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Summary of Alastair Cox

End of life tyres (ELT) derived rubber are the main source of raw material for recycled crumb rubber. It has proven to be a reliable material able to reply to the demanding technical requirements of infill of synthetic turf fields (STF), to mention, STF represent approximately 30% of the ELT derived rubber market. Using ELT derived rubber for infill of STF closes the recycling loop of tyres and helps Europe to meet its circular economy targets. On the other hand, tyres are highly technical and strictly regulated products that need to meet specific requirements for their performance. Several types of rubber with specific chemical composition are needed in order to meet those requirements. The presence of some chemicals in ELT derived rubber, like heavy metals or Polycyclic Aromatic Hydrocarbons, PAHs, has raised concerns on the risk those substances may pose when using ELT derived rubber in STF. A restriction, as established in title XVII of REACH, that limits the content of PAH and other chemicals in crumb rubber used in STF, is expected.

The project ERASSTRI - European Risk Assessment Study on Synthetic Turf Rubber Infill - has assessed the exposure and potential risks to human health associated with the use of ELT derived rubber in synthetic turf fields. Lead by expert consultant FoBIG, and including Eurofins and Labosport, the two-year project will deliver, by beginning of 2019, a detailed risk characterization and risk assessment on the use of ELT derived rubber in STF. ERASSTRI includes the following phases: an extensive literature review, chemical characterization of ELT derived rubber based on more than 60 sampling points, weathering, aging and chamber experiments, bio-accessibility tests and on-site air monitoring exposure.