GASPI proposal: Various Clarifications

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This is a collection of small bug reports and proposed changes to the standard. Changes are marked bold throughout the document.

1 Wrong `gaspi_group_add` signature

The group paramter of `gaspi_group_add` is a simple [in] parameter and it doesn't need to be passed to the function via a pointer

Proposed Changes

In sec. 6.3.2 (`gaspi_group_add`) change the following item:

> *(**inout**) group:* the group to which the rank is added

becomes:

> *(**in**) group:* the group to which the rank is added

2 Safety of `gaspi_barrier` in multi-threaded applications not exactly stated

The following statement in sec. 11.2.1 intends to describe the safety of barrier calls in multi-threaded applications:

> Starting a barrier operation in another thread before a previously invoked barrier is finished on all processes of the group is not allowed and yields undefined behavior.

This seems to imply, that the `gaspi_barrier` calls of all participating processes have to be finished (i.e. returned to their caller). This is not neccessary. If a `gaspi_barrier` returns successfully, then all communication regarding that barrier should be completed anyway at the local process.

Proposed Changes

Relax the above statement as follows:

> Starting a barrier operation in another thread ***of a process*** before a previously invoked barrier ***of the same group*** is finished ***at that process*** is not allowed and yields undefined behavior.

3 `gaspi_error_meassage` undefined

The function `gaspi_error_message` is mentioned in sec. 3.11 and used in example A.1. Instead the function `gaspi_print_error` (defined in sec. 13.3.2) is meant.

Proposed Changes

Replace all occurrences of `gaspi_error_message` with `gaspi_print_error`.

4 Sorting of ranks in a group

The description of `gaspi_group_add` in sec.6.3.2 states:

> Whenever you add a rank the list of ranks is sorted in ascendinging order.

Whether ranks are stored sorted within a group, is an implemetation detail. The intention is, that `gaspi_group_ranks` returns the ranks in sorted order.

Proposed Changes

In sec. 6.3.2 remove the above quote. In sec. 6.5.3 change the description as follows:

> After successful procedure completion, i. e. return value `GASPI_SUCCESS`, the list *group_ranks* contains the ranks of the processes ***in ascending order*** that belong to the *group*.