



**MINUTES
GENERAL ASSEMBLY OF MEMBERS
INTERNATIONAL CADMIUM ASSOCIATION
Thursday, October 14, 2010 – 1:00 PM**

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

CALL TO ORDER

The General Assembly of Members of the International Cadmium Association was called to order at 1:00 PM by its Chairman, Emil Josendal of Boliden AB., representing the International Zinc Association. The following persons participated in person or were represented by their Proxy as follows:

REPRESENTATIVE

Rainer Weyhe (Proxy to Patrick de Metz)
Emil Josendal
Max Cossette
Laurent Smits
Albert Hardies (Proxy to Emil Josendal))
Michael Hughes
Howard Winbow
Phil Rowley
Yukihiro Hoshi (Proxy to Emil Josendal)
Anne Dekker
Mark Booth (Proxy to Emil Josendal)
Patrick de Metz
Mitsunori Takao (Proxy to Patrick de Metz)
Eric Nottez
Colin Thirlaway

MEMBER COMPANY

Accurec Recycling GmbH
Boliden AB for IZA
5NPlus
Floridienne Chimie SA
INMETCO
James M. Brown Ltd.
James M. Brown Ltd.
James M. Brown Ltd.
Japan Mining Industry Association
Nyrstar for IZA
Rockwood Pigments (UK) Ltd.
SAFT
Sanyo
SNAM
Stanley Black & Decker Corporation

GUESTS AND STAFF

Alex Heard
Christian Canoo
Hugh Morrow
Noomi Lombaert
Stephen Wilkinson
Frank Van Assche

ORGANIZATION

First Solar, Inc.
International Cadmium Association
International Cadmium Association
International Cadmium Association
International Zinc Association
International Zinc Association

An attendance roster was circulated for each attendee to sign. The Chairman welcomed all attendees to the meeting, noted that Statements of Compliance (see Slide No. 3 of Annex I attached) had been circulated and that all Member Company representatives were asked to sign these statements for the meeting's official

records. The Chairman asked Hugh Morrow to serve as the Secretary Pro-Tempore to record the Minutes of the General Assembly. He then asked each attendee to introduce himself/ herself and his/her affiliation.

It was noted that representatives of 12 of the association's 15 Official Members were either present in person or were represented by Proxies, and that therefore a quorum was officially established for the transaction of business. The entire slide presentation of materials presented at the General Assembly is attached to these Minutes as Annex I. The Proposed Agenda for the General Assembly is shown in Slide No. 2. The Chairman noted that the question of the statement to the Consumer Products Safety Commission (CPSC) regarding support of a prohibition of cadmium in children's jewelry had to be added to the agenda. He asked if there were any further additions or corrections to the Proposed Agenda. They're being none, the agenda was adopted as presented. Since there are many acronyms and abbreviations utilized throughout these Minutes, a complete list of these acronyms and abbreviations and their meanings is also attached to these Minutes for reference as Annex IV.

APPROVAL OF THE MINUTES OF OCTOBER 15, 2009 GENERAL ASSEMBLY

The Minutes of the previous ICdA General Assembly of Members, held in London on October 15, 2009, had previously been distributed to the membership for review and comment and are posted on the ICdA Members Only website. A brief outline of these Minutes is shown in Slide No. 4 of Annex I attached. Chairman Emil Josendal asked if there were any additions or corrections to these Minutes or whether the Secretary, Hugh Morrow, had received any comments to the Minutes as previously distributed. General Manager Christian Canoo noted that Patrick de Metz had submitted comments requesting the addition of a sentence under the Cadmium REACH Consortium on page 5 as follows:

“It was also noted that ICdA Member Companies should check with their national authorities to determine whether or not they intend to propose cadmium and/or cadmium compounds for REACH authorization and that ICdA or Cadmium REACH Consortium staff should check with those Member Companies to ensure that such Contacts were made.”

Upon motion made by Colin Thirlaway, seconded by Anne Dekker, and carried unanimously, the Minutes of the October 15, 2009 ICdA General Assembly of Members were tentatively approved with the proviso that the additional comment of Mr. De Metz would be incorporated in those Minutes.

OPERATIONAL MATTERS

Membership Report – The Membership Report for the association as of October 14, 2010 was presented and is shown in Slide No. 5 of Annex I attached to these Minutes. The current membership includes 15 companies or organizations. Dr. Canoo noted that, since the last General Assembly of Members held in October 2009, two new members had joined the association. They are 5N Plus, a producer of high purity cadmium for the photovoltaic industry, and Accurec Recycling GmbH, a recycler of nickel-cadmium batteries. It was also mentioned that First Solar, Inc., a manufacturer of cadmium telluride solar cells, was considering ICdA membership, and that their representative was in attendance at the meeting as a guest.

The point was raised regarding the comparative memberships of ICdA and the REACH Cadmium Consortium. It was noted that there were 25 members of the REACH Cadmium Consortium, many of who were not members of ICdA, and that perhaps some of these companies would be worth approaching with regard to ICdA membership. Some are already represented through IZA (HC Miasteczko Slakie, JSC Chelyabinsk, KCM, Korea Zinc, Portovesme, Southern Copper, Umicore, Votorantim, Xstrata), but others (Ami Doduco, Bochemie, Cerac, Recyclex, ZM Silesia) are not, and perhaps might be viable ICdA membership candidates. Three traders (LN, Todini and Traxys) are REACH Cadmium Consortium members, but not ICdA members. Traders have generally not participated in ICdA in the past, but indications of interest in ICdA membership from some traders have been received within the past few years.

Report on the Officers of the Association – Christian Canoo reviewed the slate of proposed Officers and Directors of the International Cadmium Association. Essentially the Officers and Directors would remain

the same as they were in 2010 except for the following changes. Mark Booth would replace Colin Graham from Rockwood Pigments (UK) Ltd. as the representative of the cadmium pigments industry. Colin Thirlaway from Stanley Black & Decker Corporation would replace Timothy G. Pugh who has retired. Maxime Cossette of 5Nplus was nominated as an additional Director to represent the interests of the photovoltaic industry. **Upon motion made by Patrick de Metz, seconded by Eric Nottez, and carried unanimously, the proposed Slate of Officers and Directors of the International Cadmium Association for 2011 (as shown in Slide 10 of Annex I attached but amended below) was approved.**

The Officers and Directors of the International Cadmium Association for 2011 will be as follows:

Chairman	Emil Josendal	Boliden AB for IZA
Vice Chairman	Patrick de Metz	SAFT S.A.
Vice Chairman	Laurent Smits	Floridienne Chimie S.A.
Director	Anne Dekker	Nyrstar for IZA
Director	Mark Booth	Rockwood Pigments (UK) Ltd.
Director	Mitsunori Takao	Sanyo Electric Co., Ltd.
Director	Colin Thirlaway	Stanley Black & Decker Corporation
Director	Al Hardies	INMETCO
Director	Eric Nottez	SNAM
Director	Mark Edwards	Teck Resources for IZA
Director	Maxime Cossette	5N Plus

Patrick de Metz of SAFT S.A. remains as Chairman of the Health & Safety Committee.
Maxime Cossette of 5N Plus was elected Chairman of the Regulatory Affairs Committee.

FINANCIAL REPORT FOR 2009

The ICdA Financial Report for 2009, as audited by Deloitte Touche Tohmatsu, was presented to the General Assembly for formal approval, and is summarized in Slides 6 and 7 of Annex I attached. The total audited costs for 2009 were 166,941 Euros against total income of 172,018 Euros for a 2009 year-end surplus of 5,076 Euros. Combined with the surplus brought forward from previous years, the total surplus carried forward into 2010 was 168,578 Euros. The un-audited forecast expenses for 2010 are projected to be 170,957 Euros against projected income of 185,254 Euros for an expected year-end 2010 surplus of 14,298 Euros. Therefore the balance carried forward into 2011 is expected to be approximately 182,875 Euros. It was noted that the association's financial health is quite good which will be instrumental in allowing it to respond to with more flexibility to regulatory situations. The audited balance sheets for 2009 were also presented and detailed for the membership. It was also pointed out that it would be useful in future presentations to show both the detailed line-item budgets against the actual line-item expenses to establish any areas of significant under-expenditure or over-expenditure.

Upon motion duly made by Colin Thirlaway, seconded by Maxime Cossette, and unanimously approved by the meeting, the audited accounts and balance sheets of the International Cadmium Association for 2009 were accepted as presented in Slides Nos. 6 and 7 of Annex I attached.

PROPOSED OPERATING PLAN AND BUDGETS FOR 2010-2012

The ICdA Proposed Business Plan and Financial Forecast for 2010-2011-2012-2013 was presented for approval by the Members of the General Assembly. The financial plan is summarized in Slide Nos. 8 and 9 of Annex I, while the entire 2011 Business Plan and Financial Forecast for 2011-2013 is also attached to these Minutes as Annex II. The basic objectives of the association will remain the same in 2011 as they have in recent years, and the staff and structure of the association is likewise expected to remain the same. The 2011 proposed Business Plan calls for 0.30 man-years effort from Christian Canoo as General Manager, 0.45 man-years work from Hugh Morrow as Senior Consultant to cover North American and International Regulatory Affairs, and 0.33 man-years time from Mrs. Noomi Lombaert as a Human Health Assistant dealing with EU and International Regulatory Affairs. It is envisioned that additional scientific

support will be drawn, as needed, from outside organizations. Provision has been made in the proposed 2011 budget for 10,000 Euros for scientific support on health issues and 10,000 Euros for scientific support on environmental issues. Total staffing and operational costs for 2011 are proposed at levels higher than those planned or realized for the past few years because it is anticipated that staffing will be at fully planned levels for the first time in the past two years and because of anticipated increased regulatory activities in some areas.

The proposed Business Plan for 2011, 2012 and 2013 forecasts total expenses to slightly exceed total income in each of these three years, thus resulting in successive decreases in the surplus carried forward at the end of each of these three years. However, these forecasts do not include new subscription income from prospective members, as outlined in the Membership Report, nor do they anticipate any income generated from the International Cadmium Conference in Shanghai in 2011. In spite of these decreases in the surplus, the overall surplus of the association is still forecast to remain healthy at the end of 2013.

The principal specific proposed regulatory activities of the association for the European Union, North America and international organizations for 2011 were also summarized as follows:

- Working on the EU Cadmium Risk Reduction Strategy to implement worker protective occupational exposure standards,
- Produce a more user-friendly version of the ICdA Guidance Document,
- Interface with the autonomous Cadmium REACH Consortium and provide a “Trustee” function to that group by providing scientific support and developing a common risk management approach for industry,
- Work to ensure that reform of the Toxic Substances Control Act (TSCA) in the United States does not impose overly-burdensome reporting requirements and does not result in bans on cadmium-containing products,
- Work to address public and regulatory concerns concerning cadmium in consumer products, especially in children’s jewelry,
- Support revision of the U.S. EPA Integrated Risk Information System (IRIS) file on cadmium by supplying information,
- Work on the UNECE LRTAP Heavy Metals Protocol to prevent cadmium products from being listed as prohibited products,
- Work on UNEP programs on heavy metals that are also attempting to establish that trade in cadmium products is leading to global cadmium contamination and therefore should be prohibited,
- Revision and merger of the ICdA public and private websites,
- Internal communications, meetings of the Health & Safety and Regulatory Affairs Committees, and plans to develop an Eighth International Cadmium Conference in Shanghai, China in 2011,
- Gathering cadmium statistics and market information
- The Chairman noted that the budget was flexible enough to accommodate changing regulatory conditions, but that any additional work plans and budgets would have to be developed and proposed to the ICdA Board of Directors for approval.

Further details for each of these activity areas are shown in the attached Business Plan for 2011 as Annex II.

It was noted that the information on the financial forecasts for 2012 and 2013 was being presented for information only, and the only item requiring formal approval by the General Assembly was the 2011 Business Plan and Budget. It was further pointed out that, in view of the unknown but anticipated regulatory developments in 2011, it would be better to discuss in more detail regulatory activities in Europe, North America and International Organizations before approving the proposed 2011 business plan and budget. Therefore, the regulatory activities in Europe, North America and international organizations were first reviewed, and then the Chairman called for a vote to approve the proposed 2011 Business Plan and Budget.

Upon motion duly made by Anne Dekker, seconded by Laurent Smits, and unanimously approved by the General Assembly of Members, the 2011 Business Plan and Budget for the International Cadmium Association was adopted as presented.

UPDATE ON REGULATORY ISSUES

An overview of the present status of cadmium regulatory affairs in Europe was presented by Christian Canoo and Noomi Lombaerts including the activities of the ICdA Health & Safety Committee on the EU Cadmium Risk Reduction Strategy and the work of the Cadmium REACH Consortium on REACH implementation. This was followed by a summary of North American cadmium regulatory issues and international cadmium regulatory initiatives by Hugh Morrow such as revision of the Toxic Substances Control Act (TSCA), revision of the US EPA IRIS file on cadmium, public and regulatory concerns over cadmium in consumer products, the UNECE LRTAP Heavy Metals Protocol, the UNEP Heavy Metals Program, and revision of the WHO JECFA tolerable intake levels for cadmium.

