The role of trust in effective co-regulation of nanomaterials

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Under existing occupational health and safety (OHS) legislation employers in the US and EU are obliged to protect the health of employees, who handle nanomaterials in workplaces, through having risk assessment and management in place. But since scientific data for nanomaterials is scarce, it is uncertain whether the traditional risk assessment approach is evidently effective in protecting employee health. Industry has been asked to share scientific data and knowledge with regulators, which would allow making traditional risk assessment applicable to nanomaterials.[1] Specifically business associations appear to collaborate with public policy-makers to push forward nanomaterial characterization and risk specification. However, the actual contribution of business associations to effective regulation of nanomaterials occupational health and safety is unclear.

This paper adopts a process-oriented perspective to effectiveness in which the aspect of collaboration is attributed a central role: when processes of collaboration among business associations and public policy-makers are successful, activities aimed at supporting nanomaterials OHS are effective. Collaboration is successful when business associations and policy-maker *learn* how to apply traditional risk assessment to nanomaterials. Learning requires relations of trust among collaborators.[2] Trust relationships are both a precondition and amplifier for information exchange and they stimulate sustainable problem-solving and potential for innovation.[3] The assumption is, when business association and policy-makers have a common basis of trust, opportunities for knowledge exchange and deliberation are enhanced, allowing for increased capacity in making risk assessment applicable to nanomaterials.

This paper evaluates collaborative business association activities directed at nanomaterials OHS in terms of trust among actors. Trust will be measured by three factors: absence of opportunistic behavior, agreement, and goodwill.[4] To this end collaborative activities by a US business association in the chemical industry are analyzed, based on data from publicly available documents, interviews with association staff/member companies and policy makers.

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