Smart metering infra

March 17, 2023

<u>In news</u>— The Cellular Operators Association of India has flagged concerns over the deployment of advanced metering infrastructure using unlicensed spectrum in the 865-868 MHz frequency band.

What is Smart metering ?

- A smart meter is an electronic device that records information such as consumption of electric energy, voltage levels, current, and power factor.
- Smart meters communicate the information to the consumer for greater clarity of consumption behavior, and electricity suppliers for system monitoring and customer billing
- Smart meters are part of the Advanced Metering Infrastructure (AMI) solution that measures and records consumers' electricity usage at different times of the day and sends this information to the energy supplier.
- The technology through which such information is transferred is called RF or radio frequency mesh technology which is an over-the-air communication technology and works like Wifi.

What is the concern flagged by COAI?

- As this infrastructure will rely on unlicensed spectrum and equipment with limited or no security, external persons or agencies may get central access to the control centre as well as databases required for operation of the smart grid via security infringement.
- They can severely disrupt the operations of public utility infrastructure with the intent to harm.
- Among other key things, COAI also flagged the issue of quality of services as use of low quality equipments under the unlicensed spectrum for AMI may interfere with

the licensed spectrum, thereby leading to service quality issues.

About Cellular Operators Association of India-

- It is an Indian non-governmental trade association and advocacy group focused mainly on telecommunications industry.
- COAI was constituted in 1995 as a registered, nongovernmental society.
- As of 2017, COAI has been (jointly) organizing the India Mobile Congress with the Department of Telecommunications, Government of India.