European Union – The two principal issues facing the cadmium industry in the European Union are the implementation of the Risk Reduction Strategy for Cadmium and compliance with the EU Registration, Evaluation, and Authorization of Chemicals (REACH) Directive by the industry. The emphasis of the Risk Reduction Strategy is on occupational exposure in the workplace, and the Health & Safety Subcommittee has formulated a work plan to deal with this problem. Compliance with the REACH requirements is being accomplished through the Cadmium REACH Consortium. The complete EU regulatory affairs presentation is attached to these Minutes as Slide Nos. 12-26 of Annex I attached to these Minutes.

EU Cadmium / Cadmium Oxide Risk Reduction Strategy: The activities of the Health & Safety Subcommittee have included work on the ICdA Cadmium Guidance Document, the convening of a series of industry meetings to review various occupational exposure issues related to cadmium, and reacting to the work of the EU's Scientific Committee on Occupational Exposure Limits (SCOEL) recommendations for occupational exposure limits and biological exposure indices for the EU (see Slides 12-16 of Annex I attached). The Health & Safety Committee meetings have or will be held covering air quality measurement, medical surveillance principles and programs, individual and collective hygiene procedures, and status of the REACH registration process for cadmium substances. The ICdA Guidance Document has been disseminated to ICdA Member Companies, and each meeting has been designed to exchange information on current practices, and identify and share best practices.

The SCOEL issued their first draft of the Summary Document (SUMDOC) on cadmium and cadmium oxide in February 2009. Public consultation on this draft was open until the end of November 2009 and the ICdA filed official comments on this proposal and met with SCOEL on November 30, 2009 including scientific input by Professor Bernard with results of a large workers cohort, and resolutions of difference standards and practices employed by different companies. The Minutes of the SCOEL March 2010 meeting reflected ICdA's comments and the following points were noted:

- A more explicit explanation of the mechanisms involved in genotoxicity will be added to the final SUMDOC, and reference will be made to the 10 µg/g creatinine for cadmium-in-urine as the threshold level for genotoxicity,
- “Having defined a threshold for genotoxicity, it was shown that renal and respiratory effects are more sensitive than genotoxicity, in turn thought to be a pre-requisite for carcinogenicity,”
- The insolubility of cadmium pigments and certain other cadmium compounds will be addressed in the final SUMDOC paper. However, there is as yet no information yet on when it will be published.

In relation to the REACH dossiers filed by ICdA Member and REACH Consortium Members, it is expected that the threshold for carcinogenicity effects will be established at 10 µg/g creatinine for cadmium-in-urine which is higher than the threshold levels for renal effects or respiratory effects. Thus, renal threshold effects are the most sensitive measure for the protection of worker safety. The inhalable

occupational exposure limit (iOEL) which is recommended at 4 µg cadmium/m³ will correspond to the default no effect level (DNEL).

Cadmium REACH Consortium: The current activities of the Cadmium REACH Consortium were reviewed by Christian Canoo and Noomi Lombaert (see Slides 17-25 of Annex I attached). The Consortium was formed in July 2007 and contains 25 Members. Most recently, in August and September, the Consortium has been assisting Members to file their registration dossiers in a timely manner. The files for lead registrants for each of the several cadmium chemicals (cadmium metal, oxide, hydroxide, nitrate, chloride, carbonate, sulphide and sulphate) have now largely been completed as required. The issue of joint submissions and a co-registration dossier is also being addressed.

Of additional interest are the Default No Effect Levels (DNELs) and the Predicted No Effect Concentrations (PNECs) developed for the REACH dossiers, and how these values relate to the risk management of cadmium under the EU Risk Reduction Strategy. For example, the PNECs derived under the REACH process are as follows:

- | | |
|---------------------------|--------------------------------------------|
| • Freshwater | 0.19 µg/L generic value |
| • Saltwater | 1.14 mg/L |
| • Sewage Treatment Plants | 20 µg/L |
| • Freshwater Sediment | 1.8 mg/kg sediment dry weight added value |
| • Saltwater Sediment | 0.64 mg/kg sediment dry weight added value |
| • Soil | 0.9 mg/kg soil dry weight |

The DNEL for workers in general will be the same as the SCOEL iOEL at 4 µg cadmium per cubic meter of air. Risk management of occupationally exposed workers will be based on medical monitoring and individual medical follow-up. The medical monitoring includes cadmium in urine, measured as micrograms of cadmium per gram creatinine, and/or cadmium in blood, measured as micrograms of cadmium per liter of whole blood. Early (sub-clinical) indicators of renal tubular dysfunction (kidney failure) may be established by biological indicators such as β-2 Microglobulin (β-2 MG) or Retinol Binding Protein (RBT). Thus, the safe area in which no action is required involves a combination of a cadmium-in-urine level below 2 µg cadmium / gram creatinine, a respirable cadmium-in-air concentration below 4 µg/m³, and levels of biological indicators of kidney function, such as β-2 microglobulin or retinal binding protein, to be below 300 µg/g creatinine. For cadmium-in-urine levels above 2 µg/g creatinine, but below 5 µg/g creatinine, medical follow-up is required. Cadmium occupational exposure is not allowed if cadmium-in-air levels exceed 4 µg/m³ or cadmium-in-urine measurements exceed 5 µg cadmium / g creatinine or β-2 microglobulin levels exceed 300 µg/g creatinine.

North America and International Issues –The major regulatory developments affecting cadmium in North America and in several international organizations were reviewed by Hugh Morrow. His summary is attached to these Minutes as Slide Nos. 33-59 of Annex I attached to these Minutes. In North America, these issues included revision of the Toxic Substances Control Act (TSCA), recent adverse publicity and regulatory proposals involving cadmium in consumer products, particularly cadmium in children's jewelry, the revision of the US EPA IRIS file on cadmium, proposed USA State legislation of cadmium and cadmium products, and the formation of a North American Regulatory Affairs Committee. The most important current international programs involving cadmium (UNECE, UNEP and WHO JECFA) and the potential threats posed for cadmium products by these programs were also summarized.

Revision of the Toxic Substances Control Act: In mid 2010, largely at the prompting of environmental groups but also strongly supported by a Democratically-controlled US Congress, bills were introduced in both the US Senate and the US House of Representatives to drastically revise the Toxic Substances Control Act (TSCA). Essentially these bills would require the extensive gathering of information on all chemical substances and are much like the provisions of the EU REACH legislation. However, they are much more far-reaching in some respects and have certain definitions and criteria who could prove problematic for cadmium, metals, and industry in general. Of particular concern were the inclusion of persistence and bioaccumulation as metrics for adverse human health effects, the revision of the definitions of adverse health effects, the specific naming of cadmium as a chemical for priority action, a requirement requiring new information to be gathered on all nano-materials, apparent disregard for confidential business

information, seemingly sole EPA authority to require further information and testing, and unrealistically short time frames for industry to gather the required information and for EPA to evaluate that information. In the forms proposed in mid 2010, these bills would have been very problematic for the cadmium industry. Fortunately, the US Congress is no longer controlled by the Democrats, and it is now much more likely that more reasonable versions of these bills will be proposed in 2011.

Cadmium in Consumer Products Issues: In 2009 and 2010, several issues have arisen with respect to cadmium contained in consumer products. The first was cadmium present as alloys in children's jewelry imported from China that, in some cases, contained alloys with as much as 91% cadmium. An environmental coalition of four organizations filed a petition with the Consumer Product Safety Commission (CPSC) and the Environmental Protection Agency (EPA) to ban all children's jewelry containing more than trace amounts. The International Cadmium Association agrees that cadmium alloys in children's jewelry is not a necessary or appropriate use of cadmium, and has filed comments with CPSC supporting the prohibition of cadmium in children's jewelry. ICdA however has decided not to issue a press statement on this issue for fear of mis-interpretation.

However, somewhat later in the year, another environmental group in concert with a Democratic congressman from California, detected cadmium-pigmented enamels on McDonald's glasses, and created adverse publicity for McDonald's and the glass makers to the extent that 12 million of these glasses were withdrawn from the market. In this case, the cadmium-pigmented enamels are virtually insoluble, passed the leaching standards for cadmium from glassware, and never should have been pressured into withdrawal by CPSC. ICdA in cooperation with the Society of Ceramic and Glass Decorated Products (SCGDpro) contacted an Ohio Senator and Congressman and sought and received assistance in questioning the CPSC actions. CPSC is now reviewing its entire stance on the presence of cadmium in products and the leachability of cadmium from products.

Update of the EPA IRIS File on Cadmium: The US Environmental Protection Agency is updating its Integrated Risk Information System (IRIS) file on cadmium, which was last updated in 1998. This information must support proposed and adopted EPA regulatory actions and therefore is important to the status of EPA regulations on cadmium. The current update is well behind its scheduled completion date of 2012 because of higher priority work on other substances. ICdA has contacted Lynn Flowers, Peer Review Leader for the IRIS Cadmium Update, and she has invited ICdA to submit information for their file. As time from REACH activities permits, Noomi Lombaert will review the IRIS file and compile studies to be submitted to EPA.

US State Programs on Cadmium: There are currently two USA State programs of higher concern than numerous others regarding cadmium at the state level in the United States. These are the Minnesota Chemicals of High Concern program and the California Safer Consumer Product Alternatives legislation. The Minnesota program requires the Minnesota Department of Health to develop lists of Chemicals of High Concern (CHC) and Priority Chemicals (PC). These lists are developed largely based on other listings, leading to a de facto listing system where if cadmium is listed by one state or organization, it automatically becomes listed elsewhere, regardless of any scientific evidence on its health or environmental effects. The priority chemicals will be chosen from the CHC list and will be based more on risk than simply on hazard. Thus far, the only action contemplated under this program is the listing of the chemicals themselves.

The proposed California legislation, on the other hand, requires selection of chemicals on concern based on hazard prioritization and on their relative volume in consumer products in the marketplace. California utilizes persistence and bioaccumulation as hazard criteria, and thus metals are virtually automatically included. NAMC has already filed comments against this practice and referenced EPA's *Framework for the Risk Assessment of Metals*. Cadmium has also been listed in their program because it is listed as a human carcinogen by the International Agency for Research on Cancer (IARC). A final list of priority products for which alternatives should be developed is required by December 1, 2013.

North American Regulatory Affairs Committee: Because of the increased of regulatory proposals and activities in North America, it was proposed that the association form a Regulatory Affairs Committee to

develop a coordinated and agreed-upon approach to some of these activities. The first meeting of the committee was held in Washington, DC on September 16th, and Maxime Cossette of 5N Plus was elected as Committee Chairman. Issues discussed were as noted above. It was concluded that ICdA should have a regular monitoring system for proposed legislation and regulation. Hugh Morrow approached Lynn Bergeson of Bergeson & Campbell, lawyers for NAMC, for a quote on such a service. Her quote was \$12,000 per year to cover US, Canadian, and Asian developments specific to cadmium. The committee also pointed out that, subject to political and regulatory developments, additional funding might be required to fund studies, gather information required under a TSCA Revision, or include additional staff time if warranted.

UNECE Long Range Trans-Boundary Air Pollution Heavy Metals Protocol: Hugh Morrow and Noomi Lombaert attended a meeting of the Task Force on Heavy Metals (TFHM) on behalf of ICdA on June 1-2, 2010 in Stockholm to consider the EU proposal to add certain mercury-containing products to the prohibited products Annex of the Protocol. At present, only lead in gasoline and mercury in primary batteries are prohibited products, and no cadmium products are listed in either the mandatory or voluntary prohibitions. Deliberations at the meeting and presentation of data and policy statements from the United States and Canada indicated that mercury in batteries, measuring devices and switches and relays will probably be added to the Heavy Metals Protocol annex of prohibited products, but that mercury in lamps, amalgams and electrical and electronic waste probably will not.

A subsequent meeting of the Working Group on Strategies and Review in Geneva in September indicated that the TFHM will continue its work on the Sufficiency & Effectiveness Review, that policy work will probably be reduced in future years in favor of increasing the number of ratifications to the Heavy Metals Protocol, and that future efforts may center on efforts to control cadmium emissions by controlling particulate matter consistent with the provisions of the Gothenburg Protocol. The cadmium emission limit values now established for point sources are all at 50 µg/m³.

UNEP Heavy Metals Program: The three programs on cadmium being carried out at present under the auspices of the United Nations Environment Program were also summarized and reviewed. These include the UNEP *Scientific Review on Cadmium* which was prepared by a Danish consultant and which has appeared in perhaps at least three drafts since 2006. After many complaints, UNEP DTIE has posted the previous comments of the International Cadmium Association, but has also issued an October 2010 as the “Draft Final Version” of the *Scientific Review on Cadmium*. This version is little different from earlier versions and the International Cadmium Association has responded with extensive comments on this latest version. The announced intention of the UNEP DTIE Secretariat is to table this document at the UNEP Governing Council GC26 in Nairobi in February 2011 with a “view to inform the discussions on the need for global prohibitions on cadmium products.”

The second UNEP initiative of importance to the cadmium industry is the report prepared by Chemicals Branch of the Department of Trade, Industry and Environment (DTIE) on the trade in lead and cadmium products in Africa. Since the UNECE LRTAP forum has already established that cadmium contamination does not occur by air transport over intercontinental distances, countries such as Sweden and Switzerland are proposing that such contamination occurs due to heavy trade in cadmium-containing products to continents such as Africa which does not have the technology or infrastructure to properly treat the solid waste generated by these products. To this end, UNEP DTIE Chemicals Branch prepared a report in an attempt to quantify the amounts of cadmium contamination. Again, after several complaints, ICdA’s comments on this report were posted on a difficult-to-reach website, and UNEP DTIE has announced that they are conducting two further studies on trade in cadmium products in the Latin America and Caribbean region and in Asia and the Pacific region. The results of these latter studies will be presented in Lima, Peru on November 30 – December 1, 2010.

