Institute and Faculty of Actuaries

Approval report

Subject	Ethical and professional guidance on Data Science
Regulation Board meeting	1 July 2020
Author	IFoA Executive Team
International Issues Considered	Yes – the guidance is intended to be applicable internationally although it is proposed that there will be specific references to the TASs that will apply only to those carrying out UK work

A: Executive summary

1. This paper provides an update on the Executive's continued work in developing specific guidance for Members on the ethics of Data Science, following on from the joint work with the Royal Statistical Society (RSS).

2. It shares, for approval in principle, IFoA specific guidance which aims to provide further guidance for IFoA Members specifically on ethical and professional challenges of data science, with reference to existing professional obligations.

B: Background

3. The Board will recall that it previously approved guidance that was produced jointly with the RSS and published in October 2019, entitled 'A Guide for Ethical Data Science'. This can be found on the dedicated Data Science Ethics page, created on the IFoA's website under Upholding Standards. The joint guidance focuses on occurring ethical themes relating to data science and AI, and can be applicable to any practitioners working within data science.

4. At the time of approval of the joint guide, the Board also agreed that separate guidance should be developed to explain how this then links and relates to actuarial practice, recognising that the joint guidance did not address matters from an actuarial perspective. In particular, it was agreed that it would be helpful to have guidance on how data ethical considerations relate to IFoA Members existing professional obligations contained within relevant standards and guidance, in the form of guidance and case-studies.

C: Information

5. A draft of IFoA specific guidance that has been prepared and is provided at **Appendix A**. This draft has been developed by the Regulation Executive, with input from practitioner members of the IFoA Data Science Member Interest Group (MIG) (Regulation and Ethics workstream) and Education Executive (who developed the IFoA Data Science Certificate).

6. The purpose of the draft guide is to provide Members with practical and ethical guidance on how their professional and regulatory obligations can relate to work that they undertake in data science.

7. Its contents include guidance on the Actuaries' Code and Actuarial Profession Standards (APSs). It is also proposed that the guide would provide guidance on the Financial Reporting Council (FRC) Technical Actuarial Standards (TASs) and how these might be considered in a data science context.

8. The intention is for the guide to provide various case-studies and illustrative examples of how Member's professional and regulatory obligations may come into play when they are working on a data science project. For example, some practical examples on how Members might consider APS X1 and APS X2 while working on a data science project.

9. The case-study currently included in the Guide's appendix is not yet complete and the Executive are working with Members of the Data Science MIG to develop suggested solutions and discussion points. Additionally, Members of the MIG are developing further detailed case-studies to be attached to the guidance within the appendix.

10. The Executive have contacted the FRC's Actuary Policy team in relation to including information on the TASs within the guidance. They have confirmed that they are happy for it to include guidance on the TASs and have provided some initial comments on the proposed draft. Overall, the Actuary Policy team are happy with the wording but provided a steer that it should avoid using a tone that expresses that the TASs are very difficult to comply with and does not give the impression that compliance with the TASs is optional.

D: Next steps

11. The Executive are working further with Members of the Data Science MIG and Education Executive to draft further case-studies to include within the appendix to the guidance, as well as provide more practical examples and illustrations within the guide.

12. The Executive are also having discussions with the FRC's Actuary Policy team to refine the specific wording on the TASs. A further refined draft will then be shared with the FRC's Professional Oversight team.

Conclusion

13. The Board is asked to:

   a) Approve the guidance in principle, subject to the specific wording being refined with the FRC and further illustrations and case studies to be added by the Executive with the assistance of the Data Science MIG; and

   b) Provide a steer on the proposed approach, as relevant.

E: Appendices:

Appendix A: Draft guidance