :
- General population ~ 3 Cd µg/g creatinine
- Workers : a level could not be determined

Launch a study on workers exposed to Cd to answer the following :

- At what Cd levels do effects to the bone occur? Below detected effects of the kidney??
- Understand the underlying mechanisms that lead to bone effects



Bone study : Way forward

- Issue arised through the EU Cd RRS process
- BUT has an international dimension:
 - Rising concern in the international community (WHO)
- Formal proposal ~ February 2007
- Costs estimated at ~120,000 €
- Suggested split of the costs:
 - 1/3 costs paid by ICdA reserves
 - 1/3 paid by IZA (Zn/Cd producers)
 - 1/3 paid by users (Batteries & pigments)



New EU Battery Directive 2006/66/EC

- Published in *Official Journal* on the 6th Sept '06
- Proposed restriction on portable batteries containing >0,002% Cd by weight
- Exemptions
 - Emergency, alarm systems, medical equipment, power tools (the latter with a review foreseen in 4 years)
 - Industrial batteries
- Set minimum collection targets for all battery types and high recycling targets for NiCds (75%)
- Makes producers financially responsible for the waste management of batteries
- Will be transposed into law in the next 2 years

REACH

The implementation of the new Chemical Policy in Europe

ICdA General Assembly – C.Canoo
London, 12 October 2006

1

Registration Evaluation Authorization Chemicals
probable final vote on December 4th 2006

REACH is expected to enter into force in April 2007

- And will replace the current « existing substances policy » based on RAR's by the new one: burden of proof is shifted to the producer/importer
- Such registration will be compulsory :
 - ✓ for all substances and preparations (with tonnage trigger for the date to file in) >> OSOR principle = One Substance > One Registration
 - ✓ for all manufacturers or importers of such substance(s) in Europe, with a preference for joined and shared efforts through consortia to limit the costs and the vertebrate testing, when needed.

2



What does this imply for a supplier of Cadmium in Europe ?

- To pre-register before Dec.2008, mentioning :
 - its portfolio of substances or preparations (CAS or EINECS n°): Zinc, Zn-alloys, Zinc compounds (ZnO, ZnSO₄, ZnCl₂, ...), Cadmium (metal, oxide, residue, ...), Zinc ashes or drosses, H₂SO₄, ...
 - Its own (relevant) data for Registration file (CSA/CSR)
 - Its choice i.t.o.data-sharing
- To wait for the SIEF-process
- To Register before Dec.2010, the several substances, alone or in consortium, depending the SIEF-process



* Shared Information Exchange Forum



The Cadmium Industry needs to start the preparation of the REACH process

Now & Together

- The process will require resources, that could be shared from now on:
 - On the Technical level
 - ✓ To develop a standard Pre-Registration dossier for all interested companies (M/I/D) ready for filing by them and by mid-2008
 - ✓ To prepare the appropriate Registration / Autorisation dossier(s) to be filed in by the consortium by mid-2010
 - To develop 'exposure scenario's' for each use or application of Cadmium in the downstream chain
 - To prepare the CSA/CSR- Chemical safety assessment & report – This information is mainly contained in the RA, but needs to be put on EUCLID 5 format
 - Mandate a substitution plan - including economic, technical impact /feasibility
 - On the Managerial level
 - ✓ Gather Manufacturers, Importers and Users,
 - ✓ Start implementation of consortia
 - ✓ Ensure proper resources (human and financial) to manage the process
 - On the Communication level
 - ✓ Respond to inquiries from members, non members and first users
 - ✓ Provide regular update



What might be the structuring of those shared efforts ?

