

# CSIR's Emergency Retrieval System (ERS)

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In news

CSIR's constituent laboratory Structural Engineering Research Centre (SERC) develops an indigenous technology, Emergency Retrieval System (ERS)

What is the Emergency Retrieval System (ERS)?

- ERS is **a lightweight modular system that is used as a temporary support structure to restore power immediately after the collapse of transmission line towers during natural calamities** such as cyclone/earthquake, or manmade disruptions.
- ERS can be assembled quickly at the disaster site for restoration of power in 2-3 days, whereas the permanent restoration may take several weeks.
- Made of structurally highly stable box sections, ERS is lightweight, modular and reusable.
- It provides a complete solution from member connections up to the foundation for different type of soil conditions.
- The ERS system is verified through rigorous structural tests.
- Basic knowledge and tools are enough to assemble and install ERS at the disaster site. With ERS suitable configurations for different voltage-class of transmission line systems are possible.
- The ERS system is compact and yet provides full functionality on erection.
- It is designed as a scalable system for 33 to 800 kV class of power lines and can help in building a disaster resilient society.

## Current status its production

At present, the ERS systems are imported. There are very few manufacturers across the world and the cost is relatively high.

## Significance

This technological development will enable manufacturing in India for the first time, which will be an import substitute and will cost about 40% of imported systems. ERS has huge market requirement in India as well as in SAARC and African countries. Hence, this technological development is a big leap forward towards Atma Nirbhar Bharat and Make in India