



## **Recommendations for the Reduction of Phosphorus in Detergents**

**UNDP/GEF Danube Regional Project  
Presented by  
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## **Project Management**



- Funding: UNDP/GEF Danube Regional Project
- Technical Supervision: ICPDR Secretariat and Task Force
- Execution: WRc (UK) with assistance from CECEP (Romania)

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## Project Objective



- Develop proposals for the introduction of measures (voluntary agreements?) leading to a reduction in phosphate in (laundry) detergents used across the Danube River Basin
  - Current practice (legislation, policy, usage, production structures) in DRB countries
  - Recommendations for voluntary agreements or other measures

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## Premise



Project based on previously established need for reduction of P load in Danube River Basin (DRB) !

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## Main Tasks



- Task 1 – Review existing legislation, policies and voluntary agreements (EU and DRB countries)
- Task 2 – Compile and evaluate data on P in detergents, production structures and costs in DRB countries
- Task 3 – Develop proposals for voluntary agreements between DRB countries and detergent industry or other measures based on project outcome

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## Approach



- Collection of information through questionnaire, input from CECEP and other sources, including local consultants
- Data collation and analysis
- Summarising/highlighting useful information
- Identification of information gaps and relevant issues
- Recommendations

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## Difficulties



### Definition of P free:

- EC 648/2004 labelling (phosphate, phosphonates)
  - > 30 %
  - 15 – 30 %
  - 5 – 15 %
  - < 5 %
- no need to declare < 0.2 %

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## Populations & phosphate free detergents by country



| % Detergent that is Phosphate free | Country                        | Total laundry detergent usage (tonnes/year) | Total population (million) <sup>1</sup> | Total population in Danube Basin (million) <sup>2</sup> |
|------------------------------------|--------------------------------|---|---|---|
| >98%                               | Austria                        | 55,197                                      | 8.1                                     | 7.7   |
|                                    | Germany                        | 643,000                                     | 82.0                                    | 9.1   |
| >~50%                              | Czech Republic                 |   | 9.9                                     | 2.7   |
|                                    | Hungary                        | 126,300                                     | 10.3                                    | 10.3  |
|                                    | Slovenia                       |   | 2.0                                     | 1.7   |
|                                    | Serbia-Montenegro <sup>3</sup> | 89,057                                      | 9.3                                     | 9.1   |
| <10%                               | Bosnia-Herzegovina             | 7,485                                       | 4.4                                     | 2.5   |
|                                    | Bulgaria                       |   | 7.9                                     | 4.4   |
|                                    | Croatia                        | 16,516                                      | 4.7                                     | 3.2   |
|                                    | Moldova                        |   | 4.3                                     | 1.1   |
|                                    | Slovak Republic                |   | 5.4                                     | 5.2   |
|                                    | Ukraine                        | 219,873                                     | 49.1                                    | 3.1   |
| Not known <sup>4</sup>             | Romania                        | 154,584                                     | 22.4                                    | 21.8  |

Note 1. Information from Whitaker's Almanack 2005

Note 2. From Joint Action Programme, 2000-2005

Note 3. Data for 'phosphate-free' in Serbia-Montenegro may include detergents with up to 5% phosphate

Note 4: Data for products indicates no phosphate free

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## Need for action in DRB countries



| Country                  | Proportion of DRB population |
|--------------------------|------------------------------|
| <i>No action needed:</i> |                              |
| AT, D, CZ                | 26%                          |
| <i>Priority action:</i>  |                              |
| Romania                  | 26%                          |
| <i>Action:</i>           |                              |
| HU, CS                   | 24%                          |
| Other 6                  | 24%                          |

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## Current situation in RBD



|  |   |
|--|---|
| Legislation (combined with voluntary and public involvement) to reduce P in laundry detergents | Germany (>98% P-free in 2005)<br>Czech Republic (new)   |
| Voluntary Agreements to reduce P in laundry detergents   | Austria (~100% P-free)<br>Czech Republic (partial success)<br>(Slovenia no formal agreement - >75% P free but decreasing) |

