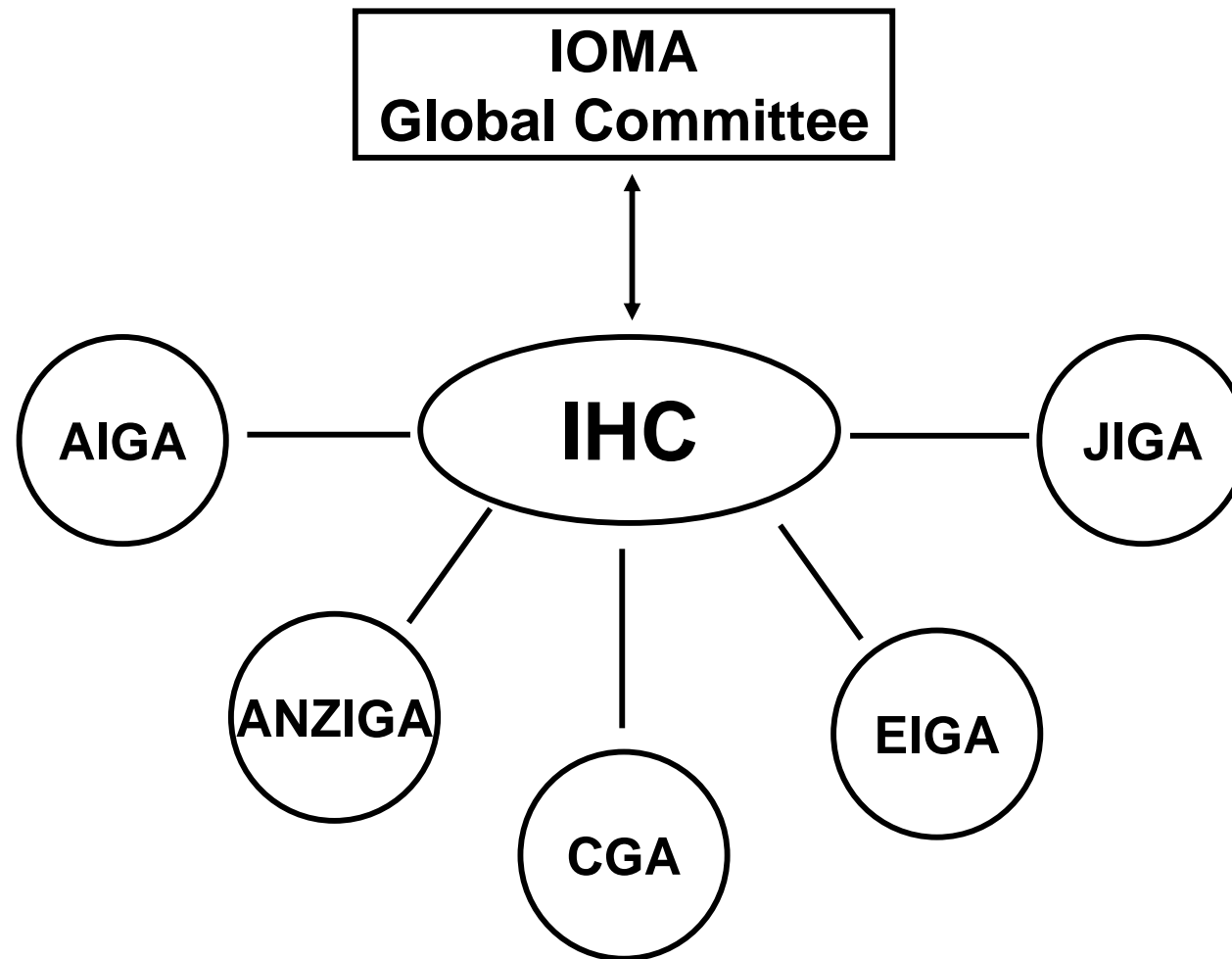


International Harmonisation EIGA Internal Process

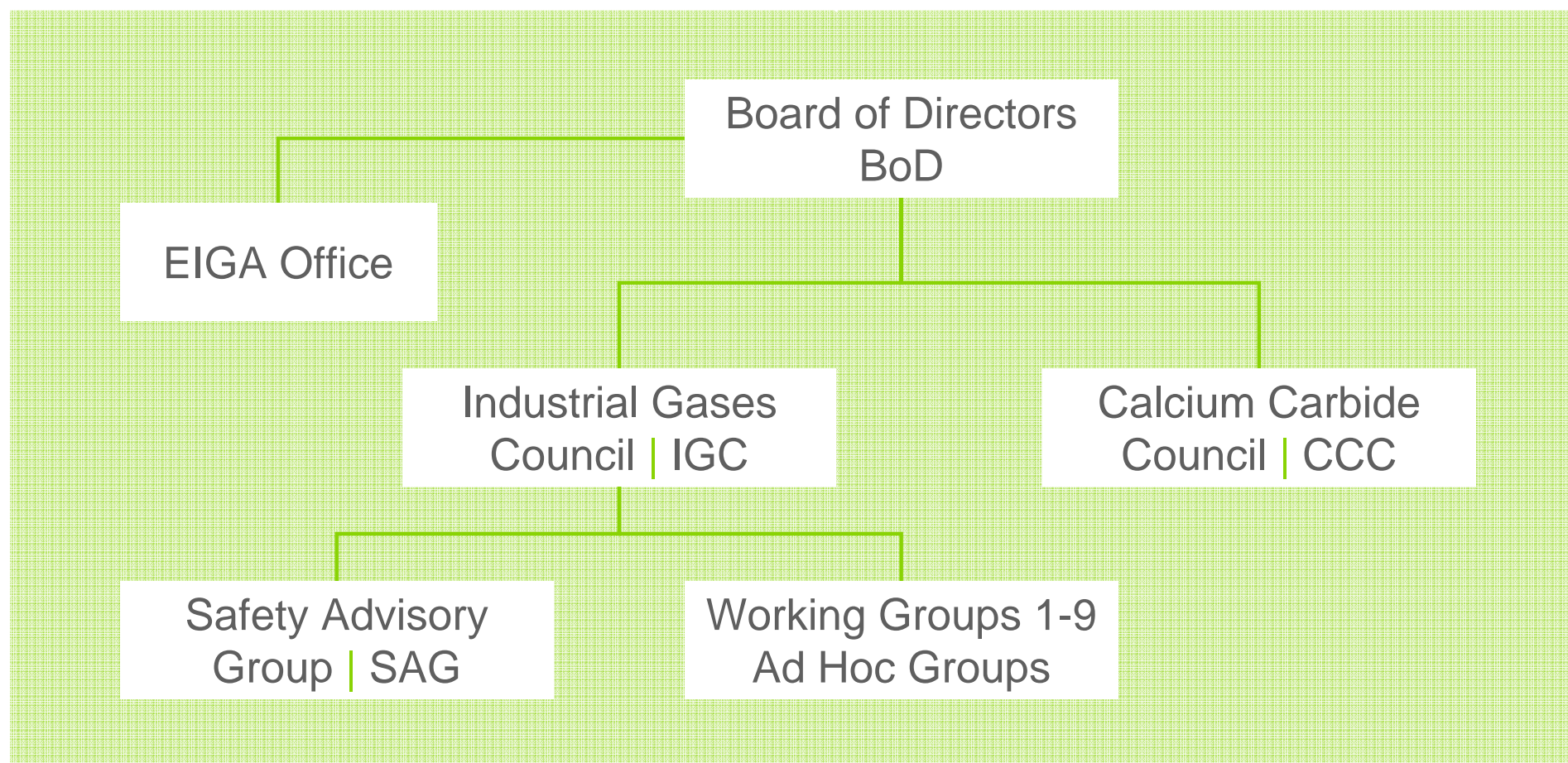
**Helmut Kahl (Linde)
Chairman Industrial Gases Council**

**Presented at AIGA 2005 Meeting
30 August 2005**

International Harmonisation



The EIGA Organisation



Working Group Organisation

•SAG	Safety Advisory Group	H Oehmen	AL
•WG 1	Transport	C. Jubb	BOC
•WG 2	Gas Cylinders and Pressure Vessels	W. Dörner	Linde
•WG 3	Process and Process Equipment	M. Masson	AL
•WG 4	Specialty Gases	K. Cleaver	BOC
•WG 5	Environment	S. Bradley	AP
•WG 6	Cryogenic Vessels	H. Barthélémy	AL
•WG 7	Medical Gases and Equipment	P. Henrys	BOC
•WG 8	Food Gases and Carbon Dioxide	H. Zacher	Linde
•WG 9	Classification, Labelling and SDS	J. Merckaert	Carbagas

Key Focus Areas

Safety
our prime concern

Technical
legislation and
standards

Harmonisation
within the industry

Effectiveness
of working groups
and processes

Key Focus - Harmonisation

Harmonisation
within the industry

- » AIGA, ANZIGA, CGA, EIGA and JIGA Co-operation
- » Promotion of consistent standards worldwide
- » Focus on UN Regulations and ISO Standards
- » Co-ordination with national gas associations

International Harmonisation

- 1. A standard item on the agendas of**
 - Board of Directors**
 - Industrial Gases Council**
 - SAG & Working Groups**
- 2. Some Ad Hoc Groups were formed with the sole intention to produce a harmonised document**
- 3. Some WGs have liaison members EIGA/CGA**
- 4. Joint EIGA WG & CGA Committee Meetings start**

Winter Technical Meeting 2005

Harmonisation

EIGA



Examples for Globally Harmonised Documents:

- **Oxygen pipeline systems**
- **Safe use of alu-structured packing for O₂ distillation**
- **Safe use of BAHX for producing pressurised Oxygen**
- **Safe operation of reboilers/condensers in ASUs**
- **Code of practice Nitrous Oxide**
- **Carbon Monoxide and Syngas pipeline systems**
- **Hydrogen transportation pipeline systems**