The third UNEP initiative underway that could potentially affect cadmium-containing products is the UNEP SAICM Chemicals in Products Program which is being led by Sweden. Toys, jewelry, electronics, clothing, construction materials, personal care products and food containers are the consumer product groups of current interest, and toys and jewelry are probably the main categories in which cadmium might be scrutinized. An international workshop is being organized on this subject for early 2011, and the results

and recommendations will be presented at Third International Conference on Chemicals Management (ICCM3) in 2012.

Revision of the WHO JECFA Tolerable Intake Levels for Cadmium: The World Health Organization's (WHO) Joint Expert Committee on Food Additives (JECFA) met in Geneva on June 8-17, 2010, to consider revision of the human tolerable intake levels for cadmium. Because of cadmium's exceptionally long half-life in the human body, JECFA withdrew tolerable intake levels based on a daily or weekly basis and adopted a Provisional Tolerable Monthly Intake (PTMI) level of 25 µg/kg of body weight. While this new level does represent a reduction from the previous standard of about 18%, it is far from the reductions proposed by some in the European Union. Furthermore, JECFA specifically that "exposures to cadmium through diet for all age groups, including consumers with high exposures and subgroups with special dietary habits (vegetarians), are below the PTMI." This finding clearly indicates that extensive cadmium poisoning of the general population is not occurring and that the tolerable intake levels for cadmium are not "dangerously close to the levels necessary to develop significant clinical effects" as alleged by some, again mainly within the European Union.

PROPOSAL FOR AN INTERNATIONAL CADMIUM CONFERENCE IN 2011

Hugh Morrow briefly reviewed the status of the proposal to convene an Eighth International Cadmium Conference in Shanghai, China in 2011. Because of more-pressing demands on staff time, such as registration of cadmium substances under REACH, little progress has been made on planning this conference, and there appeared to be general agreement that its originally scheduled date of April 2011 would probably have to be deferred until later in the year, perhaps to coincide with a zinc conference scheduled for the Fall of 2011 in China. A conference call of the Steering Committee for this conference was held on June 28, 2010, and at that time certain points were agreed upon. It was decided to make the theme of the conference the risk management and control of cadmium. It was agreed that in order to produce a successful conference, ICdA must have both the approval of Chinese authorities and input from China on subjects such as market data, political viewpoints, regulatory status, public perception and risk management practices currently in place. It was also noted that if approval from the Chinese authorities proved problematic, then the conference could equally well be held in Hong Kong.

A tentative program for the conference now appears to be:

- Welcome and Organizational Overview
- Four General Overview Papers
 - Markets and Applications
 - Health Effects of Cadmium
 - Environmental Effects of Cadmium
 - Regulations for the Control of Cadmium
- Session on Controlling Cadmium Exposure in the Workplace
- Session on Controlling Cadmium in the Environment
- Session on Controlling Cadmium in the General Population
 - Recycling of Cadmium
 - Cadmium in Consumer Products
 - Cadmium from Non-Product Sources

UPDATE OF ICdA PUBLIC AND MEMBERS WEBSITES

Christian Canoo and Noomi Lombaert reported that the revision of the ICdA websites, both the public one and the Members Only website, was well along and nearing completion. The two sites have been combined into one site at www.cadmium.org, but a User Name and Password will be required to access the Members Only section of the website. A number of documents have been added to the Members Only section, and data and text of the public section is being updated and revised. This revision is expected to be complete by the end of 2010. Noomi Lombaert showed example pages from both the public and Members home pages which are shown respectively in Slides 31 and 32 of Annex I attached.

UPDATE ON MARKET AND MARKET DEVELOPMENT ISSUES

Hugh Morrow presented a brief review of the cadmium market situation that is shown as Slides 60 through 72 of Annex I attached to these Minutes. According to figures from the World Bureau of Metal Statistics (WBMS), primary cadmium production has been increasing during the period from 2000 to 2010, while primary cadmium consumption has been decreasing. Most of primary cadmium production and consumption occurs in Asia, mainly in China, Korea and Japan. Primary cadmium production in Europe has also increased slightly in the past ten years, due mainly to metal smelted and refined in Eastern Europe, notably in Bulgaria and Poland. However, production of secondary or recycled cadmium has also been increasing and now accounts for about 23% of total cadmium production. However, the extent to which secondary cadmium production is being recorded in WBMS figures is not accurately known, and worldwide consumption of secondary cadmium is very often proprietary business information and not reported. It is however certain that increased amounts of NiCd batteries are being collected and recycled by the battery collection programs in Europe, North America and Japan.

Approximately 85% of the world's cadmium consumption is devoted to NiCd batteries and most of these are produced in China, Japan, Sweden, India, France or the USA. The only other large cadmium consumption occurs in Belgium that actually represents the conversion of cadmium metal to cadmium oxide and other salts, mainly for export to the battery producers in China and Japan. While NiCd batteries remain as the largest application for cadmium, accounting for about 85% of the total, pigments account for roughly 10% of total consumption and coatings for about 4% of total consumption. Cadmium use in stabilizers for PVC has largely disappeared as a cadmium application, while the utilization of cadmium in alloys is now largely confined to only the copper-based electrical and thermal conductivity alloys or the silver-based electrical contact alloys. The utilization of cadmium telluride in photovoltaic applications, although still small, is a growing use for cadmium. Cadmium price, as published in *Metal Bulletin*, has remained remarkably stable in the past year at roughly \$US 2.00 per pound, indicating a stable balance between supply and demand during 2010.

NEXT MEETING DATES

Chairman Emil Josendal announced that the next General Assembly of Members of the International Cadmium Association would most likely be held during London Metals Exchange Week on Thursday, October 13, 2011, from 1 PM to 4 PM. The venue will probably again be the Royal Aeronautical Society at 4 Hamilton Place, but these details will subsequently be confirmed to the Membership. However, some noted that it was not really necessary to hold the ICdA General Assembly in London during LME Week as most of the present ICdA representatives do not need to attend LME for commercial reasons.

The next ICdA Board of Directors' Meeting will be held in December 2010, probably by web teleconference, and at a date and time to be determined. The details of this meeting will subsequently be confirmed to all ICdA Board Members.

The next three meetings of the Environmental Health & Safety Subcommittee are planned as follows:

- October 15, 2010 in Brussels
- June 14, 2011 Site to be determined
- October 2011 Date and Site to be determined

The next meeting of the North American Regulatory Affairs Committee will probably be held by web teleconference and on a date to be determined.

ADJOURNMENT

There being no further business before the General Assembly of Members and upon motion duly made by Michael Hughes, 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, Emil Josendal, at 4:35 PM.

Respectfully Submitted,

Hugh Morrow
Secretary, Pro-Tempore

Approved,

Emil Josendal
Chairman

ICdA - 2010

General Assembly

London – 14 October, 2010



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Proposed Agenda

- ☐ Introduction word of the Chairman
- ☐ Approval of the Minutes of the GA of 15/10/2009.
- ☐ Membership Report
- ☐ Financial Report
- ☐ Proposed Operating Plan and Budget for 2010/2011/2012
- ☐ Update on Regulatory Issues:
 - European Union
 - North America
 - International
- ☐ Proposal to organize a 8th International Cadmium Conference in Asia
- ☐ Update on Market and Market Development Issues
- ☐ Any other business
- ☐ Next Meeting Date

London – 14 October, 2010



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Statement of Compliance

- ❑ The purpose of the meeting is to address, under the applicable confidentiality rules, issues concerning cadmium and cadmium compounds producers and users and more particularly the ICdA program results of 2009 and those proposed for 2010.
- ❑ The minutes kept at the meeting will have to reflect all significant matters discussed during the meeting.
- ❑ No discussions will be held, formally or informally, during specified meeting times or otherwise, involving, directly or indirectly, express or implicit agreements or understandings related to: (a) any company's price; (b) any company's terms or conditions of sale; (c) any company's production or sales levels; (d) any company's wages or salaries; (e) the division or allocation of customers or geographic markets; or (f) customer or suppliers boycotts; or (g) any disclosure of information which may affect applicable rules on Competition Law.
- ❑ The International Cadmium Association, as a group will make no recommendations of any kind and will not try to reach any agreements or understandings with respect to an individual company's prices, terms or conditions of sale, production or sales levels, wages, salaries, customers or suppliers.

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Approval of the minutes of our last GA on 15 October 2009

- ❑ Introduction word of Emil Josendal, Chairman: 9 on 12 Association Members are present or represented
- ❑ Approval of the Minutes of the GA of 16/10/2008.
- ❑ Operational matters:
 - Review of ICdA's priorities
 - Membership report
 - Re-conduction of Officers and Directors for 2010
 - Approval of the Financial Report 2008
- ❑ Discussion and approval of the proposed 3y-Op. Plan 09+10/11/12
- ❑ Update on Regulatory Issues:
 - European Union
 - North America
 - International
- ❑ Confirmation of the Cadmium Conference to be prepared for Q2-2011
- ❑ Update on Market and Market Development Issues
- ❑ Next Meeting Date was fixed on October 14, 2010

London – 14 October, 2010

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Membership report

- ❑ **5N Plus** (Photo-Voltaic) and **Accurec** (Ni-Cd bat. Recycling) applied for joining the Association since the last General Assembly; the application was approved and confirmed by the Board on 08/01/2010
- ❑ **Current membership:**
 - 1. ACME Aerospace Inc. - Ni-Cd Battery manufacturer
 - 2. Accurec - Ni-Cd Battery recycler
 - 3. Black & Decker - Article-user > Ni-Cd Battery user
 - 4. EnerSys / Gaz - Ni-Cd Battery manufacturer
 - 5. Floridienne Chimie - Cd compounds manufacturer
 - 6. Hoppecke - Ni-Cd Battery manufacturer
 - 7. Inmetco - Ni-Cd Battery recycler
 - 8. IZA - Zinc Association representing Cd producers
 - 9. JMIA - Japanese Association > Miners & smelters
 - 10. James M Brown - Cd pigment manufacturer
 - 11. 5N Plus - Cd-compounds for PhotoVoltaic applications
 - 12. Rockwood pigments - Cd pigment manufacturer
 - 13. Saft Batteries - Ni-Cd Battery manufacturer & recycler
 - 14. Sanyo - Ni-Cd Battery manufacturer
 - 15. Snam - Ni-Cd Battery recycler

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« P&L 2009 » for approval

Table 3: audited accounts 2009 - to be approved (EU€)			
	2009 Approved	2009 Audited	2010 Forecast
STAFFING			
Headquarters (A)	34.991	64.234	60.791
St Cons. (North America) (B)	36.015	38.063	47.748
Scientific Support - Health	4.066	11.392	4.434
Scientific Support - Environment	0	7.537	0
Legal support	0	0	0
Secretarial	2.579	2.578	2.500
Administration/Accounting	8.138	5.756	8.200
Total Staff Costs	85.789	129.560	123.673
OPERATIONS			
Rent/Rates/Office services (incl electricity)	10.227	11.121	12.000
Office Relocation/Refurbishment	0	0	0
Telecommunications	2.078	2.765	2.525
Postage & Express Services	890	1.847	876
IT support	2.272	2.111	4.000
Stationary and office supplies	1.687	3.320	3.941
Banking Costs	645	722	5.642
Meetings	1.402	4.065	5.630
Travel & Subsistence	16.734	7.439	6.878
Membership	2.157	2.096	3.095
Publication	0	0	0
Taxes / Contingency	741	349	500
Total Operation Costs	38.592	35.834	44.784
Depreciation & non-deductible	0	0	2.500
TOTAL Staff & Operational COSTS	124.381	165.394	170.957
SPECIAL STUDIES	0	1.547	0
-XYZ		1.547	
TOTAL EXPENSES	124.381	166.941	170.957
INCOME			
Membership fees	173.075	174.839	181.388
Interest income	3.330	2.157	365
Exchange corrections	-836	-4.978	3.500
Other income (studies direct contribution)	0	0	0
TOTAL SUBSCRIPTION INCOME	175.570	172.018	185.253
BALANCE	51.189	5.076	14.296
SURPLUS/(LOSS) FOR YEAR	51.188	5.076	14.298
SURPLUS/(LOSS) BROUGHT FORWARD	163.501	163.501	168.578
SURPLUS/(LOSS) CARRIED FORWARD	163.501	168.578	182.876

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Financial report « BS 2009 » for approval

Table 2: International Cadmium Association Audited BALANCE SHEET - 2009 - to be approved (EU€)					
	2008 Approved	2009 Audited		2008 Approved	2009 Audited
ASSETS			LIABILITIES		
CURRENT ASSETS			CREDITORS		
Cash in banks	181.198	179.796	Accounts payable,	32.062	19.404
Total Cash	181.198	179.796	accrued liabilities and deferred income		
			Total Creditors	32.062	19.404
Receivables	7.566	0			
Other receivables	4.769	5.504			
Accrued income and deferred charges	2.030	2.682			
Total Receivables	14.366	8.186			
FIXED ASSETS					
Acquisition value	2.225	2.225	FUND BALANCE		
Accumulated depreciation	-2.225	-2.225	Surplus (deficit) of the previous years	112.313	163.501
Net Book Value	0	0	Surplus (deficit) of the year	51.188	5.077
			TOTAL	163.501	168.578
TOTAL ASSETS	195.564	187.982	TOTAL LIABILITIES	195.564	187.982