- Organize an horizontal host structure with key industrial Zinc Associations: IZA/IZA-E, EGGA, ZOPA, ... ICdA responsible for general communication, data-sharing and prioritisation of the activities
- Organize vertical specific consortia: [Zn, ZnO/ZnSO₄/ZnCl₂], [Cd, CdO/Cd(OH)₂/Cd(NO₃)₂, CdS/CdSe], H₂SO₄, ... with:
 - a common basic "legal agreement document": how to share the efforts and the costs – initial entrance fee, late arrival entrance fee, rights & obligations, ...
 - an independent accounting system of costs and fees
 - technical expert and managerial input from the host structure, as and when required

Regulatory Affairs Report North American and International Activities

**International Cadmium Association
General Assembly of Members**

**Royal Aeronautical Society
4 Hamilton Place, London W1J 7BQ, United Kingdom
Thursday, October 12, 2006**

North American Cadmium Issues

- **NAFTA CEC Reports: “Toxic Chemicals and Children’s Health” and “Taking Stock – 2006”**
- **U.S. EPA Development of Inorganic Metals Risk Assessment Framework**
- **USA State Programs on Cadmium**
- **CEPA Domestic Substances List**

NAFTA CEC Report on Toxic Chemicals and Children's Health

- **2004 Draft Criticized by US, CA, Industry**
- **Use of Environmental Defense "Scorecard" & PRTR / TRI for Risk Assessments**
- **NAFTA CEC Rejected or Ignored USA, Canadian and NAMC / ICdA Comments**
- **Final Report Issued May 17, 2006**
- **Environmental Defense Issued Own Report "Polluted Children, Toxic Nation" in June 2006**
- **EPA Agrees with Industry Criticism and Has Asked for NAFTA CEC Response**

NAFTA CEC 2006 "Taking Stock" Report

- **Annual Report Issued on July 27, 2006**
- **Relies on USA TRI and Canadian PRTR to Identify "Worst Polluters"**
- **Report Continues to Utilize Environmental Defense "Scorecard" Junk Science**
- **Nickel, Lead and Mercury Highlighted**
- **Special Analysis of Arsenic and Cadmium**
- **Cadmium Polluters Not Listed Because of Different US, CA, MX Reporting Thresholds**

US EPA Framework for Inorganic Metals Risk Assessment

- **Framework is Currently in Inter-Agency Review**
- **Completion Expected By End of 2006**
- **Human Health Bioaccumulation Issue**
- **NAMC / ILZRO Submitted Paper**
- **TRI Lead Rule Not Yet in Inter-Agency Review But Could Be Reconsidered**

USA State Programs on Cadmium

- **Legislation on Cadmium Product Use**
 - **California, Massachusetts and New Jersey**
- **NiCd Battery Collection & Recycling**
 - **20 U.S. States & Battery Management Act**
 - **California (WEEE)**
- **Emissions, Air & Water Quality**
 - **California, Oregon, Washington**

Canada CEPA Domestic Substances List

- **September 2006, Canada Will Publish List of 5,000 Categorized Substances**
- **Toxicological Information Required & Regulation of Schedule 1 Substances (Described as a Light Form of REACH)**
- **Categorization Depends on Substance Being Released and Posing Danger to Human Health or the Environment**

Canada CEPA Domestic Substances List

- **All Substances on DSL Must Be Categorized by September 2006**
- **Cadmium Previously Classified on Priority Substance List 1 (PSL1)**
- **Criteria Include Human Health (Highest Potential for Exposure)**
- **Environmental Protection (Persistent P, Bioaccumulative(B), Inherently Toxic (iT))**



International Issues

L. Regoli, ICdA/ Presentation for
ICdA GA/12/10/06

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UNEP – Scientific review for the need for global action on Pb, Cd

- Working group finalised the review, focusing on long range environmental transport (Geneva, Sept 18 – 22, '06)
- Working group included governments, industry, NGOs
- Final report will inform UNEP Governing Council Feb'07
- The review included the removal of speculative & unsubstantiated statements
- The report suffered heavy focus on EU data
- Several countries pushed for inclusion of production, use and trade data as evidence of transboundary effects, citing poor waste management practices in developing countries and the risks of products traded globally.
- **It is expected that there will be a strong call for Global action at the next Governing Council**

L. Regoli, ICdA/ Presentation for
ICdA GA/12/10/06

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International Cadmium Programs

