

# EMI Strategy and Mandate on Participation to Standardization Activities

## Overview

EMI has a strategic interest in participating and contributing actively to international standardization activities and contributing to the development of widely accepted open standards to be adopted by the e-infrastructure communities at large.

At the same time EMI has an immediate need to provide working solutions to its customer base in response to identified requirements and within the time, effort and budget constraints imposed by the urgency of those requirements and by the EMI project structure and funding.

It is not an easy task to find the right way of making the two goals coexist without contradictions or conflicts. They should be seen as much as possible as two inter-related aspects of the overall EMI standardization strategy. EMI, as many other projects participating in international standardization activities, has specific objectives to be achieved in the short term and far-reaching, long-term objectives to pursue as part of wider initiatives. The short-term objectives have to be seen as valuable intermediate steps towards the achievement of the ideal long-term goal, not as alternative solutions. At the same time the concrete objective of satisfying urgent requirements cannot be delayed by the necessarily long consensus-based process of defining widely accepted standards.

As part of the objectives of the JRA1 Standardization task (JRA1.6), EMI must develop an efficient strategy to achieve the short-term objective of improving the middleware usability and interoperability by harmonizing when necessary the EMI services interfaces across the four middleware distributions participating in EMI by:

- 1) Implementing existing standards whenever feasible
- 2) Extending, redefining or creating suitable specifications across the EMI services when there are no existing standards or the existing standards are not suitable and the open process required by international standardization activities is not compatible with the EMI project scope and requirements

The results and the experience collected during the EMI standardization activities must be disseminated within international standardization bodies, like OGF, OASIS and others. This activity is considered fundamental to improve the existing standards and converge to the ultimate goal of having widely agreed and adopted standards. It makes an integral part of the EMI project dissemination and use of knowledge strategy.

The work performed within EMI to define, extend, improve interface specifications to be adopted by EMI and eventually proposed to SDOs for further discussion is a fully legitimate and official part of the general EMI standardization activities.

## Strategy

The primary responsibility of EMI is to produce working solutions in response to requirements of the user communities using the EMI middleware services. As part of the general mission of EMI, the working

solutions must as much as possible be common across the four middleware distributions participating in EMI. This primary objective can be achieved in a number of ways, but it is important that priorities are correctly defined and understood by all project members. In particular in the field of standardization the primary objective is not “to adopt open standards”, but rather “to improve the user experience by simplifying the EMI middleware and adopting common specifications across ARC, gLite, UNICORE and dCache”.

Two different scenarios can be envisaged:

- 1) If the primary objective can be achieved by adopting existing standards or carefully controlling existing standardization activities, then it must be done.
- 2) If this is not possible by the collective best judgement of the EMI technical experts, then the EMI effort must be put in defining common specifications within EMI first and then proposing any useful outcome to the international community for further evaluation, but without and delay or constraint on the EMI development activities.

The JRA1 Standardization Plan (DJRA1.5.x) must clearly describe this strategy and outline which cases fall into the first scenario and which cases fall into the second one. The plan must be clearly communicated to all project members and openly and actively supported and encouraged by all EMI managers (PD, PT, WP Leaders, Technical Area leaders, etc).

In both cases, the Standardization Plan must outline the major milestones leading to the achievement of the standardization objectives, including the dates by when new specifications have to be completed (both for internal and external specifications), by when internal specification have to be presented to SDOs, by when existing or new specifications have to be implemented and by which components, which tests have to be performed, etc.

## Mandate

It is the responsibility of all EMI members involved in standardization activities to make sure that the EMI standardization strategy is implemented.

Each EMI member attending standardization events outside EMI as part of his or her EMI duties must represent EMI, its goals and the standardization activities taking place within the EMI collaborations. Results of the internal EMI standardization activities have to be presented to external events and EMI members are encouraged to help improve open community standards and specifications in light of the experience collected during the EMI activities. Conversely recommendations made by external standardization bodies have to be brought back to EMI and made part of the EMI development plans goals as much as practically possible, but without delaying or conflicting with the main objective of having working solutions based on specifications adopted by all relevant EMI services within the EMI lifetime and according to the EMI standardization plan.

The EMI activities must not be presented or commented by EMI members attending external events as “closed” activities as opposed to “open” activities or an obstacle or a competing solution to international standardization goals. On the contrary, all EMI members must ensure that the needs of EMI are clearly stated, motivated and supported and that the EMI achievements are disclosed and discussed as part of open standardization events. This dissemination activity is considered a fundamental task of any EMI members involved in standardization activities.

Any important difference in opinions and strategies among the EMI members has to be discussed within EMI and not during external events. When the EMI members present their view at external events, it must be the EMI view as collectively decided within EMI. This doesn't mean that disagreements are not possible, they are indeed needed to progress. However, external events are not the best place to sort out internal disagreements.

The JRA1 Work Package Leader assisted by the Standardization Task Leader must ensure that the outlined strategy is clearly described in the EMI Standardization Plans (DJRA1.5.x) and enforced during the EMI standardization activities within and outside EMI by all concerned EMI members.