Plenary Session IV
Potential Impacts of Regulatory Asynchronicity and LLP: Moving from the Abstract to the Concrete
Charlotte Hebebrand
Chief Executive
International Food & Agricultural Trade Policy Council (IPC)
hebebrand@agritrade.org

IPC’s Approach: IPC convenes influential policymakers, agribusiness executives, farm and civil society leaders, and academics from around the world in order to clarify complex issues, foster broad stakeholder participation in policy deliberations, and build consensus around pragmatic policy recommendations.

IPC’s Mission: IPC makes pragmatic trade policy recommendations to solve the major challenges that are facing the global food & agricultural system in the 21st century.

Outline of Presentation
• Asynchronicity/LLP: Moving from the Abstract to the Concrete
• Europe (several existing case studies)
• China (new IPC case study)
• Vietnam (new IPC case study)
• Latin America (new IPC case study)
• Conclusions & Recommendations

Global Food Security
Productivity & Sustainability
Growth & Development

European Union - Background
• Importance of Livestock Sector (40% of EU ag production)
• Compound Feeds – reliance on maize and soy; most soy is imported
• Regulatory System in place...but rapidly increasing asynchronicity
• Segregation increasingly difficult and expensive

EU – 2009 JRC Study
• Large number of events in commercial and regulatory pipelines
• Large increase in commercialized events (2009: 33 – 2015: 124)
• New Players – Isolated Foreign Approvals?
EU – 2010 ARAID Study

- Limited impact from ban of US soy imports
- "Alarming" impacts on price (500%) and trade from ban of US, Brazilian & Argentine soy imports
- Pork/Poultry production suffers the most:
  - 34% EU 27 decline
  - 37% Spain decline
- Pork/Poultry exports decline 40-50%

EU – Dec.2010 DG Agri Study
Wageningen & EMAC/U.Missouri

Maize
- Ban on US imports – very limited impact
- Ban on US, Braz, Arg imports – price increases 5-23%

Soy
- Ban on US imports – 25% price increase
- Ban on US, Braz, Arg imports – 210+%
Impacts on Economic Welfare in China, relative to baseline in 2010 (million USD)

GM maize's events approved by China (12 in total)

- YieldGard VT Pro™ (OECD Identifier: MON-8934-3)
- Enogen™ (OECD Identifier: SYN-E3272-5)
- Optimum™ GAT™ (OECD Identifier: DP-98148-6)
- Mavera™ (OECD Identifier: REN-383-3)
- Agrisure Viptera™ (OECD Identifier: SYN-IR1624)
- MON87460 (OECD Identifier: MON-87460-4)
- YieldGard VT RW™ (OECD Identifier: MON-88177-3)
- Bt-Xtra™ (OECD Identifier: DKB-896149)
- LibertyLink™ (OECD Identifier: ACS-ZM2-1)
- StarLink™ (OECD Identifier: ACS-ZM4-3)
- YieldGard™ (OECD Identifier: MON-801)
- YieldGard™ (OECD Identifier: MON-827797)
- Roundup Ready™ (OECD Identifier: MON832, MON831, MON830)
- SeedLink™ (OECD Identifier: ACS-ZM427-3)
- SeedLink™ (OECD Identifier: ACS-ZM4279-4)
- Pioneer MS (OECD Identifier: PH-MON867-7, PH-MON868-9, PH-MON868-2)
- TC 6275 (OECD Identifier: DAS6275-8)

GM maize events approved in US, but not yet in China

- YieldGard™ Vi PT™ (OECD Identifier: MON-8086-3)
- DynaGard™ (OECD Identifier: SYN-BTØ11-1)
- NatureGard™ (OECD Identifier: SYN-EV176-9)
- Agrisure GT™ (OECD Identifier: MONØØ21-9)
- Herculex I™ (OECD Identifier: DAS59122-7)
- LibertyLink™ (OECD Identifier: ACS-59780-5)
- Agrisure RW™ (OECD Identifier: MON-8086-3)
- YieldGard™ Rootworm™, MaizeGard™ (OECD Identifier: MON-863-5)
- LibertyLink™ (OECD Identifier: DKB-89798-5)
- Roundup Ready 2™ (OECD Identifier: MON-8634-6)
- phytase Ri2 (OECD Identifier: line: Ri25-3-1)

China’s maize imports

China’s GM and Non-GM maize imports

Impacts on Economic Welfare in China, relative to baseline (million USD)

Data source: Eurofins GeneScan
3 GM soybean events approved in China and 13 events approved by USA

Approved by China marked by red, in all events approved by USA,
1. Roundup Ready™ (OECD Identifier: MON-Ø4Ø32-6)
2. Roundup Ready 2 Yield™ (OECD Identifier: MON-89788-1)
3. LibertyLink™ (OECD Identifier: ACS-GMØØ5-3)
4. LibertyLink™ (OECD Identifier: ACS-GMØØ6-4)
5. Cultivance™ (OECD Identifier: BPS-CV127-9)
6. Optima™ (OECD Identifier: DP-356Ø43-5)
7. TOLER™ (OECD Identifier: DP-89423-1)
8. MON87701 (OECD Identifier: MON-877Ø1-2)
9. MON87705 (OECD Identifier: MON-877Ø5-6)
10. DuPont (lines: DD-Ø26Ø5-3, DD-Ø2Ø5-5)
11. LibertyLink™ (OECD Identifier: ACS-GMØØ20-2)
12. LibertyLink™ (lines: ACS-GMØØ2-9, ACS-GMØØ1-8)
13. LibertyLink™ (OECD Identifier: ACS-GMØØ3-1)

China’s import of soybean and its main resources

China’s import of soybean classified by GM and Non-GM

Impacts on Economic Welfare in China in 2015, relative to baseline (million USD)

Vietnam – IPC Case Study

Background
- Small market actor
- Significant GM maize, soy, soymeal, canola imports (growing livestock sector)

Regulatory framework being implemented
- Will be faced with approvals “cascade”
- Expedited approval option for events already authorized in five developed countries (2 mos)

GM event approvals passing the 5 developed country authorization threshold

Source: Based on Tables A1, A2 and A3, compiled from CERA (2010).
Likely GM versus non-GM imports of the four products in Vietnam, 1999-2010

Vietnam Figure 7

Vietnam –Impacts

Zero tolerance:
Maize - $3.7-7m ($7-28/ton)
Soybeans - $4m ($80/ton)
Soymeal - $14-57 m ($7-31/ton)

Welfare effects of a single unapproved GM maize event in the United States and Canada

Welfare effects for an unapproved GM maize event in US, Canada and Argentina

Latin America-IPC Case Study

Background
• Key exporters/biotech adopters
• Significant importers/varying stages of regulatory development
Conclusions & Recommendations

• Significant costs of zero tolerance
• Setting tolerance levels involves risk perception and economic considerations
• Trade off between lower and higher thresholds
• Important to consider specific situation faced by importers and undertake cost-benefit analysis
• Focus on pragmatic, credible and efficient regulations