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Business plan 2010-2013 – Review & proposal for approval

Table 3: International Cadmium Association 3y '11-13' Financial Plan (EU€)					1,02
	2010 P&L Forecast 8+4	2011 Plan	2012 Plan	2013 Plan	
STAFFING					
Total Staff Costs	123.673	159.582	147.063	149.604	
OPERATIONS					
Total Operation Costs	44.784	50.405	51.413	52.441	
Depreciation & non-deductible	2.500	0	0	0	
TOTAL Staff & Operational COSTS	170.957	209.987	198.476	202.045	
TOTAL EXPENSES	170.957	209.987	198.476	202.045	
INCOME					
Membership fees	181.388	181.388	190.457	190.457	
Interest income	366	3.000	3.000	3.000	
Exchange corrections	3.500	-1.500	-1.500	-1.500	
Other income (studies direct contribution)	0	0	0	0	
TOTAL SUBSCRIPTION INCOME	185.254	182.888	191.957	191.957	
BALANCE	14.298	-27.098	-6.517	-10.087	
SURPLUS/(LOSS) FOR YEAR	14.298	-27.098	-6.517	-10.087	
SURPLUS/(LOSS) BROUGHT FORWARD	168.578	182.876	155.777	149.260	
SURPLUS/(LOSS) CARRIED FORWARD	182.876	155.777	149.260	139.173	

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	2009 Rev.	2010 Plan	2010 P&L Forecast 8-4	2011 Plan	2012 Plan	2013 Plan
STAFFING						
Headquarters (A)	64,234	77,530	60,791	76,230	77,750	79,310
Sr Cons (North America)(B)	38,063	40,000	47,748	52,537	38,277	39,043
Scientific Support - Health	11,392	20,000	4,434	10,000	10,000	10,000
Scientific Support - Environment	7,637	20,000	0	10,000	10,000	10,000
Legal support	0					
Secretarial	2,578	2,575	2,500	2,575	2,627	2,679
Administration/Accounting	5,756	8,240	8,200	8,240	8,425	8,573
Total Staff Costs	129,590	188,345	123,673	159,582	147,063	149,604
OPERATIONS						
Rent/Rates/Office services (incl electricity)	11,121	12,000	12,000	12,000	12,240	12,485
Office Relocation/Refurbishment	0	0	0	0	0	0
Telecommunications	2,785	3,000	2,525	3,000	3,080	3,121
Postage & Express Services	1,847	761	576	537	653	670
IT support	2,111	4,000	4,000	3,985	4,085	4,148
Stationery and office supplies	3,320	2,600	3,941	3,023	3,084	3,145
Banking Costs	722	1,000	5,642	1,000	1,020	1,040
Meetings	4,085	4,500	5,630	5,000	5,100	5,202
Travel & Subsistence	7,439	12,000	9,878	10,810	10,290	10,615
Membership	2,096	2,450	3,095	4,339	4,426	4,514
Publication	0	750	0	750	765	780
Taxes / Contingency	349	500	500	500	510	520
Total Operation Costs	35,834	44,563	44,784	50,404	51,412	52,440
Depreciation & non-deductible	0	2,500	2,500	0	0	0
TOTAL Staff & Operational COSTS	165,394	215,408	170,957	209,986	198,475	202,044
SPECIAL STUDIES						
	1,647	0	0	0	0	0
TOTAL EXPENSES	166,941	215,408	170,957	209,986	198,475	202,044
INCOME						
Membership fees	174,839	180,000	181,388	181,385	190,407	190,457
Interest income	2,157	3,000	365	3,000	3,000	3,000
Exchange corrections	-4,976	-1,500	-3,560	-1,500	-1,500	-1,500
Other income (studies direct contribution)	0	0	0	0	0	0
TOTAL SUBSCRIPTION INCOME	172,019	181,500	180,293	182,885	191,907	191,957
BALANCE	8,076	32,908	14,298	-27,098	-6,517	-10,087
SURPLUS/(LOSS) FOR YEAR	8,076	-33,908	14,298	-27,098	-6,517	-10,087
SURPLUS/(LOSS) BROUGHT FORWARD	163,991	168,578	168,578	182,875	156,777	149,260
SURPLUS/(LOSS) CARRIED FORWARD	168,578	134,670	182,875	155,777	148,260	139,173

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Directors for 2011

- Proposal is made to maintain on place the former Officers and Directors for 2011

Chairman	Emil Josendal	IZA (Boliden)
Vice Chairman	Patrick de Metz	SAFT S.A.
Vice Chairman	Laurent Smits	Floridienne Chimie
Director	Anne Dekker	IZA (Nyrstar)
Director	Colin Graham	Rockwood Pigments (UK)Ltd
Director	Mitsunori Takao	Sanyo Electric Co., Ltd.
Director	Colin Thirlaway	Black & Decker Corporation
Director	Al Hardies	INMETCO
Director	Eric Nottez	SNAM
Director	Mark Edwards	IZA (Teck Resources)

- It is proposed, as well, to foresee an additional Director function for a representative of our members in the emergent photovoltaic sector.
The proposal is to nominate for that function:

Director	Maxime Cossette	5N Plus
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Update on activities

- Europe
- North America
- International

London – 14 October, 2010



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Update on the EU-regulatory issues

- H&S committee
 - Review of former meetings, i.e. the 5th meeting on 8/6
 - SCOEL SUMDOC status
- REACH-implementation

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Objective of the ICdA H&S Committee

- ❑ Disseminate the ICdA Guidance document to ICdA member companies and their key personnel
- ❑ Dissemination programme is expected to be approx. 10 sessions long. Each session focusing on specific sections of the Guidance:
 - Session 1: H&S Ctee set up, organization and planning
 - Session 2: Air quality measurement
 - Session 3: Medical surveillance programme – principles
 - Session 4: Individual and collective hygiene procedures
 - Session 5: The medical surveillance program
 - Session 6: Status of the REACH registration process Cd-substances
- ❑ Contents:
 - Share on the « WHY » and « WHAT » of each section
 - Exchange on current practice
 - Identify and share best practice

SCOEL – Sumdoc

- ❑ The Scientific Committee for setting of Occupational Exposure limits (OEL) issued February 2009 a first draft of their documented proposal for setting of indicative harmonised OEL and BLV (Bio-limit value)
- ❑ The public consultation was open until end of November 2009 and the Cd-industry reacted officially: paper and meeting November 30th 2009 Luxembourg
 - Scientific input by Prof. Bernard (results on a large workers-cohort)
 - Challenged items put forward by companies (different/additional for battery sector and for pigment sector)
 - Summary presented by ICdA

SCOEL

- Follow up of SCOEL SUMDOC paper

SCOEL minutes of March meeting 2010 took into account ICdA comments:

- ❖ A more explicit explanation on the mechanisms involved in genotoxicity will be added to the final SUMDOC document; reference will be made to the 10 µg/g creatinine in Cd/urine as a **threshold** for genotoxicity (Forni et al. in RAR).
- ❖ "Having defined a threshold for genotoxicity, it was shown that renal and respiratory effects are more sensitive than genotoxicity, in turn thought to be a pre-requisite for carcinogenicity."
- ❖ To the comments on pigments being very different to the rest of Cd compounds, because of their insolubility, this fact and improved terminology have been announced to be added to the document.

No information yet when the final SUMDOC paper will be published

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Our expectation of the SCOEL document in relation with REACH- dossiers

- **Threshold carcinogenicity** (10 µg/g creatinine in Cd/urine), which is incorporated in our REACH registration files
- **iOEL**: 4 µg Cd/m³ (respirable fraction: inhalation tox)
→ **DNEL**

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Consortium



REACH update —October 2010—

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Outline REACH

- Status consortia, Status Registration process,
- Issues of interest
 - DNELs/PNECs
 - Risk Management approaches for Cd
 - *Science tools recently developed and available for use (BLM screening tool, Soil Risk Calculator, DU exposure calculator)*

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Cd-Consortium Members: no changes

25 Members	Cd I	Cd II	Cd III	~55 Legal entities
SN PV GmbH	x	x	x	Photovoltaic
AMI DODUCO GmbH		x		Surface Technology (elec.)
BOCHEME a.s.		x		Cd-comp. Manuf. / Recycler
BOLIDEN AB	x			Cd-producer
CERAC Inc.		x		Cd-comp. Manuf.
FLORIDIENNE CHIMIE	x	x		Cd-comp. Manuf. / Recycler
H. C. MASTECZKO SLAKIE	x			Cd-producer
JAMES M. BROWN Ltd		x	x	Pigment manuf.
JSC Chelyabinsk Zinc Plant	x			Cd-producer
KCM 2000 S.A.	x			Cd-producer
KOREA ZINC	x			Cd-producer
LN Metals Ltd.	x			Trader
NYRSTAR S.A.-N.V.	x			Cd-producer
PORTOVESME s.r.l.	x			Cd-producer
RECYLEX S.A.		x		Photovoltaic
ROCKWOOD PIGMENTS		x	x	Pigment manuf.
SAFT S.A.	x	x		NiCad-battery
SOUTHERN COPPER CORP.	x			Cd-producer
TECK COMINCO Limited	x			Cd-producer
TODINI & Co, SPA	x	x		Trader
TRAXYS	x			Trader
UMICORE	x	x	x	Recycler / Photovoltaic
VOTORANTIM METAIS ZINCO sa.	x			Cd-producer
XSTRATA ZINC GmbH	x			Cd-producer
ZM SILESIA SA		x		Cd-comp. Manuf. / Recycler

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Registration process

- ❑ To allow timely registration for the Zinc and Cadmium Consortia members within 2010, the Lead Registrants agreed to register between August 17 and end September for each of the 32 dossiers
- ❑ The Consortium Secretariat was assisting them individually in that task

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Cd Scope in substances and status registration process

	Name	EINECS	Lead Registrant	Registr. process
	<i>Substances</i>			
1	Cadmium metal	231-152-8	Xstrata	Registered Sept. 21
2	Cadmium oxide	215-146-2	La Floridienne Chimie	Registered Sept. 16
3	Cadmium hydroxide	244-168-5	SAFT	Registered Sept. 17
4	Cadmium nitrate	233-710-6	La Floridienne Chimie	Registered Sept. 16
5	Cadmium chloride	233-296-7	5NPlus	Registered Sept. 8
6	Cadmium carbonate	208-168-9	Rockwood Pigments	Registered Oct. 12
7	Cadmium sulphide	215-147-8	5NPlus	Registered Sept. 8
8	Cd sulphoselenide	261-218-1 235-758-3	Rockwood Pigments	Registration in 2013
9	Cd Zn sulphide	232-466-8	Rockwood Pigments	Registration in 2013
10	Cd telluride	215-149-9	5NPlus	Registration in 2013
	<i>Intermediates</i>			
	Cadmium Sulphate	233-331-6	5NPlus	Registered Sept. 8

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Joint submissions

- The Consortium team wrote a guidance for joint-submissioners how to submit a co-registration dossier
- And organized several webinars (Oct 5, 6 & 7th) addressed to consortium members and purchasers of letter-of-access (LoAs)
 - to define and instruct on how to register individually in "Joint Submissions"
 - Per session: +/- 20 participants

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PNECs derived under REACH

Compartment	PNEC value for Cd
Freshwater	0.19 µg/L (generic; specific values are possible as a function of hardness)
Saltwater	1.14 µg/L
STP	20 µg/L
Freshwater sediment	1.8* mg/kg sediment d.w.
Saltwater sediment	0.64* mg/kg sediment d.w.
Soil	0.9 mg/kg soil d.w.

