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<i>ORFEUS Secretary General (hosted at ETH):</i>	Dr. Carlo Cauzzi	<a href="mailto:orfeus_secretary@knmi.nl">orfeus_secretary@knmi.nl</a>
<i>ORFEUS Data Center:</i>	R. Sleeman, L. Trani, J. Bieñkowski	

### ORFEUS Software Development Grants: Call for Applications 2022

ORFEUS (Observatories and Research Facilities for European Seismology; <http://orfeus-eu.org/>) welcomes applications for grants supported by the ORFEUS Software Development Fund 2022.

Grants will be awarded for the development, consolidation and implementation of relevant software to ease the management of, access to, and processing of data and metadata integrated in the ORFEUS EIDA (European Integrated Data Archive), Strong-Motion and Mobile Instrument Pools programs. This includes but is not limited to:

- software to monitor and enhance data quality and availability;
- software libraries that can be used centrally as well as by external clients;
- software useful to prepare the ORFEUS infrastructure to deal with and to integrate new data types and communities.
- software to generate and distribute new waveform data products.

The grants will be awarded to individuals affiliated to seismological observatories and institutions in the greater European region. Precedence will be given to Participants or Core Participants of ORFEUS, or to institutions that are actively participating in any ORFEUS activities, including those of the ORFEUS UAG. The institutions should be committed to open data and software policies. The grants are intended to support developments by the wider ORFEUS community (i.e., not by members of the ORFEUS Infrastructure Development Groups).

The eligibility criteria for the grants are:

- affiliation to a seismological observatory / institution in the greater European region by the date of the application: if the observatory / institution is not yet a Participant of ORFEUS or is not in good standing<sup>1</sup> by the time of the application, the grant will automatically imply the start of the participation and will include a complimentary participation fee for one year;
- clear identification of the individual who will carry out the activity at the institution, and/or of the principal investigator responsible for the project at the institution;
- commitment to free and open-source software development - the software project to be supported should be available on a public software repository (e.g., Github, Gitlab) with an open standard license (e.g., GPL or similar) and dedicated public detailed documentation;
- commitment to active interaction with the ORFEUS Infrastructure Development Groups to ease integration of the software in ORFEUS workflows as needed;
- submission of a complete application form following the template in Appendix.

The applications should be sent by email with subject "Application for ORFEUS Software Development Grant" to [orfeus\\_secretary@knmi.nl](mailto:orfeus_secretary@knmi.nl) by 31 March 2022 at midnight GMT.

The applications will be evaluated by the ORFEUS Executive Committee, which may contact the Applicants for questions and clarifications, that may include review of the budget. Applications by Early Career Scientists<sup>2</sup> are encouraged. The existence of a public software repository actively maintained by the applicant by the date of the application will be regarded positively. The grants are awarded based on the evaluation of the ORFEUS Executive Committee. The grant recipients (individuals, institutions, brief software description) will be announced on the ORFEUS website (<http://orfeus-eu.org/>) by 30 April 2022. The recipients of the grants and their hosting institutions will be invited to sign an agreement with ORFEUS prior to the transfer of funds.

ORFEUS expects to award a maximum of five grants. The maximum total expenditure of ORFEUS will be equal to 25,000 Euros, to be distributed among the recipients based on the expected work plans presented in the successful applications. The financial support for each selected application will range between about 5,000 and maximum 10,000 EUR. The grants will be transferred (typically in one single payment upon signature of the grant agreement, at the start of the grant period<sup>3</sup>) to the Institutions to support the activities of the individuals identified in the successful applications. The grants are expected to partly support the direct salary costs of the Applicant and / or the Applicant's travel expenses related to the funded project. The project supported by the grant should be completed within one year of the grant start.

<sup>1</sup> "Good standing" means that the Participation fee to ORFEUS for year 2021 is paid.

<sup>2</sup> Based on the definition used by the European Geoscience Union: "An early career scientist (ECS) is an undergraduate or postgraduate (Masters/PhD) student or a scientist who has received their highest degree (BSc, MSc, or PhD) within the past seven years (provided parental leave fell into that period, up to one year of parental leave time may be added per child, where appropriate)".

<sup>3</sup> If the applicant is planning to permanently move to a different institution during the grant period, this should be specified in the application.

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**Appendix – Template of:**
**Application for ORFEUS Software Development Grant**
**(Max. three pages, including max. one picture and max. one table; + Applicant's CV of max. two pages)**

- Name and Surname.
- ECS status.
- Title of the software project.
- Current position and its relationship to the software project.
- Affiliation (current and future, if applicable)<sup>3</sup>.
- Previous experience in software development and with ORFEUS data and services.
- Link to applicant's public software repository, if available.
- Software description: motivation, scope, programming language, expected impacts (also beyond ORFEUS), interoperability with FDSN- and ORFEUS-promoted web services.  
(max 500 words)
- Workplan (3 to 12 months maximum) towards public software release (including essential documentation): milestones to be achieved, timeline, total effort in person-months (PM), expected direct travel costs (max. 15% of the total budget), total estimated direct costs<sup>4</sup>.  
(max 1/2 page)
- Expected effort needed by the ORFEUS Infrastructure Development Groups for integration and sustainability.
- Please enclose an updated CV of max. two pages.

The applicant and the institution commit to:

- free and open-source software development and release: the software project supported by the grant should be available on a public software repository (e.g., Github, Gitlab) with an open standard license (e.g., GPL or similar) and dedicated public detailed documentation;
- active interaction with the ORFEUS Infrastructure Development Groups to ease integration of the software in ORFEUS workflows as needed;
- complete the project supported by the grant within one year of the grant start;
- provide at least one presentation to the ORFEUS community in one of the ORFEUS meetings when development is completed.

The applicant and the institution are aware and accept that the awards will be announced on the ORFEUS website, including the name and surname of the recipient, affiliation, and a short software description.

Date, Place

Signature of the applicant

Signature for the institution (please specify Name, Surname, Role of the Signatory)

<sup>4</sup> While the ORFEUS grant will likely cover only part of the effort, we recommend focusing on projects that can be realistically finalized within a few PM, to optimize the impact of the ORFEUS funding and avoid overcommitment of the recipient. ORFEUS grants will cover direct costs only: please do not include overheads and VAT in the estimated costs.