

**Q1** What is your organisation's/project's name?

Fraunhofer ITWM

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**Q2** Your organisation's/project's website

<https://www.itwm.fraunhofer.de/en.html>

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**Q3** Are you?

**A research organisation**

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**Q4** Your name

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**Q5** Your email address

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**Q6** Your contact phone number

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**Q7** Please summarise who you are and what you do

The Fraunhofer-Gesellschaft FhG is Europe's largest organization for application-oriented research. Founded in 1949, the organization undertakes applied research that drives economic development and serves the wider benefit of society. Its services are solicited by customers and contractual partners in industry, the service sector and public administration.

As part of Fraunhofer ITWM, the Competence Center for High Performance Computing (CC-HPC) develops innovative HPC solutions for the industry and participates in national and international research programs. Since its foundation in 2002, the CC-HPC focuses primarily on parallel application development and development of HPC tools. This includes the communication middleware GPI (Global Address Space Programming Interface), the GPI-Space programming environment for parallel and big data applications, and the BeeGFS File System formerly known as FhGFS.

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**Q8** In what way would like to contribute to an EsD project? **As a technology provider,**  
**An an application**  
**provider**

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**Q9** What would be your contribution to an EsD project?

We could contribute with our programming model GPI, the runtime system GPI-Space and the file system BeeGFS) to develop an eco-system for an ESD. The developers of the HPC tools are in-house allowing to apply new concept, extensions and adaptations to the middleware quickly.

We also develop numerous applications. Most notably seismic imaging methods (like GRT and RTM), a linear algebra library (GspiLS) and a scalable deep learning application (CafeGPI).

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**Q10** What partners are you looking for?

We are looking for system integrators who are building a proposal for the ESD.

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**Q11** Please include links to any additional material.

GPI: <http://www.gpi-site.com/gpi2/>

GPI-Space: <http://www.gpi-space.de/>

BeeGFS: <https://www.beegfs.io/content/>

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**Q12** Other comments/ideas

**Respondent skipped this question**

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