* added value

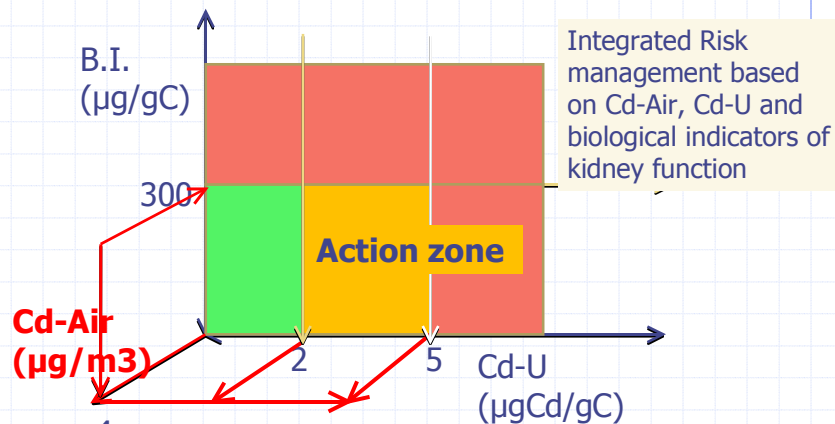
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Cadmium at the workplace: DNELs and risk management

- Workers general: DNEL= 4 µg Cd/m³
- Workplace Risk management
 - based on Individual medical follow up of parameters of exposure and effect for workers:
 - Cd in urine (µg Cd/g Creatinine) and /or Cd in blood (µg Cd/l)
 - integrated systemic exposure of the individual
 - early (subclinical) indicators of tubular (kidney) dysfunction, e.g.: β₂-MG and retinol binding protein

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Management of Cd-risk at the workplace (post-SCOEL)



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Cd-reach website: www.reach-cadmium.eu

→ Recent updates available

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Proposal for the Eighth International Cadmium Conference

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8th International Cadmium Conference (1)

- ❑ Now Tentatively Planned for April to June 2011 in Shanghai But Need Approval of Chinese Authorities
- ❑ Steering Committee Conference Call held on June 28, 2010
 - Theme: Risk Management and Control of Cadmium
- ❑ Agreed that we must have Chinese/Asian input for the conference which will include:
 - ❑ Market data – production, consumption & recycling
 - ❑ Political viewpoints on cadmium
 - ❑ Regulatory attitude towards cadmium
 - ❑ Public perception of cadmium in China
 - ❑ Cadmium risk management practices in China

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2010



8th International Cadmium Conference (2)

- Timing is now also critical since there is only 6 to 8 months left to organize conference
- Tentative Program
 - Welcome and Organizational Overview
 - Four General Overview Papers – Market and Applications, Health Effects, Environmental Effects, Regulations
 - Controlling Cadmium Exposure in the Workplace
 - Controlling Cadmium in the Environment
 - Controlling Cadmium in the General Population
 - ✓ Recycling of Cadmium
 - ✓ Cadmium in Consumer Products
 - ✓ Cadmium from Non-Product Sources

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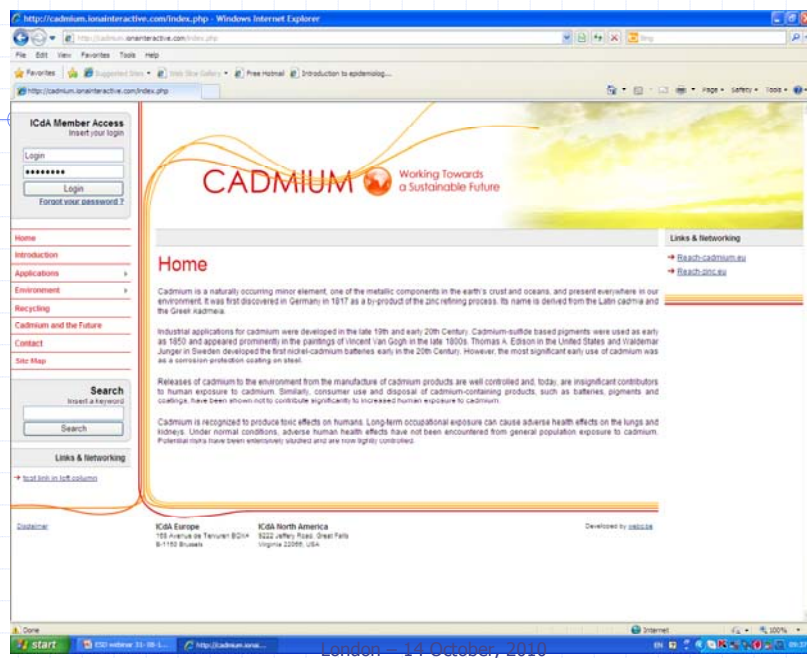
Update website ICdA

- The re-looking of the ICdA website(s) is nearly completed
- The 2 sites (public and members section) have been merged to cadmium.org
- Website under provisional web address, the definitive address will be :
<http://www.cadmium.org>
- The contents will be updated ... during the next months

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Regulatory Affairs Report North America and International

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North American Cadmium Issues

- ❑ Revision of the Toxic Substances Control Act (TSCA)
- ❑ Cadmium in Consumer Products Issues
 - ❑ Cadmium in Children's Jewelry Proposals
 - ❑ Cadmium in Enamels on McDonald's Glasses
- ❑ IRIS Update on Cadmium 2009 – 2011
 - ❑ Last Updated in 1998
 - ❑ Current Update Behind Schedule
 - ❑ EPA Has Invited ICdA to Submit Information
- ❑ State Legislation on Cadmium
 - ❑ Minnesota List of Chemicals of High Concern
 - ❑ California Safer Consumer Product Alternatives
- ❑ North American Regulatory Affairs Committee

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I - Revision of TSCA

- ❑ US Senate – S. 3209 Safe Chemicals Act of 2010
- ❑ US House of Representatives – H.R. 5820 Toxic Chemicals Safety Act of 2010
- ❑ Purposes of the Legislation
 - ❑ Ensure EPA has information on chemical hazards, uses and exposures to judge chemical's safety
 - ❑ Requires EPA to categorize and prioritize chemicals based on hazard and exposure characteristics.
 - ❑ Ensure expedited action to reduce use or exposure to "chemicals of highest concern."
 - ❑ Require that all chemicals be shown to be safe to remain or enter into commerce.
 - ❑ Ensure broad public access to chemicals information.
 - ❑ Promote development of safer chemical alternatives.

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Concerns for Industry

- ❑ Inclusion of mixtures as well as chemicals
- ❑ Aggregate and cumulative exposures ("Background?")
- ❑ Definitions of Persistent and Bioaccumulative
- ❑ Minimum data set required which includes uses
- ❑ EPA will have authority to require additional testing
- ❑ The presence of chemical substance in human tissues (biomonitoring data) may be critical factors in requirement for additional testing.
- ❑ Nanomaterials will be regulated as new substances.
- ❑ Safety determination based on chemical or chemical in a particular use?
- ❑ New properties considered including size, size distribution, shape, surface structure, reactivity, etc.
- ❑ Definitions of "Adverse Effect" greatly broadened

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Future Developments on TSCA Reform

- ❑ Both the House and Senate bills have been referred back to Committee, and no further action is expected in 2010 because of the upcoming elections and higher legislative priorities in the present Congress.
- ❑ TSCA Reform will affect all metals, and therefore ICdA will be working closely with NAMC to effect changes in the more problematic provisions of TSCA Reform.
- ❑ If the Democrats maintain control of Congress in the November elections, then there will be a substantial battle in 2011 over TSCA Reform.
- ❑ If the Republicans seize control of Congress in November, then it should be much easier for industry to modify some of the proposals' provisions.
- ❑ The ICdA North American Regulatory Affairs Committee will be working specifically on maintaining cadmium-containing products in commerce.

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II -Cadmium in Consumer Products

- ❑ Cadmium in Children's Jewelry
 - ❑ Negative publicity on imported Chinese jewelry along with EU proposed restrictions on cadmium in alloys (e.g. jewelry imported from India)
 - ❑ Environmental groups petition sent to CPSC, EPA requesting a ban on jewelry containing cadmium
 - ❑ CPSC issued a notice for comments by Oct 18th
 - ❑ EPA has responded to petition stating that if CPSC does not act, EPA will initiate a TSCA rulemaking
 - ❑ ICdA will respond with comments to CPSC
 - ❑ ICdA will also respond with comments to any proposed EPA rulemaking
 - ❑ Statement of ICdA position on children's jewelry?

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Proposed ICdA Statement

- ❑ The International Cadmium Association (ICdA) represents the interests of the world's producers, users and recyclers of cadmium metal and cadmium compounds, and strongly supports the safe use of these substances and their products. The association has noted with great concern the recent articles in the press reporting the use of cadmium-containing alloys in costume jewelry and, more particularly, in children's jewelry such as charm bracelets and necklaces imported from China.
- ❑ While some of these press reports have incorrectly overstated the health effects of cadmium in this case, the use of cadmium-containing alloys in children's jewelry is not a normally intended application and should never have occurred.
- ❑ The International Cadmium Association fully agrees with the United States Consumer Products Safety Commission (CPSC) that cadmium-containing alloys should not be utilized by importers or manufacturers of children's costume jewelry. ICdA and its Members promote the responsible use of cadmium which includes supporting the substitution of cadmium-free alloys in specific applications where the use of cadmium is not appropriate or poses unacceptable risks.

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Cadmium in Consumer Products

- ❑ Cadmium in Enamels on McDonald's Glasses
 - ❑ Initiated by California Environmental Group and Congresswoman Jackie Speier (D-CA)
 - ❑ Adverse publicity and CPSC pressure forced McDonald's to withdraw 12 million glasses even though they passed the Cd TCLP extraction limits.
 - ❑ Society of Glass and Ceramic Decorated Products (SGCD pro) and ICdA visited Ohio Senator and Congressman to express industry concern.
 - ❑ Senator Sherrod Brown (D-OH) and Congressman Zack Space (D-OH) have written letters to CPSC expressing concern over CPSC role in "voluntary" recall of McDonald's glasses and questioning test method for extractable cadmium in enamels.

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III - IRIS Update of Cadmium File

- ❑ Information in the IRIS file is important in that EPA regulatory actions must be based on the information in that file.
- ❑ Last Updated in 1998
- ❑ Currently scheduled for review and update, but other updates (As, Be, Cr, Cu) have precedence and cadmium review is well behind schedule.
- ❑ ICdA has contacted Lynn Flowers, Peer Review Leader for EPA Cadmium Update, and she has invited ICdA to submit information to their file.
- ❑ ICdA (Noomi Lombaert) will review IRIS file and compile studies to be submitted to EPA.

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IV- State legislation on Cadmium

➤ Minnesota Chemicals of High Concern

- ❑ Toxic Free Kids Act of 2009 requires Minnesota Department of Health to develop lists of Chemicals of High Concern (CHC) and Priority Chemicals (PC).
- ❑ Similar to lists in other states (ME, WA)
- ❑ Cadmium is on CHC list based on cancer, kidney, reproduction and development, and listings or legislation in other states (CA, ME, OR and WA).
- ❑ PC list will be developed from CHC list, will be based more on risk rather than hazard and will be published in February 2011.
- ❑ Only action thus far is publication of the lists and revision at least every three years.

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➤ California Safer Consumer Product Alternatives

- ❑ Draft Green Chemistry regulation would require:
 - ❑ Prioritization of toxic chemicals and products
 - ❑ Manufacturers to seek safer alternatives in products
- ❑ DTSC has released proposed legislation and requested comments by November 1, 2010
- ❑ Selection of chemicals based on identifying chemicals of concern which are most prevalent in consumer products in the marketplace.
- ❑ Phases of the program will include:
 - ❑ Prioritization of chemicals and their products
 - ❑ Alternatives assessment for priority products
- ❑ NAMC filed comments that Persistence and Bioaccumulation do not apply to metals

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➤ California Safer Consumer Product Alternatives

- ❑ Selection of the initial list of Priority Chemicals is based on
 - Chemicals that are carcinogens or reproductive toxins or both;
 - Chemicals that are listed as having mutagenic properties in the European Union Category 1A or 1B under Annex VI, part 3 of the regulation; or
 - Chemicals that have been determined by the US Environmental Protection Agency to be persistent bioaccumulative toxic chemicals. This latter criterion was the detailed subject of NAMC's comments.

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California Safer Consumer Product Alternatives

- ❑ Timelines for the proposed regulation
 - January 1, 2011: DTSC expects legislation adoption
 - June 1, 2011: Proposed initial list of Chemicals under Consideration issued for public review and comment.
 - March 1, 2012: Final initial list of Chemicals under Consideration will be issued.
 - July 1, 2012: Proposed initial list of Priority Chemicals issued for public review and comment.
 - March 1, 2013: Proposed initial list of Products under Consideration issued for public review and comment.
 - September 1, 2013: Proposed initial list of Priority Products issued for public review and comment.
 - December 1, 2013: Final initial list of Priority Products issued.

V - North American Regulatory Affairs Committee

- ❑ Organized mainly because of TSCA reform and issues with cadmium in consumer products
- ❑ First meeting held in Washington DC – Sept 16th
- ❑ Max Cossette of 5NPlus Elected Chairman
- ❑ Issues discussed as previously noted today
- ❑ Need expressed to have a regular monitoring system for legislation. Quote from NAMC lawyer?
- ❑ Possibility of need for funding to sponsor studies in support of information files on cadmium
- ❑ Mechanism for utilizing REACH data or EU Risk Assessment data on cadmium for US legislation
- ❑ Possible need for additional staff time

International Cadmium Issues

- ❑ UNECE LRTAP Heavy Metals Protocol and Task Force on Heavy Metals (TFHM)
 - Outcome of June 2010 TFHM Meeting in Stockholm
 - WGSR August 2010 Meeting in Geneva
- ❑ UNEP Heavy Metals Programs
 - Scientific Review on Cadmium
 - DTIE Report on Trade in Lead and Cadmium Products in Africa
 - UNEP Governing Council in Nairobi in February 2011
 - UNEP SAICM Chemicals in Products Project
- ❑ Revision of the WHO FAO JECFA Tolerable Intake Levels for Cadmium

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I -UNECE LRTAP Task Force on Heavy Metals

- ❑ Task Force Meeting in Stockholm on June 1-2, 2010 to further consider EU proposal to add mercury products to restrictions of Annex VI of Heavy Metals Protocol
- ❑ Lead in gasoline and mercury in primary batteries already prohibited. No cadmium products are banned.
- ❑ EU proposal is to ban all other mercury products.
- ❑ TFHM evaluated information from USA and Canada on:
 - ❑ Whether atmospheric emissions occur during production and use which lead to a bio-available form;
 - ❑ Whether emissions are a significant part of LRTAP;
 - ❑ Whether emissions cause adverse effects on human health and the environment.