- **UNECE LRTAP Heavy Metals**
- **UNEP Heavy Metals Program**
- **Intergovernmental Forum on Chemical Safety (IFCS) Proposed Program on Heavy Metals**
- **WHO / FAO JECFA PTWI for Cd**

UNECE LRTAP Heavy Metals Protocol

- **Entered into Force 29 December 2003**
- **Applies to Long-Range Transboundary Air Emissions of Pb, Cd & Hg**
- **Applies BAT to Reduce HM Emissions of Selected Industries from 1990 Base**
- **Existing Product Restrictions**
 - **Pb in Gasoline; Hg in Batteries; None Cd**
- **Sufficiency & Effectiveness Review**

UNECE LRTAP Sufficiency & Effectiveness Review

- **5 Chapters of S&E Review Completed**
- **Working Group on Strategies and Review Meeting in Geneva in Sept**
- **TFHM Reported Emissions of Pb, Cd and Hg Declined Since 1998 Protocol**
- **Identified Emerging BATs to Further Reduce Heavy Metal Emissions**
- **No Specific Wording on Products and Indirect Emissions was Included**

UNECE LRTAP TFHM Work Plan for 2007

- **Review Options to Further Reduce Heavy Metal Emissions (HME)**
- **Consider Information on Health and Ecosystem Benefits of Reduced HME**
- **Consider Canadian Report on Other Types of Effect-Based Approaches Besides Critical Loads Technique**
- **Need for Improved Emission Data**

IFCS Proposed Program on Heavy Metals

- **“Health and Environmental Concerns Associated with Heavy Metals: Global Need for Further Action?”**
- **25 Sept 2006 during IFCS Forum V**
- **Organized by Switzerland with Emphasis on Developing Nations**
- **12 Case Studies Presented and Cadmium Working Group Discussion**

IFCS Heavy Metals Event Cadmium Case Studies

- **India – Cadmium Use and Emissions Increasing in Developing Countries**
- **Sweden – Environmental, Human and Occupational Cadmium Exposure**
- **UNEP – Described UNEP Cd Program**
- **WHO – Summarized WHO Cd Activities**
- **UNECE – LRTAP HM Protocol**

IFCS Heavy Metals Event Cadmium Working Group

- **Rapporteur – University of Dar es Salaam**
- **Exposure Sources – Zinc, Tobacco, Batteries, Fertilizers, Fossil Fuels, Solar Cells, and Incense**
- **Trade – Fertilizers, Food, Toys, Medicines**
- **Management Strategies – Substitution, Information Sharing, Priority Chemicals List, Risk Communication, & Management of Historically Contaminated Sites**

IFCS Heavy Metals Event Meeting Conclusions

- **Switzerland, Nigeria, Norway and Denmark Called for Global Action**
- **USA, Canada, Japan, Australia and Industry (ICMM) Opposed It**
- **IFCS is Not Appropriate Forum & Programs Exist in UNEP / UNECE**
- **USA Feels Issue Will Arise Again at Feb 2007 UNEP Governing Council**

WHO / FAO JECFA PTWI For Cadmium

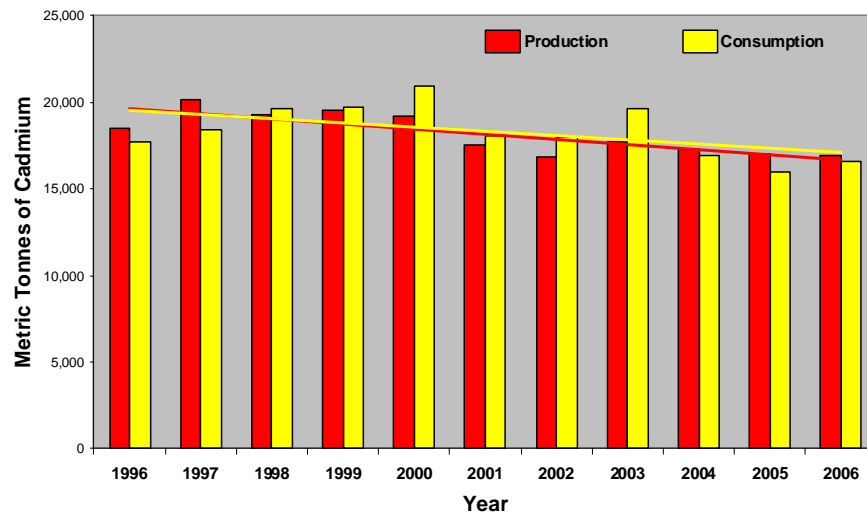
- **Cadmium Provisional Tolerable Weekly Intake Level (PTWI)
Maintained at 7 $\mu\text{g}/\text{kg}$ bw per week at
2003 and 2005 JECFA Meetings**
- **EU Risk Assessment and Nordic
Reviews Suggest Much Lower Levels**
- **Current Intake Levels Range = 2.8 to
4.2 $\mu\text{g}/\text{kg}$ bw per week (40-60% PTWI)**

