

Improving the world through engineering

### THE INSTITUTION OF MECHANICAL ENGINEERS The Monitored Professional Development Scheme Career Developer for MPDS Mentors

**1) INTRODUCTION** Career Developer is a web-based records management system designed to record a graduate engineer's Initial Professional Development (IPD). It is not intending as a substitute for face-to-face meetings between mentor and developing engineer. You should still meet regularly to discuss and agree development plans and to explore opportunities to bridge skills and knowledge gaps.

MPDS is endorsed by the Engineering Council as a QA route to registration and MPDS Mentors are therefore required to maintain their CEng or IEng registration with the Engineering Council throughout their mentoring period. To participate on MPDS Developing Engineers must maintain their membership of a professional engineering Institution and be linked to a registered MPDS mentor. The last 4 quarterly reports and last two annual assessment reports are the documents used for the Professional Review application, both for **Chartered Engineer and Incorporated Engineer**.

Career Developer is used by all graduates on MPDS. Undergraduate students do not use an online reporting tool, unless the company they join have registered them. Undergraduate students will continue to use Technical, Personal & Business (TP&B) objectives.

1.1) **Role of the Mentor:** The MPDS mentor indirectly represents the IMechE and as a consequence, the Engineering Council. They also represent their company and as such the integrity of the accredited company MPD Scheme. This requires commitment, professional judgement and ethical practice to ensure the MPD Scheme reporting requirements are maintained. MPDS mentors assess the developing engineer against UK Standards for Professional Engineering Competence (UK-SPEC).

1.2) **Framework of Reporting**: Companies adopting the MPDS make a commitment to develop their engineers from first placement to potential eligibility for professional registration. Whilst embracing company objectives, the Developing Engineer adopts a disciplined quarterly reporting framework and timeline to record their initial professional development. The compulsory reporting ensures regular feedback and planned development.

1.3) **Optional Tools in Career Developer:** Career Developer has many **optional features.** These can enhance reports and provide additional written feedback. It is not compulsory to use these features, but forward planning of professional development is part of good practice. Your Developing Engineer can use all the functions for planning, recording and feedback, or, they may use Career Developer as a simple tool, creating quarterly reports via the templates, then cutting and pasting in the report content.

1.4) **Timely Submission/compulsory reporting:** 4 Quarterly reports are followed by a compulsory annual assessment; otherwise the individual cannot claim MPDS as a route to professional registration. Your valuable feedback provides the 'monitored' aspect of the MPDS. The developing engineer is responsible for timely submission and you should approve these reports within 2 months of the due date, to meet QA requirements.

1.5) **Registration and Previous Experience Claims:** Developing Engineers must complete an IMechE MPDS registration form to participate. Developing Engineers working towards CEng can claim up to 78 weeks previous experience and those working towards IEng can claim up to 52 weeks previous experience. The claim must be approved by you. Please sign to confirm this period on the MPDS registration form at the time of registration.

1.6) Link to company online records: You are linked to your developing engineer and your company scheme co-ordinator via Career Developer. To ensure the link remains current please update your personal contact details and email address online when changes occur. Please email mpds@imeche.org if you are no longer mentoring an individual, or if your developing engineer moves to a new company.

1.7) **Assessing Competence levels:** Aspiring registrants work toward 5 main areas of competence. These are outlined in UK SPEC, which replaced SARTOR in September 2004.

**UK SPEC Scoring guidance:** You are assessing the 'overall competence' level as a Chartered Engineer or Incorporated Engineer.

### Level 1 – Aware

- Performs activity with significant supervision and guidance
- Performs basic routine tasks; little or no responsibility

#### Level 2 - Familiar

- Performs activity in a range of contexts
- Supervision only required in more complex circumstances
- Some individual responsibility or autonomy

### Level 3 - Skilled

- Performs activity in some complex or non routine contexts
- Significant responsibility and autonomy can oversee the work of others

#### Level 4 - Expert

- Performs activity in a wide range of complex or non-routine contexts
- Substantial personal autonomy can develop others in the activity

### 2) LOG ON to Career Developer

Go to: <u>https://www.imeche.org/my-account/login/career-</u> <u>developer?rURL=http%3a%2f%2fwww.imeche.org%2fmembership%2fprofessional-</u> <u>development%2fCareer-development%2fCareer-developer</u>

and enter your IMechE username and password, even if you are from another Institution.

