# Quality Control Plan

Quality Control Plan defines the project's quality objectives and the procedures for achieving those objectives.

Quality control and monitoring procedures started at the begin of the project.

The project coordinator established Quality Control Matrix (QCM), the QCM allows an online control for all project activities and management of the outcomes in the visible form. The project partners were trained to use this matrix during the Kick-Off meeting.

The project indicators described in the LFM are used to measure the projects progress in a quantifiable way.

The Quality Assurance Team (QAT) was established. It consists of the QA Manager from Coordinator, the QA Manager from the partner responsible for WP5 "Quality Control and monitoring", persons responsible for the development WPs and representative of non-academic partner (insures the feedback from the stakeholders). QAT controls the progress, prepares a report and presents it to Steering Group (SG). SG organize the meetings in ½ year period, between these meetings SG communicate using Skype and/or video conferencing. The SG approves the reports and give the recommendation for the activities for improvement of the delivered results if necessary.

For daily work QAT uses QA tools of SUNRAISER platform.  All activities are reported in QCM. There are forms "Status" and "Evaluation", so it is possible to control the current state of the activity. The fulfilled activities get the status "completed" and evaluated.

The special site tools are used for QA of progress and QA of activities.

The QA manager keeps the information in QA platform up to date, insuring that all activities are controlled at least once a month.

The deadlines for the reporting of accomplished activities are available in the Work plan and Schedule  in the project management platform http://sakai12.escience.uni-bremen.de All project members got an account for it. There exists a separate Quality control schedule with  the deadlines of all QA activities.

If quality standards are not met or outcomes are not achieved on time, an adjustment period, agreed by the consortium, is given to a responsible actor to bring the quality to the required level or to provide the output within the newly set deadline. The work plan is corrected in line with the individual case.

Administrative and/or financial instruments may be implemented to make an influence in such a situation.

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The most important activities are evaluated immediately. Thus the lectures will evaluate the student's reports in view of the mobility periods.

The upgraded Curricula with new developed syllabi have to be evaluated and accredited in accordance with the regulations of each partner country.

Afterwards, they will be evaluated by EU and non academic partners. This evaluation will be taken into account and the changes will be done to Syllabi. These activities for improvement are planned in the work plan.

The new learning materials, new eLearning modules will be evaluated by lectures and students in PC universities and after it by the partners from EU Universities, as well as by the specialists from SPIIRAS and stakeholders partners. Teachers from EU and PC universities will evaluate the reports of the students concerning the summer school.

The study periods in PC universities will be evaluated by PC university staff.

The assessment of the dissemination and sustainability activities will be done during the project period.

Reports of admission boards of PC universities; minutes of information workshops and all other dissemination activities will be analysed by all consortium members and by the student and scientific organizations in PCU.

The QA activities are carried out on different Levels:

I.      Project Level (Internal)
    - Work Package activities: Quality Control and Monitoring (WP leader and co-leader)
    -    Steering Group: One member from each partner; Monitoring the overall progress of the project
    -    Evaluation of Activities (e.g. Training)

II      External

    -    External experts evaluate the most important activities and make QA of the whole project.

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## Quality Control activities

| Activity | Deadline | Level |
|---|---|---|
| 5.1 Peer-review of SUNRAISE deliverables | All project time, according the deadlines of the deliverables | Internal/External |
| 5.2 Project monitoring; deployment and maintenance of the quality control matrix | All project time, monthly | Internal |
| 5.3 QA of staff development, IT deployment & dissemination | All project time, according the deadlines of the activities | Internal/External |

## Quality objectives

The main quality objectives are based on the indicators of the progress, defined in the LFM in the proposal. Most important indicators are: number of developed courses, textbooks and guidelines, eLearning modules, virtual labs, newsletters, workshops, publications, participants of the summer school, workshops, students studying according to the new TLM, reports.

Schedule and budget compliance, quality of deliverables are important indicators that are monitored by QAT and PM.

### QA Of achiement of Objectives – Online in Management Platform

| N | Objective/s: | Indicators of progress: | How indicators will be measured: | Results | Status |
|---|---|---|---|---|---|
| | **Wider Objective:**<br><br>Promotion of sustainable management of Arctic and high mountainous ecosystems in Bhutan, India and Russia through | • Revised selected topic-relevant BSc & MSc  and upgraded PhD research programmes at partner universities, and developed learning materials | • Relevant documents from partner Universities registries and departments, academic council records; enrollment records; online learning materials | Report is availible in | C |

