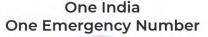
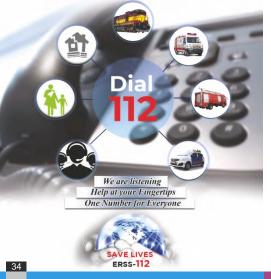


mergency Response Support System (ERSS) is the single most important and path-breaking vision of the Government of India which would revamp and revolutionize the existing emergency response support systems in the country by unifying the varied and multiple emergency numbers existent across the nation. It envisages the use of a globally recognized, pan-India single number 112 for all emergency purposes.







ERSS is as an initiative under Nirbhaya Fund Scheme, a nonlapsable corpus fund, constituted for ensuring safety and security of women in the aftermath of the Nirbhaya incident. It is a synergetic endeavour of Ministry of Home Affairs (MHA), Ministry of Women and Child Development (MWCD) and Center for Development of Advanced Computing (C-DAC).

Since the inception of the project in 2017, C-DAC has been in for a long haul completing the project in 19 states and Union Territories by 2019. In 2019-20, this flagship project of the government was marked as a Special Achievement of the MHA portfolio. With highly sophisticated and state-of-the-art system being launched in Delhi in September 2019, C-DAC went ahead with the commissioning and the operationalizing of the ERSS-112 in 29 States and Union Territories with an eye on covering all the 36 states and Union Territories by the end of December 2020.

The advanced technology and state-of-the-art facilities/components envisaged in ERSS -112 make it a best-of-class integrator solution in adherence with the requirements of MHA. The solution designed and developed at C-DAC lab is a complete end-to-end indigenous solution equipped with

intelligent backend systems. The mathematical model and algorithms used in the geographical information system (GIS) analytics is conceived and developed using Free and Open Source tools/software and the sensitive data handled in the ERSS-112 project is secure under the ownership of the Government. This cost-effective solution developed by C-DAC is customizable for various state governments based on Standard Operating Procedure stipulated by MHA and has achieved seamless integration with multiple emergency services all overthe country.

The Emergency Response Centre (ERC) accepts a multitude of emergency/distress signals of the likes of voice calls, SMS, e-mail, Twitter and SoS alerts, making it a highly user-friendly and immensely accessible interface. ERSS 112 has a simple yet efficient mechanism where, the Communication Officer (CO) who receives the distress call after recording the necessary event information along with the location of the victim dispatches it to the Dispatch Officer (DO). The Dispatch Officer now aided with the location of the victim will trace the nearest ERU (Emergency Response Unit) and dispatch the event information to that unit in a minimum response time



allowing the rescue officers to pitch in. By integrating all the services under a centralised mechanism, ERSS-112 circumvents the need of connecting with multiple emergency services on the part of the user and negates the tedious process of remembering multiple numbers.

With an average response time of 15 minutes, the ERSS-112 is a boon to any individual in distress. Able to cater to the widest spectrum of distress situations, the services of ERSS-112 were extended and launched for the public as the Covid Helpline Number for the State of Punjab. The reach of the system was further enhanced with the launching of a mobile application named "112 app" equipped with a unique 'Shout' alert and Incident Locator which ropes in volunteers for distress aid. All these novel features are in addition to the transparency and reliability that ERSS offers to the public in the matter of response to distress, by offering reliable communication and ease of traceability of rescue vehicles.

ERSS 112 has lived up to its reputation as a formidable technology in the matter of rescue operations. During the Kerala floods of 2019, distress calls to 112 saved around 700 lives. A massive disaster was avoided in Udaipur when the rescuers responding to a 112 call reached the site to carry out rescue and evacuation. ERSS-112 extended their help for stranded women/





children/youth during night hours at Chhattisgarh due to non-availability of public transportation and ensured their safe travel to home. During the COVID crisis, Delhi recorded maximum number of actionable calls reporting a whopping 18,16,068 actionable calls, out of the 54,44,447 ones landed.

In the second phase of ERSS-112, multi cloud management and automated operations are planned to be introduced. The individual ERSS systems of different states will be integrated into a unified system, with capability of interstate dispatch. A national portal NSS (National Support System) will be setup with subscriber database of whole country and a dashboard for monitoring the performance in each state.

Other emergency services of Central Reserve Police Force (CRPF), Railway Protection Force (RPF), and National Disaster Management Agency (NDMA) will also be integrated with ERSS through Machine-to-Machine communication. It will further the vision of 'One India, One Number' many steps forward with 'One Solution'.