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Success Stories and Lessons Learned in Implementation of Chemicals Management in Canada

Health Canada – PAHO Workshop

Lima, Peru

November 8-10, 2016



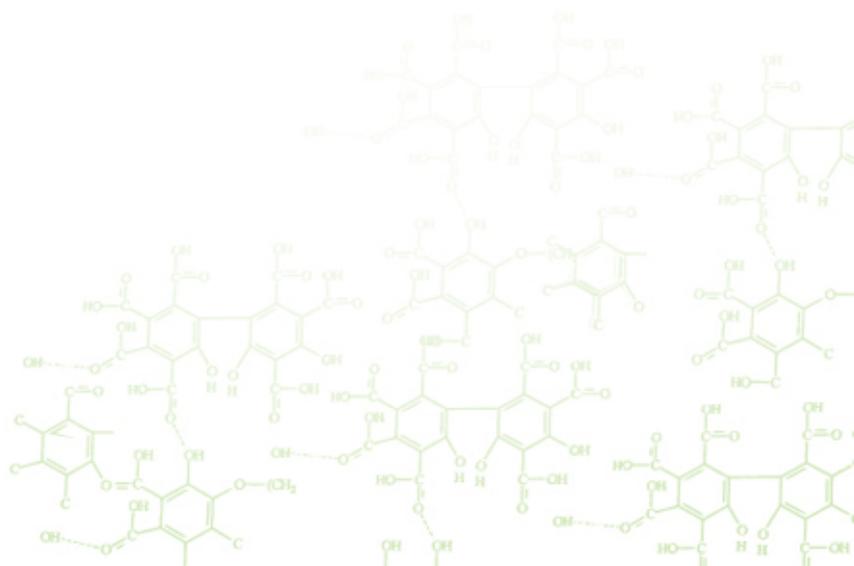
CHEMICALS
MANAGEMENT
PLAN

PLAN DE
GESTION DES
PRODUITS CHIMIQUES

Canada 

Outline

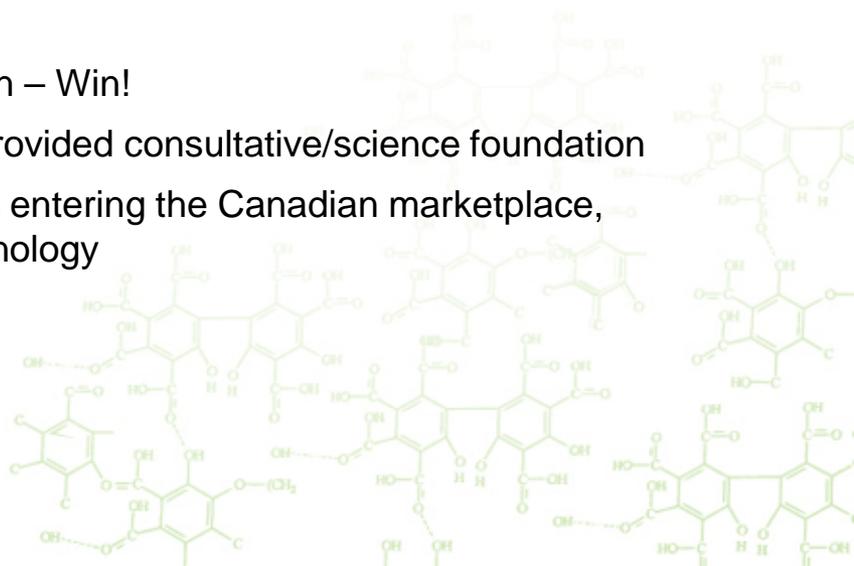
- Accomplishments
 - Risk Assessment
 - Risk Management
 - Research
 - Stakeholder Engagement
- Lessons Learned