- Or go to www.imeche.org and log in via the fields in the top right hand corner of the page.
- The Career Developer link is in the left hand menu when you log in to Your Account
- Click the Career Developer link, you will be directed to a landing page where you can access your MPDS profile.
- If you have forgotten your user name or password, please contact subscriptions@imeche.org
- Contact subscriptions@imeche.org if you are unable to log in to My Account
- Contact <u>MPDS@imeche.org</u> if you are unable to log in to your Career Developer account

# 3) MAIN PAGES

When you have logged on to Career Developer, the first screen is the **Noticeboard**. Here you will find messages posted from the systems administrator.

Click on **Developing Engineers** to check the Developing Engineers assigned to you. If your Developing Engineer is not showing, email mpds@imeche.org and let us know, so we can connect you. Go to 'Update Developing Engineer Chart' if you want to set 'expectation levels' for additional feedback (optional). Update this after each Annual Assessment.

The following are the key pages within the system for recording Initial Professional Development:

TABS	DEVELOPING ENGINEER'S actions	MENTOR actions
My Status	Confirm your name; your Mentor; MPDS Year and quarter; Claim for previous experience and the UK-SPEC Competence Framework (IEng or CEng)	Not applicable
Developing Engineer	Not applicable	List of Developing Engineers under your guidance Set Developing Engineer's year
Plans	Prepare / Edit / Submit Plan: Add the competences from the UK-SPEC drop-down menu. Submit to mentor	Review the Plan: Add comments or notes (optional) Approve/Return for review/Reject Plan
Evidence	Evidence Summary/ Submit Evidence: Add the relevant UK-SPEC competences you have achieved. These will auto- generate into your quarterly report and annual assessment.	Review Evidence Submitted: Assess Evidence (optional) Add Notes or Comments (optional) Accept/Reject Evidence

Reports	Create Quarterly Report: (200-500 words) Cut+paste contents of a word doc into the space provided. Please note all formatting will be lost. If you chose not to submit Evidence, you must highlight the competences you have addressed, after each paragraph of your report (e.g. A2; B3; C1; C2; D2) Create Annual Assessment: When Evidence has been submitted, the competences you selected will auto-generate to your report. If no evidence is submitted, manually type in each of the A, B, C, D, E boxes	Review Quarterly reports: Make relevant comments to provide feedback to the graduate engineer and the professional review interview panel Review Annual Assessment + Summary: Score competencies 1-4 for A,B,C,D,E Complete each section of the report answering questions 1 to 4. Provide relevant comments as an assessment of the year. If in doubt, ask the developing engineer for input to include all of their key activities. Discuss their overall development with others in the company, e.g. line manager, supervisor etc before completing the feedback
Meetings	Record formal meetings (optional)	Record formal meetings (optional)

# 4) REVIEWING PLANS, EVIDENCE AND REPORTS

An auto-generated email will be sent to you when your Developing Engineer submits these items. Do not reply to the email but log in to your MPDS account. **Always review items in chronological order** - ie. Plans before Evidence, so the competences auto-map. Then review the quarterly report. This sequence ensures everything maps over to the Quarterly Report and finally to the Annual Assessment Report.

### 4.1) Reviewing the development action plan (Plans)

Click on the **Plans** tab to show a list of Unreviewed Plans submitted by your developing engineer(s)

• Click on the Plan title.

- Check that you are happy with the objectives and competences chosen by your Developing Engineer
- You can add your comments or feedback here by clicking Add Note (optional). Type your notes then press 'save'.
- Go back to the Plans tab. Use the drop down menu to select: 'Accepted' or 'Return to Developing Engineer for revisions' if you want the Developing Engineer to amend the plan and then resubmit. 'Not Accepted' should be used only in severe circumstances.

This completes the review. The plan is returned to the developing engineer. Your developing engineer will proceed with their development plan or amend the Plan as you have suggested, then resubmit it. This ensures objectives are clearly stated, achievable, timely and measurable against UK SPEC.

