



**NUCLEAR** SIG

Chartered Quality Institute

# Nuclear Quality Knowledge (NQK)

**Version 4 – 2023**



Leadership



Governance



Assurance





























Improvement





Context

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## Preface

The Nuclear Quality Knowledge (NQK) is a nuclear industry guidance document that has been written by members of the Chartered Quality Institute (CQI) Nuclear Special Interest Group (NucSIG) to supplement the [generic quality knowledge on the CQI website](#). NQK aims to highlight the differences or nuances that a quality professional will experience on joining or supplying the nuclear sector. These differences are a consequence of the special hazards and regulatory requirements that apply. This is a significant part of what is sometimes called the “Nuclear Delta”.

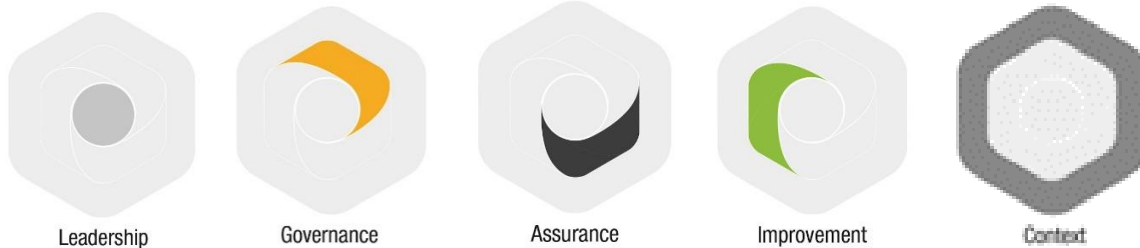
It is not expected that you read this document from cover to cover, rather that you will use it in three ways:

1. As a reference text book for structured learning.
2. As a source for revision on a specific aspect or to dip into as you come across topics or issues during your career.
3. As a source of information to support CQI members continual personal development (CPD)

This fourth edition of the NQK has been updated by NucSIG’s nuclear next generation (NNG) but retains the basic structure of all previous editions. The formatting and language have been updated to support next generation members who will access the content in future for CPD, learning, support and guidance. A new chapter on Fusion has also been added.

To facilitate the continual personal development (CPD) of its members, the nuclear special interest group (NucSIG) has cross referenced the Nuclear Competency Framework (which can be found at <https://cqinucsig.wixsite.com/nucsig/competency-framework>) to each of the NQK chapters. This relationship has also been identified in the Contents pages above.

Each NQK chapter has a framework marker and competency table detailed, as below, to indicate which competency area the chapter covers. This makes it easier to focus on the required competency areas.



## NucSIG

If you find the NQK helpful and are not a member of the CQI's NucSIG then we would encourage you to join the group. Networking with nuclear quality professionals facing similar challenges is a very valuable way of gaining knowledge and developing your competence and skills.

Details on how to join NucSIG are to be found on the NucSIG website [www.nucsig.org](http://www.nucsig.org).

## Acknowledgements

Thanks to the many members who have contributed to this document. The names of Section Editors and Contributors are given on the cover sheet of each of the Chapters. Special thanks to the NNG steering group members for leading the review and revision exercise that has led to the production of NQK 2023.

We are grateful to many international, governmental and industry bodies for extracts from their publications, which are provided as identified and accredited in the document. This includes UK public sector information, licensed under the Open Government Licence,

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## Comments by external bodies on second edition

### Office for Nuclear Regulation:

The ONR welcomes the CQI NucSIG's achievement in gathering the collective experience and knowledge of its membership and publishing the Nuclear Quality Knowledge. We believe this document will help quality professionals to understand the unique requirements of the nuclear sector and how quality management principles and standards can contribute to safety in nuclear facilities.

### Nuclear Institute

The Nuclear Institute welcomes the latest edition of the Nuclear Quality Knowledge publication. This document, compiled by experts from across the industry, enables knowledge and learning to be shared with all nuclear professionals.

## Nuclear Quality Knowledge (NQK) Version History

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Initial (First) Version	2011
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# Disclaimer

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