Accomplishments

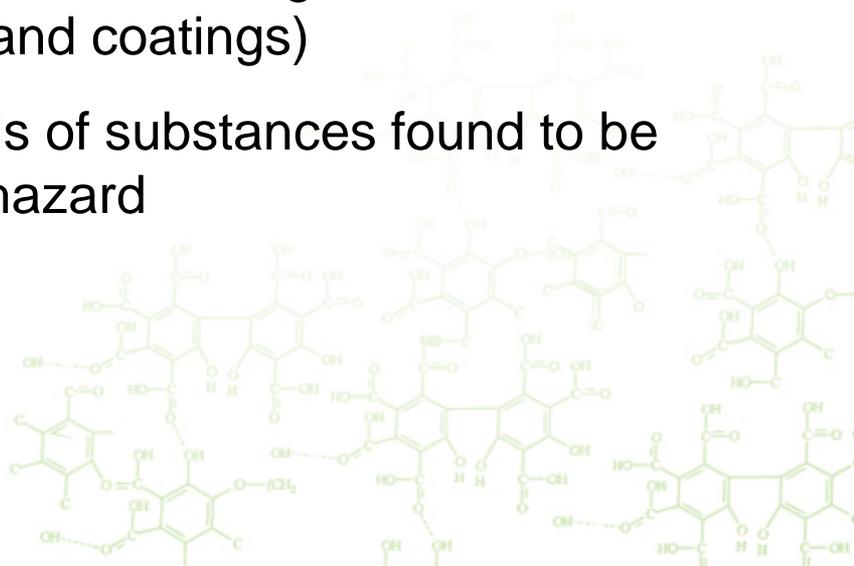
- Risk Assessment

- Recognition that approach to addressing chemicals needs to be comprehensive
 - CEPA 1988 ►►CEPA 1999►►CEPA 20XX
- Canada was first country to systematically prioritize all Existing Substances to lay path for informed path forward (internationally precedent setting)
- Launch of integrated Chemicals Management Plan
- In CMP1, highest priorities assessed and risk management recommended for many.
- Groupings initiative under CMP2: efficiencies gained, novel approaches initiated
- Risk Assessment Toolbox application in CMP3
- New innovative assessment methodologies developed, significantly advanced incorporation of predictive technologies
- Influencing research priorities
- Active participation in international initiatives; Win – Win!
- CMP Advisory Committee/Science Committee provided consultative/science foundation
- Each year, assessment of ~450 new substances entering the Canadian marketplace, including nanomaterials and products of biotechnology



Accomplishments

- Risk Management
 - Action taken on identified priorities
 - Risk management instruments finalized for 40 of 42 substances found to be harmful to human health and/or the environment under the “Challenge” in CMP1
 - Over 20 substances added to Health Canada’s Cosmetic Ingredients Hotlist (list of substances that are restricted or prohibited in cosmetics)
 - Working with industry on innovative risk management measures (e.g., codes of practice for paints and coatings)
 - Actively monitoring uses and levels of substances found to be not S.64 toxic but represent high hazard



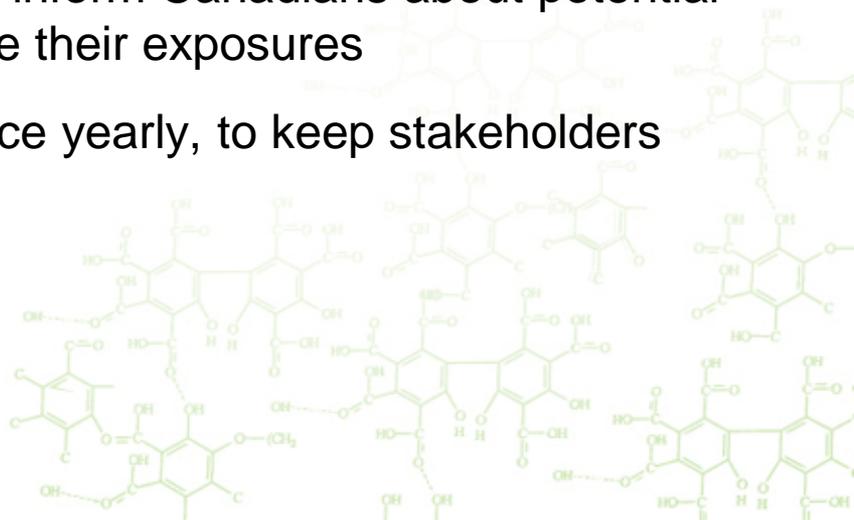
Accomplishments

- Research, Monitoring and Surveillance
 - Supporting assessment and management decisions
 - Research on key health concerns (e.g., endocrine disruption), complex types of substances (e.g., UVCBs, nanomaterials), substances already assessed (e.g., cumulative impacts)
 - Environmental and human biomonitoring (e.g., completed multiple cycles of Canadian Health Measures Survey, nationally representative data for ages 6-79 on levels of large number of environmental contaminants)



