

| TSVV    | Code name                       | Task required to ACH  | ACH name          |
|---------|---------------------------------|---|-------------------|
| Task 10 | EUTERPE/<br>ORB5                | Code refactoring: improving the data structures and workflows to facilitate GPU-enabling of EUTERPE and implementation of advanced structure-preserving methods. Targeting unified and inclusive framework with ORB5.   | ACH-01<br>(MPG)   |
| Task 10 | ORB5/<br>EUTERPE                | Further development of GPU functionality (OpenACC) for large-scale EM turbulence simulations; extension to other options (such as OpenMP4.5 or Kokkos). Improvement of solver performance and strong scalability on GPUs.   | ACH-02<br>(EPFL)  |
| Task 10 | ETS/<br>LIGKA/HAGIS<br>/HYMAGYC | Up-to-date IMAS support including ITER/WPCD integrated modeling tools, experimental data import/export, visualization on IMAS. Integration of all actors needed for the reduced models and of the reduced models themselves into the ETS. Maintenance of development toolchains (gcc/intel, fortran, c/c++, python3). Speeding up transport models for burning plasmas in presence of Alfvénic waves and energetic particles once these models are established. | ACH-04<br>(IPPLM) |