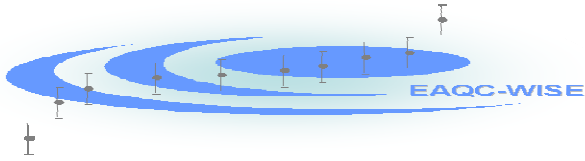


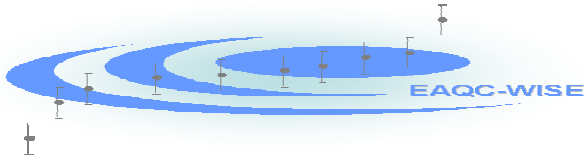
Measuring priority substances in water today

Are laboratories expected to be
masters in all areas?



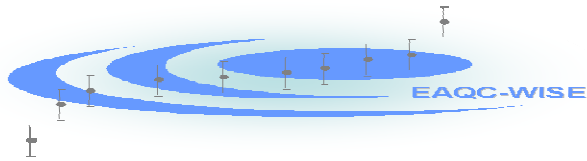
Outline

- Experience with PT for WFD Priority Substances (PS)
- Results overall
- Comparisons
- Where do we go?
- What are the needs?



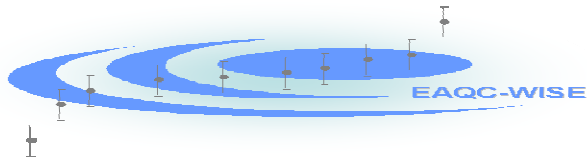
Experience with PT for WFD

- PT = Proficiency test, a means of testing labs actual ability to reliably analyse samples for the PS in WFD
- Commercial exercise Labs paid to take part
- Run as development, participant input welcomed



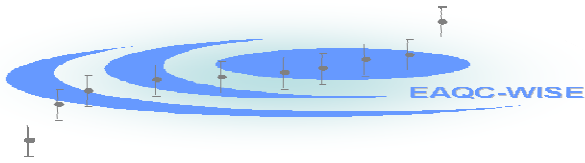
Experience with PT for WFD

- 2 PT exercises completed, one due in January 2007
- 39 chemicals to cover 31 PSs in water
- 17 laboratories from 12 countries but...
- What does this tell us about labs being “masters in all areas”?
- What about WFD implementation?