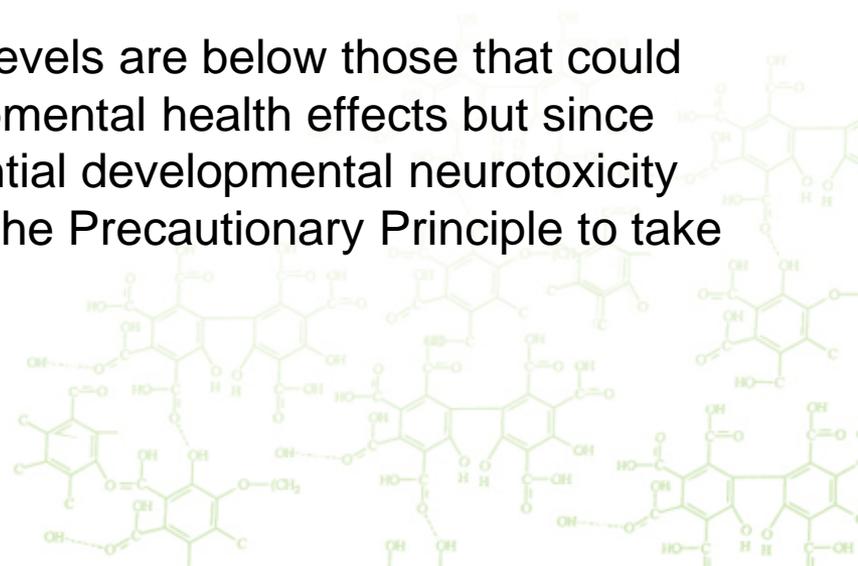
Accomplishments

- Stakeholder engagement, public outreach and communications
 - Over 1000 subscribers to Chemical Substances web site
 - Ongoing work with multi-sectoral Stakeholder Advisory Council to foster dialogue among stakeholders and inform the program
 - Face to face workshops, teleconferences and webinars with stakeholders held on a wide variety of CMP topics
 - ~ 1 million *Hazardcheck* distributed to inform Canadians about potential risks in their homes and how to reduce their exposures
 - CMP Progress Reports, published twice yearly, to keep stakeholders informed of progress



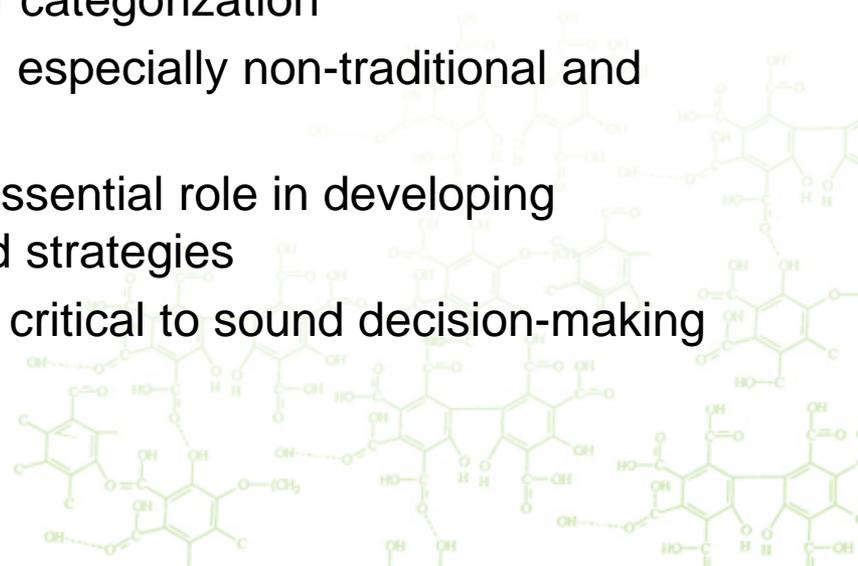
Case Study: BPA and the Precautionary Principle