Cadmium Market Report

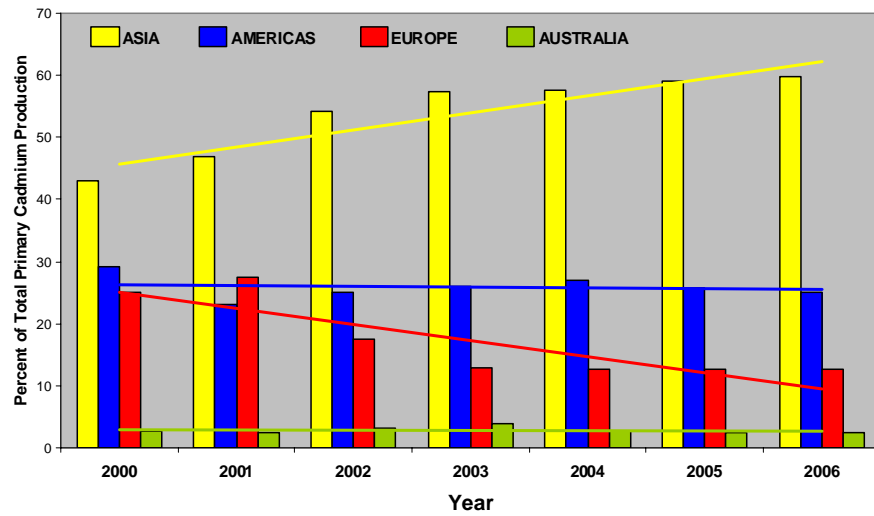
**International Cadmium Association
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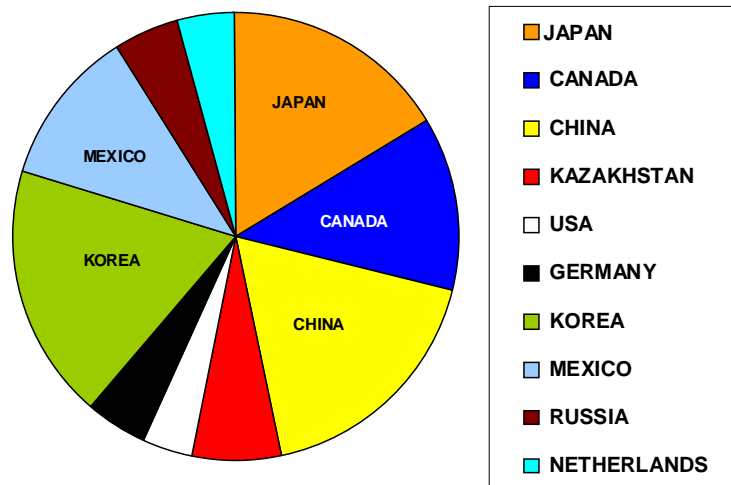
Primary Cadmium Production and Consumption, 1996 - 2006



