







### Large scale infrastructure operational program 2014—2020

Improving energy efficiency through the implementation of intelligent smart metering systems to low-voltage electrical networks

Ministry of European Funds









- □ Smart energy distribution has become a priority of ANRE which, starting from Law No 123/2012 on electricity and gas, issued Order No 91/2013 that provides as national target implementation of smart metering systems for electricity to approx. 80 % of final consumers number by 2020
- ☐ The positive effects of smart distribution results from monitoring and improving the operational parameters and operation of the electricity system, such us:
- Internal technological consumption
- **Duration of power supply interruptions, the number of incidents, voltage dips**
- ❖ Volume of expenditure, volume of investment in networks, reduce operating costs (for reading, connecting/disconnecting remote place of consumption)
- **\*** Better management of consumption at the end users









- ☐ Types of specific actions:
- ❖ A homogeneous implementation of smart distribution to non-industrial electricity consumers (demonstration projects in the regions covered by the distribution system operators dealers) by:
  - Installation of intelligent metering systems for about 10.000 consumers in a homogeneous area served by an electricity distribution operator for each demonstration project will be done (a total of approx. 80.000 consumers at the level of projects financed)
  - Permanent monitoring of electricity consumption information at consumers (in real time), to enable them to benefit from the positive impact of energy efficiency measures to be implemented, as well as the immediate impact of pricing policies to be applied on non-industrial electricity consumer behavior
  - Registered data that must be sufficient to analyse and optimise the functioning of the distribution facilities and equipment in order to increase the efficiency of the network. These data must allow the rapid identification of action points









#### Expected results:

- ❖ Installation of smart meters and all other related elements to enable companies to reach the target distribution on implementation by 2020 at aprox. 80 % of final customers as required by Law No 123/2012
- ❖ For selected areas, electricity consumption to decrease by 10 % due to smart management at consumer and distribution level
- ❖ To support the model which the distribution operators use for the implementation of intelligent metering systems
- Savings around 300 MWh/year/project (based on annual average electrical consumption of urban families in Romania)









- Types of beneficiaries:
- ❖ Distribution system operators concessionaires of public service electricity, subject to implementation of smart metering obligations in proportion of 80 % by 2020 (according to ANRE Order No 91/2013 on implementation of smart metering systems for electricity)

# Thank you for your attention!















## For further information on the JASPERS Networking Platform and questions on this presentation, please contact:

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