- Canada was the first country in the world to take action on bisphenol A (BPA)
 - Health Canada scientists concluded that exposure to BPA poses negligible risk to most Canadians
 - Focus has been on newborns and infants up to 18 months of age because developmental effects reported in animal studies
 - Main source of exposure was through migration of BPA from polycarbonate baby bottles and from can linings into liquid infant formula
 - Scientific data suggests that exposure levels are below those that could cause systemic or reproductive/developmental health effects but since they are close to the levels where potential developmental neurotoxicity effects could occur, Canada exercised the Precautionary Principle to take action to reduce exposures further



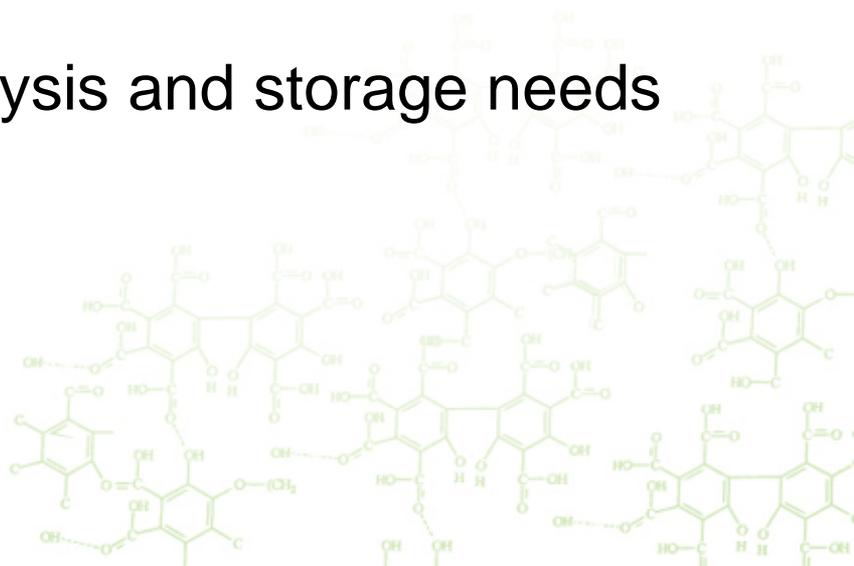
Lessons Learned

- Need to constantly evolve to adapt to changing circumstances
 - Adjust approaches and decisions based on new evidence
- Evaluation of progress and performance measurement are essential
- Long term program visions may not meet need for short term deliverables; need to identify opportunities for frequent deliverables/reporting out
- Strong stakeholder engagement, starting early on
 - Use of older DSL data problematic for categorization
 - Earlier buy-in to approaches adopted, especially non-traditional and group approaches
 - Stakeholder engagement played an essential role in developing information gathering approaches and strategies
 - Evidence provided by stakeholders is critical to sound decision-making



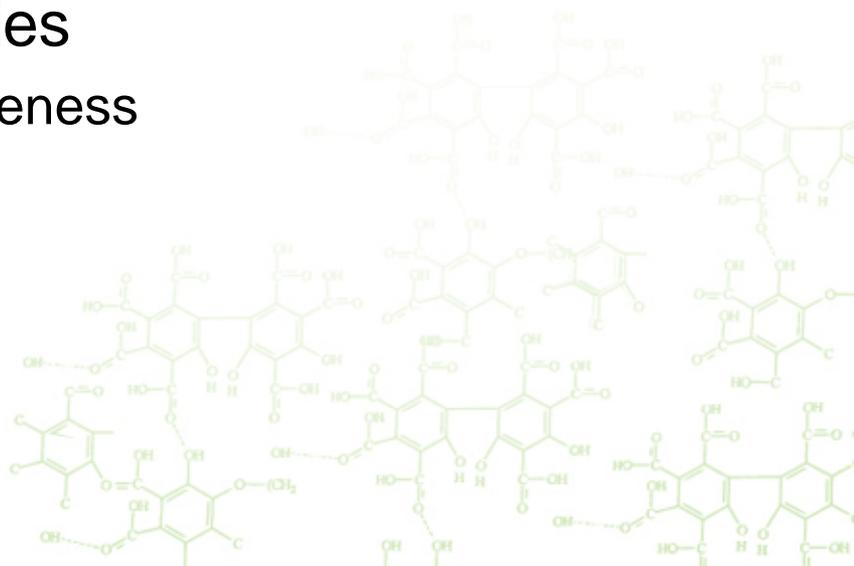
Lessons Learned

- Streamlining efficiencies in risk assessment
 - Grouping of substances based on similarities
 - Use of high throughput tools (e.g. rapid screening) to screen for potential risk
 - Importance of using international data and methods
- Recognition of value of ‘low’ priorities
 - Identification of lower hazard alternatives
- Recognition of information analysis and storage needs



