JOINT STUDY GROUPS’ WORKSHOP ON METALS RECYCLING
(ST PETERSBURG 10 – 12 SEPTEMBER 2003)

WORKSHOP FINDINGS

The Joint Study Group’s international workshop on metals recycling was held in St Petersburg, Russia on 10 –12 September 2003. The Workshop was hosted by the Government of Russia and organised by the three intergovernmental Study Groups – the International Lead and Zinc Study Group, the International Copper Study Group, and the International Nickel Study Group with further sponsorship of the UN Common Fund for Commodities.

The workshop brought together over 100 participants including representatives from governments (policy makers/regulators), representatives of industry (metal recyclers, producers, traders, collectors), and other stakeholders to examine the challenges and benefits of metals recycling, share experiences with different jurisdictions from around the world and to look at metal-bearing recyclable materials as valuable, globally traded commodities.

Particular emphasis was placed on issues concerning developing countries and the workshop was structured to give participants the opportunity to discuss recycling policies and practises, recycling markets and information as well as recycling technology and innovation.

Recycling Policy

In the area of recycling policy the issues of Environmentally Sound Management (ESM), waste definition and classification, trade distorting measures and scrap supply deficits were discussed.

Delegates agreed that there needed to be a range of flexible policy options that enhanced recycling without hindering current successes and that there needed to be a change in perception to define recyclables as input materials and not wastes.

Furthermore, the workshop found that:

Governments should:

- Explore the role of Life Cycle Assessment as a tool for assessing environmental benefits and impacts both to develop integrated product policy and formulate regulations
- In cooperation with other stakeholders formulate robust LCA protocols and models that consider metal properties appropriately and fully encompass metals recycling.
- Emphasise the contribution of metals recycling to resource efficiency of use
- Promote metals recycling as a key element in achieving sustainable development
- Pursue flexible approaches to formulating recycling policy that balance regulatory measures with market based incentives appropriate to local conditions
- Encourage the creation of collection and recycling infrastructure through the provision of financial and technical assistance
- Facilitate the sharing of experience on aspects such as materials flow management and recycling policies
- Facilitate trade in international recyclable materials through addressing trade distorting policies that affect the flow of recyclables
• Harmonise international efforts to regulate waste management and define globally applicable criteria for Environmentally Sound Management (ESM)

Industry should:

• Develop strategic alliances, including with the environment movement, to formulate and communicate appropriate messages on the benefits of recycling to the public, commercial sector and governments
• In co-operation with other stakeholders formulate robust LCA protocols and models that consider metal properties appropriately and fully encompass metals recycling
• Promote metals recycling as a key element in achieving sustainable development
• Strengthen dialogue between metals producers and customers on recycling issues

Recycling Markets

Discussion on recycling markets and information also highlighted the role of market distortions (such as scrap trade restrictions and protectionist measures) in determining future scrap supplies. Delegates discussed the feasibility of creating a global level playing field for scrap recycling and considered how scrap trade restrictions could be discouraged.

Regarding recycling markets the workshop found that:

• The drivers behind international trade and movement of metal scrap are economic (metal and scrap prices) and regulatory (export bans, fiscal measures)
• More detailed analysis of trade data and trade measures (such as tariffs and fiscal instruments) is necessary to understand the impact of past events and regulation as well as deviations in current trade movements
• Aggregation of existing data rather than generation of newer, very detailed data would be more useful and cost effective in providing a coherent picture of the current non-ferrous metal trade situation
• The Study Groups, supported by governments, should take the lead and industry should assist by interpreting the data gathered

Recycling Ratios

A discussion was also held on market information and delegates emphasised the importance of data on recycling and the need for co-ordinated data collection. The complexity and responsibility for data gathering was discussed.

Regarding recycling ratios the workshop found that:

• While the Recycling Input Ratio (RIR) is useful in understanding the composition of input materials to produce refined metal, the Recycling Efficiency Ratio (RER) developed by the Study Groups is a better measure of sustainability and must be used in addition and preferentially to the RIR.
• There is merit in using a common approach to calculating the ratios between the Study Groups and sharing assumptions across all the non-ferrous metals
• The common definitions of the recycling ratios need to be communicated within industry, to customers, to policy makers in government and to NGOs
• There is an opportunity to act quickly to promote use of the ratios in Europe within the context of the EU’s initiative on the sustainability of natural resources. The Study Groups have a role to globalise and standardise the methodology as well as the underlying data and assumptions and to improve the understanding of all stakeholders
There is a need to indicate the optimal (range of) the recycling efficiency ratio, and communicate clearly why 100% is impossible

Recycling Technology and Innovation

The discussions on recycling technology and innovation considered the concept of best available technology (BAT), design options for re-use or life extension, and the need for modular approaches that enable new procedures and facilities to be added as recycling businesses improve profitability and proficiency.

The workshop found that:

- There is a need to improve communication along the value chain between metal producers and recyclers to raise awareness of changes in materials flow such as feed composition
- There is a need to promote design for recycling among metal product manufacturers
- Awareness of recycling should be enhanced at all levels through public education and outreach to promote changes in behaviour and supportive public policy
- Technologies applicable to developed countries are not necessarily applicable to those nations in the developing world, and manual handling for example may still be important
- There is no single “best available technology” and that technology choice depends on cost, economic and environmental benefit
- There should be co-operative efforts to increase proficiency and to enhance the exchange of information on recycling between countries
- The Study Groups could have a role in compiling and disseminating critical assessments of existing recycling technologies
- Developing countries often receive goods that contain hazardous substances, which cannot be processed at the end of life in these countries (CFCs in refrigerators shipped in the framework of aid programs is an example)
- Recycling technology needs to be introduced in developing countries in modules that allow for acceptance of the first stage before proceeding to a second stage; education on sound environmental and health practices in the informal sector might be a good start.