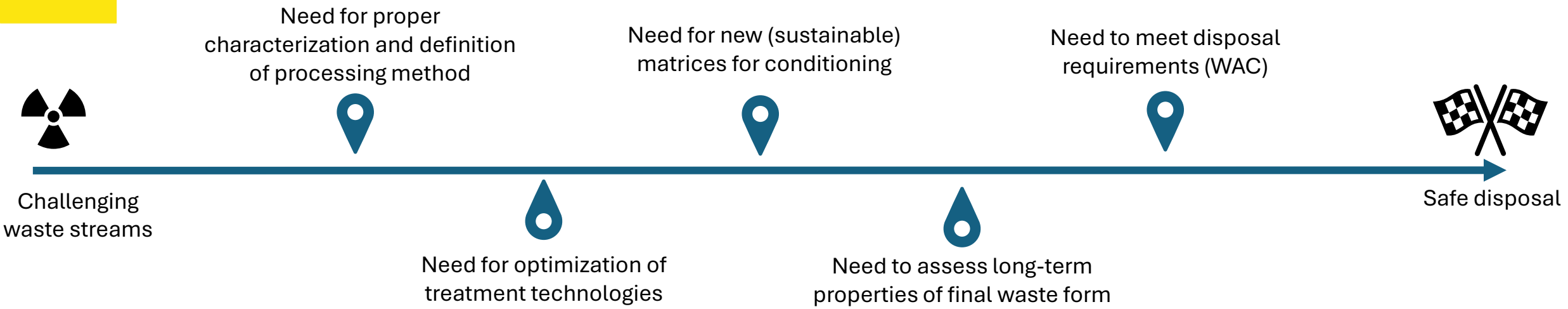
Topical session 1 – Pre-disposal



ICARUS	to develop innovative solutions to **advance characterization**, providing essential data for developing processing routes and assessing final waste package characteristics
STREAM	to explore various **processing methods**, including **new sustainable matrices** for waste conditioning, improve performance and waste loading. The new technologies will be optimized and integrated into existing systems to ensure compatibility with current infrastructure and scalability for industrial use.
L'OPERA	evaluate **boundary conditions** and **long-term performance** of waste forms, ensuring that they will not release harmful substances over time

Topical session 1 – Challenges

	Gap/Challenge	ICARUS	STREAM	L'OPERA
1	Waste Acceptance Criteria	>10	>10	>10
2	DTM Radionuclide Analysis	>10	1	1
3	Waste Form Durability	2	>10	>10
4	Sustainability and Environmental Impact	0	>10	>10
5	Modeling	0	4	>10
6	New Conditioning Matrices	2	>10	>10
7	NDT enhancement	>10	3	1
8	Nochar + RLOW	2	>10	>10
9	MKPC + Metals	1	>10	>10
10	Scaling-Up	>10	>10	>10
11	Physico-Chemical Characterization	>10	>10	>10
12	Monitoring and Modeling	>10	5	>10
13	SF methodology	>10	2	0
14	Standardization	>10	>10	>10
15	GP-AAM + RLOW and RSOW	2	>10	>10
16	Optimized Treatment Technologies	4	>10	6
17	MKPC + SIERs	0	>10	>10