

World Fire Congress Communities of Practice

Topic Abstracts — 2026 London Congress

3. Data: The Foundation of Evidence-Driven Fire Services

Across the world, fire service decision-making — at the incident, department, and policy levels — is only as good as the data that informs it. Yet in most countries, fire data remains fragmented, inconsistently collected, difficult to compare, and rarely shared across jurisdictions or borders. There are many concerns and issues shared across countries and continents, but without common data standards, it is nearly impossible to know what solutions are actually working — or to measure progress against shared goals. The challenge is to develop modern architectures that enable consistent and timely data collection, introduce automation and analytics, and allow for the application of artificial intelligence to enhance analytic capacity. The gap is most acute in lower-resource settings: fire policy and mitigation strategies in poorer countries are constrained by inadequate data on incidence, impacts, and causes, primarily due to a lack of capacity and resources for data collection, analysis, and modeling. This Community of Practice convenes practitioners, researchers, and policymakers to explore shared approaches to fire data governance, interoperability across national systems, minimum viable data standards for resource-constrained environments, and the vision of a global fire intelligence ecosystem that serves every nation — not only those with the most advanced reporting infrastructure.

[UL Global](#) [DHS S&T NERIS](#) [PMC Improved Fire Risk Assessment](#)