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UNECE LRTAP Task Force on Heavy Metals

- ❑ Mercury products evaluated were batteries, measuring devices, EEE, fluorescent lamps, dental amalgams and switches and relays in vehicles.
- ❑ Canada plans to restrict mercury in batteries, switches and relays, and measuring devices, but to allow exemptions for mercury in lamps and dental amalgams.
- ❑ USA conducting studies to regulate mercury in batteries, switches and relays, measuring devices, flame sensors and thermostats, but does not plan to ban mercury in fluorescent lamps or dental amalgams.
- ❑ Thus, UNECE LRTAP Heavy Metals Protocol will probably add mercury in batteries, measuring devices, and switches and relays to list of prohibited products.

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UNECE LRTAP WGSR Meeting

- ❑ Working Group on Strategies & Review Meeting Held 30 Aug – 3 Sept in Geneva
- ❑ WGSR discussed options for revising the HM Protocol
 - ❑ Consideration of Swiss proposals to amend Protocol
 - ❑ Consider TFHM's technical review of EU proposal to add mercury products to Annex VI of HM Protocol
- ❑ Draft 2011 Workplan for Implementation of Convention
 - ❑ TFHM technical work on Sufficiency & Effectiveness Review
- ❑ 2010-2020 Strategic Vision for the Convention
 - ❑ Science and implementation work is likely to continue, but policy work will probably be reduced.
 - ❑ Emission reductions and abatement techniques developed to control particulate matter (PM) are expected to deliver acceptable reductions in emissions of metals other than Hg.
 - ❑ Ultimate priority will be, after current revision of the Protocol, to increase the number of countries ratifying and implementing the revised Protocol.

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UNECE LRTAP WGSR Meeting

- ❑ Swiss proposal to revise the Heavy Metals Protocol
 - ❑ Update BATs & ELVs per Sufficiency & Effectiveness Review
 - ❑ Accommodations for countries with economies in transition
 - ❑ Review EU proposal to add mercury products to Annex VI
 - ❑ Consider alternate mercury reduction strategies
 - ❑ Make consistent with POPs and Gothenburg Protocols
- ❑ Specific Changes Requested
 - ❑ Change base year from 1990 to 1985-1995 or beyond
 - ❑ Add manganese and aluminum facilities as point sources
 - ❑ Introduce new Annex VIII prohibiting export of mercury
 - ❑ Most ELVs for cadmium are established at 0.05 mg/m³
 - ❑ ELVs for cadmium for point sources in glass industry
 - ❑ Limit value for cadmium emissions = 0.05 mg/Nm³
 - ❑ Limit value for cadmium emissions in container glass production = 0.5 mg/Nm³ (N indicates normal T and P)
 - ❑ Limit value for cadmium emissions if cadmium compounds are used as coloring agents for quality reasons = 0.2 mg/Nm³

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UNECE LRTAP WGSR Meeting

- ❑ Important Differences Between Mercury and Cadmium Products within UNECE Programs
 - UNECE LRTAP has already agreed that cadmium is transported over only very short national or regional distances
 - Cadmium bio-availability issues and the methyl mercury factor does not exist for cadmium
 - Most cadmium environmental and human exposure does not originate from products whereas a major portion does for mercury
 - There appears to now be worldwide political consensus on mercury, but opinion is still much more divided on cadmium

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ICdA Strategic Plan for UNECE LRTAP

- ❑ Remain on TFHM and attend meetings
- ❑ Continue close relationships with USA and Canada
- ❑ Expand relationships with other countries with more sympathetic views
- ❑ Continue to compare cadmium product air emissions to total cadmium air emissions
- ❑ Continue to note that cadmium air emissions are not long-range and trans-boundary in nature
- ❑ Develop coherent industry voluntary plan to minimize cadmium air emissions
- ❑ Oppose viewpoint that trade in cadmium products results in trans-boundary air pollution

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II - UNEP Scientific Review on Cadmium

- ❑ UNEP is in the process of finalizing the Scientific Reviews on Lead and Cadmium
- ❑ The final versions will be circulated to Working Group on Lead and Cadmium for "minor comments."
- ❑ Final Reviews will be published electronically and presented to UNEP GC26 in Nairobi in February 2011 with a view to informing discussions on the need for global action on lead and cadmium
- ❑ UNEP has finally responded to ICdA protests about our comments not being posted to their website
- ❑ ICdA comments are available at http://www.chem.unep.ch/Pb_and_Cd/Information_responses_GC24_NGOs.htm
- ❑ UNEP states that these comments were posted on 1 December 2008

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UNEP Scientific Review on Cadmium

- Additional information requested by UNEP on cadmium
 - Exposure assessments and release inventories especially for developing countries
 - Atmospheric transport models for southern hemisphere
 - Extension of cadmium atmospheric models to demonstrate long range transport of cadmium
 - Ocean transport of cadmium
 - Data on natural vs. anthropogenic sources
 - Effects of dermal exposure to cadmium from jewelry
 - Sources of cadmium in waste other than batteries
 - Global flow of cadmium in products

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UNEP DTIE Report on Trade in Lead and Cadmium Products in Africa

- Draft report prepared in December 2008 and only released for comment in May 2009
- Workshop on Trade in Lead and Cadmium Products organized by Sweden in February 2009 in Geneva
- ICdA filed 20 pages of comments on draft report noting many errors and impossible conclusions
- Comments were not posted but UNEP claims they were posted on 17 June 2009
- ICdA comments now available at http://www.chem.unep.ch/Pb_and_Cd/African_study_trade_products_comments.htm.
- UNEP now conducting two additional studies on trade in cadmium products in Latin America and Asia
- Results of these studies to be presented 30 November – 1 December in Lima, Peru

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UNEP SAICM Chemicals in Products Program

- ❑ Initiated at SAICM ICCM 2 in 2009 in Geneva
- ❑ December 2009 workshop identified toys, jewelry, electronics, clothing, construction materials, personal care products and food containers as main product sectors of concern.
- ❑ "The flow of products is also a flow of chemicals"
- ❑ Planning case studies of priority sectors to identify existing information systems and stakeholder needs
- ❑ International workshop to be organized for early 2011
- ❑ Results and recommendations from these workshops and conferences will be presented at ICCM 3 in 2012
- ❑ Steering group for Chemicals in Products (CiP) Program is dominated by Sweden, no metals industry observer

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ICdA Strategic Plan for UNEP

- ❑ Clarify functionality and role of UNEP Working Group on Lead and Cadmium
- ❑ Offer constructive comments and offer to work with UNEP on cadmium-related reports
 - Scientific Review on Cadmium
 - Trade in Africa, Latin America and Asia Reports
 - Chemicals in Products Project
- ❑ Continue to work with USA and Canadian delegations with respect to UNEP Heavy Metals Program
- ❑ Expand relationships with other countries with more sympathetic views (Australia, China, Japan)

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III - Revision of the JECFA - **Tolerable Intake Levels for Cadmium**

- ❑ WHO FAO Joint Expert Committee on Food Additives (JECFA) met in Geneva, 8-17 June 2010
- ❑ Because of cadmium's exceptionally long half-life, JECFA withdrew PTWI and adopted PTMI (Provisional Tolerable Monthly Intake) level.
- ❑ New PTMI level = 25 µg/kg body weight
- ❑ New level corresponds to a PTWI of 5.75 µg/kg bw or PTDI of 0.82 µg/kg bw, a reduction of 18% from their previous levels.
- ❑ JECFA noted that "exposures to cadmium through diet for all age groups, including consumers with high exposures and subgroups with special dietary habits (vegetarians), are below the PTMI."

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Cadmium Market Report

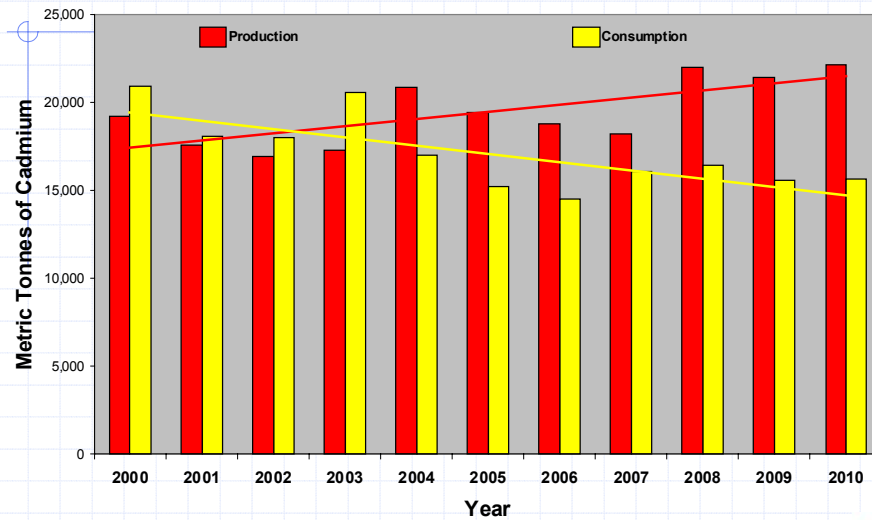
International Cadmium Association
General Assembly of Members

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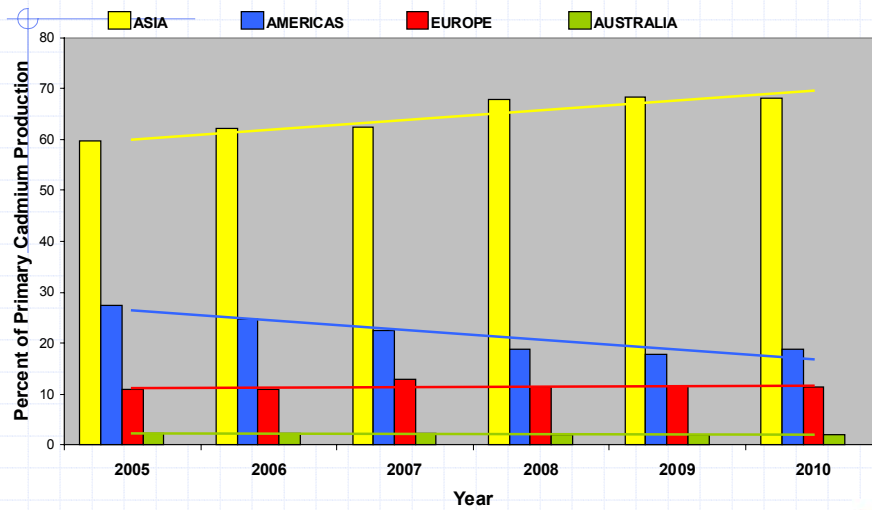
Primary Cadmium Production and Consumption, 2000-2010



61



Geographical Trends in Primary Cadmium Production, 2005-2010

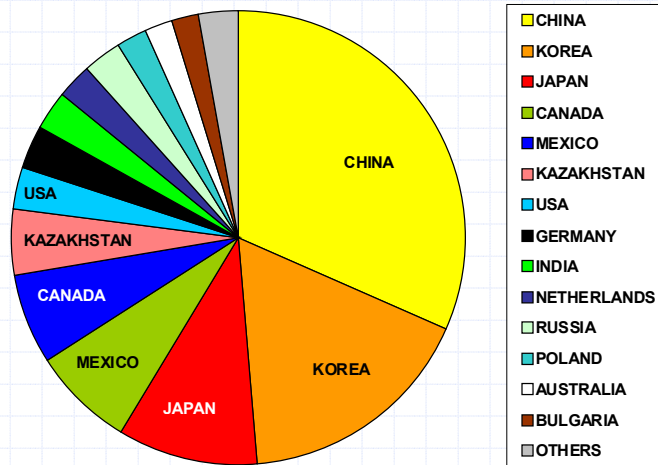


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2010 Primary Cadmium Production by Country

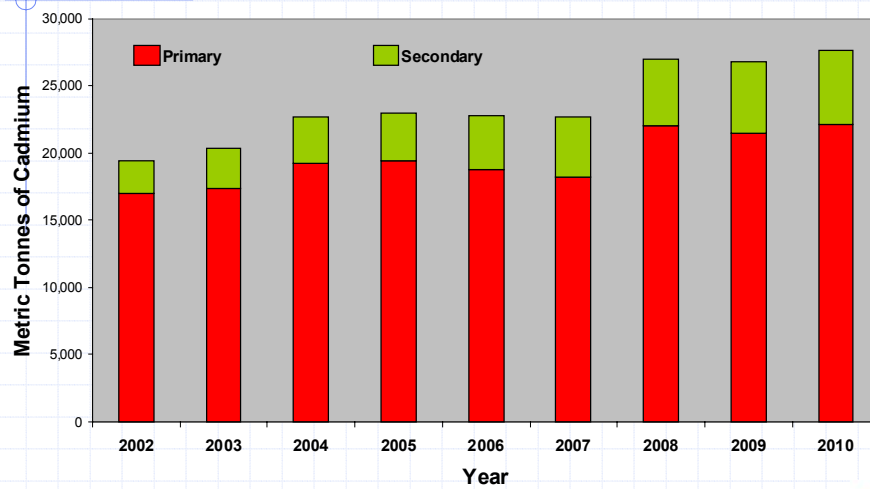


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Primary and Secondary Cadmium Production Trends, 2002-2010

