Medium	Target Synthetic?	Analytes	No. of Participants	No. of rounds	Central Analysis?	Ref.	Date	Comment
Soil	No	Pb & Cu	9	1	No	1	1995	First reported SPT realisation
Air-Workplace	Yes	Hydrocarbons Aromatic & Chlorinated	38	3	No	2	1997	Not called an 'SPT', no z-scores. 3 sampling exercise each with sets of 4-8 runs. Has evidence for improved performance between rounds.
Soil	No	Pb & Cu	9	2	No	3	1998	Improved performance in second round (s down from 36% to 20%)
Soil	Yes	Ba	9	1	Yes	4	2000	Spatial resolved analyte, Synthetic Target
Gas-landfill	No	CH_4, CO_2, O_2	9	1	No	5	2001	*In situ* measurements. Temporal variability monitored by reference borehole
Wheat-bulk	No	N, Mo, Pb	5	1	Yes	6	2002	All participants used same protocol
Coffee-Bulk	No	H_2O	8	1	Yes	6	2002	All participants used same protocol
Lettuce in field (Virtual)	Yes	NO_3^-	16	1	Yes	7	2008	First example of virtual SPT. Undertaken by 16 different countries
Butter - bulk	No	H_2O	9	1	Yes	8	2011	Results also used to make improved estimate of measurement uncertainty including between-sampler bias
Apple Juice -bulk	No	Patulin	9	1	Yes	9	2011	Limited access to the sampling target, ownership of the target, and this being the same as sampler's employer, limited independence of the samplers.
Gas - stack	Yes	Gases & particulates	4[§]	Many – not reported	No	10	2015	[§]4 sampler at a time, use in-house-constructed emission simulation apparatus. *In situ* measurements. Adapted homogeneity test for ISO 13528 compliance
Water-waste	No	COD, TOC, pH, Temp	16-20	3	Yes*	11	2015	*In situ* measurement of pH &Temp. *Own labs used as well as central analysis.
Gas – stack	Yes	Gases	15	16	No	12	2016	Run annually. 3 participants at a time, repeat over 4 to 8 days of testing. In-house constructed emission simulation rig allowing the testing of hot and wet test atmospheres. Homogeneity to EN15259.

Electronic supplementary information. A selection of the sampling 'proficiency tests' (SPT) that have been reported since the first in 1995, showing a variety of analytes in a wide range of media that include gases, liquids and solids. Eight of the exercises were only a single round to show the feasibility of the concept, but three have apparently become routine with multiple rounds.

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