GASPI Proposal: Clarification of \texttt{gaspi\_write\_notify} Semantic

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As discussed in the last GASPI Forum’s meeting on January 20th 2016, we propose to change the semantic of `gaspi_write_notify` as described in the “Implementor’s Advice” of `gaspi_write_notify`:

[p. 76] The procedure is semantically equivalent to a call to `gaspi_write` and a subsequent call of `gaspi_notify`. However, it should be implemented more efficiently, if supported by the network infrastructure.

to a more fine-grained semantic.
Proposed Change

Problem:
gaspi_write_notify ≡ gaspi_write, gaspi_notify
⇒ fence for all previous writes.

Proposed Change:

▶ notification coupled directly to this message
▶ imply nothing on previously posted writes.
Required Changes

Change in implementor advice p. 76 and p.80:

▶ **Implementor advice:** The procedure is not semantically equivalent to a call to gaspi_write and a subsequent call of gaspi_notify. A call to gaspi_write_notify does not enforce an ordering relative to other gaspi_write, gaspi_write_list, gaspi_write_list_notify or gaspi_write_notify operations.

▶ **Implementor advice:** The procedure is not semantically equivalent to a call to gaspi_write_list and a subsequent call of gaspi_notify. This call does not enforce an ordering relative to other other gaspi_write, gaspi_write_list, gaspi_write_list_notify or gaspi_write_notify operations.
Additional proposed Change

In addition we propose the inclusion of the following user advices:

- **User advice:** In **GASPI** specification v16.1 and lower, the semantic of `gaspi_write_notify` was equivalent to `gaspi_write` followed by `gaspi_notify`. Due to the change in semantic, applications relying on the old semantic of `gaspi_write_notify` will have to replace their fencing `gaspi_write_notify` call with a `gaspi_write` followed by a `gaspi_notify`.

- **User advice:** In **GASPI** specification v16.1 and lower, the semantic of `gaspi_write_list_notify` was equivalent to `gaspi_write_list` followed by `gaspi_notify`. Due to the change in semantic, applications relying on the old semantic of `gaspi_write_list_notify` will have to replace their fencing `gaspi_write_list_notify` call with a `gaspi_write_list` followed by a `gaspi_notify`. 