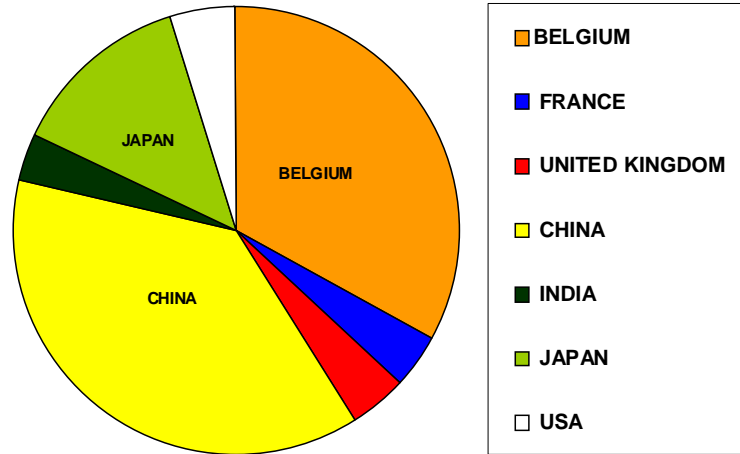
Geographical Trends in Primary Cadmium Production



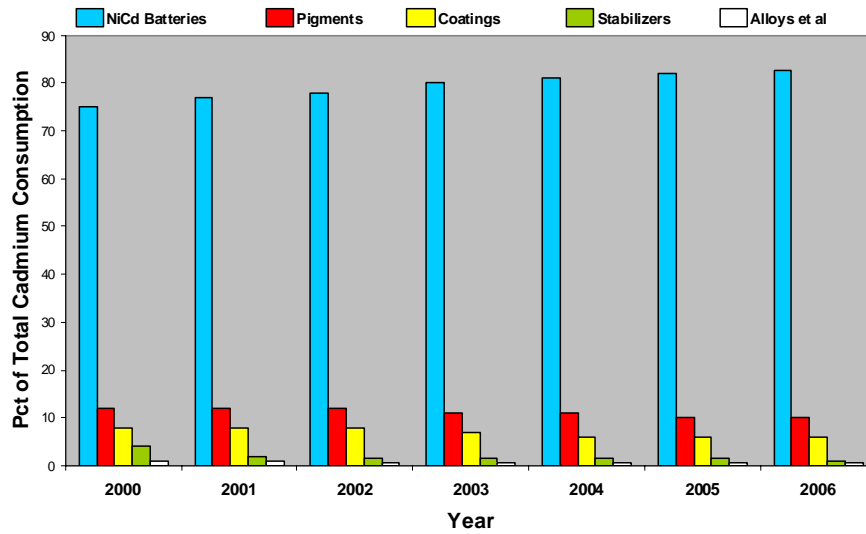
2005 Cadmium Production by Country



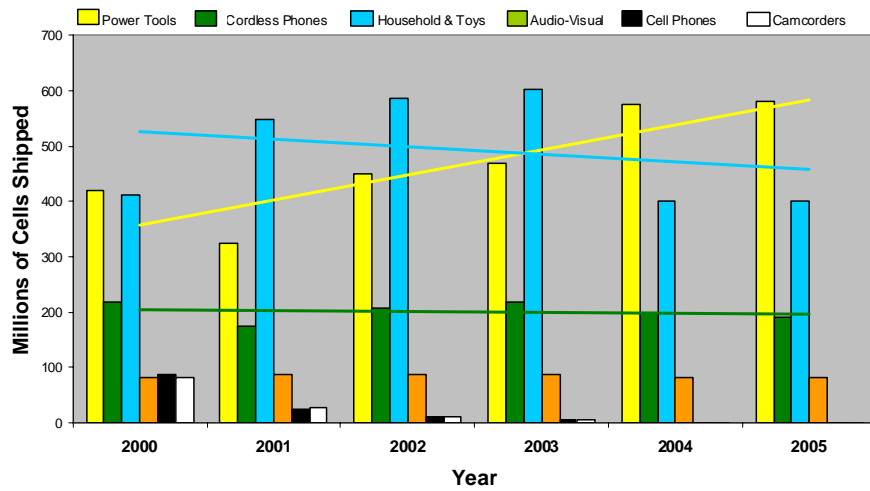
2005 Major Cadmium Consumption by Country