# 4.2) Reviewing evidence submitted against a Plan

Your Developing Engineer may submit evidence of activities (projects, courses, assignments, etc) or they may elect not to use this function at all. If they submit evidence, you are not obligated to score it.

**Note** – **Commercial Sensitivity**: The actual evidence of a particular project is often confidential. If you find commercially sensitive information has been submitted, contact us on Tel: 0845 226 0211 so we can delete it. Personal items and non-sensitive items can be uploaded (eg. appraisal).

A brief mention of the evidence is sufficient to record competence achieved as a result of this activity. Activities can be submitted in a list format, rather than sent in separate submissions. For example: team leader role; investigated possible cause of failures in xyz; recorded non-conformities; made recommendations on quality and risk; prepared findings in report. This list forms one evidence submission, rather than 5 separate submissions.

UK-SPEC competences will have been added by the developing engineer. They will comment on their activities in the quarterly report. You confirm that the competences have been achieved when you 'approve' the evidence submission.

### 4.2.1) Rating or Scoring Evidence (this is optional)

Scoring evidence is optional. The developing engineers' **Checksheet** acts as a gap analysis to show where further development may be required. To see the checksheet, go to Evidence submitted for the developing engineer, and look for the Checksheet tab on the left side.

You have the option to score evidence 1-4 against competences of UK-SPEC. Remember that you are scoring 'overall competence' as a Chartered or Incorporated engineer for this particular piece of work only.

Go to the *Evidence* tab and click on Submitted Evidence

- Click on the Evidence Title
- Review the evidence score evidence (this is additional optional feedback see below)
- Add very brief notes/Comments (optional)
- Select: 'Accepted' or 'Return to Developing Engineer for revisions' if you want the Developing Engineer to amend the evidence and then resubmit. 'Not Accepted' should be used only in severe circumstances.

• Click on Submit review

This is automatically returned to your developing engineer.

**4.2.2)** When scoring evidence, the score you give at this stage is for the individual piece of work.

The scores from 1-4 are auto mapped to a checksheet within the system. You cannot add or change the scores on the checksheet. If you are not scoring evidence, this is acceptable. You will be leaving the scoring field blank for evidence submissions. This means that on the printed report, 'n/a' appears against the evidence submission. On the Developing Engineer's check sheet, an 'tick' appears in place of a score. This 'tick' shows the competence was addressed. Please remember to select 0, if competence is not related, otherwise it will appear on the checksheet as if this competence has been addressed.

**4.3) Checksheet**: To view a checksheet, click My Developing Engineers, go to the *Evidence* link. Click Checksheet on the left side panel. You will notice the 1-4 scores or a 'tick' is auto-mapped here, reflecting the development profile. Annual assessment scores will not appear in this checksheet.

# 5) QUARTERLY REPORTS

You are 'monitoring' your developing engineer on a regular basis, via the quarterly reports. Your Developing Engineer must show evidence of having been monitored. Several reports logged together shows IMechE and the Engineering Council that monitoring has lapsed and regular feedback has not been provided. Potentially these developing engineers will not be able to use MPDS as their route to professional registration. To ensure monitoring and regular feedback takes place, please sign reports off at quarterly intervals. The date of submission and signing off represent the audit trail and QA evidence of monitoring.

Quarterly reports are 200-500 words long. They may be written in the first person or may be bullet points with explainers. They should be a synopsis of contribution, opportunities explored, learning outcomes from errors, failures etc

Competence is further 'monitored' through the Annual Assessment process. This is a summary of the year's achievements. The Mentor's comments provide positive and constructive feedback as well as the current assessment levels against UK-SPEC.

### 5.1) Reviewing Quarterly Reports (compulsory)

An email will be sent to you when your developing engineer has uploaded a submission. Go to **Reports** tab and click on "Quarterly Report".

- Review the Report and add your comments this feedback is a compulsory component for monitored development. It must be positive and constructive so that is of value to your Developing Engineer
- Mark the report 'Accepted' or 'Return to Developing Engineer for revisions' if you want the Developing Engineer to amend the report and then resubmit. 'Not Accepted' should be used only in severe circumstances.
- Press SAVE.

After your review and acceptance, the report is automatically sent back to your Developing Engineer with a note placed on their **Noticeboard**.