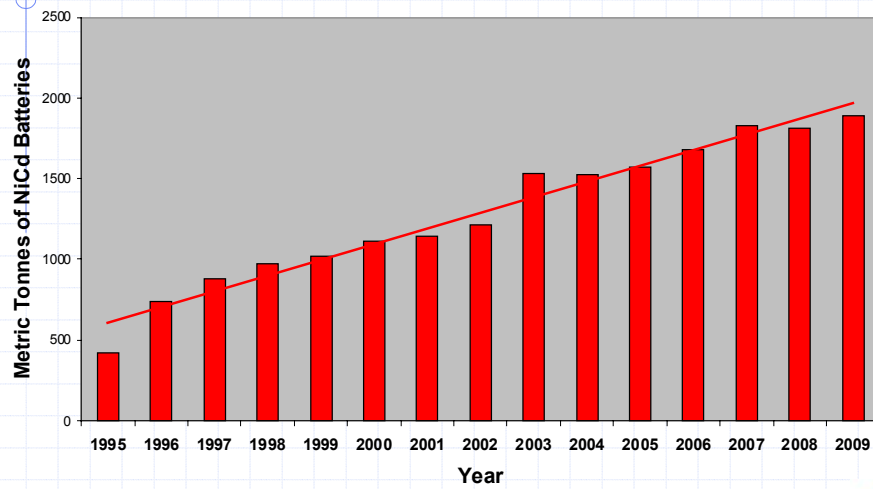


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NiCd Batteries Collected in the USA and Canada by the Rechargeable Battery Recycling Corporation



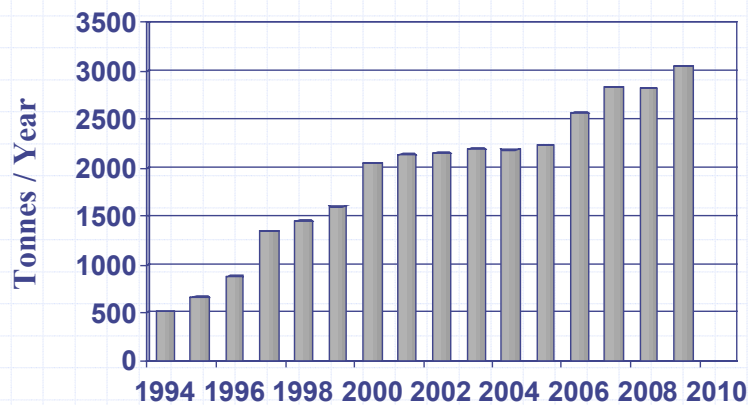
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Portable Ni-Cd Batteries

Spent Portable Ni-Cd Batteries from European Sources collected separately and processed in Recycling Plants



Data consolidated from SNAM, ACCUREC GmbH & SAFT AB by RECHARGE aisbl

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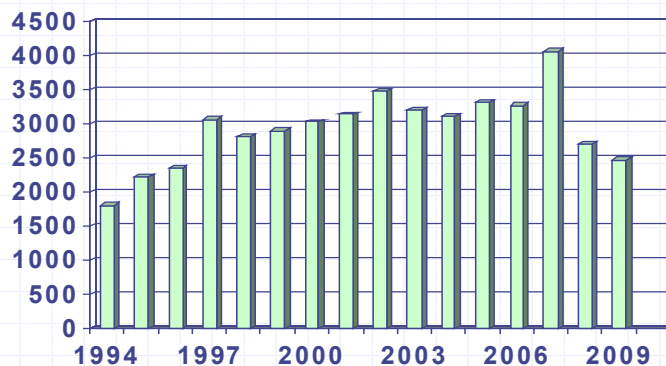
66



Industrial Ni-Cd Batteries

Spent Industrial Ni-Cd Batteries from European Sources
collected separately and processed in Recycling Plants
(15 EU MS + CH + N) - Data in Metric Tonnes per year

Industrial with Electrolyte



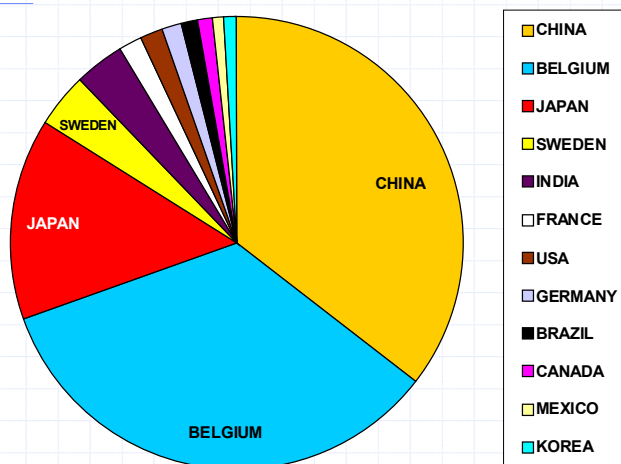
Data consolidated from SNAM, ACCUREC GmbH & SAFT AB by RECHARGE aisbl

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2010 Primary Cadmium Consumption by Country

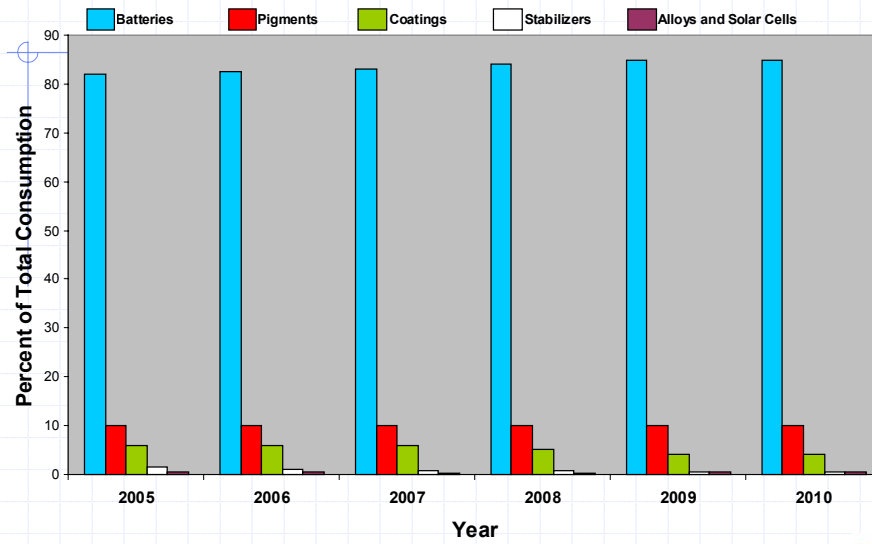


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Trends in Cadmium Consumption Patterns, 2005-2010

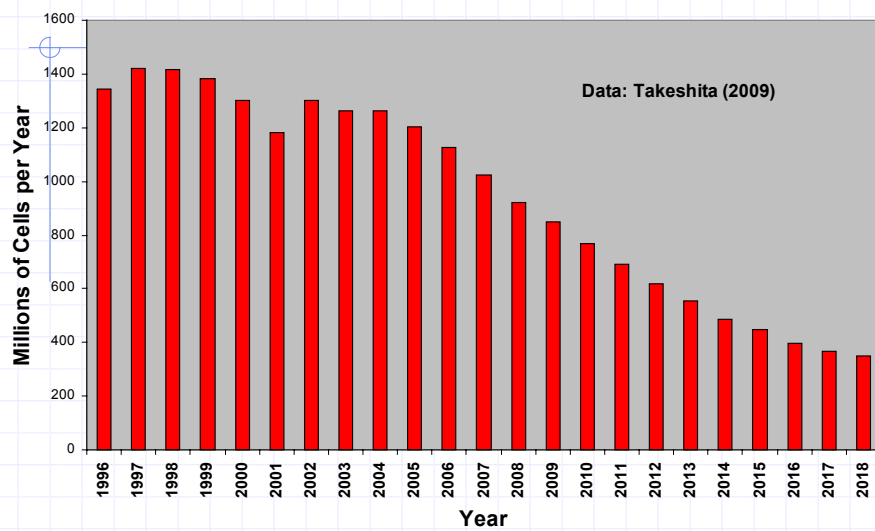


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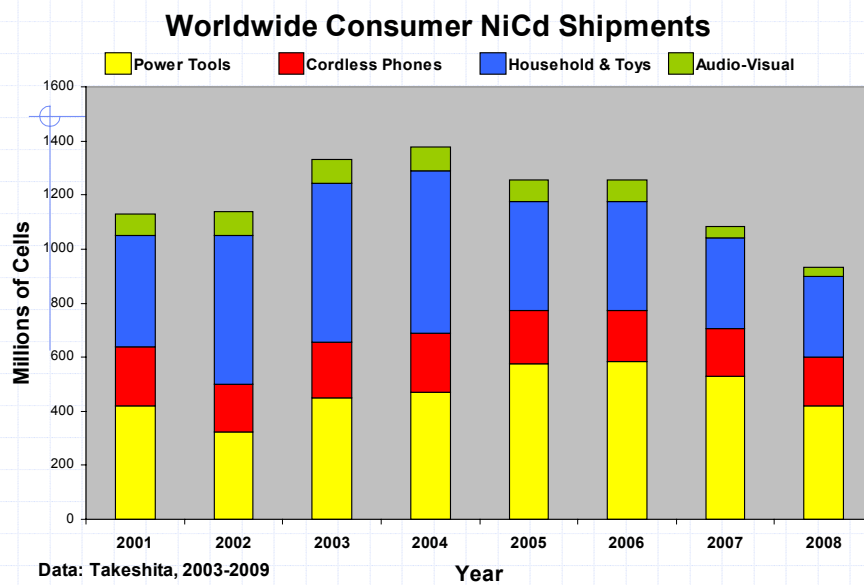
Portable NiCd Battery Demand Forecast, 1996 - 2018



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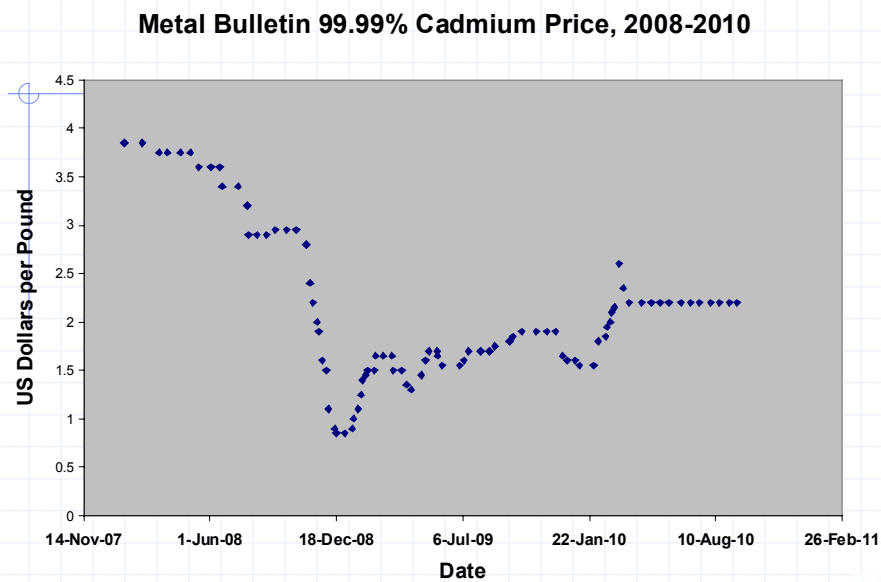
70





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Next meetings

- ❑ Next general Assembly: with your approval ...
 - **October 13, 2011 ?**
- ❑ Next Board of directors meeting:
 - December, 2010 ? tbd
- ❑ Next Reg-Committee NA: webmeeting format ?
 - ? Tbd
- ❑ Next H&S-Committee meetings:
 - October 15, 2010
 - June 14, 2011
 - October, 2011 tbd



International Cadmium Association

**BUSINESS PLAN 2011
and financial forecast 2011-2012-2013**

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

14 October 2010

International Cadmium Association

2011 Business Plan

1 Introduction

The International Cadmium Association confirms its strategic vision to be a forum for producers and users of Cadmium metal and its compounds to share collective interests.

This Business Plan sets out the operational and financial plans for ICdA in 2011 and gives tentatively a 3 year perspective of the financial plan..

2 Mission and Objectives

ICdA's mission is:

- To monitor scientific and regulatory developments that may impact significantly members' cadmium-related activities
- To respond to regulatory proposals and make scientifically-based data available to the community and authorities
- To report on scientific and regulatory developments to members

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

3 ICdA Secretariat and Staff

IZA provides staffing and secretariat services for ICdA. Activities will largely be executed by three part-time principal staff members.

Principal ICdA officers are shown in Table 1.

Table 1: ICdA Staff 2011		
General Manager Mr. Christian Canoo	<i>Location:</i>	Brussels, Belgium
	<i>Responsibilities:</i>	Association management and control; EU regulatory affairs
	<i>Reports to:</i>	ICdA Chairman
	<i>Min Activity level:</i>	0.3 man-year
Environment Assistant	<i>Location:</i>	Brussels, Belgium

International Cadmium Association

2011 Business Plan

Mrs. Nôomi Lombaert	<i>Responsibilities:</i> EU and International regulatory affairs <i>Reports to:</i> General Manager <i>Min Activity level:</i> 0.33 man-year
Senior Consultant Mr Hugh Morrow	<i>Location:</i> Washington DC, USA <i>Responsibilities:</i> North American regulatory affairs; specific international regulatory affairs <i>Reports to:</i> General Manager <i>Min Activity level:</i> 0.35 man-year / mutually agreed to be increased up to 0.50 man/year in 2011 (TSCA agenda)

These staffing arrangements are, in principle, flexible and higher levels of staffing can be applied dependent on ICdA requirements, other priority settings (e.g. TSCA, REACH dossiers) and available funding.