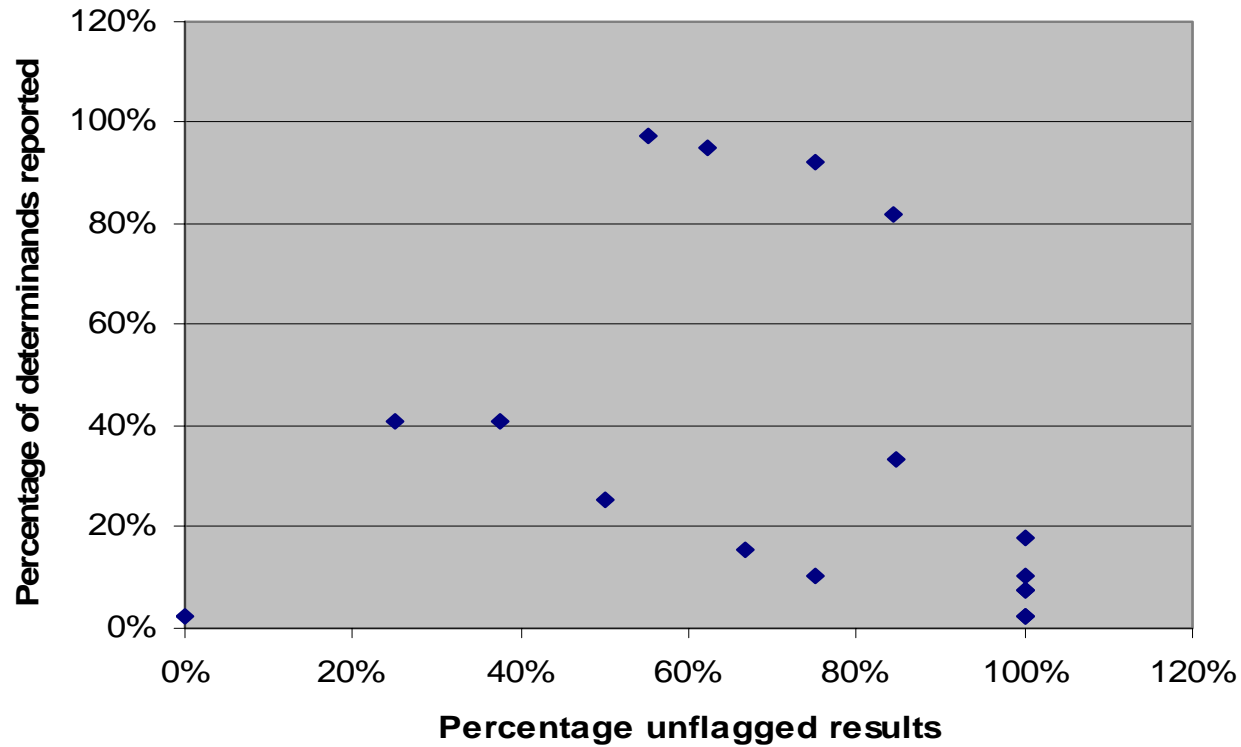


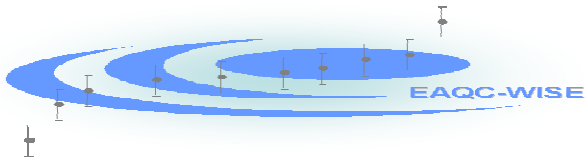
Results of PT

- **First exercise MAC levels**
 - Overall pretty good
 - Some outstanding 82% participation, 84% pass (based on 15% error target)
- **Second exercise AA levels**
 - More problems with detection limits and possibly contamination



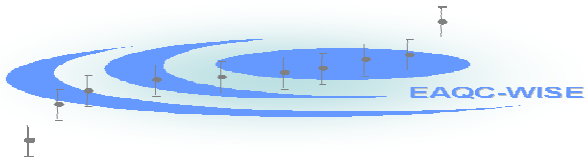
Overall performance comparison





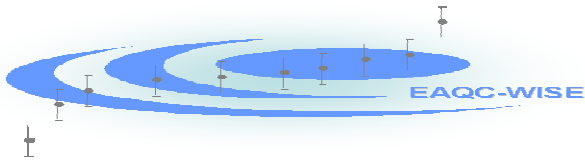
Performance comparison with normal Aquacheck samples

	Conc	No	Rsd %	Aq Conc	Aq No	Aq Rsd %
Cadmium	0.6	8	7.8	2.2	47	5.3
Diuron	2.6	5	10	0.05	20	13
Hexachlorobenzene	0.1	5	9.2	0.06	16	12
Benzo(ghi)perylene	0.3	8	5	0.015	21	11



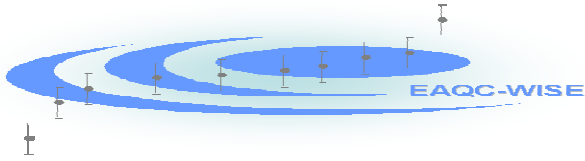
Conclusions

- PT only one part of QA/QC needed
- PT participation improves performance
- Many areas of PS analysis are already well covered - proof from existing PT
- Concentrate R&D on gaps
 - PT gaps are chloroalkanes and PBDE and maybe very low levels eg HCB, DEHP



Conclusions 2

- Numbers of labs in PT is very important
- Two routes to consistency
 - Specialist – high level of checking, high cost
 - Production – high level of QC, demand led, low cost
- For WFD is this possible organisationally?
Who decides which is which?



Conclusions 3

- In my view for roughly 90% of WFD monitoring requirements
 - Adequate analytical and QA/QC tools exist
 - A specific (ie detailed, monitoring these substances in these places) strategy is required to implement them
 - Focus R&D on real gaps