International Harmonisation A-projects (status May 2005)

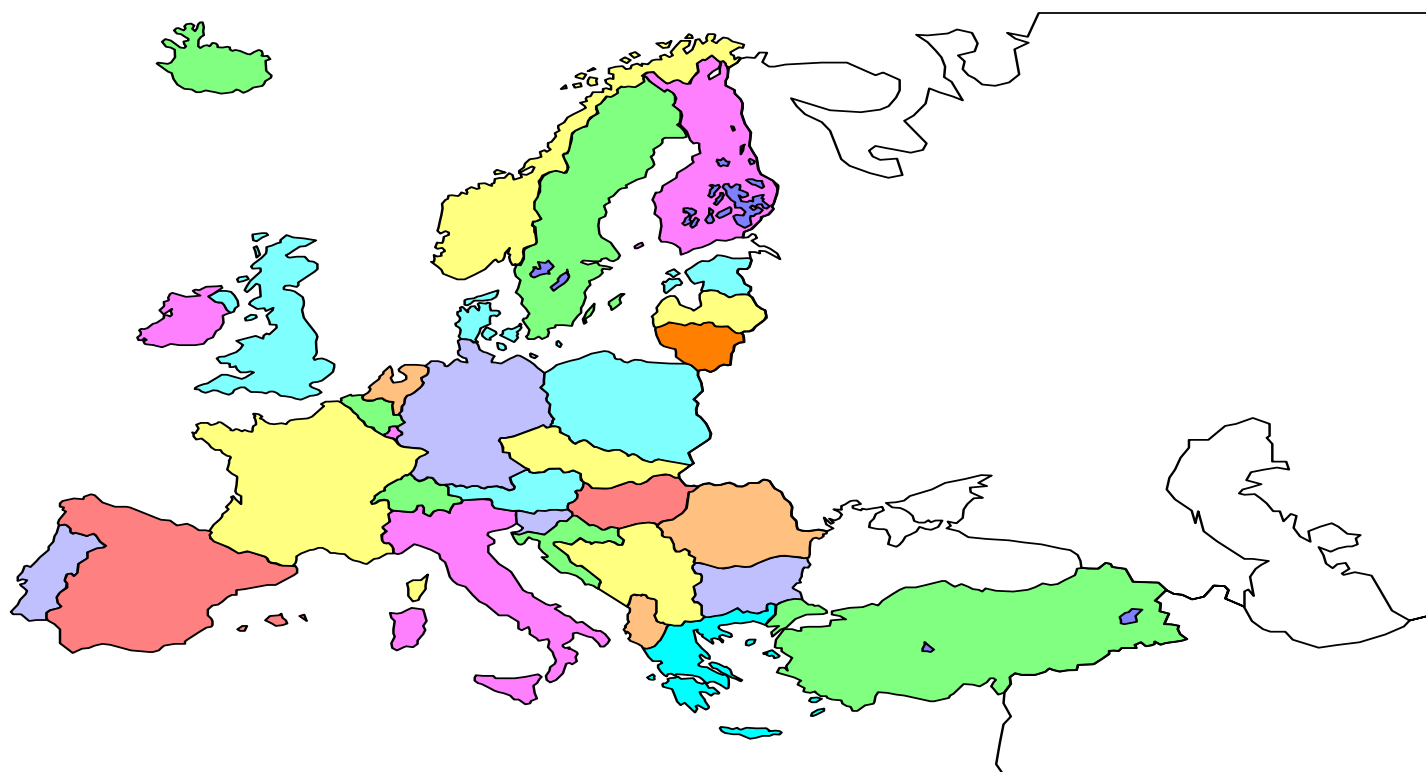
- C – Installation Guide for LOX pumps
 - E – GHS Classification & Labelling of Chemicals
 - E – Unmanned Air Gas Plants / Design & Operation
 - C – Flat Bottom Tanks
 - E – Prevention of Excessive Pressure During Filling of Cryo-Tanks
 - E – Prevention of Brittle Fracture in Cryogenic Operation
 - E – Safe Handling of Fluorine
 - E – Safe Preparation of Oxidizing/Flammable Gas Mixtures
 - C – Safe Handling of Silane
-
- C – Cryogenic Hydrogen Storage (above & underground)*
 - C – Rooftop Storage of Liquid and Gaseous Hydrogen*
 - C – Underground Gaseous Hydrogen Storage*

C = CGA lead

E = EIGA lead

* to be combined

EIGA Member Countries



National Associations

- 
- Austria
 - Denmark
 - France
 - Hungary
 - Norway
 - Slovakia
 - Switzerland
 - Belgium
 - Egypt
 - Germany
 - Italy
 - Poland
 - Spain
 - Ukraine
 - Czech Republic
 - Finland
 - Greece
 - Netherlands
 - Romania
 - South Africa
 - United Kingdom

Benefits:

- **Improve safety of employees/consumers/public**
- **Avoid duplication of work**
- **Harmonised approach to ISO & regulators**
- **Standardised design & procedures reduce manufacturing and operational costs**