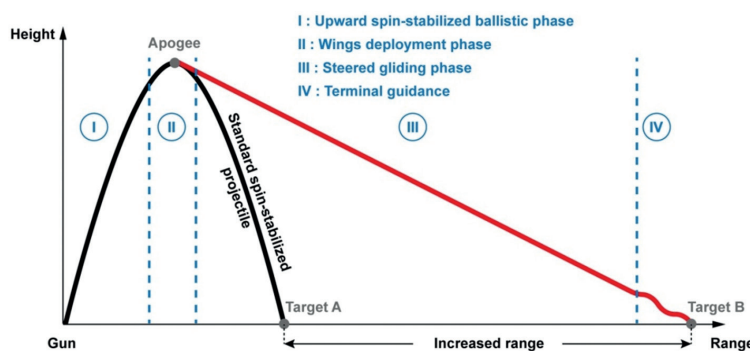


155-mm long-range full-calibre guided projectile

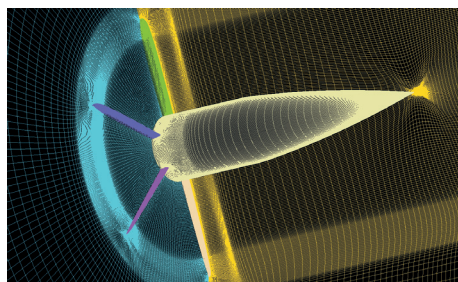
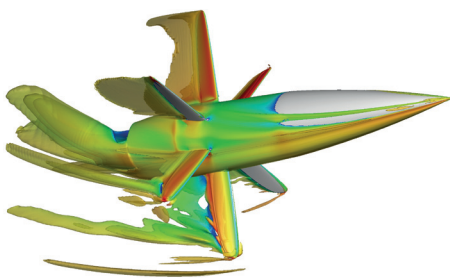
ISL works on innovative aerodynamic architectures as well as on guidance and control solutions beyond existing gun-launched ammunition - such as EXCALIBUR (in service in the US Army) or VULCANO (under development) - which are typical fin-stabilised configurations.

The ISL concepts of 155-mm full-calibre projectiles are spin-stabilised up to the apogee. At the top of the trajectory, the front part, which integrates navigation sensors, a GNSS receiver, antenna, control devices and possibly a seeker, is roll-decoupled. Then the wings are unfolded.



The expected ranges exceed 80 km. Optimising the shape and dimensions of the wings as well as the spin rate in the gliding phase requires specific ISL know-how.

In parallel, ISL works on cost-efficient solutions for the navigation, guidance and control of such concepts.



Technical data

- 155-mm full-calibre projectile
- Initial velocity: 935 m/s
- Initial launch angle: 35° to 65°
- Foreseen maximum range: > 80 km
- Flight time: 250 s to 500 s

Operational challenges

- Use of classical rifled artillery systems
- Longer range → Improves armed forces safety
- Precision → Efficiency, reduction of collateral damage and of logistic footprint
- Cost efficiency

Technical challenges addressed by ISL

- Aerodynamics design and characterisation
- Design and testing of the deployment system
- Cost-efficient on-board components and electronics
- Advanced algorithms for navigation, guidance and control