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## Example CZ



- Voluntary Agreement between producer association and Ministry of Environment to reduce P in detergents:
  - Initial success (total P in detergents more than halved from 1994-2003)
  - Overall limited success because increasing market share from non-members (free-riders) (from negligible in 1995 to ~50% in 2005)
  - Now legislation: all laundry detergents <0.5% P

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## Example Slovenia



- No formal agreement but virtually P-free in 2000
- Recent increase in P detergents
- Reason for increase: small producers/imports (?) of P detergents
- Seems to re-enforce CZ example
- More details

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## Difficulties with voluntary agreements



- Weaknesses in agreement
  - Motivation
  - Parties to agreement (companies, trade ass.)?
  - Free-riders
  - Imports
- Enforcement
  - Consumer awareness
  - Checking compliance
  - Penalties
  - Threat of legislation

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## Cost information



- Industry will not comment on production costs (except to say that 'P free implies higher cost')
- Cost to consumers:
  - Shop prices highly variable
  - Insufficient data for accurate P / P free comparison, but
  - No evidence of higher shop prices for P free

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## Other issues



- Difficult to make voluntary agreements work without legislative back-up (CZ, AT)
- Few related activities, e.g. eco-labelling, on which to build
- Manufacturers not co-operative
- Manufacturers prefer to wait for legislation

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## AISE member associations in Danube countries



| Country                   | AISE member association? |
|---------------------------|--------------------------|
| Austria                   | Yes                      |
| <b>Bosnia-Herzegovina</b> | <b>No</b>                |
| <b>Bulgaria</b>           | <b>No</b>                |
| <b>Croatia</b>            | <b>No</b>                |
| Czech Republic            | Yes                      |
| Germany                   | Yes                      |
| <b>Hungary</b>            | <b>Yes</b>               |
| <b>Moldova</b>            | <b>No</b>                |
| <b>Romania</b>            | <b>Yes</b>               |
| <b>Serbia-Montenegro</b>  | <b>No</b>                |
| <b>Slovakia</b>           | <b>Yes</b>               |
| Slovenia                  | Yes                      |
| <b>Ukraine</b>            | <b>No</b>                |

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## AISE Membership in Danube countries



| <i>Association / AISE member</i> | <i>Nr members</i> | <i>Nr SMEs<sup>1</sup></i> | <i>Nr active in consumer product domain</i> |
|----------------------------------|-------------------|----------------------------|---|
| Czech Republic                   | 7                 | 1                          | 4   |
| Hungary                          | 19                | 11                         | 13  |
| Romania                          | 16                | 1                          | 15  |
| Slovenia                         | 21                | 13                         | 20  |
| Slovak Republic                  | ?                 | ?                          | ?   |
| Austria                          | 17                | 10                         | 8   |
| Germany                          | 128               | 99                         | 75  |

Note 1. SME = small / medium sized enterprise  
Bosnia-Herzegovina, Bulgaria, Croatia, Moldova, Serbia-Montenegro and the Ukraine have no members of AISE.

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## Data gaps



- Insufficient cost information
- Information on production structures inadequate
- Economic effects of change from P detergents to P free (detergent, phosphate, other detergent builders industries)

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## Situation in EU



- Some MS have legislation:
  - Germany, Czech Republic, Italy, the Netherlands
- Two more MS soon to introduce legislation:
  - Sweden and France
- Effective bans through voluntary agreements:
  - Austria and Ireland

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## Recent developments in EU legislation



- Regulation 648/2004 on detergents - entry into force 8 October 2005
- Art.16 p.1: *'by April 2007, the Commission shall evaluate, submit a report on and, where justified, present a legislative proposal on the use of phosphates with a view to their gradual phase-out or restriction to specific applications.'*

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## Conclusion



- Action needed in all except AT, CZ, DE
- Voluntary agreements likely to be ineffective in DRB
- Need for legislation (EU/national)
- Dialogue with industry / associations
- Harness consumer power!
  - Dissemination of information
  - Persuade consumers of environmental benefits
  - Involvement of NGOs

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## Recommendations



- EU should take the lead:
  - EU legislation would be most effective for DRB (non-EU countries tend to follow EU legislation)
- If not EU, persuade national governments to introduce legislation
- Complementary measures:
  - Improved wastewater collection and treatment
  - Good agricultural practice

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