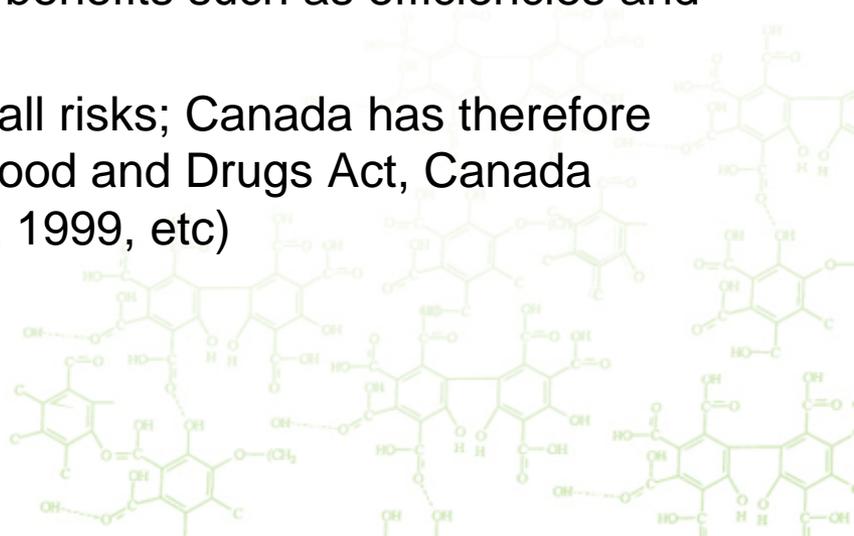
Lessons Learned

- Importance of review processes (internal & external), ensure validity and consistency
- Constant need to prioritize, make workload manageable
- Predictive models for hazard and exposure
 - Develop and document consistent approaches for interpretation and incorporation
- Comprehensive search strategies
 - Ensures consistency and completeness
 - Defensibility of outcome
 - Constantly evolving



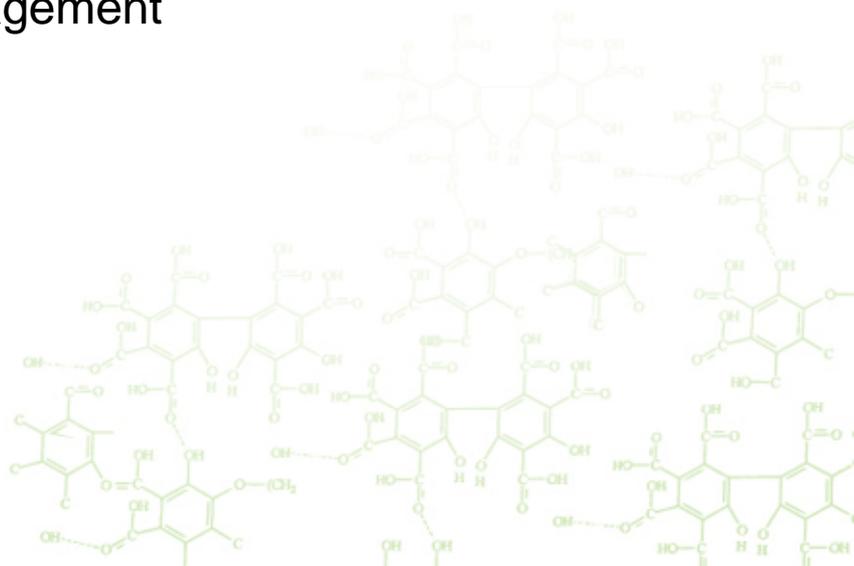
Lessons Learned

- Importance of developing clear compliance promotion materials and using technology to provide greater access to a wider range of stakeholders.
- Documentation, record of basis for decision making, approaches adopted
- Careful consideration of which risk management instruments to use
 - Use of other instruments in addition to regulations
 - Working with industry to encourage voluntary actions can achieve the RM objectives and may provide other benefits such as efficiencies and flexibilities
 - No one Act is best placed to manage all risks; Canada has therefore adopted use of the best placed Act (Food and Drugs Act, Canada Consumer Product Safety Act, CEPA, 1999, etc)