As soon as the Developing Engineer has created and 'saved' a plan, evidence or report, you will have access to it. They will not be able to amend the plan, evidence or report unless you have clicked 'Return to Developing Engineer for revisions'. The developing engineer can delete items if they are still in 'edit' mode. Once you have opened the plan/evidence/report, the Developing Engineer cannot delete these items and a permanent record and audit trail has been created.

If plans and evidence were submitted, you will notice that the system has automatically added the competences and evidence summaries into the quarterly report. This is why it is important to review plans, evidence and reports in that order, so the information can automatically generate into the annual assessment.

### 6) ANNUAL ASSESSMENTS

Annual Assessment Reports should be completed within 2 months of their due date. Information in each area of competence will either be auto-mapped from evidence submissions or inserted manually by the developing engineer. Please ensure your comments are constructive and are an accurate reflection of the MPDS development of your Developing Engineer.

Question 4 asks you to make comments on the further development to be undertaken during the following year. This is an opportunity to meet and plan for the coming year and quarter.

After each 4th Quarter, you are required to complete the Annual Assessment. The template is generated by your developing engineer and forwarded to your MPDS account.

Go to the **Reports** tab. Click on "Annual Assessment". Read the graduate engineer's evaluation of the period

- Arrange a meeting to discuss the content of the report before completing your sections to close the report
- When closing the report: Enter an appropriate assessment level from 1-4 for each competence A B C D E
- Complete 'Mentor's Report' Questions 1, 2, 3, and 4.
- Ensure your comments are an accurate reflection of your developing engineer's progress.
- Mark the report 'Return for revisions' to allow your developing engineer to amend the report and then resubmit or 'Complete' when you are satisfied.
- Click 'Save'.

Reports marked as 'Return for revisions' or 'Complete' will automatically be returned to your developing engineer.

Annual Assessment Reports MUST be completed before the next Quarterly Report. The system will not prevent this, but you are asked to conduct assessment in a timely manner to allow the next quarter to commence. Plans and evidence can be lodged in preparation for the next quarter, but further quarterly reports should not be entered into the system until the previous Annual Assessment Report is completed. Timely submission is up to the Developing Engineer. Your co-operation in signing off reports in a timely manner is always appreciated, so that individuals can confidently move forward in their development. If there is a delay due to your other commitments, you may wish to make a brief comment to this effect.

### 6) RECORDING MEETINGS (optional)

Throughout your Developing Engineer's Initial Professional Development, it is essential that you discuss their progress and company objectives. There is no substitute for open communication and face to face meetings. These meetings should be programmed regularly or at least every quarter.

# 7) COMPLETING MPDS

MPDS is not time serving but applicants for Chartered Engineer should normally offer at least four years of initial professional development of which at least two and a half years will have been on MPDS.

Applicants for Incorporated Engineer should normally offer at least three years of initial professional development of which at least two years will have been on MPDS.

When your Developing Engineer has completed their Initial Professional Development (IPD) and reached an appropriate level of competence within UK SPEC criteria for CEng or IEng, you will acknowledge this by ticking the FINAL report box. If you feel your Developing Engineer is not quite ready for registration, they should continue their MPDS development activity, maintaining quarterly reports until they have the appropriate levels of professional competence. Let the IMechE know if the Developing Engineer is extending their MPDS development, so we can adjust the final assessment date. email mpds@imeche.org

When you sign off the Final Assessment Report, this generates an auto-email advising your Developing Engineer to make an application for professional registration within 6 months.

When applying for professional registration, your Developing Engineers should submit the membership application together with the Final Annual Assessment; the penultimate Annual Assessment, the last 4 Quarterly Reports; and a Final Personal Report and Development Action Plan. The Development Action Plan is forward looking. It includes details of proposed continuing professional development (CPD). The developing engineer will need your guidance with the Code of Conduct and preparing items related to CPD. Every professional engineer makes a commitment to continued professional development throughout their career and must demonstrate their intentions and commitment.

### THANK YOU FOR YOUR CONTRIBUTION

Mentoring is a valuable and worthwhile undertaking. Your organisation benefits from improved recruitment and retention of high quality staff and the early identification of 'high flyers'. Ultimately, this leads to a well-qualified workforce as professional status becomes increasingly the norm for businesses today.