Proposal to setup

"Distance Learning Educational Program Framework" of The Indian Institute of Metals

Date: 30th April 2019

Expression of interest is sought from prospective application service providers(ASP) to setup a portal for Distance Learning educational Program framework (referred to henceforth as DLP) of the Indian Institute of Metals(IIM).

The setup and execution of the DLP will be taken up by a committee of IIM, referred here as the DLP-Team.

1.Features

DLP shall have the following essential features.

- 1. Web based portal available on desktop as well as on the mobile devices.
- 2. Branding of appearance and content marking with IIM.
- 3. Allow for fine grained authentication of users as per their roles such as guest, student, member, instructor, course coordinator, controller of examinations, administrators etc.
- 4. All for sharing of media of different types of both downloadable and streaming type.
- 5. Modules for the complete life cycle of a course to be part of core, eg. registration, course delivery, assignments, assessment, grading and closure of learning objectives.
- 6. The portal shall operate over HTTPS with certificate indicating ownership of the portal with IIM.
- 7. The portal shall allow for delivery of courses in MOOC format.

DLP shall have the following desirable features:

- 1. A payment gateway for the collection of course/examination fees and linked with an identified account of IIM.
- 2. The portal shall be setup using a leading open source platform based on LAMP such as Moodle/Google course builder.
- 3. The portal shall conform to industry standards such as SCORM/Tin Can API/IMS Global/AICC/IEEE LTSC.
- 4. An SMS gateway to help with two stage authentication as well as sharing alerts.
- 5. The portal shall aid live steaming content delivery to group of users. This should be made possible using open source/industry standard format of data. The live-streamed media shall be part of the portal to organise, backup and maintain the media files of the portal.
- 6. A file management feature shall be part of the portal to organize, backup and maintain the media files of the portal.

2. Portal Delivery

DLP installation shall be with the following features:

- 1. The portal shall be delivered over cloud with the content stored in a data centre located in India.
- 2. The content shall be backed up and have disaster recovery as per the schedule given separately.
- 3. The media hosted on the platform can be delivered to the users using a content delivery network (CDN).

3. Setup and Maintenance

ASP shall take up maintenance of existing code, addition of new features as per requirements, and deployment of DLP application needs to be carried out by the ASP.

The cloud platform for hosting DLP is chosen by the ASP taking the long term use of the portal.

The specific tasks of the ASP include, but are not limited to the following:

- 1. Support DLP-Team for execution of the DLP for the first year and offer continued support through AMC.
- 2. Fix any identified bugs within the required time period as decided mutually using an escalation matrix as per Service Level Agreement (SLA).
- 3. Enable module or add features as required by DLP-Team on a regular basis. A list of features and timelines/priorities need to be maintained always with a clear roadmap for the application. This will be manually agreed upon between the ASP and the DLP-Team
- 4. Training of IIM staff on usage of current as well as, any new features.
- 5. Working with and assisting IIM with access to data generated by the application.
- 6. Working with IIM instructors and course staff to ensure that the application meets their requirements in offering courses and evaluating students through assignments.
- 7. A detailed user manual for all types of users should be maintained at all times and be available online.
- 8. Optimization of cloud usage charges.

4. Costing

The costing of the DLP shall be according to the following features.

- 1. The initial cost shall be for the following units: Setup of the portal, execution and support for one year, cloud usage charges for the first year.
- 2. Running cost on a monthly basis past the first year shall be using line items that are disclosed and agreed upon mutually in advance.
- 3. The cost component for the setup of the portal shall be estimated as per user per month taking storage, network, compute costs and rest of the cloud hosting costs into account.
- 4. There shall be no hidden costs for the intended setup and execution of the portal.

5.Analytics

- 1. The DLP shall also provide analytics on the usage for the benefit of IIM to plan the Expansion of these activities.
- 2. The analytics shall also made available to reconcile with the cloud hosting.
- 3. Date wise statistics shall be prepared to estimate time periods for peak and steady state use of the portal.

6. Expected behaviour of the portal

The following items indicate the expected behaviour of the portal.

- 1. Users are able to register/sign-up for their accounts on the portal.
- **2.** After a two-setup authentication process that also checks for user to be human, their accounts are created.
- **3.** Portal administrators are able to categorise the users into different roles. Portal allows for customization of permission for each role as per the lifecycle of a course.
- **4.** Users in the student role are able to enrol for an available course using different methods such as manually by the instructor/using an enrolment key/upload of a CSV containing user list etc.
- **5.** Enrolled users are able to take part in the complete life cycle of the course.
- **6.** Instructors are able to take an archival backup of their course for a re-run of the course.
- 7. **Legal Compliance:** ASPs must fulfill the Requirement of Licenses as the Service provider, Applicable Taxes and Certificates needed to be held to carry out the offered services; and also the legal permissions to host the online program