3.1 Accounting and Administrative / secretarial support

ICdA does not employ any support staff. Administrative and secretarial support for ICdA's missions will be drawn from IZA staff (at cost) or otherwise outsourced

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 other resources. Support may also be drawn from other individuals/organizations, as required. These organizations will be reimbursed for costs incurred in providing this support.

International Cadmium Association

2011 Business Plan

4	2011 Activities
----------	------------------------

Activities in 2011 will focus on:

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

4.1 Regulatory Developments

4.1.1 European Union

Priorities:

- Prepare an update of the "ICdA Guidance document" on occupational preventive management in line with the risk management envisaged for the Reach dossiers. In addition, a more user-friendly version would be an asset.
- Running the EH&S-Steering committee (~2-3 times in 2011) in order to i.e. efficiently exchange views on implementation of the ICdA Guidance document and Bio-monitoring data;
- REACH :
 - o Interfacing with autonomous Reach Cd Consortium, especially regarding the monitoring of the National initiatives and other to list Cadmium or cadmium compounds as substances to be Authorised (Annex XV / Annex XIV process)
 - o Continuing providing the "Trustee" function to that Consortium: i.e. Bio-monitoring data – ICdBio 3 review (study Prof. Bernard UCL)
 - o providing scientific support if deemed necessary
- Follow-up of SCOEL – SUMDOC- final version (still not yet published), a requirement of the EU Commission regarding actions to be conducted in the frame of a Risk Reduction Strategy).
- Finalisation of the revision-process of the BREF notes under IPPC

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.

International Cadmium Association

2011 Business Plan

4.1.2 North America

Priorities:

- Activities in the United States Congress and EPA to revise the Toxic Substances Control Act, require extensive reporting on cadmium-containing substances and products, and possibly impose restrictions on the marketing of cadmium-containing products.
- Activities to address consumer, public and regulatory perceptions concerning cadmium in consumer products and, most particularly, in products intended for children such as toys and jewelry.
- Activities in support of the revision of the US EPA's Integrated Risk Information System (IRIS) file on cadmium, which forms a large part of the formal basis for EPA regulations on cadmium.
- Conduct regular meetings of the North American Regulatory Affairs Committee to address the priorities noted above and others that may arise during the year.

Monitoring level:

- Proposed US State and Canadian Provincial legislation restricting the manufacture, sale or distribution of certain cadmium-containing products.
- Toxicological reviews on cadmium and cadmium compounds by the Agency for Toxic Substances & Disease Registry (ATSDR), the National Toxicology Program (NTP), the American Conference of Industrial Governmental Hygienists (ACGIH) and other governmental and non-governmental organizations.

4.1.3 International

Priorities

:

- UNECE Long Range Transboundary Air Pollution (LRTAP) Heavy Metals Protocol. Participate in the activities of the Heavy Metals Task Group to revise the Protocol in line with the Sufficiency & Effectiveness Review, the Swiss Proposal to introduce revised BATs and ELVs, and the EU proposals to impose restrictions of certain heavy-metal products.
- UNEP Heavy Metals Program. Work on the UNEP Scientific Review on Cadmium, the UNEP DTIE Trade in Products Reports in Africa, South America and Asia, and the UNEP SAICM Chemicals in Products Program to oppose the proposal or adoption of cadmium

International Cadmium Association

2011 Business Plan

product prohibitions as a result of the UNEP Governing Council meeting in Nairobi in February 2011.

Monitoring level:

- The adoption of mandatory cadmium product recycling laws and EU-type restrictions on cadmium products by individual countries in Asia, South America and Africa.
- WHO/FAO limits for dietary exposures to cadmium through monitoring of the activities of the Joint Expert Committee on Food Additives (JECFA).

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. With the approval of the General Assembly, re-organize and thoroughly update our website, and remove material which is significantly out-of-date.

One General Assembly of Members is usually held in October (London, England). An information meeting may also be held in April/May in North America or through webinar conferences depending upon the preferences of ICdA Members. Other meetings and conference calls of the Board of Directors and ICdA Committees will be held as required to address specific developments.

With the approval of the General Assembly, develop plans for the Eighth International Cadmium Conference to be held in Shanghai, China in Q3- 2011.

4.3 Communications activities

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. See suggestions above about updating the public website (www.cadmium.org) with the more recent developments.

On request of ICdA-members, the “Cd Guidance Document” should receive a revised “user-friendly” version: production of a brochure / leaflet will be considered in 2011. Consideration should also be given to reprinting the brochure, “Cadmium: Working Towards a Sustainable Future,” which was revised and updated during the Summer 2010.

4.4 Statistics and Market Information

An ongoing but 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.

International Cadmium Association

2011 Business Plan

5 2011 Financial Plan

The proposed 2011 financial plan and a 3y-budget perspective is given in Table 4.

**Table 4: International Cadmium Association
3y '11-13' Financial Plan
(EU€)**

1,02

	<u>2009 Rev. *</u>	<u>2010 Plan</u>	<u>2010 P&L Forecast 8+4</u>	<u>2011 Plan</u>	<u>2012 Plan</u>	<u>2013 Plan</u>
STAFFING						
Headquarters (A)	64.234	77.530	60.791	76.230	77.755	79.310
Sr Cons.(North America)(B)	38.063	40.000	47.748	52.537	38.277	39.043
Scientific Support - Health	11.392	20.000	4.434	10.000	10.000	10.000
Scientific Support - Environment	7.537	20.000	0	10.000	10.000	10.000
Legal support	0	0	0	0	0	0
Secretarial	2.578	2.575	2.500	2.575	2.627	2.679
Administration/Accounting	5.756	8.240	8.200	8.240	8.405	8.573
Total Staff Costs	129.560	168.345	123.673	159.582	147.063	149.604
OPERATIONS						
Rent/Rates/Office services (incl electricity)	11.121	12.000	12.000	12.000	12.240	12.485
Office Relocation/Refurbishment	0	0	0	0	0	0
Telecommunications	2.765	3.000	2.525	3.000	3.060	3.121
Postage & Exoress Services	1.847	763	576	837	853	870
IT support	2.111	4.000	4.000	3.985	4.065	4.146
Stationary and office supplies	3.320	2.600	3.941	3.023	3.084	3.145
Banking Costs	722	1.000	5.642	1.000	1.020	1.040
Meetings	4.065	5.500	5.630	5.000	5.100	5.202
Travel & Susbsitence	7.439	12.000	6.878	15.970	16.290	16.615
Membership	2.096	2.450	3.095	4.339	4.426	4.514
Publication	0	750	0	750	765	780
Taxes / Contingency	349	500	500	500	510	520
Total Operation Costs	35.834	44.563	44.784	50.405	51.413	52.441
Depreciation & non-deductible	0	2.500	2.500	0	0	0
TOTAL Staff & Operational COSTS	165.394	215.408	170.957	209.987	198.476	202.045

International Cadmium Association

2011 Business Plan

<u>SPECIAL STUDIES</u>	1.547	0	0	0	0	0
- XYZ	1.547	0	0	0	0	0
- XYZ						
	0	0	0	0	0	0
TOTAL EXPENSES	166.941	215.408	170.957	209.987	198.476	202.045
<u>INCOME</u>						
Membership fees	174.839	180.000	181.388	181.388	190.457	190.457
Interest income	2.157	3.000	366	3.000	3.000	3.000
Exchange corrections	-4.978	-1.500	3.500	-1.500	-1.500	-1.500
Other income (studies direct contribution)	0	0	0	0	0	0
		0	0	0	0	0
TOTAL SUBSCRIPTION INCOME	172.018	181.500	185.254	182.888	191.957	191.957
BALANCE	5.076	-33.908	14.298	-27.099	-6.518	-10.088
SURPLUS/(LOSS) FOR YEAR	5.076	-33.908	14.298	-27.099	-6.518	-10.088
SURPLUS/(LOSS) BROUGHT FORWARD	163.501	168.578	168.578	182.875	155.776	149.258
SURPLUS/(LOSS) CARRIED FORWARD	168.578	134.670	182.875	155.776	149.258	139.170

Rates of subscription for 2011 and following years were considered unchanged over 2010, and are given in Appendix I.



ASSESSMENT SCHEDULE 2011

The assessable period for 2011 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, 2010 through December 31, 2010. The Board of Directors has set the following assessment rates (euro per pound of cadmium contained) for 2009 – The same rates will apply in 2011:

<u>CLASSIFICATION</u>	<u>DUES BASIS</u>	<u>2011 DUES</u>
Cadmium Producers	Total Pounds of Cd Production	euro 0.025
	Minimum Assessment	euro 5,115
	Maximum Assessment	euro 51,140
Cadmium Recyclers	Total Pounds of Cd Production (excluding toll treatment)	euro 0.0128
	Minimum Assessment	euro 2,560
	Maximum Assessment	euro 25,570
Cadmium Oxide Producers	Total Pounds of Cd Contained In Cadmium Oxide Production (excluding Primary Metal Production reported above)	euro 0.0013
	Minimum Assessment	euro 2,560
	Maximum Assessment	euro 25,570
Other Cd-compound Producers	Total Pounds of Cd Contained In Cadmium Compound Production (excluding Primary Metal Production reported above)	euro 0.0013
	Minimum Assessment	euro 2,560
	Maximum Assessment	euro 25,570
Cd Metal/Compounds Consumers	Total Pounds of Cd Consumption	euro 0.0026
	Minimum Assessment	euro 2,560
	Maximum Assessment	euro 25,570
Mining Companies	Total Pounds of Cd Mined (excluding Primary Metal Production reported above)	euro 0.0128
	Minimum Assessment	euro 2,560
	Maximum Assessment	euro 25,570
Others	International Zinc Association (IZA)	euro 95,000



GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
ATSDR	Agency for Toxic Substances and Disease Registry (USA)
BAT	Best Available Technology
BI	Biological Indicator(s)
CDC	Center for Disease Control (USA)
ChAMP	Chemicals Assessment and Management Program (USEPA)
COM	Council of Ministers (EU)
CMR	Carcinogenic, Muta-genetic and Reproductive Toxicant
CRT	Cathode Ray Tube
CSA	Chemical Safety Assessments
CSR	Chemical Safety Report
DG	Directorate General
DEQ	Department of Environmental Quality
DNEL	Default No Effect Level
DTIE	Division of Trade, Industry and Economics (of UNEP)
DU	Downstream User
E	Environment
EB	Executive Body (of the UNECE LRTAP Treaty)
EC	European Commission
ECHA	European Chemicals Agency
EEE	Electrical and Electronic Equipment
EINECS	European Inventory of Existing Chemical Substances
ELV	Emission Limit Value
EPA	Environmental Protection Agency (United States)
EU	European Union
FAO	Food and Agricultural Organization (United Nations)
GA	General Assembly of Members of the International Cadmium Association
GACT	Generally Available Control Technology
GC	Governing Council (of the United Nations Environment Program)
GES	Generic Exposure Scenario
GHS/CLP	Globally Harmonized System of Classification, Labeling and Packaging
HH	Human Health
HM	Heavy Metals
H&S	Health and Safety Committee of International Cadmium Association
IARC	International Agency for Research on Cancer
ICCM	International Conference on Chemicals Management (of SAICM)
ICMM	International Council on Metals and Mining
ICdA	International Cadmium Association

IFCS	Intergovernmental Forum for Chemical Safety
ILA	International Lead Association
i-OEL	Inhalable Occupational Exposure Limit (Based on Respirable Fraction)
IOMC	International Organization for Management of Chemicals
IPSRM	International Panel for Sustainable Resource Management (of UNEP)
IRIS	Integrated Risk Information System (USEPA)
IUCLID	International Uniform Chemical Information Database
IZA	International Zinc Association
IZA-E	International Zinc Association - Europe
JECFA	Joint Expert Committee on Food Additives (World Health Organization)
LRTAP	Long Range Transboundary Air Pollution
MS	Member States (of the European Union)
MSW	Municipal Solid Waste
NAMC	North American Metals Council
NCEA	National Center for Environmental Assessment (of U.S. EPA)
NCOM	Nordic Council of Ministers
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NOEL	No Observable Effect Level
NTP	National Toxicology Program (USA)
OECD	Organization for Economic Cooperation and Development
OSPAR	Oslo-Paris Convention
PRBA	Portable Rechargeable Battery Association (United States)
PRTR	Pollutant Release and Transfer Registry
PTWI	Provisional Tolerable Weekly Intake
PVC	Polyvinylchloride
RA	Risk Assessment
RBRC	Rechargeable Battery Recycling Corporation (North America)
REACH	Registration, Evaluation & Authorization of Chemicals (EU)
RIP	REACH Implementation Projects
RPA	RPA Ltd. (formerly Risk Policy Analysts), Consultant for EU
RRS	Risk Reduction Strategy (European Commission)
SAICM	Strategic Approach to International Chemicals Management
SCOEL	Sub-Committee on Occupational Exposure Levels
SEE	South East Europe
SIEF	Substances Information Exchange Forum
SUMDOC	Summary Document
TCNES	Technical Committee on New and Existing Chemicals
TFHM	Task Force on Heavy Metals (UNECE LRTAP Heavy Metals Protocol)
TSCA	Toxic Substances Control Act (United States)
UCL	Universite Catholique Louvain (Belgium)
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WGs	Working Groups
WGSR	Working Group on Strategies and Review (of UNECE LRTAP Treaty)
WHO	World Health Organization
WSSD	World Summit on Sustainable Development