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## **Laser Wakefield Acceleration Experimental Area at the CLF Extreme Photonics Applications Centre**

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The Central Laser Facility are constructing the Extreme Photonics Applications Centre (EPAC), aiming to become operational as a user facility in 2027. EPAC will house a 10 Hz, 1 PW laser serving two independent experimental areas. The first area to come online is configured as a long focus beamline, predominantly for developing laser wakefield acceleration in gas targets. I will describe the design of this beamline, our plans for targetry and diagnostics, and our proposed operational model.

One of the goals for EPAC is to optimise secondary sources for applications, particularly x-ray imaging using ultrafast x-ray pulses. This will require the implementation of stabilisation strategies and machine learning techniques that have been demonstrated by the LWFA community in recent years. We have established a network of industrial users who are interested in using LWFA technology and I will highlight several areas we aim to explore with proof-of-principle campaigns.

Before starting full operations, we plan a period of beamline commissioning to establish reliable LWFA performance. I will outline our plan for these initial experimental campaigns and explain our facility priorities. Bringing EPAC online will be a collaborative effort with our users and we welcome involvement from all in the LWFA community.

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