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| | enhanced tertiary education linked to labour markets and wider stakeholder circles | <ul><li>Enhanced learning and teaching environments</li><li>Stakeholders involved to the educational process</li></ul> | <ul><li>Installed Learning Management Systems and their usage statistics.</li><li>Establishment documents for National sectoral collaborative panels in PCs</li></ul> | | |
| | **Specific Project Objective/s:** | | | | |
| 1 | To revise and upgrade selected BSc, MSc & PhD programs in PIs to make them end-user-oriented & policy-relevant, and enhance opportunities for LLL education | <ul><li>New (at least 30 ECTS) and revised existing (at least 12 ECTS) B/MSc courses, peer-reviewed & included to curricula (with initial version of learning materials available online) by Oct 2019 with at least 140 B/MSc students enrolled</li><li>PhD training research framework approved by September 2019 with 12 PhD students enrolled by Dec 2019; revision of relevant RU educational standards submitted by Jan 2020</li><li>1.3 Trained faculty (24), technicians (6) and administrators (6) in series of 3 summer schools and 6 on-site seminars</li></ul> | <ul><li>Evaluation of the the updated Curricula with new Syllabi are available. They are accredited in accordance with the regulations of each partner country.</li><li>Enrollment lists</li><li>The training activities will be evaluated via assessment and questionnaires</li></ul> | | |
| 2 | To develop SUNRAISE open education environment Platform (SUNRAISER) and online training | Learning management systems in place at PIs, with relevant faculty and students enrolled by Oct 2019, and selected | Courses are available online The students access to different courses will be measured by statistic tools and used for the evaluation | | |

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| | services of the new generation (MOOC) for qualitative improvement of the education process and academic workflow support among universities and stakeholders across the PC and EU Member States | courses available to external users from Mar 2020. MOOCs are used by the stakeholders' employees and external users | | | |
| 3 | To create sustainable feedback mechanisms to end-users, ensuring adaptive and practice-relevant teaching contents, knowledge co-production opportunities and stakeholder support to post-project course development and teaching | National sectoral collaborative panels established in PCs & adopted protocols for interactions between academia and the world of profession by Feb 2019, and started with support activities to curriculum development and teaching from Sep 2019 | Establishment documents of the panels and their oprrational documents | | |
| 4 | To develop capacity for academic mobility, shared experimental facilities and joint research by PIs and beyond | Approved arrangements for credit and physical mobility, sharing of experimental facilities, joint MSc & PhD supervision and research collaboration launched by Sep 2019 and staff (12) trained on 1 summer school and 6 on-site seminars | Approving documents by PIs and (where relevant), competent national authorities | | |

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## QA of activities– Online in Management Platform

| N | Outputs (tangible) and Outcomes (intangible): | Indicators of progress: | How indicators will be measured: | Results | Status |
|---|---|---|---|---|---|
| 1.1 | Detailed end-user and partner curricula survey, and development of ToRs for revision and development of B/MSc courses and MOOCs | ToRs for revision and development of B/MSc courses & learning materials (1.1), PhD research framework & revision of PhD training standards (1.2), learning management system (1.3) mobility and research collaboration arrangem. 1.4) approved | Minutes of relevant decision-making bodies at PCIs and notes by the coordinator issued by… | Report is availible in | C |
| 1.2 | 1.2 Development of ToR for PhD research framework and revision of RU PhD training standards | ToRs for revision and development of B/MSc courses & learning materials (1.1), PhD research framework & revision of PhD training standards (1.2), learning management system (1.3) mobility and research collaboration arrangem. 1.4) approved | Minutes of relevant decision-making bodies at PCIs and notes by the coordinator issued by… | Report is availible in | C |
| 1.3 | 1.3 Development of ToRs for the learning management system and related IT solutions<br><br>1.4 Development of TOR for mobility and research collaboration arrangements | ToRs for revision and development of B/MSc courses & learning materials (1.1), PhD research framework & revision of PhD training standards (1.2), learning management system (1.3) mobility and research collaboration arrangem. 1.4) approved | Minutes of relevant decision-making bodies at PCIs and notes by the coordinator issued by… | Report is availible in | C |
| 1.4 | Development of TOR for mobility and research collaboration arrangements | ToRs for revision and development of B/MSc courses & learning materials (1.1), PhD research framework & revision of PhD | Minutes of relevant decision-making bodies at PCIs and notes by the coordinator issued by… | Report is availible in | C |

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| | | training standards (1.2), learning management system (1.3) mobility and research collaboration arrangem. 1.4) approved | | | |
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| 2.1 | Revision of existing and development of new BSc/MSc courses | 12 ECTS of B/MSc courses revised & 30 ECTS developed, peer-reviewed & added to syllabi; learning materials online by Oct 2019 (140 students). Min. 8 sets od Lecture notes (Guidelines) | Peer Reviews are available, Resolutions of responsible authorities. Evaluation and assessment of Syllabi by EU and non academic partners<br>Min. 8 sets of Guidelines/lecture notes are published | | |
| 2.2 | Development of PhD research framework and proposals to amend RU PhD training standards and "passports of PhD programs" | PhD research framework is developed, peer-reviewed and approved by PIs by Sep 2019; proposals to amend PhD training standards and submitted by Jan 2020 | Peer Reviews are available, The Framework is using SUNRAISER- List of users is available | | |
| 2.3 | Summer schools and on-site seminars for faculty and PhD students | summer schools and 6 on-site seminars conducted with at least 24 trained faculty and PhD students | Results of student selection. At least (30 Students). Program, questionnaires, assessments Certificates with 2 ECTS | | |
| 3.1 | Deployment and implementation of SUNRAISER | Equipment acquired by PIs. Open education Environment platform SUNRAISER set; users guides available | Proof of purchase, inventories. Software licences | | |
| 3.2 | Development of eLearning modules | 6 sets eLearning Matrils available | Min 6 eLearning modules are available online . Cross–peer evaluations of TLM | | |
| 3.3 | Development of MOOCs | 3 MOOCs are by Jan 2020 | MOOCs are available online. Feedbacks from Stakeholders | | |
| 3.4 | Development of eScience modules for doctoral students | eScience Module for SUNRAISER | eScience module are available online. Feedbacks from Stakeholders | | |