Lessons Learned

- Consumer products
 - Gather information early to identify chemicals in finished products intended for consumer use and develop consistent, realistic approaches to characterize
 - Often more important than volume of use/manufacture/import/release data
- Managing expectations!!
 - Stakeholders, public and senior management
 - Communication
 - up, down and out
 - continual



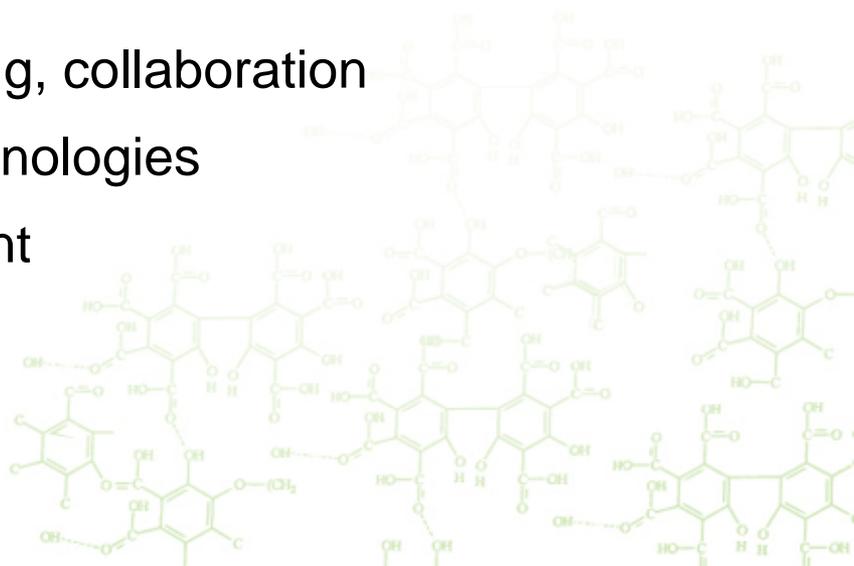
Legislated or Publically Committed Deadlines: A Curse or a Blessing?

- **Curse**

- Requires much foresight & planning
- Resources ideally in place before clock starts
- Large volume of work, pressure & stress
 - Need to manage to avoid high staff turnover and subsequent staffing and training
- Consequences of not meeting deadlines

- **Blessing**

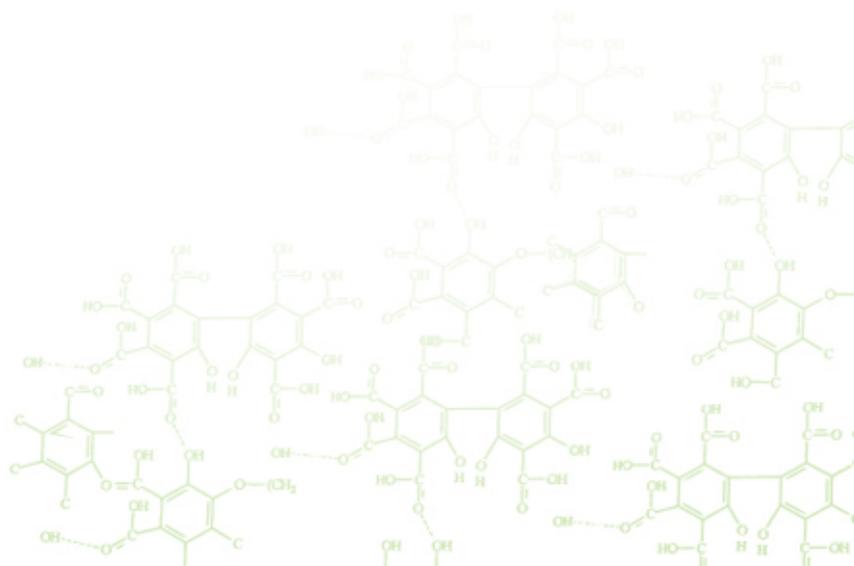
- Forces innovative, creative thinking, collaboration
- Advances used of alternative technologies
- Leading methodology development



Summary

Assessment and Management of Chemicals Under CMP

- ***A success story!!***
 - Visionary
 - Integrated approach
 - Fit for purpose
 - Efficient
 - Innovative





Thank you!

