The South-East Asia Regional Office of the World Health Organization (WHO-SEARO), the Global Outbreak Alert and Response Network (GOARN), the Association of European Operational Research Societies (EURO and ORAHS), and the Association of Asia-Pacific Operational Research Societies (APORS) are glad to announce the Winter School of Operational Research in Public Health EmergencieS (ORPHES). ORPHES will take place online from **January 10 to February 25, 2022**, with the support of the International Federation of Operational Research Societies (IFORS).

Theme. Public Health Emergencies (PHE), due to their scale, timing, or unpredictability, can overwhelm routine local health capabilities. Operational Research (OR) has shown its capability to aid decision makers in the fields of health and disease management, patient flow and all aspects of optimal use of scarce resources. The goal of ORPHES is to illustrate how public health emergency preparedness and response can benefit from the application of OR methodologies to prevent, protect against, quickly respond to, and recover from health emergencies.

Audience. ORPHES seeks to develop a community of people interested in the application of OR to PHEs, connecting public health practitioners with OR professionals. The ideal audience is a mix of public health officials, and OR experts (graduate and PhD students, and practitioners with an OR or Operations Management background). Participants from member states of the WHO South-East Asia Region will be given priority.

Program and syllabus. ORPHES's preliminary program is available online (see the "Links and further information section").

Learning Goals	The Winter School is aimed at providing the students with notions of (i) the main OR methodologies, especially those widely used in the delivery of health care and public health services during public health emergencies, and (ii) the most successful OR applications in the area of health and social care. Furthermore, the students will learn from practice through a series of case studies.
Intended Learning Outcomes	At the end of the school, students will be able to (i) recognise a specific OR problem in a real operative context, (ii) identify relevant parameters and variables of the problems, (iii) describe / develop a model for the problem using the OR methodologies, and (iv) understand the numerical results obtained by solving the model and their applicability to the real context.
Desirable skills and interests	Numeracy, computer programming, and interest in applying Operational Research in Public Health Emergencies.
School organisation	The Winter School will be composed of a set of online lectures. All experts / teachers involved in the winter school will provide their own materials. **The lectures will take place in the time interval 12:00 - 16:00 CET and it will be recorded.**
Registration	Participants can register to either only attend the lectures (hereafter **attenders**), i.e. general registration, or they can attend and also submit abstracts of current or future work (hereafter **proposers**). Abstracts must depict a PHE problem suitable to be solved through the application of OR approaches. Abstracts will be reviewed and some will be selected to be presented by the participant (during the debriefing part of the school agenda). As the School intends to build a community of OR practice, faculty members will be available to work together with the participants whose abstracts were chosen towards the completion of the work. The more promising works (which may continue past the School), if suitable for publication may be supported by the School, i.e. covering article publishing charges. All participants to the school will receive a certificate of attendance, after adequate completion of a post-event questionnaire.

How to apply. Applicants should send their candidature by filling out the form linked below. The form is intended to collect information about the participants (educational background, affiliations, previous

experiences, ...), the motivation for attending the school, and eventually the abstract of current or future work (only for proposers). **School numbers are limited to 40**. Participation in the school for selected applicants is **free of charge**. ORPHES will select the participants in order to guarantee a balance in terms of gender and country of origin.

Important dates.

- Deadline for applicants   Dec 1, 2021, 17:00 CET
- Selection of the participants   Dec 8, 2021, 17:00 CET
- ORPHES Winter School   from Jan 10 to Feb 25, 2022

Links and further information.

- Website: https://www.euro-online.org/web/pages/1700/
- Request for information: orphes@euro-online.org
- Call for Applications: https://di.unito.it/orphescallforapplicants (this document)
- Application form: http://di.unito.it/orphesapplicationform
- Scientific Program: available from November 15, 2021

Organising Committee.

- Prof. Roberto Aringhieri, University of Turin, Italy (EURO contact person)
- Dr. Victor Del Rio Vilas, WHO SEARO (GOARN contact person)
- Dr Honora Smith, University of Southampton, UK
- Prof. Stefan Nickel, IFORS Vice-President for EURO, KIT, Karlsruhe, Germany