



Why Harmonization?

Presentation to joint CFI/CFIA Meeting

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Universal Round



Universal British



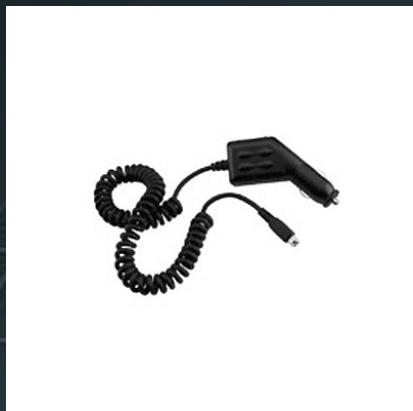
Universal France



Universal Australia



Blackberry



Erickson



Universal Motorola



Telus



A WorldwideMarket

- ▶ Nitrogen, DAP, MAP & Potash Are Traded On A Worldwide Scale
- ▶ We All Have To –
 - Think Globally
 - Understand Regulatory Requirements
 - Understand Contract Obligations
 - Facilitate Smooth Transactions
 - Minimize Deficiencies, Disputes & Claims



The International Fertilizer Assoc. Plan

IFA Tackles Inconsistent Fertilizer Sampling and Analysis Procedures

Global fertilizer producers and traders face an increasing number of international trade disputes, due to an apparent lack of internationally accepted or standardized methods which can be used to sample and analyze fertilizers across regional markets. Such trade disputes – and the associated inefficiencies and arbitration – incur significant monetary losses by fertilizer companies.

To address this issue proactively, IFA has formed a task force of member company executives from various stakeholder groups to identify action steps and move towards increased harmonization of methods. Currently the task force consists of IFA member representatives from Brazil, China, Europe, India, the Middle East, North Africa, North America and Russia.

Since the task force's initial meeting in January 2007, it has met regularly to compile methods used around the world in a set of priority areas, in order to review and evaluate procedures for their applicability and statistical performance. Once the methods are validated according to acceptable criteria, they will be included in a list of IFA-recommended methods for use in international trade. This non-binding list will be widely disseminated in the fertilizer community (to IFA members and non-members alike) to help guide practices with regard to the sampling and analysis process.

In parallel, the IFA task force is studying interest within the fertilizer community to develop a model contract for use in international fertilizer sales. Once again, this model contract would be non-binding and available to all parties. It would act as a guidance document for international buyers and sellers to help facilitate trade.

If you have any questions or comments on the task force, please contact Ben Muirheid, Executive Secretary of the IFA Technical Committee, bmuirheid@fertilizer.org.

IFA Initiatives

Method Harmonization Taskforce

- Bulk Vessel Sampling – moving belt
- Total Nitrogen - N
- Available - P_2O_5
- Soluble Potash - K_2O
- Other Analysis To Follow