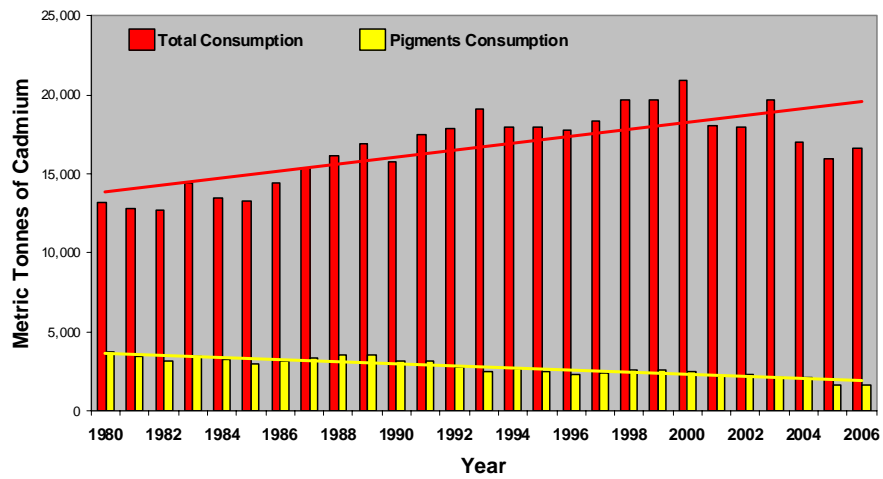
Trends in Cadmium Consumption Patterns



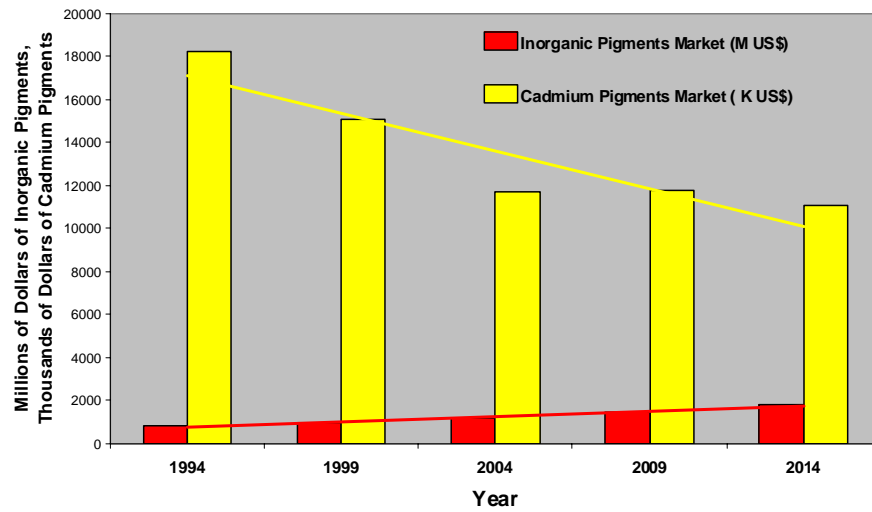
Worldwide Consumer NiCd Shipments (Takeshita - 2003, 2004, 2005, 2006)



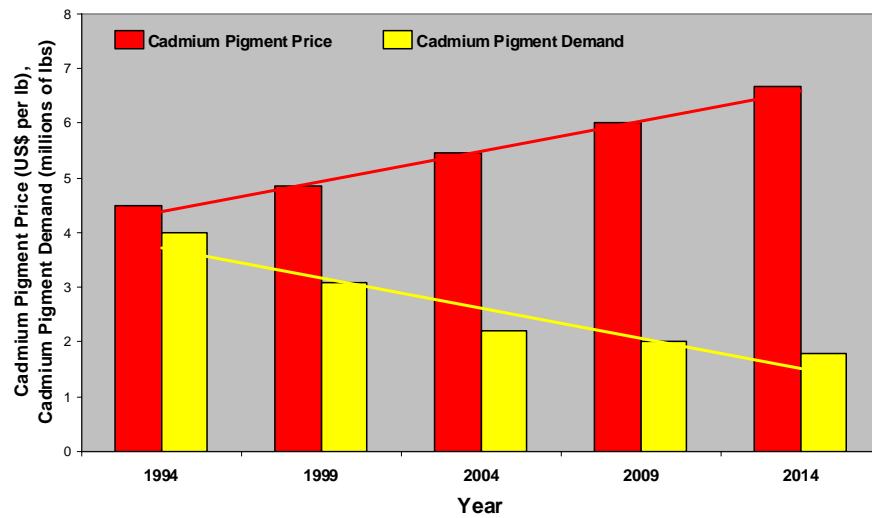
Cadmium Pigment Consumption vs. Total Cadmium Consumption, 1980-2006