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| 3.5 | 1 summer school and 6 on-site seminars for faculty, technicians, and administrators | summer school and 6 on-site seminars, at least 18 trained faculty, 6 technicians, and 6 administrators | Lists of attendees, Program of summer school, Questionnaires on the retraining. Staff mobility evaluation reports | | |
| 4.1 | Establishment of sectoral collaborative platforms in each PC | 3 sectoral collab. platf., codes of operational pract. by Feb 2019 | Establishment and operational documents available from hosting PIs, revised institutional regulation | | |
| 4.2 | Development of arrangements for credit and physical mobility, sharing of experimental facilities, joint MSc & PhD supervision and research collaboration | Arrangements for mobility, sharing facilities, joint MSc & PhD supervision approved by Sep 2020 | Establishment and operational documents available from hosting PIs, revised institutional regulation | | |
| 4.3 | 6 on-site seminars for administrators and stakeholders | 36 staff and 30 stakeholders trained on 6 on-site seminars | Establishment and operational documents available from hosting PIs, revised institutional regulation | | |
| 5.1 | Peer-review of SUNRAISE deliverables | Peer-review of curricula, learning materials, research frame., MOOCs | The inputs in QCM. Resolutions and accreditation documents. The cross-peer review of TLM; Evaluations are summarized, the results are published in QM | | |
| 5.2 | Project monitoring; deployment and maintenance of the quality control matrix | Tracked and followed-up project progress; deployed and maintained quality control matrix | The inputs in QCM. Resolutions and accreditation documents. The cross-peer review of TLM; Evaluations are summarized, the results are published in QM | | |
| 5.3 | QA of staff development, IT deployment & dissemination | QA of staff training, LMS deployment, dissemination | The inputs in QCM. Resolutions and accreditation documents. The cross-peer review of TLM; Evaluations are | | |

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| | | | summarized, the results are published in QM | | |
| 6.1 | Development and maintenance of SUNRAISE www portal, social media accounts and promotion plan | SUNRAISE www portal launched and regularly updated from Dec 2017 | SUNRAISE www portal is available, the list of accounts | | |
| 6.2 | Development of SUNRAISE detailed business plan | SUNRAISE detailed business plan agreed by PIs and collaborative platforms by Mar 2020 | Business plan is developed and adopted by the partners | | |
| 6.3 | Organisation of 2 SUNRAISE business-academy conferences | 2 SUNRAISE policy-business-academy conf. by September 2020 | Conference Program, Abstract, Attendees, List of publications | | |
| 6.4 | Running of collaborative sectoral platforms | Collaborat. platf. from Sep 2019 | The lists of users, Feedbacks | | |
| 6.5 | Implementation of SUNRAISE curricula and research training | Curricula and research training implemented from Jan 2020 | Minutes of departmental and university meetings | | |
| 7.1 | Establishment of Consortium Agreement | Consortium Agreement by M3 | Partner agreements | | |
| 7.2 | Establishment and work of the Steering Committee; meetings of the Partner Assembly | Steering Com. est. by Jan 2018, ToR agreed by Feb 2018, biannual Skype meetings; meeting of Partners | Programs and minutes of meeting | | |
| 7.3 | Mid-term monitoring visits to all the partners by the coordinator | Mid-term monitoring visits to PIs | 6th month reports Inputs in QCM site | | |
| 7.4 | Reporting to EACEA | Timely & accur. EACEA reporting | progression report, final report and the feedback from the target groups | | |

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## Quality Assurance Team

To implement the plan, Quality Assurance Team (QAT) is set up composed of LPMs or their delegates. QAT monitors and evaluates the quality indicators of the project outputs and outcomes. Quality reports/decisions on each deliverable are issued by two independent bodies – WP Leaders and QAT. External assessments are envisaged for such key deliverables as the university courses (peer-reviewing and approval by Academic Councils of Faculties and/or Universities) The quality reports are available online to all the consortium members and, where relevant, disseminated to external stakeholders.

QAT assists Project Manager (PM) in monitoring the project performance indicators and updating the project work plan, as well as in synthesising a feedback from field monitoring visits by National Erasmus+ Offices into periodic internal quality reviews. This information is then integrated into the work packages. The Coordinator takes operational decisions on risk mitigation; strategic decisions are taken by Steering Group.

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