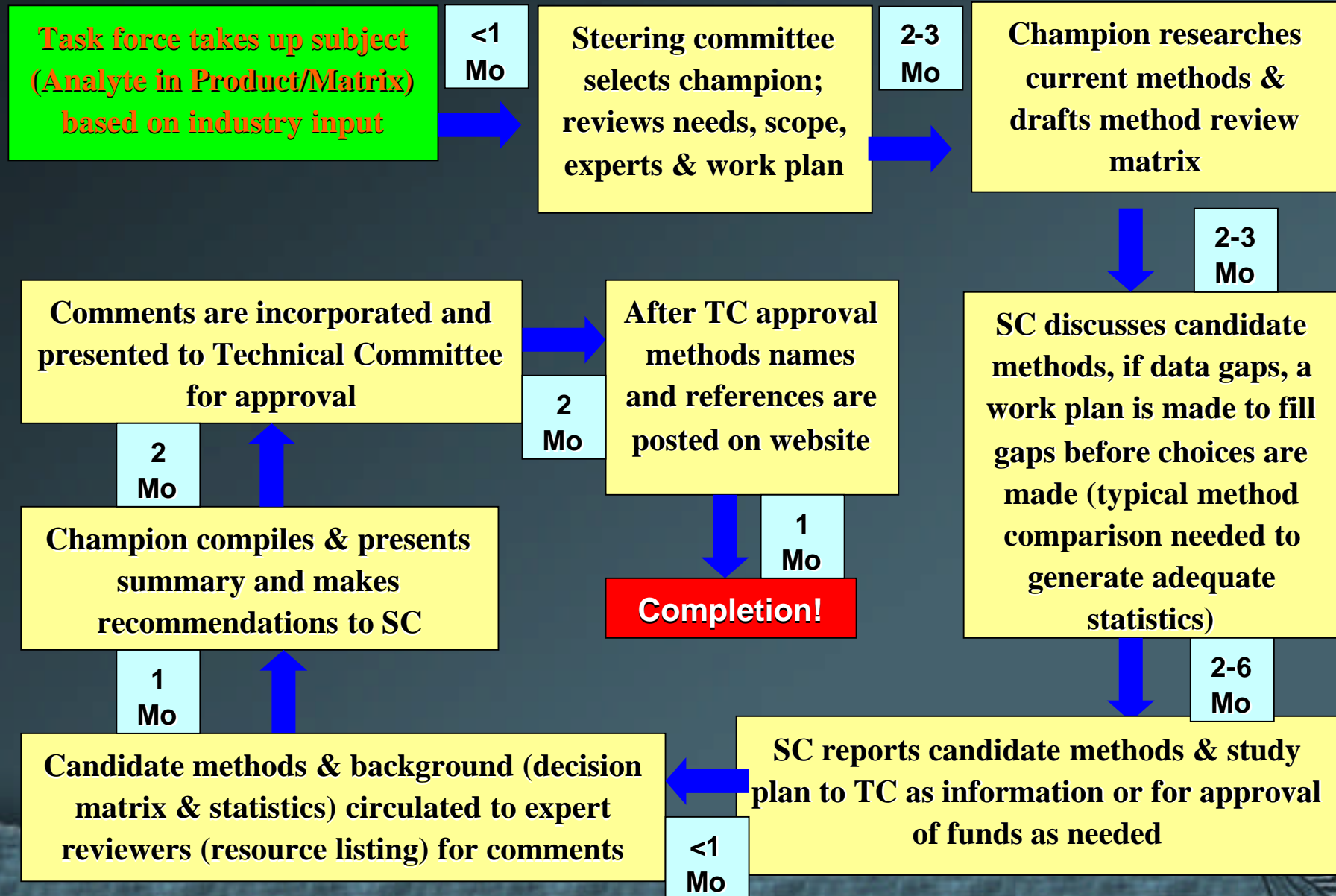
Task Force Objectives:

- ▶ Ensure robust participation in the task force: Credibility of the outcome will be bolstered if the process is open and representative
- ▶ Develop a list of recommended “best practice” methods for use by industry (IFA and non-IFA members) on a voluntary basis. Recommended methods will be based on a defensible set of criteria.
- ▶ Develop and manage a communications plan to support the successful uptake of the “best practice” methods internationally



Process Review Map

(With Time Estimates)



Progress Sampling

- ▶ Sampling study nearly complete
 - Showed a bias between modified manual and mechanical (automatic) sampling
 - Bias increased as uniformity decreased
 - Bias increased as belt loading increased
- ▶ Study may recommend mechanical sampling as best practice for vessel sized cargo



Progress Nitrogen

Nitrogen Method Comparison Matrix

- ▶ Traditional nitrogen method uses hazardous chemicals (Hg)
- ▶ Combustion method needs modification - sucrose
- ▶ Test work in progress comparing modified methods



Progress Phosphate

- ▶ Phosphate Method Comparison Matrix
 - Many different ways to analyze for phosphate
 - Difficulty agreeing on standard method
 - Phosphate typically at or near guarantee
 - Matrix development in progress



Progress Potash

▶ Potash Matrix developed

- Have evaluated multiple methods from:
- Belarus Brazil Canada
- Chile China EU
- Germany India Israel
- Jordon Kenya Malaysia
- Russia USA



Progress Potash

- ▶ Potash methods can be grouped into 4 main categories
 - Gravimetric/Volumetric
 - AA/Flame photometry
 - ICP – OES and
 - X-Ray Fluorescence



Progress Potash

- ▶ Potash (all) methods can ranked by
 - Must be Validated - available to public
 - Method Performance r , R & Delta
 - EH&S
 - Scope and dynamic range
 - Equipment
 - Cost effective



Progress

- ▶ Method Evaluation Protocol developed
 - Ensure recommended methods are based on performance (inter-laboratory) rather than politics.
 - Defensible in international community



Laboratory Proficiency

▶ **Keystone to success**

- Ensure laboratories
- And analysts are capable at the required precision.

▶ **Standards**

- **ISO 5725 and six steps to repeatability/reproducibility**
- **ISO 17025 and Lab QAP – based on early work by SCC**
- **AOAC Appendix E**



How Can You Help?

- ▶ Represent Your Organizations Interests
- ▶ Respond With Comments
- ▶ Suggest Additional Expert Reviewers
- ▶ Participate In Collaborative Studies
- ▶ Suggest Methods For Study
- ▶ Become A Member Of AOACI & Its Fertilizer Community



» *Questions????*