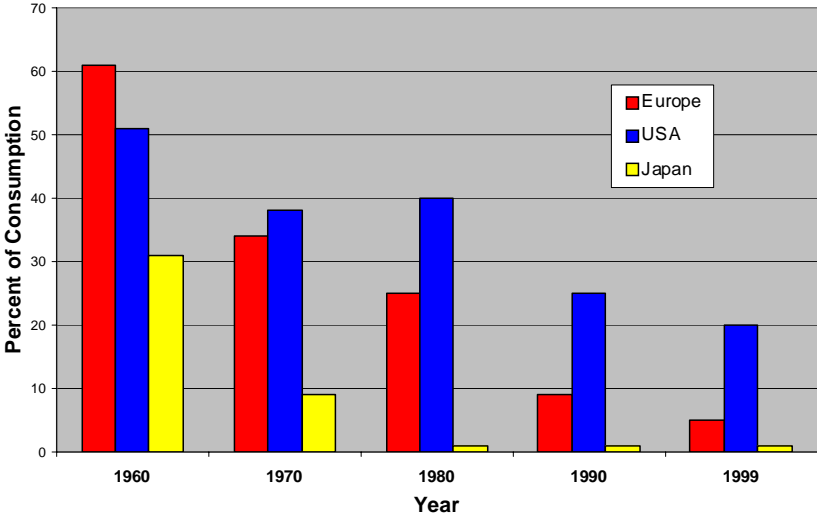
Freedonia Forecast of Cadmium Pigments Market



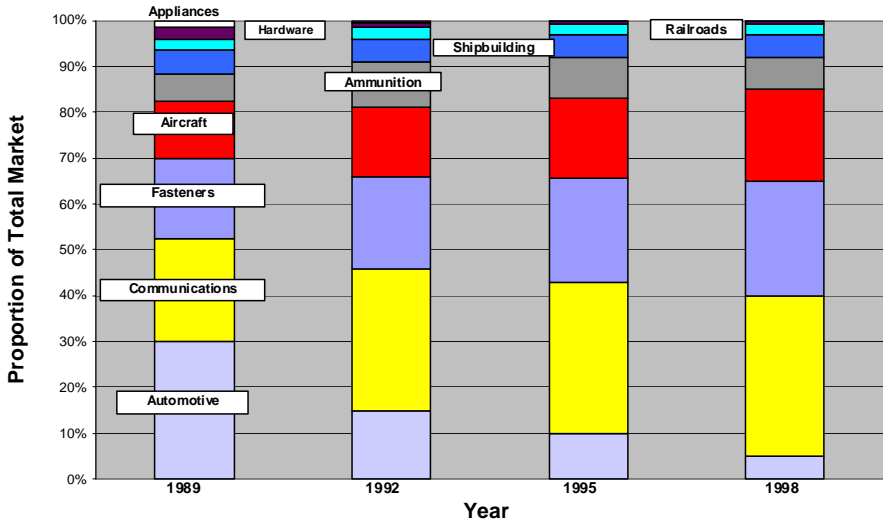
Freedonia Forecast of Cadmium Pigment Price and Demand



Geographical Cadmium Coating Markets, 1960 - 1999



USA Cadmium Coatings Market



Metal Bulletin 99.99% Cadmium Price, 1993-2006

